THE IMPLEMENTATION OF STATE RESPONSIBILITY PRINCIPLE IN INDONESIA CONCERNING PLASTIC WASTE OF PACIFIC OCEAN

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Abstract
Today, plastic waste is the most widely found in the Pacific Ocean, around 99% of garbage in the Pacific Ocean is plastic waste. Indonesia as the second-largest contributor plastic waste to sea, it needs to implement the state responsibility principle to fulfill the international obligations as referred to article 235 (1) of the United Nations Convention on the Law of the Sea (UNCLOS) 1982, stated that states are responsible for the fulfillment of their international obligations concerning the protection and preservation the marine environment. The state responsibility principle is also discussed at the national level, in Indonesia itself, there is a national regulation that discusses the state responsibility principle such as Law No. 32 of 2009 on environmental protection and management. Therefore, this paper will discuss the implementation of state responsibility principle in Indonesia and the challenges faced by Indonesia in implementing the state responsibility principle.

Keywords:
State Responsibility Principle; International Obligation; Environment.

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I. INTRODUCTION

Plastic waste is a material that difficult to decompose in the ocean. Plastic waste not only takes a long time to decompose, but it also contains toxic that are certainly dangerous for marine ecosystems and habitat1. The pile of plastic waste in the Pacific Ocean, known as the Great Pacific Garbage Patch. 99% of garbage in the Pacific Ocean is plastic waste2. The Great Pacific Garbage Patch was discovered for the first time in the 1990s, and the garbage came from states across Asia, North America, and South America3. It is estimated that 8 million tons of garbage are delivered to the

1 Nurhadi Sucahyo, written on June 8, 2018, “Ancaman sampah plastik di Indonesia”, <https://www.voaindonesia.com/a/ancaman-sampah-plastik-di-laut-indonesia/4430037.html>, [accessed on September 25, 2019].
2 Akhyari Hananto and jay Fajar, Written on March 26, 2018, “Kawasan Samudra Pasifik yang dipenuhi sampah plastik kini hampir seluas daratan Indonesia”, <https://www.mongabay.co.id/2018/03/26/kawasan-samudera-pasifik-yang-dipenuhi-sampah-plastik-kini-hampir-seluas-daratan-indonesia/>, [accessed on June 20, 2019].
3 Ibid.
sea every year based on research published in the Science Journal\(^4\). In the Pacific Ocean, there are 1.8 trillion more plastic pieces which weigh an estimated 80,000 tons\(^5\).

The plastic waste in the Pacific Ocean comes from states and form the largest pile of plastic waste in the world. The surprising fact is Indonesia as the second-largest contributor plastic waste to sea after China\(^6\). The Pacific Ocean is part of the high seas\(^7\), is used as the common heritage of mankind.\(^8\). That means all states including Indonesia are obliged to protect and preserve natural resources on the high seas. Every state has full sovereignty over their territorial waters and has the exclusive right to use natural resources in their territory and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.\(^9\)

States are responsible for the fulfillment of their international obligations concerning the protection and preservation of the marine environment. They shall be liable in accordance with International Law\(^10\). It can be concluded that the state has responsibility for the protection and preservation of the marine environment as a form of fulfilling the international obligation. One of the customary international law is states must prevent, reduce, and control transboundary pollution and environmental harm.\(^11\)

The state must ensure that their activities under their jurisdiction do not cause damages to other states. Therefore, Indonesia as the second state that contributes plastic waste to the ocean must be responsible for domestic waste in the Pacific Ocean. Under Indonesia regulation there is Law No.32 of 2009 on Environmental Protection and Management, particularly in article 2 also discussed the state responsibility principle. Therefore, this paper attempts to investigate how the implementation of state responsibility principle in Indonesia as a state that contributes plastic waste to Pacific Ocean and the challenges faced by Indonesia in implementing state responsibility principle to handle the issue of plastic waste.

\(^4\) Rina Nurjanah, Written on August 8, 2015, “Lautan Sampah terbesar di dunia berada di..”, [https://www.liputan6.com/citizen6/read/2286069/lautan-sampah-terbesar-di-dunia-berada-di], [accessed on June 20, 2019].
\(^5\) Laurent C. M. Lebreton, et al., “Evidence that the Great Pacific Garbage Patch is rapidly accumulating plastic”, Scientific Reports 8, no. 4666, 2018, p.1
\(^6\) Eijas Ariffin, written on July 6, 2018, “Indonesia’s plastic Waste problem” [https://thecaseanpost.com/article/indonesias-plastic-waste-problem-0], [accessed on March 22, 2019].
\(^7\) The high sea is all part of the sea that are not included the exclusive economic zone, territorial sea, internal water of a state, or archipelagic waters of an archipelagic state. See on Boer Mauna, Hukum Internasional, Pengertian, Peranan dan Fungsi dalam Era Dinamika Sosial, PT Alumni, Bandung, 2005, p. 312.
\(^8\) Ibid.
\(^9\) Stockholm Declaration, principle 21.
\(^10\) UNCLOS 1982, article 235 paragraph 1.
\(^11\) Patricia Birnie, Alan Boyle, Chaterie Redgewell, International Law and Environment, Third Edition, Oxford University Press, New York, 2009, p. 137
II. RESEARCH METHODS

