**ENFORCEMENT OF ENVIRONMENTAL LAW ON WASTE MANAGEMENT AS A FORM OF IMPLEMENTING THE PRINCIPLES OF GOOD ENVIROMENTAL GOVERNANCE (GEG) BASED ON CHARACTER**

**Elly Kristiani Purwendah, Daniel Joko Wahyono**

*Faculty of Law, Wijayakusuma University Purwokerto*

*E-mail :* [*ellypurwendah@gmail.com*](mailto:ellypurwendah@gmail.com)

|  |  |  |
| --- | --- | --- |
| ***Info Artikel*** |  | ***Abstract*** |
| *Masuk: 20 April 2024*  *Diterima: 27 April 2024*  *Terbit: 1 Mei 2024*  ***Keywords:***  *Law Enforcement, Waste Management, Good Environmental Governance, Character* |  | *This research aims to find out how environmental law enforcement regarding waste management is implemented as a form of implementing the principles of good environmental governance (GEG) based on character values. This research uses a normative juridical research method with a type of approach, namely a statutory approach and a conceptual approach. The legal materials used are primary, secondary and tertiary legal materials, obtained by conducting literature studies. The research results show that waste management is currently still an unresolved problem. There are several laws and regulations that have a correlation with waste management in Indonesia, namely Law no. 32 of 2009 concerning Environmental Protection and Management and several other laws. Law enforcement in waste management refers to 3 legal systems which are a combination of components, namely structure, substance and culture. Regulations regarding environmental law enforcement regarding waste must also apply character values, so that the goal of environmental law enforcement can be achieved, namely creating a sustainable environment in order to achieve a just, orderly, prosperous and characterized society. Apart from that, related to law enforcement in waste management, it can be studied from 2 sides, namely preventive and repressive law enforcement. Law enforcement in waste management is also an embodiment of the government and local governments in implementing the principles of Good Environmental Governance with the aim of raising public awareness of a good and healthy environment.* |
|  |  | ***Abstrak*** |
| ***Kata kunci:***  Penegakan Hukum, Pengelolaan Sampah, *Good Enviromental Governance*, Karakter  ***Corresponding Author:*** *Elly Kristiani Purwendah, e-mail :* [*ellypurwendah@gmail.com*](mailto:ellypurwendah@gmail.com)  ***DOI:***  *xxxxxxx* |  | Penelitian ini bertujuan untuk mengetahui bagaimana penegakan hukum lingkungan terhadap pengelolaan sampah sebagai bentuk penerapan prinsip *good environmental governance (GEG)* berbasis nilai karakter.Penelitian ini menggunakan metode penelitian yuridis normatif dengan jenis pendekatan yaitu pendekatan perundang-undangan dan pendekatan konseptual. Bahan hukum yang digunakan yaitu bahan hukum primer, sekunder, dan tersier, diperoleh dengan melakukan studi kepustakaan. Hasil penelitian menunjukan bahwa pengelolaan sampah saat ini masih menjadi permasalahan yang belum terselesaikan. Terdapat beberapa peraturan perundang-undangan yang mempunyai korelasi dengan pengelolaan sampah di Indonesia yaitu Undang-Undang No. 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup dan beberapa undang-undang lainnya. Penegakan hukum dalam pengelolaan sampah mengacu pada 3 sistem hukum yang merupakan gabungan dari komponen-komponen yaitu struktur, substansi, dan budaya. Pengaturan mengenai penegakan hukum Lingkungan terhadap sampah juga harus menerapkan menerapkan nilai nilai karakter, agar tujuan penegakan hukum lingkungan dapat tercapai yakni mewujudkan lingkungan yang berkelanjutan guna tercapainya masyarakat yang adil, tertib, sejahtera dan berkarakter. Selain itu berkaitan dengan penegakan hukum dalam pengelolaan sampah dapat dikaji dari 2 sisi yaitu penegakan hukum secara preventif dan represif. Penegakan hukum dalam pengelolaan sampah juga menjadi sebuah perwujudan pemerintah maupun pemerintah daerah dalam menerapkan prinsip Good Environmental Governance dengan tujuan akan menumbuhkan kesadaran bagi masyarakat akan lingkungan hidup yang baik dan sehat. |
|  |  | *@Copyright 2024.* |

