

Criminal Offence of Dumping Pig Carcasses into the Sea Based on Unlawful Acts

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Abstract

Introduction: This study examines the criminal aspects of dumping pig carcasses into the sea in East Flores. This phenomenon has significant ecological and social impacts.

Purposes of the Research: The purpose of the research is to analyze the application of the concept of criminal law in the case and identify obstacles to law enforcement.

Methods of the Research: Using normative-empirical research methods with a case study approach, data was collected through document studies and interviews with authorities.

Findings of the Research: The results of the study show that the act of dumping pig carcasses into the sea in East Flores has met the elements of criminal law, especially related to criminal law. The results of the study show that the act of dumping animal carcasses into the sea meets the elements of illegal acts because it causes environmental pollution, threatens public health, and damages marine ecosystems and coastal economic activities. This act is contrary to the Environmental Protection and Management Law, the Marine Law, and regulations on animal health. Perpetrators can be held criminal, civil, and administrative liable in accordance with applicable legal provisions. However, law enforcement faces challenges such as: lack of public awareness, difficulty in proof. This research contributes to the understanding of the existence and application of environmental criminal law in coastal areas.

Keywords: Marine Pollution; Animal Carcasses; Environmental Crimes; Criminal Liability.

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INTRODUCTION

It is important for us as humans to always preserve seawater as the main support for life. Therefore, people are prohibited from throwing garbage and waste and even animal carcasses that can pollute water so that they can disrupt the existing ecosystem. Marine pollution is one of the environmental problems faced today and is often caused by human activities or activities. Most human-caused marine pollution is done either directly or indirectly. Indonesia, where most of its territory is the sea and many people depend on the sea for their livelihood, it is very necessary to protect the sea from various pollution so that marine resources remain sustainable. Marine Pollution according to Government Regulation Number 19/1999 concerning Pollution Control and/or Marine Destruction is the entry or inclusion of living things, substances, energy, and/or other components into the marine environment by human activities so that the quality drops to a certain level which causes the marine environment to no longer comply with seawater quality standards and/or its function. In line with that, the Regulation of the Minister of Environment and Forestry Number 6 of 2021 concerning Procedures and Requirements for the Management of Hazardous and Toxic Material Waste emphasizes that every person or business actor is obliged to manage B3 waste correctly through procedures for reducing, storing, collecting,

transporting, utilizing, processing, and final stockpiling to prevent environmental pollution, including marine pollution.

The emergence of environmental cases that occur in various parts of the world cannot be separated from human exploitative attitudes and behaviors towards the environment. Such attitudes and behaviors are nothing but the implication of the still strong view of anthropocentrism, which always puts people and their interests at the center of everything. Humans are considered the most decisive in the order of ecosystems, so they can do anything to the environment, even in ways that damage the environment. As a result, there has now been a so-called environmental crisis, such as a crisis of water, clean air, the extinction of animals, and so on. Today's environmental problems are no longer a problem for just one or two countries, but have become a global problem involving almost all countries. The environment has global characteristics, so it cannot be partially addressed. Environmental damage and its impact in a country is not only felt by the country where the pollution or environmental damage occurs, but will also be felt by other countries.¹

The disposal of animal carcasses can cause environmental contamination and the most severe is environmental pollution. Marine pollution is the entry of materials or energy into the marine environment, either directly or indirectly by humans, which causes destructive impacts such as endangering biological resources, interfering with human health, inhibiting activities in the sea, degrading seawater quality, and reducing environmental comfort, in the context of environmental law, various laws and regulations are drafted to regulate and sanction pollution acts, so that it becomes a strong legal basis for Indonesia in protecting and enforcing environmental conservation efforts.²

Juridically and sociologically, the dumping of animal carcasses into the sea in Larantuka is a serious problem because it causes environmental pollution, threatens public health, and disturbs public order. This action pollutes the waters that are the source of livelihood for fishermen and damages marine ecosystems and coastal economic activities. From a legal aspect, this act is a criminal act because it is contrary to regulations regarding environmental protection and public health. The cases that occurred showed low legal awareness, weak supervision, and lack of law enforcement against these violations.

Environmental criminal liability in the context of criminal law enforcement is one part of criminal law in addition to criminal acts, criminal offenses. Criminal accountability is an important thing in criminal law, because there is no meaning of a crime that is threatened to the person who commits a criminal act if the person who does it is not asked to be criminally responsible. If a person is suspected of committing a criminal act but is not processed based on the criminal procedure law to determine whether or not he can be held criminally accountable, it will be able to lower the authority of criminal law in society. This will be able to cause a public view that there is no need to be afraid of committing criminal acts because they will not be asked for criminal responsibility.

Environmental criminal law is criminal and if there is no crime, then there will be no criminal law. This crime is threatened against a person who commits an act that is prohibited by law, through criminal liability. The criminal threat contained in the law is actually imposed on the person who is proven guilty of committing a criminal act. Criminal liability is based on the principle of error, the principle of error in Dutch reads *geen straf zonder schuld* meaning there is no crime without fault. Thus, a person can only be punished

¹ Ruslan Renggong, *Hukum Pidana Lingkungan* (Jakarta ; Prenadamedia Group, 2018). p. 4-6.

² R.M. Gatot P. Soemartono, *Hukum Lingkungan Indonesia* (Sinar Grafika, Jakarta, 1996). p. 18.

if there is a mistake in that person. It is not fair that people who have no fault against him are sentenced to death.³

The lack of public understanding to maintain marine conditions is one of the problems that must be immediately overcome by the Government to explain and understand so that public awareness about the importance of the sea arises. The solution is to put a maritime curriculum for primary to secondary education as a form of understanding for the younger generation to protect marine and coastal resources in a good way and will give rise to a love for the sea. The Law on Environmental Protection and Management contains the principles, objectives and objectives of environmental management. Environmental management organizers based on the principle of state responsibility, sustainable principles and benefits principles that aim to realize the direction and approach of environmental management are based on a broad and sharp perspective far ahead so that the community is able and understandable in the world of the environment.

