



Effectiveness of AMDAL Implementation in Protecting Environmental Damage Due to Industrial

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Abstract: To prevent environmental damage due to industrial activities in Indonesia, AMDAL is an essential document to prepare. AMDAL has an instrument that aims to prevent environmental damage and prevent environmental damage (Law No.32 of 2009). In making and implementing AMDAL, we must pay attention to ecological sustainability so that we do not cause significant impacts that are harmful to current and future generations. This research aims to find and collect information coherently and comprehensively regarding the effectiveness of AMDAL implementation in preventing environmental damage due to industrial activities in Indonesia. This research uses a literature study method on activities that are organized systematically and scientifically using an interdisciplinary and even multidisciplinary approach to answer the effectiveness of AMDAL implementation in preventing environmental damage due to industrial activities in Indonesia. The results of this study indicate that the effective implementation of AMDAL activities is significant and must be implemented by all businesses, companies, and industries. AMDAL is one of the requirements in environmental permits to prevent ecological damage and pollution around the activities of these companies, businesses, and industries.

Keywords: AMDAL; Damage; Environmental; Industry

1. Introduction

The environment refers to all the physical, chemical, biological, social, and cultural factors that affect living things and their interactions within a given area or region. It includes all-natural components such as air, water, soil, flora, and fauna, and human factors such as industrial, social, economic, and cultural activities that affect the ecosystems around us. The environment is essential for maintaining the balance of ecosystems and the sustainability of life on Earth.

In essence, the environment is a gift from God Almighty that we must protect and care for survival and improve the quality of our lives. The atmosphere is a source of life and support for Indonesia's people, nation, and all living things. Indonesia is a country that is famous for its enormous natural resource potential, so of course, as Indonesians, we must be proud and continuously maintain, protect, and care for the preservation of the environment in the place we live in so that any industrial activity cannot harm this environment.¹

Indonesia's Industrial development and activities have positive and negative impacts on the environment. The impact of industrial activities on the environment has been a primary concern in recent decades. Along with industrial growth, there is an increase in environmental adverse effects. Therefore, it is necessary to prevent environmental damage due to industrial activities in Indonesia today. Reducing the adverse impact of industry on the environment requires a collaborative effort from the government, industry itself, and society. Eco-friendly technological innovations, strict regulations,

¹ Pelangi Asy-Syifaa, "Efektivitas Pelaksanaan Amdal Dalam Pencegahan Kerusakan Lingkungan Hidup Akibat Kegiatan Perindustrian Di Indonesia" 3, no. 3 (2023): 1-14, <https://www.ncbi.nlm.nih.gov/books/NBK558907/>.



more sustainable production practices, and awareness of the importance of protecting the environment are critical steps in addressing this issue. Environmental damage due to industrial activities in Indonesia is prevented through the enforcement of Environmental Impact Assessment (AMDAL). By making and enforcing AMDAL in an industry, it is hoped that industry or company owners can be more careful and pay attention to the actions they will take on the environment, which must be by the procedures set out in the AMDAL.²

Article 1 point (11) of Law Number 32 of 2009 provides a definition of AMDAL: "Environmental Impact Analysis, hereinafter referred to as AMDAL, is a study of the important impacts of a business and planned activity on the environment which is needed for the decision-making process regarding the implementation of the business and activity." Concerning environmental protection and management, business actors who will manage the environment must first make licenses because the licensing factor can be used as a guide for business actors who will manage the environment. Environmental licensing is associated with obtaining an AMDAL (Environmental Impact Assessment) as an instrument to prevent ecological pollution. This principle has been outlined in the form of legal products so that it becomes an obligation that everyone in Indonesia must obey.³

AMDAL (Environmental Impact Assessment) plays an important role in protecting the environment from damage caused by industrial activities. AMDAL (Environmental Impact Assessment) helps analyze an industrial project's potential impacts before it is implemented. This includes assessing the social, economic, and environmental impacts that a particular industrial activity may generate. Through AMDAL (Environmental Impact Assessment), environmental risks that may arise from industrial activities can be identified, which helps to anticipate possible problems and prepare appropriate mitigation strategies.