**INTRODUCTION**

Waste is one of the main environmental problems in Indonesia. Continuously increasing waste production and suboptimal management have resulted in various negative impacts, such as environmental pollution, flooding and public health problems (Purwendah, 2020). The quality of the environment continues to decline, giving rise to problems of environmental degradation in people's lives. According to Article 1 number (1) of Law no. 18 of 2008 concerning Waste Management defines waste as the remains of daily human activities and/or natural processes in solid form. Meanwhile, according to Article 1 number (5) waste management is a systematic, comprehensive and sustainable activity which includes reducing and handling waste.

Poor waste management and processing gives rise to various very complex problems. These problems include the high rate of waste accumulation, very low public awareness (human behavior) as well as problems with final disposal activities (Purwendah & Wahyono, 2022). Problems resulting from waste that is not managed properly will result in more and more waste, resulting in difficulties to manage this waste, especially for cleaning managers in urban settlements, as a result a lot of waste is not handled properly and is thrown away in many places. As a result, unmanaged waste will cause serious environmental pollution.

The process of managing waste so that it does not cause disease and does not disturb the environment, waste must be managed properly and correctly so as not to pollute the environment. Waste management can be done by reducing waste from the source (3R), namely: Reduction, Reuse, Recycle; Waste Separation Before Disposal, namely: Container, Collection, Transport, Environmentally Friendly TPA Disposal (Setiadi, 2015). Apart from this, in urban society there is a consumer culture which influences the improvement of the quality and type of waste. So that waste management cannot be separated from state intervention and various sectors in society, including the business world. Not only that, the participation of the community which is a network or community of waste disposers must also have a big role in waste management, in this case the recycling process so that it can be reused. So waste management is part of public services which must be regulated in regulations which are expected to provide comfort in the daily lives of citizens.

Waste has become the biggest national problem so its management needs to be carried out in an integrated and comprehensive manner, starting from collection to waste processing. Waste management can run effectively and efficiently if there is good cooperation from the government and the community. The government has used its authority to provide legal certainty and clarity of responsibility with Law Number 18 of 2008 concerning Waste Management (Indonesia, 2008).

It is felt that the current policies in the form of regulations in Indonesia are not yet effective and optimal in having a deterrent effect on society. This is proven by the population of 237 million which is expected to increase to 270 million people in 2025, it is estimated that the amount of waste that will be produced is 130,000 tons/day. So it is not surprising that Indonesia has also been appointed as the second-ranked country producing domestic waste, namely 5.4 million tons per year. The problem of waste management has become a crucial problem because regions (Districts/Cities) also experience many obstacles in waste management (Purwendah, 2019). One of the obstacles is the implementation and enforcement of law in waste management which is part of environmental law enforcement, especially in the application of sanctions.

Law enforcement is the process of implementing legal norms in real terms as guidelines for behavior or legal relations in the life of society, nation and state. In fact, in Indonesia itself, there are already several laws and regulations that have a correlation or are directly related to waste management, namely Law no. 32 of 2009 concerning Environmental Protection and Management(Indonesia, 2009), Law Number 32 of 2004 concerning Regional Government (Indonesia, 2014) was replaced by Law no. 23 of 2014 concerning Regional Government, Law no. 18 of 2008 concerning Waste Management and several regional regulations that have been established by regional governments at the Regency or City level. Apart from that, the Government also issued Government Regulations as implementing regulations for Law Number 18 of 2008 concerning Waste Management, namely Government Regulation Number 81 of 2012 concerning Management of Household Waste and Similar Types of Household Waste, Presidential Regulation of the Republic of Indonesia Number 97 of 2017 concerning National Policy and Strategy for Management of Household Waste and Waste Similar to Household Waste.

