

**FORMULATION OF LOSSES FOR OIL POLLUTION DUE TO TANKER SHIP  
ACCIDENT IN THE INDONESIAN LEGAL SYSTEM  
VALUE OF JUSTICE**

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**Abstrak**

Tuntutan ganti kerugian yang berdasarkan kepentingan lingkungan laut sebagaimana konsep ekonomi biru yang dicanangkan oleh pemerintah tentu saja harus menjadi dasar klaim kerugian yang diberikan oleh pelaku pencemar untuk merestitusi korban baik korban manusia (nelayan) maupun korban ekosistem laut, mengingat beberapa instrumen internasional sudah diratifikasi oleh sistem hukum nasional terkait ketentuan yang mengatur ganti kerugian pencemaran minyak oleh kapal tanker. Nilai keadilan ganti kerugian pencemaran minyak akibat kecelakaan kapal tanker dapat terwujud dengan menggunakan metode pendekatan ekonomi. Analisis teori ekonomi pada hukum perlu digunakan, agar nilai keadilan dapat terukur dengan baik. Konsep-konsep ekonomi yaitu seperti konsep maksimalisasi (*maximalisation theory*), konsep keseimbangan (*equalibirium theory*) dan konsep efisiensi (*efficiency theory*) diperlukan untuk menjadi tolok ukur nilai keadilan. Metode penghitungan yang dibutuhkan untuk penghitungan ganti kerugian yang dapat dituntut adalah metode *contigent analysis method*, yaitu metode penghitungan berdasarkan pemberian nilai moneter pada barang atau komoditas lingkungan, keinginan untuk membayar pencemar terhadap barang dan jasa yang dihasilkan sumber daya alam dan lingkungan (*willingness to pay*), serta penerimaan untuk menerima penurunan sesuatu (*willingness to accept*).

Kata kunci : ganti rugi, lingkungan, sistem hukum nasional, keadilan.

**Abstract**

*Claims for compensation based on the interests of the marine environment as well as the blue economy concept launched by the government must of course be the basis for the claims of losses given by polluters to restore victims, both human victims (fishermen) and victims of the marine ecosystem, considering that several international instruments have been ratified by the system. national law regarding provisions regulating compensation for oil pollution by tankers. The fair value of compensation for oil pollution due to tanker accidents can be realized by using an economic approach. Analysis of economic theory on law needs to be used, so that the value of justice can be measured properly. Economic concepts, such as the concept of maximization (*maximization theory*), the concept of equilibrium (*equalibirium theory*) and the concept of efficiency (*efficiency theory*) are needed to become a benchmark*

*for the value of justice. The calculation method required for the calculation of claimable compensation is the contingent analysis method, which is a method of calculation based on the assignment of monetary values to environmental goods or commodities, the desire to pay polluters for goods and services produced by natural resources and the environment (willingness to pay). , as well as acceptance to accept something decreasing (willingness to accept).*

*Keywords: compensation, environment, national legal system, justice.*

## **Introduction**

Indonesia's sea area which reaches 3.11 million km<sup>2</sup> makes the potential of the marine sector invaluable, especially from its marine natural resources sector. The potential of marine wealth is so important as prioritized by Indonesia in the concept of green economy and blue economy which leads to sustainable development, as conveyed by the President of the Republic of Indonesia during his remarks at the Rio + 20 Conference (United Nations Conference on Sustainable Development) in Rio de Janeiro, Brazil at 20-22 June 2012 (Lilley, 1999).

The marine environment is part of a country's economy (Gore, 1995). With a coastline of approximately 95,181 km, Indonesian waters have high potential. This measure is second only to Canada as a country that has the second longest coastline in the world. The economic value of the sea is estimated at US \$ 3 trillion - US \$ 5 trillion or equivalent to Rp. 36,000 trillion - Rp. 60,000 trillion per year (Media Finance; 2015). This figure does not include other potentials that come from the wealth of biotechnology, marine tourism and marine transportation development. Indonesia's huge maritime potential is captured as one of the flagship visions and missions of the current President Jokowi administration. Apart from that, the great economic and ecological potential that is stored as a maritime country, the potential for natural damage that can be caused by excessive exploration which can threaten the sustainability of development should also receive attention. For this reason, the government is currently promoting maritime economic policies with a blue economy model. Basically blue economy combines economic development and environmental preservation.