Based on the above background, the author is interested in further examining the importance of the application of AMDAL to prevent damage to the environment so that justice for ecology in Indonesia is realized, which is written in the form of legal writing entitled "The Effectiveness of AMDAL Implementation in Protecting Environmental Damage Due to Industrial Activities."

2. Research Methode

This research is normative legal research using a literature study, namely legal research that places the law as a building system of norms. The search for materials is based on legal materials in the form of laws and regulations and written works such as books or other articles related to the object of research. This normative legal research is used to understand the effectiveness of the application of AMDAL in protecting against environmental damage due to industrial activities.

3. Discussion

Theoretically and practically, the concept of AMDAL as one of the important instruments to achieve the preservation of environmental functions in the face of threats and pollution has an important value because it is accepted as a national instrument and, therefore companies must be committed to realizing it in their industrial activities. Based on the legal concept of AMDAL in the management tool, it is necessary to understand that AMDAL is an important legal tool in protecting the environment against various activities, especially actions taken by business actors whose activities can have a

² Ibid

³ Satria Sukananda and Danang Adi Nugraha, "Urgensi Penerapan Analisis Dampak Lingkungan (AMDAL) Sebagai Kontrol Dampak Terhadap Lingkungan Di Indonesia," *Jurnal Penegakan Hukum Dan Keadilan* 1, no. 2 (2020): 119–37, <https://doi.org/10.18196/jphk.1207>.

negative impact on environmental sustainability. From the point of view of environmental protection, the characteristics of AMDAL are ideally understood as legal regulations that function as tools to maintain the balance of the nation's life, especially in terms of protecting the environment and providing benefits to the community for a good and healthy environment.⁴

The position of AMDAL (Environmental Impact Analysis) is important in strategic environmental management because AMDAL itself is a tool that functions to prevent environmental damage and can determine the quality of the environment through the mechanism of checking documents in advance, such as AMDAL and UKL-UPL. Further application of AMDAL can also be a reference in a system that serves to maintain the stability of the goals of the industry or company. AMDAL can explain the various impacts that may arise on the community around the company or the industrial environment where industrial activities are or are taking place. Therefore, the role of AMDAL is to prevent pollution and environmental damage.⁵ Based Article 16 of the Environmental Law Number 4 of 1982 states that every plan that is expected to have an important impact on the environment must be equipped with an AMDAL (Environmental Impact Analysis), the implementation of which is regulated by government regulations.⁶

Before discussing further the application of environmental law, we must first know the definition of the environment itself according to Law Number 32 of 2009, is the unity of space with all objects, forces, conditions, and living things, including humans and their behavior that can affect nature itself, the continuity of life and the welfare of humans and other living things. Next, we will discuss the definition of pollution. Based on Law Number 32 of 2009 concerning Environmental Protection and Management, pollution is the introduction of embedded organisms carried out to preserve environmental functions and prevent pollution and damage to the environment, which includes planning, maintenance, control, utilization, supervision, and law enforcement.⁷

Environmental pollution occurs when materials or energy are introduced into the environment that can cause negative changes to natural ecosystems, disrupt the balance of nature, and harm living things. Environmental pollution can take many forms and come from natural sources and human activities. One of the main causes of environmental pollution is industrial activity. Intensive industrial activities can produce solid waste, liquid waste, and harmful gas emissions into the air. Some of the impacts of environmental pollution caused by industrial activities are greenhouse gas emissions, air pollution, water pollution, and solid waste pollution. Some of these things greatly affect the sustainability of the environmental ecosystem, which causes problems in the running of the ecosystem. Therefore, AMDAL is needed to protect against environmental damage due to industrial activities.

3. 1 Development of AMDAL Regulation

⁴ Nina Herlina and Ukilah Supriyatin, "Amdal Sebagai Instrumen Pengendalian Dampak Lingkungan Dalam Pembangunan Berkelanjutan Dan Berwawasan Lingkungan," *Jurnal Ilmiah Galuh Justisi* 9, no. 2 (2021): 204, <https://doi.org/10.25157/justisi.v9i2.5610>.