The existence of sanctions imposed and contained in regulations, especially those concerning waste management, does not provide a deterrent effect for people who do not manage waste in an environmentally sound manner, so it is necessary to study the effectiveness of sanctions in enforcing laws in waste management. Apart from that, the role of local governments is also very important in issuing policies regarding waste management.

From the description of the problem above, it is necessary to apply it to the community, government and also law enforcement officials to understand and implement the values of national character as put forward by the Ministry of National Education, there are 18 values of national character that must be understood, absorbed and implemented by all officials who are involved in law enforcement, especially environmental law enforcement so that the environment can be utilized for future generations to create sustainable development (Purwendah & Periani, 202 C.E.). If the cooperation and synergy of all stakeholders between the central and regional governments is able to manage waste well then the implementation of the principles of Good Environmental Governance can be said to be fulfilled. In this way, the problems related to waste mentioned above will be resolved if these character values can be understood and implemented, because the country represented by the government has issued a policy aimed at improving and regulating waste management in Indonesia.

**RESEARCH METHODS**

The research method used in this research is a type of normative legal research, or known as doctrinal legal research, which is a process for discovering legal rules, as well as for answering legal problems or issues that are researched by examining library materials (Marzuki, 2014). This research uses a statutory approach and a conceptual approach. A legislative approach (statute approach) to study or review regulations relating to environmental law enforcement regarding waste management as a form of application of the principles of good environmental governance (GEG) based on character values. Conceptual approach to provide views and doctrines of legal science as a basis for analyzing problem resolution. The legal material collection technique used consists of primary legal material, secondary legal material, and tertiary legal material obtained by conducting a literature study consisting of legal material instruments that have a direct connection regarding environmental law enforcement on waste management as a form of application of the principles of good environmental governance. (GEG) based on character values.

**RESULTS AND DISCUSSION**

**Environmental Law Enforcement Regulations on Character Value-Based Waste Management Governance**

Fulfillment of a good and healthy living environment is a human right and constitutional right for every Indonesian citizen. Therefore, the government, regional governments and all stakeholders are obliged to protect and manage the environment in implementing sustainable development so that the Indonesian environment can remain a source and support for life for the Indonesian people and other living creatures. So that good and correct waste management is a form of fulfilling a good and healthy living environment.

The problem of waste is very important nowadays. Waste is something related to the culture and behavior of society, especially in urban areas. For this reason, proper waste management is needed in accordance with existing laws and regulations. The waste problem is an important problem in various (especially) densely populated urban areas. This is because most people still view that waste is leftovers from the use of goods, whether organic or inorganic, that cannot be utilized.

Large volumes of waste piled up at final waste processing locations have the potential to release methane gas (CH4) which can increase greenhouse gas emissions and contribute to global warming (Purwendah et al., 2022). In order for a pile of waste to decompose through natural processes, it takes a long time and requires treatment at a large cost. So that society in managing waste still relies on the end-of-pipe approach, namely waste is collected, transported and disposed of at the final waste processing site. In waste management, the government and regional governments require policies in the field of regulation that are based on national and regional regulations.

In order to carry out integrated and comprehensive waste management, fulfill the rights and obligations of the community, as well as the duties and authority of the central government and regional governments to carry out public services, a legal umbrella is needed in the form of a law. As stated in Article 28 H paragraph (1) of the 1945 Constitution of the Republic of Indonesia, it gives every person the right to have a good and healthy living environment. This article has the consequence that the government is obliged to provide public services in waste management. This has legal consequences that the government is the authority and responsible party in the field of waste management. Even though waste management is the government's obligation, it can also involve the business world and the community involved in the waste sector.

The legal regulation of waste management in this Law is based on the principle of responsibility, the principle of sustainability, the principle of benefit, the principle of justice, the principle of awareness, the principle of togetherness, the principle of safety, the principle of security and the principle of economic value (Mulyanto, 2013). In relation to waste management for the central government and regional governments, it cannot be separated from the principles contained in Article 2 of the Environmental Protection and Management Law which regulates the principles of state responsibility, participatory principles, principles of good governance; and the principle of regional autonomy. Therefore, waste management is a form of state responsibility through the government and regional governments.