Considering the very strategic role of the sea because some people rely on the sea for their livelihoods and livelihoods, the sea needs to receive major attention in law enforcement, especially from the impact of ecosystem damage due to pollution. Sources of marine pollution can come from (Atmadja, 1992): (1) pollution caused or originating from ships; (2) pollution originating from oil drilling installations; (3) sources of pollution on land; and (4) air pollution. The problem of oil pollution due to ship (tanker) accidents in Indonesia needs serious attention with regard to the right to sue (*ius standi*), evidence related to scientific verification to explain causal relationships, application of the principle of compensation, coverage and extent of environmental issues to determine the amount of compensation , and environmental restoration criteria related to the formal truth system adopted in the civil compensation prosecution system (Triatmodjo, 2001).

Claims for compensation based on the interests of the marine environment as well as the blue economy concept proclaimed by the government must, of course, be the basis for the claims of losses given by polluters to restore victims, both human victims (fishermen) and victims of the marine ecosystem, considering that several international instruments have been ratified

by the system. national law regarding provisions regulating compensation for oil pollution by tankers. Recently at Teluk Penyu Beach, Cilacap, there was a problem of prosecuting compensation for oil pollution. On Monday, 25 May 2015, there was a huge oil spill in the Cilacap sea. On Monday, 25 May 2015, residents and fishermen were busy with activities to collect the spilled crude oil that contaminated the tourist area of Teluk Penyu Beach in Cilacap Regency, Central Java. The spills originated from the leak of the pipeline for the loading and unloading facilities of Pertamina Refinery Unit IV Cilacap which was damaged on Wednesday night, May 20, 2015.

Claims for direct marine pollution compensation by fishermen without the participation of the state are not in accordance with the state's obligations as regulated in the constitutional basis of the 1945 Constitution, Article 33 Paragraph 3 which states that, "the earth and water and the natural resources contained therein are controlled by the state. and used for the greatest prosperity of the people ". Oil pollution in the Cilacap Sea leaves many problems, therefore this study seeks to examine the problem of compensation for oil spills at sea as a result of tanker accidents. The fair value of compensation for oil pollution due to tanker accidents needs to be studied in depth considering the function of the sea as a potential natural resource.

## **Discussion**

### **Definition of Marine Pollution**

Marine pollution according to GESAMP (*Group of Experts on the Scientific Aspect of Marine Environmental Protection*) (Triatmodjo, 2001) : *Pollution means the introduction by man, directly or indirectly, of substances or energy into the marine environment (including estuaries) resulting in such deleterious effect as harm to living resources, hazards to human health, hindrance to marine activities including fishing, impairment of quality for use of sea water and reduction of amenities.*

Pollution means the imposition by humans, directly or indirectly, of substances or energy into the marine environment (including estuaries) which cause damaging effects to living resources, are harmful to human health, hinder marine activities including fishing, decreased quality of sea water use and reduced comfort.

Marine pollution is defined by experts who are members of the agencies under the United Nations as (Kamil Ariadno; 2007) : *Introduction by man, directly or indirectly, of substance or energy into the marine environment (including) resulting in such deleterious effects as harm to living resources, hazardous human health, hindrance to marine activities including fishing, impairment quality for use of sea water and reduction of amenities.*

Human imposition, directly or indirectly, of substances or energy into the marine environment (including) resulting in damaging effects such as endangering living resources, harmful to human health, disrupting marine activities including fishing, decreasing the quality of use of sea water and reduced comfort.

The United States National Oceanic and Atmospheric Administration (NOAA) in its report at the congress on ocean dumping said as, "The unfavorable alteration of the marine environment ... thought direct or indirect effect of changes in energy patterns, traditions and distribution, abundance, and quality of organisms "(Smith, 2005). The OECD defines marine pollution as something that is caused by humans, whether intentional or not, which has an effect in the form of environmental damage and threats to human health and anything that

can hinder marine activities including fishery activities, decrease the quality of sea water and disrupt other uses of the environment. . Another definition, which is recognized internationally is contained in Article 1 (4) UNCLOS which states that: Pollution of the marine or directly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human healths hindrance, to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for uses of the sea, impairment of quality for use of the sea water and reduction of amenitie .

Marine pollution or directly, from substances or energy into the marine environment, including estuaries, which produce or are likely to cause damaging effects such as endangering living resources and marine life, dangerous to human health problems, disrupting marine activities, including fishing and exploitation. other lawyers, decreasing the quality of marine use, decreasing the quality of sea water use and decreasing comfort.