This study uses normative research methods. The normative legal research is research that uses library research to obtain data. Normative legal research covers the principles and legal doctrines, systematic law, written law, comparative law, and legal history. This research focusing on reading and analyzing data of the primary and secondary materials. But in the secondary sources, the researcher will include the regulation and interview with the program manager of HAkA Foundation (The Foundation focuses on Aceh’s forests, nature, and environment).

The data is obtained through library research that is related to the object of research, which covers primary sources (UNCLOS 1982, Stockholm Declaration, ILC 2001, and Law of Indonesia No. 32 of 2014 on the Sea, Law of Indonesia No.32 of 2009 on Environmental Protection and Management) and secondary sources (law books, law papers, interview with HAkA Foundation). The data obtained from library research. The collected data will be processed systematically to get a depiction that matches the research problem. The data will be analyzed by using a qualitative approach, so that objective analysis can be obtained to answer the problems raised.

III. RESULTS AND DISCUSSION

3.1. The General Aspect (State Responsibility Principle for Marine Pollution in International Regulation)

The principle of State responsibility itself was born in the late 19th century when there was a Trail Smelter case. Referring to this case, although it has not been found the element of fault, one of

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12 Abdul kadir Muhammad, *Hukum dan Penelitian Hukum*, First edition, PT. Citra Aditya Bakti, Bandung, 2004 P. 52.
13 Declaration of the United Nations Conference on the Human Environment 1972, The United Nations Conference on the Human Environment was held in Stockholm on June 5-16, 1972, followed by 113 states and observers. The conference produced a declaration which forms the basic principles in international environmental law and the enforcement. See on Davilla Prawidya Azaria, “The Protection of the Pacific Ocean Environment from Plastic Waste Clusters Based on International Environmental Law”, Faculty of Law, Brawijaya University. 2014, p. 6.
14 International Law Commission’s Articles on Responsibility of States for Internationally Wrongful Acts 2001. The topic of state responsibility has been greatly clarified and developed by the International Law Commission. At its first session in 1949, the ILC selected the matter of state responsibility for future codification. The ILC adopted a final text of Draft Articles on Responsibility of States for Internationally Wrongful Acts held in August 2001. See on Alina Kaczorowska, *Public International Law*, Third Edition, RoutledgeCavendish, Abingdon Oxon, 2005, p. 175-176.
15 Trail Smelter is a cross-border environmental pollution case involving the Federal Government of Canada and the United States as parties to the dispute in 1941. The dispute arose because pollution fumes from a zinc ore smelting plant in Canada had polluted and damaged land and food crops in Washington, United States. The fume produced from the smelting plant contains sulfur dioxide gas that is carried by the wind into the Columbia River Valley and causing damage to food crops and forests around the area passed by the fume to the territory of Washington, United States. Based on the results of the United States Department of Agriculture investigation, the zinc smelting fumes have caused damage to the leaves of food crops and also resulted in decreased soil productivity. See on Neni Ruhaeni, “Perkembangan Prinsip Tanggung Jawab (Bases of Liability) dalam Hukum anternasional dan Implikasinya terhadap Kegiatan Keruangangkasaan”, Faculty of Law, Bandung Islamic University, 2014, p. 345
the parties involved should take responsibility for the damage done by their activities. The arbitral tribunal that handled the case, stated that: “Under the principle of international law ... no state has the rights to use or permit the use of territory in such a manner as to cause injury by fumes in or to the territory of another of the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence”.

In further developments, the Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, the International Court of Justice recognizes “The existence of the general obligations of States to ensure that activities within their jurisdiction and control respect the environment of other States or of beyond national control is now part of the corpus of international law relating to the environment”. The statement above reinforces the principle of the state responsibility not to carry out activities that can cause environmental loss or damage in the territory of another State. This responsibility was born because of the obligation of states to respect the rights of other states.

In harmony with the principle of state responsibility in international environmental law, which states that the state is responsible for ensuring that actions under its jurisdiction do not harm other states or territories outside their jurisdiction. One of the elements of the internationally wrongful acts of the state is omission caused by the state. Same as what stipulated in the principle 21 of Stockholm Declaration, that is “the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction”. From that statement, it can be concluded that the state free to do anything in their area, but has the responsibility to not cause damage to the outside of their jurisdiction.