⁵ Sumadi Kamarol Yakin, "Analisis Mengenai Dampak Lingkungan (Amdal) Sebagai Instrumen Pencegahan Pencemaran Dan Perusakan Lingkungan," *Badamai Law Journal* 2, no. 1 (2017): 113, <https://doi.org/10.32801/damai.v2i1.3393>.

⁶ Ibid

⁷ Siska Ratna Anjarsari and Rochmani Rochmani, "Upaya Pencegahan Dan Solusi Terhadap Timbulnya Pencemaran Lingkungan Hidup Dari Buangan Limbah Industri," *Jurnal Ilmiah Dinamika Hukum* 21, no. 1 (2020): 43–51, <https://doi.org/10.35315/dh.v24i1.8323>.

AMDAL (Environmental Impact Assessment) first emerged with the enactment of the National Environmental Policy Act (NEPA) by the United States in 1969. NEPA came into force on January 1, 1970. Article 102 paragraph (2) letter (C) of this law states that all major proposed federal government activities and legislations expected to impact the environment significantly must be accompanied by an Environmental Impact Assessment report.

AMDAL quickly spread in developed countries and was followed by developing countries as many parties felt that AMDAL was a tool capable of protecting and preventing more severe environmental damage due to human activities. Regarding NEPA, in 1982, the Indonesian state initiated Environmental Law Number 4, 1982, concerning Basic Provisions for Environmental Management. For the first time, The declaration of the law was Indonesia's first step towards making development environmentally sound. Then Article 16 of UULH (Environmental Law) Number 4 of 1982 states that every plan estimated to impact the environment significantly must be equipped with an AMDAL (Environmental Impact Analysis) whose implementation is regulated by government regulations.⁸

In its operational follow-up, Government Regulation No. 29 of 1986 on Environmental Impact Assessment was published in the State Gazette of 1986 Number 42 and Supplement to the State Gazette Number 3338. The content of the Regulation states that AMDAL is intended as part of the feasibility study for the development of business plans and activities. Then Government Regulation Number 29 of 1986 was revoked and replaced by Government Regulation Number 51 of 1993, which was then replaced again by Government Regulation Number 27 of 1999 concerning Environmental Impact Analysis (AMDAL).

Since then, there have been many other laws and regulations related to AMDAL, one of which is considered very important in determining the form of environmental assessment that will be carried out, namely the Decree of the Minister of Environment Number 17 of 2001 concerning AMDAL and Forestry of the Republic of Indonesia Number: P.38 / MENLHK / SETJEN / KUM.1 / 2019 concerning Business Plans and Activities that are Required to Have an Environmental Impact Analysis. From the explanation above, it can be concluded that the implementation of AMDAL in Indonesia can be divided into four stages: implementation, development, improvement, and revitalization.⁹ AMDAL is designed to be made at the planning stage and used for decision-making. Matters studied in the AMDAL process include physical-chemical, ecological, socio-economic, socio-cultural, and public health aspects that are used as a complement to the feasibility study of a business plan and activity.¹⁰

3. 2 AMDAL in Environmental Licensing System

AMDAL is one of the requirements in environmental permits, which means a systemic and scientific study of activities using interdisciplinary and even multidisciplinary approach techniques, so the study must be structured in a coherent and comprehensive-integral (integrated-cross-sectoral) manner.¹¹ Based on Law No. 32/2009 on Environmental Protection

⁸ Sukananda and Nugraha, "Urgensi Penerapan Analisis Dampak Lingkungan (AMDAL) Sebagai Kontrol Dampak Terhadap Lingkungan Di Indonesia."

⁹ Yakin, "Analisis Mengenai Dampak Lingkungan (Amdal) Sebagai Instrumen Pencegahan Pencemaran Dan Perusakan Lingkungan."

¹⁰ Sulistyowati, "Analisis Mengenai Dampak Lingkungan (AMDAL)," *Tesis, Program Pascasarjana Universitas Muhammadiyah Surakarta* 2, no. 1 (2006): 116.