Larantuka is the capital of East Flores Regency, known for its natural beauty and natural sea. However, this beauty is polluted by the actions of people who throw pig carcasses into the sea, an act that not only damages the marine ecosystem but also has the potential to cause diseases for coastal residents. The case of the disposal of pig carcasses occurred on March 10, 2025 in the Kelapa Enam tourist area, Weri Village, and was known through a video uploaded by a Facebook account named Fasco Mitten which showed a pig carcass wrapped in a sack on the beach. The perpetrators of the dumping are not yet known, but this action caused an unpleasant smell and anxiety among the local community. According to the Head of Animal Health of the East Flores Plantation and Livestock Service, Vianey Kiti Tokan, this act is very unfortunate because it can cause the spread of the African Swine Fever (ASF) virus and other diseases that endanger public health. This act is also classified as environmental pollution as regulated in Law Number 32 of 2009 concerning Environmental Protection and Management, which regulates criminal threats for anyone who intentionally or through their negligence causes pollution and damage to the environment.

The provisions regarding environmental criminal sanctions are regulated in Article 98 paragraph (1) of Law Number 32 of 2009 concerning Environmental Management explained that "every person who deliberately commits an act that results in the violation of ambient air quality standards, water quality standards, seawater quality standards, or environmental dredge standards, shall be sentenced to a minimum of 3 (three) years in prison and a maximum of 10 (ten) years and a minimum fine IDR. 3,000,000,000.00 (three billion rupiah) and at most IDR. 10,000,000,000.00 (ten billion rupiah). In the context of the previous discussion, the practice of disposing of waste in the form of animal carcasses into the sea showed symptoms of violations of environmental laws which were characterized by pollution, declining marine air quality, and disturbance of ecosystem balance.

This act causes public unrest due to unpleasant odors and the potential for the spread of diseases, as well as has an impact on the decline in the quality of the environment in coastal areas. Furthermore, this condition also interferes with marine tourism areas that should be kept clean and sustainable, thus having implications for a decrease in tourist attractions and economic potential of the local community. Law Number 18 of 2008 concerning Waste Management prohibits everyone from throwing waste into environmental media, including rivers and seas, because it can cause pollution and be threatened with criminal penalties in

³ Alvi syarin, *Beberapa Isu Hukum Lingkungan Kepidanaan* (Sofmedia, Medan, 2009), 8. 19.

Article 40. The act of dumping animal carcasses into the sea also has the potential to violate Law Number 18 of 2009 jo. Law Number 41 of 2014 concerning Animal Husbandry and Health which requires the safe and hygienic handling of animal carcasses and prohibits acts that can pose health risks and environmental pollution. In addition, the protection of seawater quality and coastal ecosystems is also affirmed in Law Number 32 of 2014 concerning Marine Affairs which regulates the prohibition of any action that can cause pollution and damage to marine resources. Thus, actions that result in exceeding environmental quality standards are not only a violation of the Environmental Protection and Management Law, but also have the potential to violate the Waste Management Law, the Livestock and Animal Health Law, and the Marine Law as a complementary legal framework in environmental pollution control. Based on the above background, the question that can be formulated to study and analyze this paper is Is the act of dumping animal carcasses into the sea an act against environmental criminal law? What are the legal regulations that regulate the prohibition and criminal sanctions for the dumping of animal carcasses into the sea?

METHODS OF THE RESEARCH

This research method is descriptive by using a normative legal approach (normative juridical) which focuses on the study of written legal norms, principles, systematics, and the application of applicable law. This study aims to analyze whether the act of dumping animal carcasses into the sea can be qualified as an act against the criminal law and examine the provisions of the prohibition and sanctions. Data collection is carried out through literature studies and documentation studies with searching, collecting, and assessing techniques of relevant legal materials. The data used includes primary legal materials (laws and regulations such as the 1945 Constitution, the Criminal Code, and Law Number 32 of 2009), secondary legal materials (books, journals, and expert opinions), and tertiary legal materials (dictionaries and other supporting sources). Data collection was carried out through literature studies and documentation. Primary and secondary legal data are analyzed qualitatively using grammatical and systematic interpretation methods to understand the meaning of legal norms. Field findings are then analyzed descriptively-qualitatively to identify behavioral patterns, obstacles, and perceptions of related parties.

RESULTS AND DISCUSSION

A. Unlawful Acts and Criminal Liability The act of dumping animal carcasses into the sea as an act that is contrary to the provisions of criminal law and environmental law

1. Elements of Unlawful Acts in the Case of Dumping Pig Carcasses into the Sea

The act of dumping pig carcasses into the sea is an act that can be qualified as an unlawful act, from a criminal law perspective. In addition to being contrary to the provisions of laws and regulations in the environmental sector, these actions are also not in line with the principles of biosecurity that must be applied by every livestock business actor. The principle of biosecurity emphasizes the obligation to prevent the spread of disease through proper management of animals and waste, safeguarding the environment to avoid contamination of air, soil, and air media, and supervising animal deaths, including handling carcasses safely and in accordance with health standards. To assess the existence of the aforementioned unlawful acts, it is necessary to examine the elements inherent in it. Based

on the results of normative research, the act of dumping pig carcasses into the sea in the East Flores region meets the elements of unlawful acts⁴, including:

a) The existence of an act

The act in this case, in question is an active action in the form of dumping a pig carcass into the sea by a certain individual or group. The act of throwing a pig carcass into the sea intentionally or due to negligence of an act, either in the form of an active or passive action. This act is carried out consciously with the intention of getting rid of animal carcasses without going through a waste management process in accordance with the provisions of the law. Then the element of deeds has been fulfilled.⁵ The existence of an act, the non-destruction of animal carcasses in accordance with applicable provisions can cause legal consequences, especially if the carcass is disposed of into environmental media such as the sea, because from an environmental legal perspective, animal carcasses are categorized as biological waste that has the potential to pollute the environment if not managed properly. The obligation to destroy animal carcasses is part of efforts to prevent the spread of disease and protect the environment as reflected in the principles of biosecurity and the provisions of laws and regulations in the field of livestock and animal health.