The Stockholm declaration of 1972 were basic principles that did not have legally binding, then UNCLOS 1982 had binding power for the states of the world. UNCLOS 1982 also regulated the state responsibility specifically in section 9, article 235 paragraph 1 “States are responsible for the fulfillment of their international obligations concerning the protection and preservation of the marine environment. They shall be liable in accordance with International Law.”

In article 139 regulates the responsibility to guarantee compliance and obligation to pay compensation, whereby the State party must be responsible for guaranteeing the actions carried out by

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16 Ibid, See more on Philippe Sands, , *Principles of International Environmental Law*, First Edition, Manchester University Press, 1995, p. 191.
17 Suparto Wijoyo and A’an Efendi, *Hukum Lingkungan Internasional*, Sinar Grafika, Jakarta, 2017, p. 214-215.
18 Suparto Wijoyo and A’an Efendi, *loc.cit*, p. 215.
19 See ILC 2001, art. 2.
20 State have in accordance with the charter of the united nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. See Stockholm Declaration, principle 21.
21 Davilla Prawidya Azaria, *op. cit*, p. 9.
States Parties, or state enterprises or persons who have the nationality of States Parties, shall be
accompanied in accordance with this Part. Regarding losses caused by the negligence of a participating
State, it will result in compensation obligations. However, the State party is not obliged to bear losses
if the State party has taken all necessary actions to ensure compliance with the implementation of this
article.22

Only exceptionally do treaties adopt a form of state liability for damage without fault, as in
Articles 139 and 235 of the UNCLOS 1982, they expressly state that only for non-fulfillment of
international obligations, states parties will be held accountable. Some writers have argued, however,
that a form of strict or absolute liability for environmental harm arises independently through the
general principle of law, equity, sovereign equality, or good neighborliness.23

International law does not allow the state to conduct activities within their territories, or in
common spaces, without regard for the rights of other states or the protection of the global
environment. This point is sometimes expressed by reference to the maxim sic utere tuo, ut alienum
non laedas or this principle means “use your own property in such a manner as not to injure that of
another”. Therefore, the principle of “sic utere” or also called the principles of “good neighborliness”,
but the contribution of customary law in the environmental matter is neither as modest.24

One of two rules that provide significant support in state practice, judicial decisions,
multilateral environmental agreement, and the work of the International Law Commission that is
“states have a duty to prevent, reduce and control transboundary pollution and environmental harm
resulting from activities within their jurisdiction or control.” It can be regarded as customary
international law or in certain aspects as general principles of law.25

Indonesia responsible for domestic waste that pollute the Pacific Ocean. The Pacific Ocean is
part of the high sea, so the pollution of plastic waste that occurs in the Pacific Ocean can be
categorized as transboundary environmental harm. Indonesia should be able to ensure that the
domestic waste does not pollute another area. In harmony as regulated in article 195 UNCLOS
1982.26

3.2. Other States Policies in Handling Plastic Waste.

22 UNCLOS 1982, art 139 (2).
23 Patricia Birnie, Alan Boyle, Chaterie Redgeell, op.cit, p. 218.
24 Ibid, p. 137.
25 Ibid.
26 UNCLOS 1982, art. 195 “In taking measures to prevent, reduce and control pollution of the marine
environment, States shall act so as not to transfer, directly or indirectly, damage or hazards from one area to
another or transform one type of pollution into another”
In 2018, UK and Vanuatu launched Commonwealth Clean Oceans Alliance. States including New Zealand, Australia, Barbados, and Canada have signed a Pledge to clean the ocean. While the Republic of the Marshall Islands (an archipelagic state located in the western Pacific Ocean) has banned the import, manufacture, and use of plastic bags and Styrofoam packaging. Fiji (an archipelagic state in the southern Pacific Ocean) has charged fees for plastic bags to prevent consumers from using plastic bags, even Fiji plans to remove single-use plastic bags by 2025.

The plastic ban has been implemented in the Cook Islands, Samoa, and Yap state in Micronesia. The Solomon Islands and Papua New Guinea also consider steps on how to manage their plastic waste. In Indonesia, the paid plastic bag policy has begun to be implemented to coincide with the National Waste Care Day in February 2016. This policy is one of the government's efforts to reduce the amount of plastic waste in Indonesia. Cities and counties in California have also banned the use of single-use plastic straws and are only available on request.

In 2018, Malaysia compiled a road map to eliminate disposable plastic by 2030, starting with the cost of plastic bags and a ban on straw. Thailand announced the Plastic Waste Management Road Map 2018-2030, to remove three types of plastic by the end of the year, four other types by 2022, and plans to use 100% recycled plastic by 2027. Brunei Darussalam stops using plastic bags in supermarkets in 2019, with shoppers being encouraged to use reusable eco-friendly bags for grocery shopping. In Cambodia, major supermarkets have begun charging per plastic bag in a bid to reduce usage. Luos is encouraging the public to use recyclable plastic bags sold in downtown cafes and markets.