¹¹ Sukananda and Nugraha, "Urgensi Penerapan Analisis Dampak Lingkungan (AMDAL) Sebagai Kontrol Dampak Terhadap Lingkungan Di Indonesia."

and Management (UUPPLH), the function of AMDAL in the licensing system mechanism is as follows:

1. AMDAL as information that must be open to the public (CHAPTER VIII, Article 62 UUPPLH);
2. AMDAL as a tool to predict the likelihood of impacts/costs;
3. AMDAL as a tool for monitoring/RPL and management/RKL activities;
4. AMDAL as legal evidence.

In the context of licensing business activities, AMDAL must be a specific basic benchmark regarding the follow-up of the business license. Therefore, AMDAL obtaining each type of business activity will have different scientific analyses.

Based on Law Number 32 of 2009 concerning Environmental Protection and Management (UUPPLH), AMDAL is the first basis of the business licensing system, which will have a major influence on the environmental permits the government will issue. Then, it will continue to the business/activity license. It can be said that AMDAL is the first line of defense as a determinant of the good and bad quality of environmental permits and activity permits. Therefore, if Government Regulation Number 24 of 2018 concerning Electronic Integrated Business Licensing Services only places a commitment to obtain a business license without being preceded by an AMDAL-based environmental permit, the control system for business actors not to damage the environment or ecology is not well explained.¹²

For the implementation of AMDAL to run effectively and achieve the expected targets, it must link its supervision with the licensing mechanism. The Government Regulation on AMDAL clearly states that AMDAL is one of the licensing requirements where decision-makers must consider the results of AMDAL studies before granting business/activity licenses. AMDAL is used to make decisions on implementing or granting business and activity licenses. Here are some AMDAL licensing documents, among others:

1. Environmental Impact Assessment Terms of Reference Document (KA-ANDAL)
2. Environmental Impact Analysis Document (ANDAL)
3. Environmental Management Plan (RKL) document
4. Environmental Monitoring Plan Document (RPL)

The three documents (ANDAL, RKL and RPL) can be submitted together for assessment by the AMDAL Assessment Commission. The result of this assessment determines whether the business plan and activity are environmentally feasible or not and whether they need to be recommended for a license.

3.3 Preparation of AMDAL Based on Laws and Regulations

In the AMDAL mechanism, some documents must be fulfilled, namely the Environmental Impact Analysis (ANDAL), environmental management plan (RKL), and environmental monitoring plan (RPL). According to Government Regulation Number 27 of 2012 concerning Environmental Permits, the proponent prepares ANDAL, RKL, and RPL based on terms of reference that have received a decision from the competent agency. ANDAL is used as a review

¹² Ibid

to examine the impact of an activity. AMDAL aims to analyze an activity that has the potential to impact the environment, which will also later become one of the important points in making decisions regarding an activity permit. Meanwhile, RKL is an effort to handle major and important impacts arising from the activity plan. Furthermore, RPL is an effort to monitor environmental components affected by major and important impacts due to the activity plan.¹³

Scientific implementation procedures will intersect with other disciplines. The documents will prove that AMDAL has its scientific method for each type of activity/business. Government Regulation Number 24 of 2018 concerning Electronically Integrated Business Licensing Services states procedurally the preparation of AMDAL documents. In this case, the implementation of AMDAL must include the affected community and involve environmentalists according to Government Regulation 24 of 2018 concerning Electronically Integrated Business Licensing Services.

In preparing the AMDAL document, as referred to in Article 8, include the community: the affected community, environmentalists, and those affected by all forms of decisions in the AMDAL process. Community participation can be carried out through the announcement of the business and activity plan or through public consultation, in which case community participation can be carried out before the AMDAL preparation is made. The community, as listed above, within ten working days from the announcement, has the right to submit suggestions, opinions, and responses to the Business and Activity plan submitted in writing to the Proponent and the Minister, Governor, or Regent/Mayor.¹⁴

If a Business Actor requires a license in the field of environmental management for activities:

- a. Produce, transport, distribute, store, utilize, dispose of, process, and/or stockpile hazardous and toxic materials and the preparation of AMDAL documents is carried out including hazardous and toxic waste management;
- b. Discharging wastewater to water sources; and
- c. Utilizing wastewater for land application.