b) The act is against the law

The dumping of animal carcasses into the sea is contrary to the provisions of Law Number 32 of 2009 concerning Environmental Protection and Management, which prohibits everyone from committing acts that result in pollution and/or destruction of the environment. An act is said to be against the law if it is contrary to: 1) laws and regulations, 2) the rights of others, 3) the legal obligations of the perpetrator, 4) morality and propriety in society.

In the case of dumping pig carcasses into the sea, the act violates several legal provisions, including: "Law Number 32 of 2009 concerning Environmental Protection and Management, especially the prohibition of committing acts that result in pollution and/or environmental destruction; " Provisions regarding the management of animal waste that must be carried out safely and not pollute the environment. In addition, this act is also contrary to the norms of propriety because the sea is the source of life of coastal communities that must be preserved.

c) The existence of consequences

The consequences of dumping pig carcasses into the sea include seawater pollution, disruption of marine ecosystems, and the potential spread of diseases that can endanger public health.⁶

d) Presence of error (intentional or omission)

The perpetrator can be considered guilty if the act is done intentionally or at least due to negligence without paying attention to the environmental and health impacts, in relation to the act of dumping animal carcasses into the sea, the principle of strict liability of livestock business actors has the potential to have a serious impact on the environment and public health. Therefore, livestock business actors can still be held legally responsible for pollution that occurs due to the disposal of animal carcass waste, without first having to prove the

⁴ Moeljatno, *Principles of Criminal Law* (Rineka Cipta, Jakarta, 2008). p. 63.

⁵ Andi Hamzah, *Asas-Asas Hukum Pidana* (Rineka Cipta, Jakarta, 2014). p. 102.

⁶ Muhammad Akib, *Hukum Lingkungan Perspektif Global Dan Nasional* (Raja Grafindo Persada, Jakarta, 2016). p. 133.

existence of intentionality (*dolus*) or negligence (*culpa*),⁷ With the fulfillment of these elements, the act of dumping pig carcasses into the sea can be qualified as an act against the criminal law.⁸

2. Legal Subjects and Forms of Criminal Liability That Can Be Imposed

The regulation of legal subjects and criminal liability in the context of environmental criminal law is based on the provisions of laws and regulations that specifically regulate environmental protection and management. Environmental criminal law is part of special criminal law (*ius specialis*) which aims to provide protection for the environment through criminal threat sanctions.⁹ Therefore, the subject of law in environmental crimes is not only limited to natural persons (*natuurlijke persoon*), but also includes business entities or corporations (*rechtspersoon*) whose activities have the potential to cause pollution or environmental damage.¹⁰

The main legal basis regarding the subject of law in environmental crimes is regulated in Law Number 32 of 2009 concerning Environmental Protection and Management. Article 1 number 32 of the Environmental Protection and Management emphasizes that "every person" is an individual or business entity, both legal and unincorporated. Furthermore, Article 116 paragraph (1) of the Law on Environmental Protection and Management stipulates that if an environmental crime is committed by, for, or on behalf of a business entity, criminal charges can be imposed against: a) the business entity; and/or b) The person who gives the order or who acts as the leader of the activity in the criminal act. This provision expressly indicates that corporations that are considered the subject of criminal law in environmental cases, and criminal liability can be charged both to business entities and to the management or party who gives the order.¹¹

In addition to the Environmental Protection and Management Act, the provisions regarding legal subjects and criminal liability can also be found in the Criminal Code as a general criminal law, in the Criminal Code, it is emphasized through the principle of legality in Article 1 paragraph (1) that no act can be punished except based on the provisions of pre-existing laws. The Criminal Code basically recognizes individual criminal liability based on the principle of error (*geen straf zonder schuld*), which is that there is no crime without fault.¹² This means that a person can only be held accountable if proven to have committed an unlawful act with elements of intentionality (*dolus*) or negligence (*culpa*).¹³

The development of national criminal law, the regulation of corporate liability is also affirmed in Law Number 1 of 2023 concerning the Criminal Code, which explicitly recognizes the corporation as the subject of a criminal act and regulates the forms of crime that can be imposed on the corporation, such as fines, revocation of business licenses, dissolution of corporations, and other additional crimes. This provision strengthens the juridical basis that legal entities can be held criminally responsible, including environmental crimes.

Based on environmental criminal law, the Environmental Protection and Management Law, as well as the Criminal Code as a general criminal law, it can be affirmed that the legal

⁷ Takdir Rahmadi, *Hukum Lingkungan Di Indonesia* (Jakarta: Rajawali Pers, 2015). p. 287.

⁸ Andi Hamzah, *Hukum Pidana Indonesia* (Sinar Grafika, Jakarta, 2017). p. 109.

⁹ Deni Bram, *Hukum Lingkungan Hidup* (Bekasi: Gramata Publishing, 2017). p. 87-89.

¹⁰ Deni Bram. *Ibid*, p. 90.

¹¹ Deni Bram, *Hukum Lingkungan Hidup*. p. 112.