27 Douglas Broom, Written on July 5, 2019, “Environmentalists have removed nearly 40 tonnes of trash from the Pacific” <https://www.weforum.org/agenda/2019/07/environmentalists-have-removed-nearly-40-tonnes-of-trash-from-the-pacific/>, [accessed on July 29, 2019].

28 Imelda V. Abano, Written on June 5, 2018, “Philippines and Pacific Island Countries Step up Battle Against Plastic Pollution in the Pacific Ocean” <https://earthjournalism.net/stories/copy_of_philippines-and-pacific-island-countries-step-up-battle-against-plastic-pollution-in-the-pacific-ocean>, [accessed on July 29, 2019].

29 World economic Forum, “Environmentalists have removed nearly 40 tonnes of trash from the Pacific” <https://www.weforum.org/agenda/2019/07/environmentalists-have-removed-nearly-40-tonnes-of-trash-from-the-pacific/>, [accessed on October 29, 2019].

30 Ibid.

31 Redaksi, written on March 28, 2019, “Kebijakan Pengurangan Kantong Plastik dan Penerapannya”, <https://majalahcsr.id/kebijakan-pengurangan-kantong-plastik-dan-penerapannya/>, [accessed on April 7, 2020].

32 Environment California, written on August 20, 2018 “California “Straws on Request” Bill to Reduce Plastic Pollution Passes Out of the State Senate” <https://environmentcalifornia.org/news/caleifornia-%E2%80%9Cstraws-request%E2%80%9D-bill-reduce-plastic-pollution-passes-out-state-senate>, [accessed on July 29, 2019].

33 Zein. Z, 2018, “Malaysia to ban single-use plastic”, <https://www.eco-business.com/news/malaysia-to-ban-singleuse-plastic/>, [accessed on November 5, 2019].

34 The Nation. 2019, “Thailand to junk three kinds of plastic by end of this year”, <https://www.nationthailand.com/national/30367931>, [accessed on November 5, 2019].

35 Greenpeace Document, “Southeast Asia’s Struggle against the Plastic Waste Trade, A Policy Brief for ASEAN Member States”, 2019, p. 8.
Several cities and municipalities in the Philippines have enforced plastic bags and single-use regulations (charges or bans), apply for the National Zero Waste Program which regulates waste separation at the household level to reduce the costs of handling waste\textsuperscript{36}. Singapore, one of the world’s biggest players in the fast-food chain industry, has now banned plastics (plastic lids and straws) for dine-in customers. Large businesses and enterprises in Vietnam have also introduced eco-friendly bags to shoppers, with the government imposing an environment tax on plastic bags\textsuperscript{37}. Vietnam has started developing its National Action Plan on Management of Ocean Plastic Waste and will also explore legislation and policies related to plastics pollution\textsuperscript{38}.

In dealing with marine plastic debris issues in the East Asian Seas (EAS), one of the most important actors is UNEP (the United Nations Environment Programme). As the leading environmental agency globally, UNEP is responsible for helping to handle marine plastic pollution in the EAS\textsuperscript{39}. EAS stretches from the North to the Southern Hemisphere of the Western Pacific and serves as a link between the Pacific and Indian Oceans that separates the eastern part of the Asian from Australia\textsuperscript{40}. The role of UNEP in dealing with marine plastic debris pollution at EAS lies in every effort made by UNEP\textsuperscript{41}. The roles of UNEP are as a promoter, advocate, educator, and facilitator\textsuperscript{42}.

3.3. The Implementation of State Responsibility Principle in Indonesia as a state that Contributes Plastic Waste to Plastic Waste.

In the field of implementation, states implement their international environmental obligations by adopting national implementation measures and by ensuring that national measures are met by those subject to their jurisdiction and control\textsuperscript{43}. The implementation of the State responsibility principle is directed on State obligation to transform and harmonize international provisions,

\textsuperscript{36} Ibid.
\textsuperscript{37} Ibid.
\textsuperscript{38} Ibid, p. 9.
\textsuperscript{39} Junida Siregar, “Peran United Nations Environment Programme (UNEP) Menangani Polusi Marine Plastic Debris di Laut Asia Timur”, Faculty of Social and Political Sciences, Riau University, 2019, p.2-3
\textsuperscript{40} Ibid, p.4, see more on COBSEA, Marine Litter in the East Asian Seas Region, 2008, p.4
\textsuperscript{41} Some of UNEP efforts such as: a. Campaigning to reduce the use of plastics, especially disposable plastics, b. Discuss and establish an international framework related to marine plastic debris through the UNEP coordinating body, c. Providing guidance regarding the handling of marine plastic debris, d. Forming global action to prevent an increase in plastic waste from land-based sources entering the ocean, e. Support the 2030 Agenda and the United Nations Sustainable Development Goals (SDGs). See Junida Siregar, “Peran United Nations Environment Programme (UNEP) Menangani Polusi Marine Plastic Debris di Laut Asia Timur”, Faculty of Social and Political Sciences, Riau University, 2019, p 3
\textsuperscript{42} Junida Siregar, op.cit, p.1
\textsuperscript{43} Philippe Sands, Principles of International Environmental Law, Second Edition, University Press, Cambridge, 2009, p. 174
regarding environmental management through the establishment of national legislation in realizing a system of environmental protection and management\textsuperscript{44}.