The permit in the field of environmental management is integrated into the Environmental Permit. Based on Article 63, the integration of permits in the field of environmental management into Environmental Permits can be carried out through preparing and assessing AMDAL or UKL-UPL at the business and activity planning stage or changes to Environmental Permits.

Procedurally, the processing of AMDAL and UKL-UPL documents is regulated by Government Regulation 27 of 2012 concerning Environmental Permits. Still, the difference is that business actors can only obtain business licenses and environmental permits based on commitments without being preceded by the processing of AMDAL and UKL-UPL documents. This regulation raises issues from both normative and empirical perspectives, and normatively, Government Regulation Number 24 of 2018 concerning Electronic Integrated Business Licensing Services has a significant impact; this contradicts the spirit of UUPPLH, which makes a statement that all companies and activities that have an important impact on the environment, must require an AMDAL-based environmental permit. Meanwhile, from an empirical point of view, environmental damage can occur because business entities and local communities

¹³ Yakin, "Analisis Mengenai Dampak Lingkungan (Amdal) Sebagai Instrumen Pencegahan Pencemaran Dan Perusakan Lingkungan."

¹⁴ Ibid

affected by the environment cannot know the impact of business activities and activities carried out by these business entities.¹⁵ AMDAL and UKL-UPL should be the initial document that is the frontline to state that the company owner is willing to manage the environment. Then, the government will conduct an inspection and evaluation within a certain period.

3.4 Impact of Industrial Activities on the Environment

Based on Article 1 number 2 of Law Number 3 of 2014 concerning Industry, what is meant by industrial activity is all forms of economic activity that process raw materials and utilize industrial resources to produce goods that have added value or more benefits, including industrial services¹⁶

The presence of industrial activities creates a dilemma for the environment because the presence of industry in a country is good because it can open the door to prosperity for the people of that country. However, on the contrary, industry in a country can torment the community if it damages the environment. The presence of industry is a difficult problem because the industry cannot avoid the generation of waste, which, if not managed properly, will be very dangerous for human health and all living things around it. Industrial waste harms human health and all other living things and is certainly not environmentally friendly. It is a problem because it will not open the door to prosperity but will open the door to destruction for all living things, especially humans because it harms human health.

The Indonesian government has issued various regulations or laws that regulate industrial waste so as not to endanger human health and all living things in the surrounding environment. The regulations already exist, but the problem is how these laws can be operationalized to ensure that industrial waste does not endanger human health and damage the environment. Environmental regulations and laws need to be implemented comprehensively, because if they are not implemented properly, they will not be able to change the problems that occur. The following are some industrial sectors that emit large amounts of carbon emissions, including cement, steel, pulp and paper, textile, ceramics, fertilizers, petrochemicals, and some food and beverage industries.¹⁷

The Indonesian government is committed to preserving nature by reducing greenhouse gas and carbon dioxide emissions in Indonesia. It turns out that industry is a major contributor to large amounts of carbon emissions. High carbon emissions have a direct impact on the environment, which in turn will have a direct impact on human rights, namely the right of humans to live. Environmental problems are human problems, both local and global.

The community understands how important the environment is for human life to live well and healthily. The rejection carried out by several communities has a strong reason, namely the occurrence of geological forest destruction that causes erosion, landslides, and global warming. besides that, it also impacts the temperature on this earth, which is getting hotter and has now reached a hot temperature with an average of 34 degrees Celsius in the

¹⁵ Sukananda and Nugraha, "Urgensi Penerapan Analisis Dampak Lingkungan (AMDAL) Sebagai Kontrol Dampak Terhadap Lingkungan Di Indonesia."

¹⁶ Dwi Febriyanti et al., "Fungsi AMDAL Dalam Pengendalian Kerusakan Dan Pencemaran Lingkungan Setelah Diundangkannya UU Cipta Kerja," *Widya Pranata Hukum* 3, no. 2 (2021): 115–33.