¹² Sudarto, *Kapita Selekta Hukum Pidana* (Bandung: Alumni, 1986). p. 45.

¹³ Moeljatno, *Asas-Asas Hukum Pidana*. p. 85.

subjects in the crime of dumping animal carcasses into the sea include individuals and business entities. Both can be held criminally liable if proven to meet the elements of the criminal act as stipulated in the applicable laws and regulations. This provision shows that the Indonesian legal system has provided a clear foundation on who can be held accountable and what forms of criminal liability can be imposed in environmental cases.

1) Natuurlijke Persoon

An individual is the main legal subject in criminal law, in the case of dumping a pig carcass into the sea in the East Flores region, the legal subject of an individual can be: a) Pig breeder; b) Animal owners; c) Parties who directly dump pig carcasses into the sea; or d) The party who gave the order to carry out the removal. An individual can be held criminally liable if it is proven that they have committed the act of dumping animal carcasses into the sea intentionally or due to negligence, and meet the elements of criminal liability as stipulated in laws and regulations.

2) Rechtspersoon

In addition to individual persons, legal entities can also be subject to criminal law, especially in environmental crimes. This is in line with the provisions of Law Number 32 of 2009 concerning Environmental Protection and Management which recognizes corporations as the subject of criminal law,¹⁴ In the context of dumping pig carcasses into the sea, a legal entity can become a legal subject if the act is carried out in the context of business activities, for example: livestock companies; animal slaughter efforts; or other business entities that produce animal carcass waste. If the disposal is carried out in the name of a legal entity or for the benefit of a legal entity, then criminal liability can be imposed on the legal entity, as well as on the management or party who gave the order.

3) Forms of criminal liability that can be imposed

Criminal liability in the criminal act of dumping animal carcasses into the sea can be imposed in several forms, depending on the subject of the law and the degree of wrongdoing of the perpetrator.

a) Individual Criminal Liability

Individual criminal liability is imposed on individuals who directly commit the act of dumping pig carcasses into the sea that results in pollution and/or damage to the environment. This basis for accountability refers to the general principles of criminal law as stipulated in the Criminal Code, especially the principle of legality (Article 1 paragraph (1)) and the principle of error (*geen straf zonder schuld*)¹⁵. This form of accountability is based on the existence of: 1) Criminal acts; 2) Mistakes in the form of intentional or omission; 3) Responsible ability; and 4) The absence of justification or forgiveness.

Acts in the context of environmental law, which cause pollution or environmental damage may be subject to criminal sanctions as stipulated in the criminal provisions of Chapter XV of the Environmental Protection and Management Act, especially Article 98 and Article 99, which regulate criminal penalties against any person who intentionally or due to his negligence commits an act that results in exceeding environmental quality standards. Therefore, if the act of dumping animal carcasses into the sea is proven to meet the elements

¹⁴ Muladi, *Kapita Selekt Sistem Peradilan Pidana* (Badan Penerbit UNDIP, Semarang, 1995). p, 56.

¹⁵ Kitab Undang-Undang Hukum Pidana, Pasal 1 ayat (1)

of environmental pollution and is carried out intentionally or negligently, the perpetrator can be sentenced to imprisonment and/or a fine according to these provisions.

b) Corporate Criminal Liability

The concept of corporate criminal liability in environmental crimes is known as a form of expansion of the subject of criminal law. The regulation regarding this matter is expressly contained in Article 116 of the Law on Environmental Protection and Management, which states that if a criminal act is committed by, for, or on behalf of a business entity, criminal charges can be filed against the business entity and/or the person who gives the order or who acts as the leader of the activity. The corporation can be held criminally liable if a criminal act is committed: 1) By the management; 2) By a person who works on the basis of employment relationship; or 3) By another party acting for and on behalf of the corporation. The form of corporate criminal liability can be in the form of: 1) Criminal fines against the corporation; 2) Deprivation of profits from criminal acts; 3) Temporary suspension of business activities; and/or 4) Revocation of business license.

In addition to corporations, administrators or givers can also be held personally criminally liable if proven to have an active role in the occurrence of the criminal act.¹⁶ Based on the description above, it can be emphasized that the legal subjects in the crime of dumping pig carcasses into the sea in the East Flores region include individuals and legal entities. Both can be held criminally liable if proven to have committed acts that meet the elements of environmental crimes. The forms of criminal liability that can be imposed include individual and corporate criminal liability, with criminal sanctions adjusted to the level of error and the impact caused by the act.

3. Elements of Fault and Impact of Environmental Pollution

The element of error in criminal law is the main requirement for criminal responsibility to be asked for criminal responsibility against the perpetrator. The principle of *geen straf zonder schuld* (no crime without fault) emphasizes that a person can only be convicted if there is an inner connection between the perpetrator and the act he commits.¹⁷ The elements of guilt in the crime of dumping pig carcasses into the sea can be seen in the form of intentionality (*dolus*) and negligence (*culpa*). 1) Intentionality (*Dolus*): Intentionality can be interpreted as the inner attitude of the perpetrator who knows and desires the actions and consequences caused, in the context of dumping a pig carcass into the sea, the element of intentionality is fulfilled if the perpetrator: a) Consciously throws the pig carcass into the sea; b) Knowing that animal carcasses can cause environmental pollution and health problems; and c) Continue to do the act without paying attention to the impact. Intentionality in this case does not have to be interpreted as the perpetrator directly wants the pollution to occur, but it is sufficient if the perpetrator is aware of the possibility of the impact of pollution, but still commits the act. 2) Negligence (*Culpa*): In addition to intentionality, the element of fault can also be in the form of negligence, namely a lack of care or neglect of legal obligations that should be complied with. In the case of dumping pig carcasses into the sea, negligence can occur if: a) The perpetrator does not manage the animal carcass in accordance with the provisions of the law; b) The perpetrator considers dumping into the sea as normal without considering the impact.