Two important factors in marine pollution, the first is action taken by humans (introduction by men), whether intentional or unintentional, second is that human action causes a result in the form of damage to the environment (deleterius effect). Furthermore, Komar Kantatmadja argues that marine pollution is a change in the marine environment that occurs as a result of the direct or indirect inclusion of materials or energy into the marine environment which results in such bad consequences that it is a loss to biological wealth, a danger to health. human, disturbance to activities at sea including fisheries, proper use of sea water, deterioration of the quality of the sea and the decline in the quality of residential and recreational areas Komar Kantatmadja argues, marine pollution is a change in the marine environment that occurs as a result of direct or indirect human entry. direct materials or energy into the marine environment which results in such a bad consequence that it is a loss to biological wealth, a danger to human health, disturbance to activities at sea including fisheries, water use sea level, worsening of the quality of the sea and decreasing the quality of the place of settlement and recreation (Kusumaatmadja, 1977).

### **International Environmental Protection Principles**

The definition of environmental law is related to two aspects, the first is related to the scope of the legal subject and its institutional competence; second, related to responsibility for environmental damage. The 1972 Stockholm Declaration, in Principle 2, states that what is called natural resources on earth are "air, water, land, flora, fauna and natural ecosystems". Meanwhile, European Community law agrees on the environment as the relationship between living things and water, air, land and all biological forms. UNCLOS, as the main source of international maritime law, includes rare or fragile ecosystems and habitats as the scope of protection of the marine environment.

In the context of national law, Law Number 32 of 2009 concerning Environmental Protection and Management (UUPPLH) defines the environment as a spatial unit with all objects, conditions, and living things, including humans and their behavior, which affect nature itself, continuity of life, and the welfare of humans and other living creatures. Environmental protection has general principles, namely:

a. Sovereignty over natural resources and the responsibility not to cause damage to the environment of other states or to areas beyond national jurisdiction, as the oldest principle in

international law, sovereignty is the main characteristic of a country. A country has internal and external sovereignty. Internal sovereignty means that the state has legislative, executive and judicial jurisdiction over every activity in its territory. The recognition of sovereignty over natural resources was first stated in the UN General Assembly Resolution Number 1803 of 1962 concerning Permanent Sovereignty over Natural Resources. Principle 21 of the Stockholm Declaration states that states under the Charter of the United Nations and principles of international law are sovereign to exploit their natural resources and are responsible for ensuring that activities within their jurisdiction or control do not cause environmental harm to other countries or to areas outside the national jurisdiction of a country. . Based on this principle, the state has sovereignty over its territory and carries out activities in its territorial territory. The principle of state sovereignty over its natural wealth cannot be separated from the state's obligation to ensure that it does not damage the environment of other countries and the environment in its own jurisdiction.

*Principle of preventive action*

Apart from being stated in the 21st Principle of the Stockholm Declaration, the principle of preventive action is also mentioned in the 2nd Principle of the United Nations Conference on Environment and Development (UNCED). This principle has two perspectives. First, this principle requires minimizing environmental damage as the main goal. Second, the state is obliged to prevent environmental damage within and through its jurisdiction, including regulatory, administrative and other measures. Even in the United States of Foreign Affairs Law, it is stated that the state's obligation is not only to take preventive measures, but also to reduce (reduce) and control any environmental losses that occur.

In the case of cross-border pollution, the Principle has two perspectives. First, this principle requires minimizing environmental damage as the main goal. Second, the state is obliged to prevent environmental damage within and through its jurisdiction, including regulatory, administrative and other measures. Even in the United States of Foreign Affairs Law, it is stated that the state's obligation is not only to take preventive measures, but also to reduce (reduce) and control any environmental losses that occur. In the case of cross-border pollution, each country is required to carry out two obligations, first to take the necessary action in good faith; second, to regulate public and private activities which are the subject of its jurisdiction (Shelton, 2007).

c. *Cooperation*

The principle of this cooperation stems from the general principles of good neighborliness which can be found in customary international law and in Article 74 of the UN Charter. This principle is reflected in several international treaties and is supported by state practices primarily in hazardous and emergency activities. Cooperation is contained in the 24th Principle of the Stockholm Declaration and the 27th Principle of the Rio Declaration which states that countries must work together in the principle of good faith and the spirit of partnership as an effort to protect the environment.

d. *Sustainable development*

The principle of sustainable development emphasizes that development carried out now must not reduce the rights of future generations. In other words, the development that is being implemented must pay attention to the ability of the environment in meeting the needs

of future generations. The sustainable principle has several aspects, namely :