The principle of state responsibility is one of the principles contained in Law No.32 of 2009 on environmental protection and management\textsuperscript{45}. Based on the State responsibility principle, the State must carry out environmental protection and management through:

a. The state guarantees the use of natural resources to provide benefits for the welfare of the citizens, both current and future generations.

b. The state guarantees the right of citizens to a good and healthy environment.

c. The state prevents the use of natural resources that cause pollution or environmental damage\textsuperscript{46}.

What is mentioned in article 2 above is the same as the purpose of principle 21 of Stockholm Declaration and 235 (1) of UNCLOS 1982, where each State has the right to exploit their own resources in accordance with their environmental policies and protect the marine environment from pollution and damage in terms of meeting international obligations. The legal framework governing the marine environment can be found in several laws concerning the protection of the marine environment in general, including Law No. 32 of 2014 on the Sea\textsuperscript{47}.

In implementing the principle of responsibility for pollution and environmental damage, one of the efforts that must be made is preventive and repressive measures. Preventive measures as one points in controlling environmental damage need to be implemented to optimize the instruments of supervision and licensing\textsuperscript{48}. One example of a preventive measure is an Environmental Impact Assessment (EIA). Every business or activity that has a significant impact on the environment must have an EIA\textsuperscript{49}. EIA is a preventive measure to prevent environmental damage and prerequisites for obtaining an environmental permit\textsuperscript{50}. One of preventive measure is a risk analysis of the possible or effect of an activity plan, which is also arranged in article 206 of UNCLOS 1982.

When pollution and environmental damage have occurred, then repressive measures need to be made in the form of effective law enforcement, consequent and consistent with environmental pollution and damage that has occurred\textsuperscript{51}. Repressive actions are carried out with the use of legal

\textsuperscript{44} Fikri, “Penerapan Prinsip Tanggung Jawab terhadap kawasan Leuser di Aceh”, Kanun Jurnal Ilmu Hukum, Faculty of Law, Syiah Kuala University, 2012.

\textsuperscript{45} Law No.32 of 2009 on Environmental Protection and Management, art. 2 point a

\textsuperscript{46} See on the explanation of Law No.32 of 2009 on Environmental Protection and Management.

\textsuperscript{47} Masdin, “Implementasi Ketentuan-Ketentuan United Nations Convention on The Law of the Sea (UNCLOS) 1982 terhadap Perlindungan dan Perlestarian Lingkungan Laut di Indonesia”, Jurnal Ilmu Hukum Legal Opinion, 2016, p. 171.

\textsuperscript{48} See on the explanation of Law No.32 of 2009 on Environmental Protection and Management.

\textsuperscript{49} Law No.32 of 2009 on Environmental Protection and Management, Art. 22

\textsuperscript{50} See on the explanation of Law No.32 of 2009 on Environmental Protection and Management.

\textsuperscript{51} See on the explanation of Law No.32 of 2009 on Environmental Protection and Management.
instruments in the enforcement of environmental law including administrative law, civil law, and criminal law52.

The State responsibility in protecting and managing the environment can be applied through three legal instruments namely administrative law, civil law, and criminal law instruments to guarantee the achievement of environmental sustainability53. The settlement of environmental problems through administrative law instruments aims for acts that violate the law or that do not meet the requirements, to stop or return to the original condition of the environment before there is a violation. Administrative sanctions focus on action54.

Environmental law also recognizes other administrative sanctions namely, closure of companies, the prohibition of using certain equipment, forced money, and withdrawal of permits55. Civil law instruments are the second most important law enforcement effort after administrative law instruments because they focus on efforts to demand compensation and environmental recovery to the polluters56. Meanwhile, criminal law enforcement is seen as *ultimum remedium*57 or a last effort because law enforcement is intended to impose imprisonment or fines to the polluters58.

Cases of waste pollution in the environment tried with due regard to the principle of strict liability. In February ago, the Bale Bandung District Court Judges granted a civil suit from the Ministry of Environment and Forestry (*KLHK*) against three companies that pollute the Citarum River Basin (*Daerah Aliran Sungai*). However, one of the three companies, namely PT KAWI Mekar (KM) was terminated with a van dading deed (peace deed) and paid a lawsuit amounting to Rp 375 million59. While PT Kamarga Kurnia Textile Industri (KKTI) and PT How Are You Indonesia (HAYI) were punished by paying material compensation of Rp16.263 billion60.