¹⁶ Deni Bram, *Hukum Lingkungan Hidup*. p. 112.

¹⁷ Moeljatno, *Perbuatan Pidana Dan Pertanggungjawaban Dalam Hukum Pidana* (Bina Aksara, Jakarta, 1983). p. 45.

The principle of *geen straf zonder schuld* is a fundamental principle in criminal law which means that there is no crime without fault. This principle emphasizes that a person can only be convicted if it can be proven that there is a mistake in the perpetrator, either in the form of intentionality (*dolus*) or forgetfulness (*culpa*). Thus, punishment is not solely based on the consequences caused, but also on the perpetrator's mental attitude towards his actions. The principle of *geen straf zonder schuld* is the main basis in determining criminal liability. Dumping of pig carcasses into the sea, a person can only be held criminally responsible if: 1) Proven to have committed a prohibited act; 2) The act was done by mistake; 3) The perpetrator has the ability to be responsible (*toerekeningsvatbaarheid*).

If these three elements are met, the perpetrator can be held criminally liable in accordance with the provisions of the laws and regulations in the field of the environment. The application of the principle of *geen straf zonder schuld* in environmental criminal law has an important role to ensure justice. Although environmental law adheres to a strict approach to environmental protection, criminalization must still pay attention to the elements of the perpetrator's fault. Therefore, the disposal of pig carcasses into the sea cannot necessarily be subject to criminal sanctions if it cannot be proven that there is a mistake. However, if it is proven that the perpetrator knows or should suspect that his actions have the potential to pollute the environment, then the principle of *geen straf zonder schuld* has been fulfilled and the punishment can be applied legally and fairly.

4. Contaminated Impacts on the Marine Environment, Public Health, and Coastal Economic Activities

The discharge of pig carcasses into the sea factually creates conditions that in the perspective of environmental science can be categorized as contamination, namely the entry of biological materials, organic substances, and pathogenic microorganisms into the environmental media so as to affect the physical, chemical, and biological quality of the waters.¹⁸ The concept of contamination in a scientific sense is descriptive, because it only indicates the exposure or mixing of certain substances in the environment without requiring the fulfillment of certain legal parameters.

In contrast, Indonesian environmental law uses the term environmental pollution as a juridical concept. Based on Article 1 number 14 of Law Number 32 of 2009 concerning Environmental Protection and Management, environmental pollution is the entry or inclusion of living things, energy substances, and/or other components into the environment by human activities so that it exceeds the environmental quality standards that have been set. Thus, a contamination can be qualified as pollution in the legal sense if it is proven to meet the elements: (1) the existence of human acts, (2) the entry of components into the environment, and (3) the exceedance of environmental quality standards. Article 20 of the Environmental Protection and Management Law emphasizes that the determination of pollution is based on environmental quality standards set by the government. If these elements are met, the act has the potential to be subject to criminal sanctions as stipulated in Article 98 and Article 99 of the Environmental Protection and Management Law. Article 98 regulates criminal sanctions for every person who deliberately commits an act that results in the violation of environmental quality standards, while Article 99 regulates criminal liability for negligence that causes similar consequences. Therefore, in this context, the discussion is focused on the factual impact caused by contamination caused by the dumping

¹⁸ Takdir Rahmadi, *Hukum Lingkungan Di Indonesia* (Jakarta: Rajawali Pers, 2018). p. 95.

of pig carcasses into the sea on the marine environment, public health, and coastal economic activities.

5. Impact on the Marine Environment

The dumping of pig carcasses into the sea causes a deterioration in the quality of the aquatic environment. Animal carcasses that undergo the decay process will release organic substances, pathogenic bacteria, and toxic gases such as ammonia and hydrogen sulfide. This condition has the potential to reduce the level of dissolved oxygen in seawater.¹⁹ As a result, there are: a) Death of marine life, such as fish and other marine organisms due to lack of oxygen; b) Disturbance of the balance of marine ecosystems, especially in relatively closed coastal areas; c) Visual pollution and unpleasant odors, which reduce the aesthetic value of the marine environment. In addition, pig carcasses dumped into the sea have the potential to carry disease agents that can spread through seawater and affect other organisms, thus increasing the risk of sustainable ecosystem damage.

6. Dampak terhadap Kesehatan Masyarakat

Marine pollution due to the disposal of pig carcasses has a direct impact on the health of coastal communities, especially those who use seawater for daily activities or consume marine products from polluted areas. The impact on public health has juridical relevance because public health protection is a state obligation as stipulated in Law Number 17 of 2023 concerning Health, which emphasizes that health implementation aims to protect the public from health risk factors, including environmental factors.²⁰ In addition, in the context of environmental law, if pollution causes injury or illness, then the criminal threat can be aggravated as stipulated in Article 98 paragraph (2) and paragraph (3) of Law Number 32 of 2009 concerning Environmental Protection and Management, if environmental pollution causes people to be injured, sick, or die, then the criminal threat against the perpetrator can be aggravated.

Health impacts that can arise include: a) Skin diseases due to direct contact with polluted seawater; b) Indigestion due to the consumption of fish or seafood contaminated with pathogenic bacteria; c) Risk of zoonotic diseases, considering that pig carcasses can be a medium for the spread of diseases from animals to humans. This condition causes a sense of insecurity in the community and has the potential to reduce the quality of life of coastal communities. Therefore, the potential for health problems due to marine contamination is not only a medical or social problem, but can also be the basis for imposing criminal liability if the elements of the crime are met.