- 1) *The need to take into consideration the needs of present and future generation;*
- 2) *The acceptance on environment protection grounds, of limit placed upon the use and exploitation of natural resources;*
- 3) *The role of equitable principles in the allocation of rights and obligation;*

*The principle to be used for allocating costs of pollution prevention and control measures to encourage rational use of scarce environmental resource and to avoid distortions in international trade and investment is so called polluter pays principle. That principle means that that polluter should bear the expenses of caring out the above mentioned measures decided by the public authorities to ensure that the environment is in a acceptable states. In other world the cost of these measures should be reflected in the cost of goods and services which cause pollution in production and/or consumption. Such measures should not be accompanied by subsidies that would create significant distortions in international trade and investment.*

e. *Precautionary Principle*

*In Principle 15 the Rio Declaration states that: where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as areas on for postponing cost effective measures to prevent environmental degradation". That principle means that polluter should bear the expenses of caring out the above mentioned measures decided by the public authorities to ensure that the environment is in a acceptable states. In other world the cost of these measures should be reflected in the cost of goods and services which cause pollution in production and/or consumption. Such measures should not be accompanied by subsidies that would create significant distortions in international trade and investment.*

Where there is a threat of serious or irreversible damage, the reduction in full scholarship will certainly not be used as an area for delaying effective measures to prevent environmental degradation ". The principle means that polluters have to bear the costs of taking care of the aforementioned actions that are decided by public authorities to ensure that the environment is in an acceptable state. In other words, the costs of these measures should be reflected in the costs of polluting goods and services in production and / or consumption. Such measures should not be accompanied by subsidies that would create significant distortions in international trade and investment.

### **The Formulation of Compensation for Oil Pollution Due to Tanker Accidents in the Indonesian Legal System is Worth Justice**

The definition of value, especially regarding goods and services produced by natural resources and their environment, can indeed be different when viewed from various scientific disciplines, because a common perception is needed for the assessment of these ecosystems. One measure that is relatively easy and can be used as a common perception of the various disciplines is the provision of a price tag for goods and services produced by natural resources and the environment. We thus use what is called the economic value of natural resources. In general, economic value is defined as a measurement of the maximum amount a person wants to sacrifice for goods and services to obtain other goods and services.

Formally, this concept is called the willingness to pay (WTP) of someone for goods

and services produced by natural resources and the environment. Using this measure, the ecological value of ecosystems can be translated into economic language by measuring the monetary value of goods and services. The desire to pay can also be measured in terms of an increase in income which causes a person to be indifferent to exogenous changes. These exogenous changes can occur due to changes in prices (for example as a result of resource scarcity) or because of changes in the quality of resources. Thus, the WTP concept is closely related to the concepts of Compensating Variation and Equivalent Variation in demand theory. WTP can also be interpreted as the maximum amount that someone is willing to pay to avoid a decline in something.

Apart from measuring the economic value, it can also be done by measuring the willingness to accept (WTA) which is nothing but the minimum income of a person to accept a decrease in something. For the application of the case, WTP as the ability to pay oil business actors is realized through the transfer of civil liability through the form of CLC liability insurance in the form of mutual P&I insurance (not fixed P&I). P&I mutual insurance as a civil liability obligation is the willingness to pay up to the maximum limit of insurance coverage (Periani, A. (2019).

To be able to obtain a fairness value for compensation that reflects the value of fairness, the indicators needed are; a) decreasing quality of natural resources, b) decreasing economic and social use of natural resources, c) environmental and human victims. Therefore it is necessary to understand that natural resources and the environment have a price tag or economic value, so that the maximum amount of ecosystem ecological value can be measured in economic language by measuring the monetary value of these goods and services. So that the polluter has an awareness of willingness to pay. It is necessary to increase the role of the government as the party responsible for the value of natural resources and the environment, on the other hand, to have a measurement through the willingness to accept (WTA) which is nothing but the minimum amount of a person's income to accept a decrease in something. The government is obliged to exercise strict control on insurance requirements as a form of liability insurance and civil liability.

Compensation that has been provided so far does not meet the value of eco-social justice, because it still leaves environmental interests behind. Compensation, which is expected to meet the value of justice, is compensation that takes into account all losses arising from the result of oil pollution due to tanker accidents. Both direct and future losses for all natural resources and losses for environmental quality degradation, as well as the results and income that would have been obtained if there was no pollution. The method that should be used to calculate fairness compensation is the Contingent Analysis Method.