Director-General of Law Enforcement *KLHK* Rasio Ridho Sani said that the civil suit against PT KKTI was carried out because after being given time, the company was not serious in managing

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52 Sodikin, “*Penegakan Hukum Lingkungan Menurut Undang-Undang Nomor 32 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan*”. Kanun, Jakarta Muhammadiyah University, 2010, p. 543.
53 Sudi Fahmi, "*Asas Tanggung Jawab Negara Sebagai Dasar Pelaksanaan Perlindungan dan Pengelolaan Lingkungan Hidup*”. Faculty of Law, Lancang Kuning University, 2011, p. 226
54 Andi Hamzah, *Penegakan Hukum Lingkungan*, Sinar Grafika, Jakarta, 2005, p. 48
55 Ibid.
56 Sukanda Husin, *Penegakan Hukum Lingkungan Hidup*, Sinar Grafika, Jakarta, 2009, p.18.
57 *Ultimum Remedium* is a legal principle that puts criminal law as the final tool in law enforcement. Principle of *ultimum remedium* requires the application of criminal law enforcement as a last effort after the application of administrative law enforcement is considered unsuccessful. The application of the principle of *ultimum remedium* only applies to penalties for violating wastewater quality standards, emissions, and disturbances. See on the explanation of Law No.32 of 2009 on Environmental Protection and Management.
58 Sudi Fahmi, op. cit, p.227
59 Greener, written on February 28, 2020, “*Pengadilan Kabulkan Gugatan Pencemaran Sungai Citarum*”, <https://www.greeners.co/berita/pengadilan-kabulkan-gugatan-pencemaran-sungai-citarum/>; [accessed on April 30, 2020].
60 Lusi Arumingtyas, written on March 4, 2020, “*Dua Perusahaan Cemari DAS Citarum Kena Hukum Rp. 16.26 Miliar*”, <https://www.mongabay.co.id/2020/03/04/dua-perusahaan-cemari-das-citarum-kena-hukum-rp1626-miliar/>; [accessed on April 30, 2020].
wastewater and \textit{B3} (Hazardous and Toxic Substances) waste and now more than 780 cases of environment and forestry have been reported.\textsuperscript{61} In judging cases, the Panel of Judges uses the burden of proof with strict liability\textsuperscript{62}.

Meanwhile, according to Fajri Fadhillah as the Head of the Environmental Pollution Control Division at the Indonesia Center for Environmental Law (ICEL)\textsuperscript{63} said that the government could more efficiently carry out environmental recovery through administrative sanctions based on Article 82 of Law No. 32 of 2009\textsuperscript{64}. The government has the authority to force business actors to restore the environment and the government can ask experts or appoint the third party to calculate the cost of recovery and making a recovery using the costs of business actors that cause pollution\textsuperscript{65}.

In article 56 paragraph 1 of Law No. 32 of 2014 stated that the government is responsible for protecting and preserving the marine environment. In addressing the problem of marine pollution, the government must also work together whether bilaterally, regionally, and multilaterally to implement the prevention, reduction, and control of marine pollution\textsuperscript{66}. In managing the marine pollution, the Indonesia government in 2017 through the Coordinating Minister for Maritime Affairs established a National Action Plan (NPOA) on Marine Plastic Debris (2017-2025). NPOA Indonesia aims to manage the problem of marine pollution from plastic waste and to overcome marine plastic waste by reducing 70\% of plastic waste by 2025. The government is also seeking to encourage cleaning up rivers and beaches\textsuperscript{67}.

In addition to the implementation of Indonesia’s NPOA, the Indonesia government enacted Presidential Regulation No. 83 of 2018 on Handling Marine Litter. This Indonesian regulation aims to follow up on Indonesian commitment to reduce marine plastic litter. This regulation also aims to strengthen and provide guidance to the implementation of Indonesia’s NPOA on marine plastic litter\textsuperscript{68}.

\textsuperscript{61} MTR 02, written on February 26, 2020, “PN Bale Bandung Kabulkan Gugatan KLHK atas Perusahaan Pencemar Sungai Citarum”, [http://mediatataruang.com/2020/02/26/pn-bale-bandung-kabulkan-gugatan-klhk-atas-perusahaan-pencemar-sungai-citarum/], [accessed on Mei 1, 2020].

\textsuperscript{62} In Indonesia the strict liability is borne by businesses or companies as emphasized in Law No.32 of 2009, especially in article 88 which states: “Every person whose actions, businesses and/or activities use hazardous and toxic substances, produce and/or manage hazardous and toxic substances, and/or that pose a serious threat to the environment is solely responsible for losses that occur without the need to prove any fault”. Article 88 also limits that strict liability can be used only for environmental pollution that contains hazardous and toxic substances. See on Malvin Edi Darma, “Penerapan Asas Polluter Pay Principle Dan Strict Liability Terhadap Pelaku Pembakaran Hutan”, Jurnal Hukum Adigama, Faculty Of Law, Tarumanagara University, P.9

\textsuperscript{63} ICEL is an independent non-governmental organization for environmental law, involved in advocacy and community empowerment. See on [https://icel.or.id/], [accessed on Mei 1, 2020].