7. Impact on Coastal Economic Activity

The economic activities of coastal communities are highly dependent on the preservation of the marine environment. Pollution due to the dumping of pig carcasses into the sea has a significant impact on the economic sector, including: a) Decrease in fishermen's catches, due to reduced fish populations and damage to marine habitats; b) Decreased selling value of marine products, due to consumer concerns about food safety; c) Inhibition of coastal tourism activities, due to unpleasant odors and polluted water conditions; d) The economic losses of the community, especially fishermen and small business actors who depend on marine resources for their livelihoods. Pollution in the long term can worsen the socio-

¹⁹ R. Widodo, "Pencemaran Laut Akibat Limbah Organik," *Jurnal Hukum Lingkungan Indonesia* 6, no. 2 (2020): 145.

²⁰ Law Number 17 of 2023 concerning Health, Statute Book of the Republic of Indonesia Number 105 of 2023.

economic conditions of coastal communities and increase the potential for social conflicts due to declining sources of livelihood.

8. Linkage to Legal Liability

The impact of pollution shows that the dumping of pig carcasses into the sea is not only a technical problem of waste management, but an act that has a wide impact and is detrimental to the public interest. Therefore, these acts deserve to be qualified as unlawful acts that can be subject to criminal, civil, or administrative liability in accordance with applicable laws and regulations. In the context of livestock law, Law Number 41 of 2014 concerning Livestock and Animal Health shows a paradigm shift from an animal health approach to public health protection, which places public health as the top priority in the management of animals and animal products. This shift confirms that the handling of animal carcasses is not only aimed at protecting animal health, but also to prevent the risk of spreading diseases and pollution that impacts humans and the environment.

The impact of contamination that has been described previously shows the potential disruption to the balance of marine ecosystems, public health, and the economic activities of coastal communities. However, to assess whether the impact can be qualified as a violation of the law, further analysis of the provisions of the laws and regulations governing waste disposal and its management is needed. So that the next discussion will outline the juridical basis that is the basis for assessing the act of dumping pig carcasses into the sea from the perspective of environmental law, animal health, and the national criminal law system.

B. Waste Disposal Regulations and Their Management

Waste management, including animal waste and livestock carcasses, is expressly regulated in various laws and regulations in Indonesia. This arrangement aims to prevent pollution and/or destruction of the environment and protect public health. Waste management in the national legal system is not only seen as an administrative obligation, but also as part of a legal responsibility that has civil and criminal implications in the event of a violation.

Normatively, every activity that has the potential to have an impact on the environment must be carried out by paying attention to the principles of prudence, prevention, and responsibility for the consequences caused. Livestock carcasses, as biological waste, have the potential to pose ecological and health risks if not managed according to applicable standards. Therefore, regulations on waste management are regulated not only in the environmental law regime, but also in the animal health legal regime, as well as the protection of the marine environment.

The disposal of pig carcasses into the sea, legal analysis cannot be limited to just one regulation, but must include all provisions that regulate environmental pollution, waste management, animal disease control, and protection of marine areas as part of the environment, so the discussion in this subchapter will systematically outline the relevant laws and regulations as a juridical basis to assess whether the act meets the elements of violation of the law and can give rise to criminal liability.

1. Regulations in the Environmental Protection and Management Act

Law Number 32 of 2009 is the main legal basis in waste management and environmental pollution prevention. Some important relevant provisions include: a) Article 1 number 14,

which defines environmental pollution as the entry or inclusion of living things, substances, energy, and/or other components into the environment by human activities so as to exceed environmental quality standards; b) Article 20, which affirms that everyone is obliged to maintain the preservation of environmental functions; c) Article 69 paragraph (1), which expressly prohibits everyone: dumping waste into environmental media without permission; committing acts that result in pollution and/or destruction of the environment.

The technical provisions for the implementation of Law Number 32 of 2009 are regulated in Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management. This Government Regulation emphasizes that every business plan and/or activity that has the potential to have an impact on the environment must have approval by the Environment Agency as an operational prerequisite. In addition, it is also regulated regarding Seawater Quality Standards and the provision that waste disposal into environmental media can only be carried out if it meets the set standards and obtains approval from the authorized agencies.

The dumping of pig carcasses into the sea clearly meets the elements of the prohibition because animal carcasses are biological waste that can pollute marine waters.²¹ Thus, dumping pig carcasses into the sea without permits and without management according to standards has the potential to violate these provisions. If the act results in exceeding environmental quality standards, the perpetrator may be subject to criminal sanctions as stipulated in Article 98 and Article 99 of the Environmental Protection and Management Law.

2. Regulation on the Management of Animal Waste and Livestock Carcasses

Animal carcasses, especially livestock, are categorized as biological waste that must be managed specifically because they have the potential to pose a risk of environmental pollution and the spread of disease. The obligation to manage livestock carcasses in the context of national law is not only a moral or technical obligation, but it is a legal obligation that is expressly regulated in laws and regulations. The management of livestock carcasses must be carried out in a safe way, such as through burial according to environmental health standards, incineration (*incineration*), or other methods that do not pollute the environment and do not pose a risk of spreading the disease.

The regulation regarding these obligations is contained in Law Number 18 of 2009 concerning Animal Husbandry and Health as amended by Law Number 41 of 2014. Article 59 paragraph (1) states that "Every person who owns and/or maintains animals is obliged to prevent and control animal diseases." This provision confirms that the owner or manager of livestock is responsible for preventing the potential spread of diseases, including those that can arise from animal carcasses that are not handled properly. Furthermore, Article 60 paragraph (1) states that "The handling of sick animals and animal carcasses must be carried out hygienically and in accordance with the rules of animal health." This provision expressly requires the existence of certain hygiene standards and procedures in the management of livestock carcasses.