## **Conclusion**

The fair value of compensation for oil pollution due to tanker accidents can be realized by using an economic approach. Analysis of economic theory on law needs to be used, so that the value of justice can be measured properly. Economic concepts, such as the concept of maximization (maximization theory), the concept of equilibrium (equilibrium theory) and the concept of efficiency (efficiency theory) are needed to become a benchmark for the value of justice. The calculation method required for the calculation of claimable compensation is the contingent analysis method, which is a method of calculation based on the assignment of monetary values to environmental goods or commodities, the desire to pay polluters for

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## References

- Gayatri R. Lilley, 1999, *Demokrasi Pengelolaan Sumber Daya Alam*, Prosiding Lokakarya Reformasi Hukum di bidang Pengelolaan Sumber Daya Alam, Cetakan I, ICEL, Pustaka Pelajar Offset. Hlm. 245.
- John Baylish, Steve Smith, 2005, *The Globalization of World Politics* (3rd ed), Oxford University Press, Oxford.
- Marsudi Triatmodjo, 2001, *Pengembangan Pengaturan Hukum dan Kelembagaan Pencemaran Laut dari Darat di Kawasan Asia Tenggara*, Makalah dalam Hukum dan Lingkungan Hidup Indonesia: 75 Tahun Prof. Dr. Koesnadi Hardjasoemantri, Perpustakaan Nasional : Katalog Dalam Terbitan (KDT) Erman Rajagukguk dan Ridwan Khairandy (Ed), Program Pasca Sarjana Fakultas Hukum Universitas Indonesia.
- Melda Kamil Ariadno, *Hukum Internasional Hukum yang Hidup*, 2007, Diadit Media, Jakarta.
- Mochtar Kusuma Atmadja, 1992, *Perlindungan dan Pelestarian Lingkungan Laut Dilihat dari Sudut Hukum Internasional, Regional dan Nasional*, Sinar Grafika dan Pusat Studi Wawasan Nusantara, Jakarta.
- Mochtar Kusumaatmadja, 1977, *Pencemaran Laut dan Pengaturan Hukumnya*, Universitas Padjajaran, Bandung
- Purwendah, E. K. (2016). Penerapan Regime Tanggung Jawab dan Kompensasi Ganti Rugi Pencemaran Minyak oleh Kapal Tanker di Indonesia. *Jurnal Komunikasi Hukum (JKH)*, 2(2).
- Purwendah, E. K. (2018). Korelasi Polluter Pa S Principle Dan Konsep Blue Econom Pada Pencemaran Minyak Oleh Kapal Tanker Sebagai Upaya Perlindungan Lingkungan Laut Indonesia Correlation Of Polluter Pa S Principle And Blue Econom Concept On Oil Pollution B Tanker As Effort Of Indonesian's Marine Environment. *Bina Hukum Lingkungan*, 2(2), 127.
- Purwendah, E. K. (2020). Persepsi Budaya Hukum Dalam Merespon Pencemaran Minyak Di Laut Cilacap Akibat Kapal Tanker Dalam Perspektif Keadilan Ekososial. *Jurnal Pendidikan Kewarganegaraan Undiksha*, 8(1), 93-105.
- Purwendah, E. K. (2020). Prinsip Kehati-Hatian (Precautionary Principle) Dalam Pencemaran Minyak Akibat Kecelakaan Kapal Tanker Dalam Sistem Hukum Indonesia. *Jurnal Media Komunikasi Pendidikan Pancasila dan Kewarganegaraan*, 2(1), 7-26.
- Purwendah, E. K., & Djatmiko, A. (2015). Peran syahbandar dalam penegakan hukum pencemaran minyak di laut oleh kapal tanker. *Perspektif*, 20(1), 30-40.
- Purwendah, E. K., Mangku, D. G. S., & Periani, A. (2019, May). Dispute Settlements of Oil Spills in the Sea Towards Sea Environment Pollution. In *First International Conference on Progressive Civil Society (ICONPROCS 2019)*. Atlantis Press.
- Sakti, L. S., Mangku, D. G. S., & Yuliantini, N. P. R. (2020). Tanggung Jawab Negara Terhadap Pencemaran Lingkungan Laut Akibat Tumpahan Minyak Di Laut



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Perbatasan Indonesia Dengan Singapura Menurut Hukum Laut Internasional. *Jurnal Komunitas Yustisia*, 2(3), 131-140.