\textsuperscript{64} MTR 02, loc.cit.

\textsuperscript{65} See Law No. 32 of 2009 on Environmental Protection and Management, art. 82 paragraph 1&2.

\textsuperscript{66} Law No. 32 of 2014 on the Sea, art. 56 para 3.

\textsuperscript{67} Maruf, “Law and Policy in Addressing Marine Plastic Litter: Indonesia Response and Recent Development”, Journal of Indonesia Legal Studies, Faculty of Law, Semarang University, 2019, p.175.

\textsuperscript{68} Maruf, op.cit.,p. 178
In handling the NPOA targets, the National Marine Waste Management Coordination Team was formed to carry out the NPOA, hereinafter referred to as NCT\(^{69}\) (National Coordinating Team) which is directly responsible to the president\(^{70}\). The NCT has the duty to coordinate the activities of ministries, non-ministerial, local governments, communities, and/or businesses in the activities of handling marine debris. Formulate a resolution policy on obstacles and problems that arise, coordinating monitoring and evaluation activities regarding the implementation of the action plan\(^{71}\).

Actually, plastic is useful for our life. When it has become garbage, and disrupting the environment, the needs to be improved is the waste management in accordance with the Waste Management Law No.18 of 2008, through the sorting, transport, and processing (Zero Waste Management), the government should focus more on improving the performance of waste management\(^{72}\).

### 3.4. The Challenges Faced by Indonesia in Implementing State Responsibility Principle to Handle the Issue of Plastic Waste

Based on the principle of State responsibility in article 2 of Law No.32 of 2009, the state guarantees the use of natural resources to provide benefits for the welfare of the citizens, the right of citizens to a good and healthy environment and prevents the use of natural resources that cause pollution or environmental damage\(^{73}\). Generally, some challenges faced in implementing state responsibility principle to handle the problem of plastic waste in Indonesia are law, preventive measures, waste management strategies, education and public awareness.

The first challenge in dealing with marine plastic waste in Indonesia is the absence of a special law on marine plastic litter. Even though Indonesia has enacted a legal basis for protecting the marine environment as the Law No. 32 of 2009 on environmental protection and management, and Law No. 32 of 2014 on the sea. The law does not have specific laws relating to marine plastic waste. Presidential Regulation No. 83 of 2018 also does not specifically discuss marine plastic waste. This regulation is more likely to become a guideline in handling marine plastics through NPOA Indonesia\(^{74}\).

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\(^{69}\) The NCT which includes the Coordinating Minister for Maritime Affairs as head and Minister of Environment and Forestry as daily head, Director general of Waste Management, sewage, and hazardous toxic materials, Ministry of Environment and Forestry as secretary, and Deputy assistant for the utilization of maritime science and Technology, Coordinating Ministry for the field of education as the deputy secretary. See on Maruf,”Law And Policy In Addressing Marine Plastic Litter: Indonesia Response And Recent Development”, p. 179.

\(^{70}\) Ibid, p.178-179.

\(^{71}\) Ibid.

\(^{72}\) Kumparan,”Menelisik Permasalahan Sampah Plastik yang Makin Pelik”, <https://kumparan.com/trubus-id/menelisik-permasalahan-sampah-plastik-yang-makin-pelik-1547483158576188990/full>, [accessed on July 02, 2020].

\(^{73}\) See on the explanation of Law No.32 of 2009 on Environmental Protection and Management.

\(^{74}\) Maruf, op.cit, p.182.
Based on the results of interviews with Mr. Crisna Akbar as a program manager at the HAkA Foundation (Aceh Natural Forest and Environment Foundation). He mentioned that the settlement mechanism in Indonesia was not yet directed. According to this problem, there must be special regulations governing the mechanism of solving environmental problems.

In implementing the principle of state responsibility for pollution and environmental damage, one of the efforts that must be carried out is preventive and repressive measures. Mr. Crisna Akbar was stated that one effort of applying the principle of state responsibility is preventive measures relating to supervision and licensing. He also mentioned that the AMDAL which was one of the prevention efforts had not been carried out objectively. One of the weaknesses that the AMDAL Drafting Team is not from the government. So, the government should monitor closely the process of drafting the AMDAL so that decision or permit is given does not harm the environment.

Seeing the problems facing the global today regarding plastic waste. He argued that one of the steps that can be taken by the government in reducing plastic waste is to encourage companies to be responsible for the waste generated from the company's production. Based on the waste management hierarchy, the most strategic step is focused on avoiding the emergence of marine litter or preventing garbage from entering the sea.