Technically, the procedures for handling and destroying animal carcasses are further regulated in the Regulation of the Minister of Agriculture Number 64/Permentan/OT.140/5/2013 concerning Supervision and Handling of Animal Diseases, which stipulates that animal carcasses that have the potential to transmit diseases must be

²¹ Takdir Rahmadi, *Hukum Lingkungan Di Indonesia*, 2015. p. 156.

destroyed through safe means, such as: a) Burial according to environmental health standards; b) Incineration (incineration); or; c) Other methods that do not pollute the environment.

This provision indicates that the disposal of animal carcasses into environmental media directly, including into the sea, is not included in the legally justified method. In addition, as biological waste, livestock carcasses are also subject to the provisions of Law Number 32 of 2009 concerning Environmental Protection and Management. Article 69 paragraph (1) letter e states that "Everyone is prohibited from dumping waste into environmental media without permission." Considering that the sea is part of the environmental media, the dumping of pig carcasses into the sea without permission and without management according to standards is an act that is contrary to these provisions.

Based on these provisions, it can be affirmed that the careless disposal of livestock carcasses, especially into the sea, is not only contrary to the principles of responsible waste management, but also violates legal obligations in the field of animal health and environmental protection. So that these actions have the potential to cause the spread of disease and pollution of aquatic ecosystems, so that they have serious legal consequences if proven to meet the elements of violations regulated in the applicable laws and regulations.

3. Regulations Related to Marine Environmental Protection

The marine environment is part of the environment that receives special protection in the national legal system because it has a very important ecological, social, and economic function. Ecologically, the sea acts as a buffer ecosystem for life and the habitat of various biota. Socially and economically, the sea is a source of livelihood for coastal communities and supports the fisheries sector and other economic activities. Therefore, the sea cannot be used as a waste disposal site without legal regulation and permits, because any form of marine pollution has the potential to cause cross-regional and long-term impacts.

The sea within the framework of environmental law, is included in the category of environmental media that is protected under Law Number 32 of 2009 concerning Environmental Protection and Management. Article 69 paragraph (1) letter e states that "Everyone is prohibited from dumping waste into environmental media without permission." This provision emphasizes that any act of dumping waste, including biological waste in the form of animal carcasses, into the sea without permission is an act that is normatively prohibited. Therefore, if in the results of the study it is found that there is an act of dumping pig carcasses into the sea without going through licensing procedures and without meeting environmental standards, then juridically the prohibition element as stipulated in the provision has been fulfilled.

Furthermore, the definition of environmental pollution in Article 1 number 14 of Law Number 32 of 2009 states that pollution occurs when the entry of living things, substances, or other components into the environment by human activities results in exceeding the environmental quality standards that have been set. Pig carcasses that are thrown into the sea will undergo a decay process that produces organic substances and microorganisms that have the potential to degrade the quality of seawater. If these conditions cause the seawater quality standards to be exceeded, then legally there has been environmental pollution as referred to in the law.

Protection of the sea is also affirmed in Law Number 32 of 2014 concerning Marine Affairs. Article 52 paragraph (1) states that "Everyone is prohibited from polluting and/or

destroying the marine environment." This provision reinforces that the sea has a special protection regime and cannot be used as a dumping ground for waste freely. The act of dumping pig carcasses into the sea is not only assessed from the perspective of waste management, but also from the perspective of protecting marine areas as part of sovereignty and national interest.

Regarding criminal liability, if the consequences of the disposal of the pig carcass are proven to result in exceeding seawater quality standards, then the act has the potential to meet the elements of Article 98 paragraph (1) of Law Number 32 of 2009 which states that every person who deliberately commits an act that results in exceeding seawater quality standards is punished. The element of "everyone" refers to the legal subject of the perpetrator, the element of "intentionally" is related to the existence of awareness and willingness to do the act, while the element of consequence requires scientific proof that the quality of seawater really exceeds the set quality standards.

However, if the element of intentionality cannot be proven but there is negligence in the management of livestock carcasses that results in marine pollution, then the provisions of Article 99 paragraph (1) of Law Number 32 of 2009 can be the basis for criminal liability. The article stipulates that any person who, due to negligence, causes the sea water quality standards to be exceeded, can be punished. Thus, both in the form of intentional and negligent, environmental law still provides room for criminal liability if the consequences of pollution can be proven.

Based on all these provisions, it can be emphasized that the dumping of pig carcasses into the sea as found in the results of the study is not only contrary to the principles of responsible waste management, but also has the potential to meet the elements of environmental crimes if proven to cause pollution. Therefore, the protection of the marine environment in this context is not just an administrative norm, but has strict criminal law consequences if the elements of the delicacy are met.

4. Sanksi atas Pelanggaran Pengelolaan Limbah

Violations of the provisions on waste disposal and management are not only seen as administrative violations, but can also cause administrative, civil, and criminal legal consequences. This sanction system shows that environmental law in Indonesia adheres to a *multidoor enforcement* approach, which is law enforcement through various instruments in layers according to the level of violations and consequences caused.

a. Administrative Sanctions

Administrative sanctions are a form of law enforcement that is preventive and corrective. Provisions regarding administrative sanctions are regulated in Article 76 paragraph (1) of Law Number 32 of 2009 concerning Environmental Protection and Management which states "Ministers, governors, or regents/mayors in accordance with their authority apply administrative sanctions to the person in charge of businesses and/or activities if violations of environmental permits are found in supervision." Furthermore, Article 76 paragraph (2) states that administrative sanctions consist of: (1) written reprimands; (2) government coercion; (3) freezing of environmental permits; and/or (4) revocation of environmental permits. Dumping of pig carcasses into the sea, if the activity is carried out without an environmental permit or contrary to applicable regulations, the authorized officials can impose administrative sanctions as a first step in law enforcement. These sanctions aim to stop violations and restore environmental conditions.

b. Civil Sanctions

In addition to administrative sanctions, waste management violations that cause losses can give rise to civil liability. Article 87 paragraph (1) of Law Number 32 of 2009 states: "Every person in charge of business and/or activities that commits unlawful acts in the form of pollution and/or destruction of the environment that causes harm to others or the environment is obliged to pay compensation and/or take certain actions."