So in this case, community participation is needed to manage it. Apart from that, it is strengthened by Article 63 of the PPLH Law which regulates the authority of the government and regional governments in protecting and managing the environment. Where based on the principles of good governance; and the principle of regional autonomy can be used as a reference in waste management. In essence, waste management is the obligation of all components of society and the Regional Government. Waste management does not only involve technical issues and management systems, but also concerns people's behavior, so that the waste problem will not be resolved without community participation in its management.

Through Law no. 18 of 2008 concerning Waste Management is based on and followed by Indonesia's large population with a high growth rate resulting in an increase in the volume of waste. Not only that, people's consumption patterns contribute to creating increasingly diverse types of waste, including packaging waste that is dangerous and/or difficult to decompose by natural processes. Referring to the substance of this law which is directly related to waste management, namely Article 19 regulates the management of household waste and waste similar to household waste. Then the explanation regarding waste reduction is further stated in Article 20. Furthermore, Article 20 paragraph (3) regulates business actors in carrying out activities, namely using production materials that create as little waste as possible, can be reused, can be recycled, and/or easily decomposed by natural processes. And Article 20 paragraph (4) regulates the community in carrying out waste reduction activities, namely using materials that can be reused, recycled and/or easily decomposed by natural processes.

The explanation in Article 22 of Law Number 18 of 2008 regulates waste management. It also regulates waste handling, which includes: (a) sorting in the form of grouping and separating waste according to the type, quantity and/or nature of waste; (b) collection in the form of collecting and transferring waste from waste sources to temporary storage areas or integrated waste processing sites; (c) transportation in the form of carrying waste from the source and/or from a temporary waste storage site or from an integrated waste processing site to the final processing site; (d) processing in the form of changing the characteristics, composition and amount of waste; and/or (e) final processing of waste in the form of returning waste and/or residue from previous processing to environmental media in a safe manner.

Thus, the provisions regulated in the implementation of waste management in Law No. 18 of 2008 concerning Waste Management should be able to handle problems regarding waste in Indonesia. It is common knowledge that waste management still applies the Collect-Transport-Dispose (end of pipe) concept. With the existence of this law, waste management has adopted the 3R concept: Reduction, Reuse, Recycling. This is the case with the waste management paradigm, if so far the conventional concept has been used, namely that waste is considered waste so it is thrown away, which requires disposal costs and ultimately becomes a health threat to the community. So now a new paradigm is used which views waste as a resource that should be reprocessed so as to generate income which leads to opportunities to open up new jobs and opportunities to earn new income.

Enforcement of environmental law is very necessary to realize sustainable development so that the environment can be used for the future(Purwendah & Djatmiko, 2015). For this reason, all those involved in enforcing environmental law, especially law enforcement officers, must understand, absorb and apply these character values in carrying out their duties so that the goal of enforcing environmental law can be achieved, namely creating a sustainable environment in order to achieve a just, orderly, prosperous and characterful society.

**Implementation of Environmental Law Enforcement in Waste Management as a Form of Implementation of the Principles of Good Environmental Governance (GEG)**

In order to grow and increase public awareness in waste management, law enforcement is needed. Environmental law enforcement is an action and/or process of coercion to comply with the law which is based on the provisions of statutory regulations and/or environmental requirements (Syamsul, 2012). Therefore, law is a means that contains values and concepts about justice, truth, social benefits and so on (Ridwan, 2011). The existence of law enforcement is an activity to harmonize the relationship between values described in the principles/views of good values and embody and act attitudes as a series of final stage value translations to create "social engineering", maintain and maintain peace as "social control". social life (Mukhlis & Luthfi, 2010)

The process of implementing environmental law enforcement in the field of waste management is an effort to implement positive law in people's lives so that Law no. 18 of 2008 concerning Waste Management and regional regulations regarding waste management which aim to maintain and maintain environmental conditions so that people have a good and healthy environment.