The Ministry of Environment and Forestry issued a Circular No: S.1230/PSLB3-PS/2016 on prices and mechanisms for the implementation of paid plastic bags in all modern retail market outlets in Indonesia. The Indonesian Retailers Association (Aprindo) stopped the paid plastic bag program run by modern retail stores throughout Indonesia, starting October 1, 2016, until the issuance of government regulations. However, in March 2019, the modern retail industry began to re-impose a

75 HAkA stands for forest, nature and environment of Aceh. HAkA mission strives for a stronger and healthier Aceh. This is created through an empowered civil society whose members contribute to the wellbeing of the province by participating in activities that enhance environmental function to provide clean air, water and earth and to sustain forest, river and ocean. The vision is the long-term health of Aceh Province – socially, financially and environmentally. The vision is based on scientific evidence of environmental functions and identification of what nature needs to survive and prosper. See on <https://www.haka.or.id/?page_id=1049>, [accessed on June 1, 2020].
76 Interview with Mr. Crisna Akbar as a Program Manager of HAkA Aceh Foundation on March 3, 2020.
77 Preventive measures are one of the points in controlling environmental damage that need to be implemented to optimize the instruments of supervision and licensing. See on the explanation of Law No.32 of 2009 on Environmental Protection and Management.
78 Repressive measures is the form of effective, consistent and consequent law enforcement on environmental pollution and damage that have occurred. See on the explanation of Law No.32 of 2009 on Environmental Protection and Management.
79 Interview with Mr. Crisna Akbar as a Program Manager of HAkA Aceh Foundation on March 3, 2020.
80 Ibid.
81 Ibid.
82 Ibid.
83 Maruf, loc.cit, p.182
paid plastic bag policy\textsuperscript{84}. But, until now the Indonesian government has not yet issued regulations regarding paid plastic bags. On the other hand, several major cities in Indonesia have implemented a paid plastic bag policy through Local Regulations\textsuperscript{85}.

The last challenge that faced by Indonesia on handling the issue of plastic waste is the public awareness and behavior of community in the use and disposal of plastic waste. So education about plastic waste is needed to encourage public awareness in reducing the use of plastics. Therefore, the Indonesian government must make more efforts to increase the awareness of the Indonesian citizen on the issues of marine plastic litters\textsuperscript{86} through environmental education\textsuperscript{87}.

Education regarding the environment is a difficult topic to cover because every answer is completely different\textsuperscript{88}. Promoting marine environmental education and awareness in schools would be an effective tool to mitigate plastic pollution. By targeting youth habits, practices can be fostered that may indirectly involve marine environment protection\textsuperscript{89}.

IV. CONCLUSION

The implementation of State Responsibility Principle in Indonesia can be applied through three legal instruments which are administrative law, civil law, and criminal law instruments based on Law No. 32 of 2009 on Environmental Protection and Management. Indonesia's response as a state that contributes plastic waste to the Pacific Ocean has been well seen from Indonesia's policy through the NPOA target to reduce plastic waste. However, in implementing the legal instrument and the NPOA target the government is still weak and ineffective.

The challenges faced by Indonesia in implementing the principle of State Responsibility in handling plastic waste are the absence of special laws on marine plastic waste (although Indonesia has enacted Law No.32 of 2014 on the Sea and Presidential Regulation No.83 of 2018 on the Handling of Marine Litter), the implementation of preventive measures has not been objective, the waste management strategy is not yet effective, lack of education and public awareness about plastic waste.

\textsuperscript{84} DHO, written on March 3, 2019, “Ritel Modern Mulai Berlakukan Kantong Plastik Berbayar”., <https://investor.id/archive/ritel-modern-mulai-berlakukan-kantong-plastik-berbayar>, [accessed on April 7, 2020].

\textsuperscript{85} Maruf, op.cit, p.183.

\textsuperscript{86} Maruf, op.cit. p. 181.

\textsuperscript{87} “Environmental education is a process that allows individuals to explore environmental issues, engage in problem solving, and take action to improve the environment. As a result, individuals develop a deeper understanding of environmental issues and have skills to make informed and responsible decisions”, see in United States Environmental Protection Agency (EPA), “What is Environmental Education”, <https://www.epa.gov/education/what-environmental-education>, [accessed on June 1, 2020].

\textsuperscript{88} Kate Giesler, “The Plastic Problem: Plastic Pollution in Bali”, SIT Study Abroad, Independent Study Project (ISP) Collection. 2937, 2018, p.21.

\textsuperscript{89} Pettipas, S., Bernier, M., & Walker, T.R., “A Canadian policy framework to mitigate plastic marine pollution, Marine Policy”, 2016. 68(1), p. 117-122.
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