¹⁷ "Jumlah Produksi Sub Sektor Pertanian," 2018, 1–22.

Indonesian region. The high temperature of the earth has a direct impact on the state of the ice in the north pole, which has melted significantly, and also has an impact on coastal areas where sea levels continue to rise. The government must make regulations (laws) that take into account industry (economy), society (people), and nature (environment). Industries that are unaware of the importance of protecting the environment are harming the people around them.

Law enforcement is essential in tackling this problem. The impact of damage or pollution that occurs in industrial waste when the waste is discharged into the river, the river water is polluted. An unhealthy environment directly correlates with human health and all living things around it. The role of the government, related institutions, and all components of society must be overseen carefully. Regulations and laws regarding a healthy environment must be referenced to prevent environmental damage from industrial wastewater directly impacting public health. Environmental destruction is a human action that causes direct or indirect changes in the environment's physical, chemical, and biological properties so that it exceeds the standard criteria for environmental damage. One of the efforts that can be made to minimize environmental damage is implementing the AMDAL system.

Here are some efforts that can be made to minimize factory waste:

1. To achieve optimal waste management, some factories use chemicals in their factory production process. Hence, the waste generated from the factory production process is hazardous. Therefore, measures must be taken to ensure the waste is environmentally friendly and free from hazardous substances. If the waste generated is environmentally friendly, it will not cause pollution if disposed of directly into the environment.
2. Do not discharge liquid waste directly into water sources. Another wise way is not to dispose of factory liquid waste directly into water sources, especially without filtering and processing first. Liquid waste that comes directly from factories without treatment often causes environmental pollution.
3. Landfilling organic waste for factory solid waste requires different actions for organic and non-organic waste. Organic wastes can be landfilled because they can decompose well if buried in the ground.

3.5 The Role of AMDAL in Environmental Management

Law No. 32/2009 provides three types of environmental law enforcement: administrative, civil, and criminal. Among the three forms of law enforcement available, administrative law enforcement is considered the most important law enforcement effort. Because administrative law enforcement aims to prevent environmental pollution and destruction. In addition, administrative law enforcement also aims to punish perpetrators of environmental pollution and destruction.

The main purpose of AMDAL is to ensure that a business or development can run sustainably without damaging or sacrificing the environment; in other words, the business or activity can be achieved from an environmental point of view. The RKL-RPL document in AMDAL is environmental management. To ensure that AMDAL is consistent with its objectives, applying

administrative law is important and strategic because the main nature of administrative sanctions is preventive and restorative. Administrative sanctions include written warnings, government coercion, freezing environmental permits, or revoking environmental permits.¹⁸

Increase awareness within companies to consider AMDAL and UKL-UPL as a priority. It can be done by providing training on the importance of maintaining environmental stability, incentives from the government to companies that manage environmental impacts well, and others. Strengthening the capacity of environmental officials, both in government as monitors, proponents, and implementers, aiming to produce experts who can criticize problems in their fields. Regular monitoring and evaluation aim to enforce administrative law by imposing administrative sanctions to prevent environmental pollution and destruction.

From the point of view of environmental protection, the characteristics of EIA are ideally understood as the scope of legal regulations that function as instruments to maintain the balance of state life, especially in protecting the public interest in a good life and a healthy environment in their lives. The role of EIA is as an important tool for periodic monitoring of environmental impacts. The results of the AMDAL study function as an "early warning system," giving AMDAL a fairly important position in environmental management. This is because:

1. AMDAL is the basis of the environmental management system for development activities. AMDAL can act as input for formulating environmental management policies.
2. AMDAL can be used as a preventive instrument, namely conducting early prevention policies, so that each activity does not cause (many environmental victims).
3. The AMDAL system is an input in regional development planning.
4. The AMDAL system is also the basis for obtaining permits to carry out activities with a large and important impact.¹⁹

4. Conclusion

It can be concluded that the effectiveness of the implementation of AMDAL activities is very important and must be carried out by all businesses, companies or industries that are used to prevent damage and pollution to the environment around business activities, companies or industries. The owner of a business, business entity, or industry that does not carry out AMDAL to the fullest will feel disadvantaged to his own business, business entity, or industry because, of course, it must be subject to sanctions or forced closure and dismissal by the Regional Environmental Service or the area around the business, company or industry where it is located.