This provision emphasizes that if the dumping of pig carcasses into the sea causes losses, such as economic losses for fishermen or damage to aquatic ecosystems, then the perpetrators can be held civilly liable. In fact, Article 88 of Law Number 32 of 2009 regulates the principle of strict *liability* which states: "Every person whose actions, business, and/or activities use hazardous and toxic materials, produce and/or manage hazardous and toxic material waste, and/or pose a serious threat to the environment is absolutely responsible for the losses that occur without the need to prove an element of fault." Although pig carcasses are not hazardous and toxic waste in the chemical sense, if they are proven to pose a serious threat to the environment, the principle of absolute liability can be the basis for argument in a civil lawsuit.

c. Criminal Sanctions

If waste management violations have caused environmental pollution, criminal liability can be applied. Article 98 paragraph (1) of Law Number 32 of 2009 states: "Any person who deliberately commits an act that results in the exceedance of ambient air quality standards, water quality standards, seawater quality standards, or environmental damage standards, shall be sentenced to imprisonment for a minimum of three years and a maximum of ten years and a fine of at least IDR 3,000,000,000.00 and a maximum of IDR 10,000,000,000.00." Meanwhile, Article 99 paragraph (1) states: "Every person who, due to negligence, results in the exceedance of ambient air quality standards, water quality standards, seawater quality standards, or environmental damage standards, shall be sentenced to imprisonment for a minimum of one year and a maximum of three years and a fine of at least IDR 1,000,000,000.00 and a maximum of IDR 3,000,000,000.00."

If the dumping of pig carcasses into the sea is proven to cause exceeding seawater quality standards, then this act has the potential to meet the elements of environmental crimes. The element of intentionality or negligence will determine whether the provisions of Article 98 or Article 99 apply. Thus, the application of sanctions for waste management violations shows that the obligation to protect the environment is not only an administrative obligation, but a legal obligation that has serious consequences. The administrative approach aims to prevent and stop violations, the civil approach aims to recover losses, while the criminal approach aims to provide a deterrent effect and maximum protection of the environment.

The dumping of pig carcasses into the sea, the entire sanction regime can be applied gradually or cumulatively, depending on the level of violation and the consequences caused. This shows that environmental law in Indonesia provides comprehensive law enforcement instruments to ensure the protection of the marine environment and public health.

5. Relevance to the Case of Dumping Pig Carcasses into the Sea

Based on applicable regulations, the dumping of pig carcasses into the sea is: a) Violation of waste management obligations; b) Acts that are prohibited by environmental law; and c)

Actions that may give rise to legal liability for the perpetrators. Normatively, pig carcasses as biological waste must be managed in accordance with animal health standards and environmental protection provisions. Direct discharge into the sea without a permit and without prior treatment is contrary to the prohibition of disposing of waste into environmental media without a permit as stipulated in Law Number 32 of 2009 concerning Environmental Protection and Management. Thus, from the point of view of environmental administration law, the element of violation has been fulfilled if it is proven that there is no permit and the applicable management standards are not met.

Furthermore, if the act has a real impact on the quality of the marine environment or the surrounding community as found in the results of the research, then the act no longer stops at administrative violations, but enters the wider realm of legal accountability, in the event that it is proven that there is a violation of seawater quality standards based on scientific evidence, then the act has the potential to meet the elements of criminal acts as stipulated in Article 98 or Article 99 of Law Number 32 of 2009, depending on the proof of the element of intentionality or negligence. Thus, regulations regarding waste disposal and its management not only serve as technical guidelines, but also become a strong juridical basis to judge that the act of dumping pig carcasses into the sea is an unlawful act in the environmental field. The strength of this argument lies in the fulfillment of the elements of the act, the object that is protected, and the possibility of environmental consequences that can be legally accounted for, both administratively, civilly, and criminally in accordance with the level of proven violation.

CONCLUSION

The dumping of pig carcasses into the sea in the East Flores area can be qualified as an unlawful act in environmental criminal law because it fulfills the elements of delicacy, namely the existence of acts, unlawful nature, consequences in the form of environmental pollution, and mistakes in the form of intentional or negligence. This act is contrary to Law Number 32 of 2009 concerning Environmental Protection and Management and Law Number 41 of 2014 concerning Animal Husbandry and Health. The impact not only damages marine ecosystems, but also threatens public health and harms coastal economic activities. Legal subjects in this criminal act include natural persons and legal entities (corporations) who can be held accountable individually or corporately, on the basis of the principle of error and the possibility of applying the principle of strict liability. Therefore, these acts are not just administrative violations, but are criminal acts that can be subject to criminal, civil, and administrative sanctions. The management of animal waste and livestock carcasses is expressly regulated in various regulations, including Law Number 32 of 2009 concerning Environmental Protection and Management, Law Number 32 of 2014 concerning Marine Affairs, Law Number 18 of 2009 as amended by Law Number 41 of 2014 concerning Animal Husbandry and Health, as well as technical in Government Regulation Number 22 of 2021 and Regulation of the Minister of Agriculture Number 64/Permentan/OT.140/5/2013. Thus, dumping animal carcasses into the sea without proper management is an unlawful act that meets the elements of environmental crimes and raises legal liability, while emphasizing that environmental protection and public health must be prioritized.

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