Implementation of Law no. 18 of 2008 concerning Waste Management and regional regulations regarding waste management are felt to have not been implemented effectively. The weight of landfilled waste in Indonesia nationally reaches 200 thousand tons per day or the equivalent of 73 million tons per year and the most dominant is household waste at 48 percent, traditional markets at 24 percent, and commercial areas at 9 percent. The rest comes from public facilities, schools, offices, roads, and so on. Indirectly, the largest waste contributor is households both living in cities and villages. This data is evidence of the ineffectiveness of law enforcement in the field of waste management (Mangku et al., 2022). Basically, law enforcement is influenced by several factors, where these factors have a close relationship and influence each other. These factors are: 1. The legal factor itself; 2. Law enforcement factors, which include officials or institutions that form and implement laws; 3. Factors supporting law enforcement; 4. Community factors; 5. Cultural factors, namely as a result of creative works and feelings based on humans and social life. Referring to the factors above, the role of the government and government is also very important in enforcing laws in the field of waste management.

Efforts to enforce environmental law can be carried out in preventive and repressive ways. Preventive law enforcement is carried out through supervision and repression is carried out through the application of administrative sanctions (NHT, 2009). So that in law enforcement in the field of waste management there is no need to directly impose administrative and criminal sanctions, but preventive efforts seem to be more effective in their implementation. Preventive law enforcement is recommended because it builds public awareness of the importance of good waste management.

The government's efforts to enforce laws in the field of waste management are indeed the biggest factor in society. The components of the legal structure in the sense of the government and regional governments have a big role in law enforcement efforts in the field of waste management, both preventively and repressively (Purwendah et al., 2019). Apart from that, the existing legal substance is Law no. 18 of 2008 and the regional regulations governing regencies/cities are actually good, so there is a need for outreach from the regional government to the public regarding these regulations. For this reason, it will create a legal culture in society regarding the importance of good waste management to create a good and healthy environment.

Good waste management is basically a manifestation of good government administration in order to realize Good Environmental Governance (GEG). The implementation of the GEG principles is an embodiment of the government and regional governments in supporting the creation of a good living environment and realizing the implementation of sustainable development (Purwendah, 2020). The basis for implementing the GEG principles is Article 63 of the PPLH Law, where the article regulates the authority of the government and regional governments in managing the environment. The administration of government based on the principles of good environmental governance means that the principles of good state administration in managing the environment are in accordance with the principles of natural resources and the environment. (NHT, 2009). The role of the government and regional governments in creating waste management is also contained in Articles 5,6,7,8,9 of Law no. 18 of 2008 which contains duties and authorities in government. So that the implementation of GEG principles can also support waste management by the government and regional governments. The important elements in the GEG framework are 1. Sovereignty 2. Power 3. Policy 4. Control 5. Development 6. Responsibility. The elements in the GEG principles can be used as a reference by the government and society in waste management in efforts to enforce environmental laws both preventively and repressively in waste management.

In relation to waste management, the GEG principle criteria that can be applied are the principle of community empowerment (Yuniarti et al., 2023). Regarding waste management in Article 28 of Law no. 18 of 2008 regulates the role of the community, including: paragraph (1) The community can play a role in waste management organized by the Government and/or regional government. Paragraph (2) Roles can be carried out through: a. providing suggestions, considerations and suggestions to the Government and/or regional governments; b. formulation of waste management policies; and/or c. providing suggestions and opinions in resolving waste disputes.