It is expected that all business actors, companies, and industries in Indonesia will increasingly increase awareness of how to optimally implement the activities contained in the AMDAL document so that the preservation of the environment for future generations is getting better,

¹⁸ Yakin, "Analisis Mengenai Dampak Lingkungan (Amdal) Sebagai Instrumen Pencegahan Pencemaran Dan Perusakan Lingkungan."

¹⁹ Herlina and Supriyatin, "Amdal Sebagai Instrumen Pengendalian Dampak Lingkungan Dalam Pembangunan Berkelanjutan Dan Berwawasan Lingkungan."

not polluted, and not damaged due to waste disposal and the impact of business activities, companies, and industries that are directly related to the environment.

Therefore, to prevent environmental damage due to industrial activities, it is necessary to coordinate between the parties with their respective duties and authorities. Both the government, law enforcement agencies, companies, and the community must work together to reduce the occurrence of environmental damage. it solely aimed at creating a healthy and livable environment.

References

- Asy-Syifaa, Pelangi. "EFEKTIVITAS PELAKSANAAN AMDAL DALAM PENCEGAHAN KERUSAKAN LINGKUNGAN HIDUP AKIBAT KEGIATAN PERINDUSTRIAN DI INDONESIA" 3, no. 3 (2023): 1–14. <https://www.ncbi.nlm.nih.gov/books/NBK558907/>.
- Febriyanti, Dwi, Sartika Nur Aini, Alya Vena Resta, and Raka Bagaskara P.K.P. "Fungsi AMDAL Dalam Pengendalian Kerusakan Dan Pencemaran Lingkungan Setelah Diundangkannya UU Cipta Kerja." *Widya Pranata Hukum* 3, no. 2 (2021): 115–33.
- Herlina, Nina, and Ukilah Supriyatin. "Amdal Sebagai Instrumen Pengendalian Dampak Lingkungan Dalam Pembangunan Berkelanjutan Dan Berwawasan Lingkungan." *Jurnal Ilmiah Galuh Justisi* 9, no. 2 (2021): 204. <https://doi.org/10.25157/justisi.v9i2.5610>.
- Ihza, Uday, Mahendra Rangkuti, Universitas Islam, and Negeri Sumatera. "Penerapan Analisis Mengenai Dampak Lingkungan Atau AMDAL Sebagai Pengelolaan Lingkungan Hidup Dan Sungai." *Jurnal Pengabdian Kepada Masyarakat* 3, no. 1 (2023): 17–20.
- "Jumlah Produksi Sub Sektor Pertanian," 2018, 1–22.
- Ratna Anjarsari, Siska, and Rochmani Rochmani. "Upaya Pencegahan Dan Solusi Terhadap Timbulnya Pencemaran Lingkungan Hidup Dari Buangan Limbah Industri." *Jurnal Ilmiah Dinamika Hukum* 21, no. 1 (2020): 43–51. <https://doi.org/10.35315/dh.v24i1.8323>.
- Sukananda, Satria, and Danang Adi Nugraha. "Urgensi Penerapan Analisis Dampak Lingkungan (AMDAL) Sebagai Kontrol Dampak Terhadap Lingkungan Di Indonesia." *Jurnal Penegakan Hukum Dan Keadilan* 1, no. 2 (2020): 119–37. <https://doi.org/10.18196/jphk.1207>.
- Sulistyowati. "Analisis Mengenai Dampak Lingkungan (AMDAL)." *Tesis, Program Pascasarjana Universitas Muhammadiyah Surakarta* 2, no. 1 (2006): 116.
- Yakin, Sumadi Kamarol. "Analisis Mengenai Dampak Lingkungan (Amdal) Sebagai Instrumen Pencegahan Pencemaran Dan Perusakan Lingkungan." *Badamai Law Journal* 2, no. 1 (2017): 113. <https://doi.org/10.32801/damai.v2i1.3393>.