Law no. 18 of 2008 regulates administrative sanctions in the form of government coercion; forced money; and/or revocation of permits. The criminal sanctions in Article 39 are (1) Every person who unlawfully imports and/or imports household waste and/or waste similar to household waste into the territory of the Unitary State of the Republic of Indonesia is threatened with imprisonment for a minimum of 3 (three) years and a maximum of 9 (nine) years and a fine of at least IDR 100,000,000.00 (one hundred million rupiah) and a maximum of IDR 3,000,000,000.00 (three billion rupiah); (2) Every person who unlawfully enters and/or imports specific waste into the territory of the Unitary State of the Republic of Indonesia is threatened with imprisonment for a minimum of 4 (four) years and a maximum of 12 (twelve) years and a fine of at least IDR 200,000,000. 00 (two hundred million rupiah) and a maximum of IDR 5,000,000,000.00 (five billion rupiah). In Article 40, namely (1) Waste managers who unlawfully and deliberately carry out waste management activities without paying attention to norms, standards, procedures or criteria which can result in public health disturbances, security disturbances, environmental pollution and/or environmental damage are threatened with with imprisonment for a minimum of 4 (four) years and a maximum of 10 (ten) years and a fine of at least Rp. 100,000,000.00 (one hundred million rupiah) and a maximum of Rp. 5,000,000,000.00 (five billion rupiah); (2) If the criminal act as intended in paragraph (1) results in the death or serious injury of a person, the waste manager is threatened with imprisonment for a minimum of 5 (five) years and a maximum of 15 (fifteen) years and a fine of at least Rp. 100,000,000 ( one hundred million rupiah) and a maximum of IDR 5,000,000,000 (five billion rupiah).

Thus, efforts related to the provision of administrative sanctions or criminal sanctions constitute repressive law enforcement, while supervision regulated in administrative environmental law has a preventive and corrective function (Takdir, 2011). The manifestation of the preventive function in the form of supervision aims to prevent violations of norms, standards, procedures and criteria related to waste management.

**CLOSING**

**Conclusion**

From the discussion above, conclusions can be drawn regarding the supervision of internet-based broadcast media, which are described as follows:

1. Regulations regarding waste management in Indonesia are regulated in central and regional regulations. Regulations at the central level that have a correlation with waste management or are directly related to waste management, namely Law no. 32 of 2009 concerning Environmental Protection and Management, Law Number 23 of 2014 concerning Regional Government, Law no. 18 of 2008 concerning Waste Management and several regional regulations that have been established by regional governments at the Regency/City level. Regulations regarding environmental law enforcement regarding waste must also apply these character values in carrying out their duties so that the goal of environmental law enforcement can be achieved, namely creating a sustainable environment in order to achieve a just, orderly, prosperous and characterized society.
2. Law enforcement in waste management is also a manifestation of the government and regional governments implementing the principles of Good Environmental Governance with the aim of raising public awareness of the importance of waste management. Environmental law enforcement in the field of waste management refers to 3 legal systems which are a combination of components, namely structure, substance and culture. Apart from that, related to law enforcement in waste management, it can be studied from 2 sides, namely preventive and repressive law enforcement.

**Recommendation**

The following are several suggestions that can be given regarding the research above, including:

1. It is very important to regulate the supervision of law enforcement based on character values in the implementation of various regulations regarding waste management so that the effectiveness of environmental law enforcement can be carried out in a preventive manner by involving the community with programs related to waste management so as to raise public awareness of the importance of the environment. good and healthy life.
2. Programs that can be carried out by the central and regional governments must be community-based management, for example by having waste networks and waste banks so that the community's mindset is that waste can provide benefits and income.

**REFERENCE**

Indonesia. (2009). *Undang-undang Nomor 32 tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup*. Republik Indonesia.

Indonesia. (2014). *Undang-undang Nomor 23 tahun 2014 tentang Pemerintahan Daerah*. Republik Indonesia.

Indonesia, P. R. (2008). *Undang-undang republik indonesia nomor 18 tahun 2008 tentang pengelolaan sampah*. Sekretariat Negara.

Mangku, D. G. S., Yuliartini, N. P. R., Ruslan, R., Menteiro, S., & Surat, D. (2022). The Position of Indegenous People in the Culture and Tourism Developments: Comparing Indonesia and East Timor Tourism Law and Policies. *Journal of Indonesia Legal Studies*, *7*(1).

Marzuki, P. M. (2014). *Penelitian Hukum*. : Kencana Prenada Media Group.

Mukhlis, & Luthfi, M. (2010). *Hukum Administrasi Lingkungan Kontemporer (Diskursus Pengawasan Pengelolaan Lingkungan Hidup dan Pengembangan Hukum Administrasi di Indonesia)*. Setara Press.

Mulyanto. (2013). “Sistem Pengelolaan Sampah Terpadu (Sipengestu) Kelurahan Serengan dalam Kajian Sosiologi Hukum.” *Jurnal Parental*, *1*(2), 5.

NHT, S. (2009). *Hukum Lingkungan*. Pancuran Alam.

Purwendah, E. K. (2019). THE EKO-TEOCRACY CONCEPT IN DISPOSAL SETTLEMENT OF OIL POLLUTION IN THE SEA BY TANKER SHIP. *Ganesha Law Review*, *1*(1), 14. https://doi.org/https://doi.org/10.23887/glr.v1i1.15

Purwendah, E. K. (2020). SEA PROTECTION FROM OIL POLLUTION BY SHIP TANKER. *Ganesha Law Review*, *2*(1), 77. https://doi.org/https://doi.org/10.23887/glr.v2i1.122

Purwendah, E. K., & Djatmiko, A. (2015). PERAN SYAHBANDAR DALAM PENEGAKAN HUKUM PENCEMARAN MINYAK DI LAUT OLEH KAPAL TANKER. *Jurnal Perspektif*, *20*(1).

Purwendah, E. K., Djatmiko, A., Erowati, E. M., Triana, I. D. S., & Pudyastiwi, E. (2022). Ecological and Social justice as Basis on Marine Environment Protection and Preservation in The System of Indonesian Law. *Jurnal Ilmiah Pendidikan Pancasila Dan Kewarganegaraan*, *7*(2).

Purwendah, E. K., Mangku, D. G. S., & Periani, A. (2019). Dispute Settlements of Oil Spills in the Sea Towards Sea Environment Pollution. *Proceedings of the First International Conference on Progressive Civil Society (ICONPROCS 2019)*. https://doi.org/10.2991/iconprocs-19.2019.51

Purwendah, E. K., & Periani, A. (202 C.E.). FORMULATION OF LOSSES FOR OIL POLLUTION DUE TO TANKER SHIP ACCIDENT IN THE INDONESIAN LEGAL SYSTEM VALUE OF JUSTICE. *Jurnal Pendidikan Kewarganegaraan Undiksha*, *8*(3).

Purwendah, E. K., & Wahyono, D. J. (2022). WASTE BANK AS AN ALTERNATIVE TO COMMUNITY-BASED WASTE MANAGEMENT. *Jurnal Komunikasi Hukum (JKH)*, *8*(2), 10. https://doi.org/https://doi.org/10.23887/jkh.v8i2.47084

Ridwan, H. (2011). *Hukum Administrasi Negara Edisi Revisi*. PT. Grafindo Persada.

Setiadi, A. (2015). Studi Pengelolaan Sampah Berbasis Komunitas pada Kawasan Permukiman Perkotaan di Yogyakarta. *Jurnal Wilayah Dan Lingkungan*, *3*(1), 27. https://doi.org/10.14710/jwl.3.1.27-38

Syamsul, A. (2012). *Hukum Perlindungan dan Pengelolaan Lingkungan Hidup Di Indonesia*. PT Sofmedia.

Takdir, R. (2011). *Hukum Lingkungan di Indonesia*. PT. Raja Grafindo Persada.

Yuniarti, E., M, D., Wahyuni, F., Fadillah, N., & Mangku, D. G. S. (2023). Characteristics of plants in public areas of green open spaces in Padang City, Indonesia. *Caspian Journal of Environmental Sciences*, *21*(3), 517. https://doi.org/10.22124/CJES.2023.6927