The State's Efforts in Preserving the Environment Through Regulation

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Abstract
Environmental Impact Assessment (EIA) must be owned by every business and/or activity that has an important impact on the environment. The EIA study covers various aspects and the results are very well used as material for making decisions on the feasibility of a business plan and/or activity. By including EIA in the planning process of a business and/or activity, a broader and deeper view will be obtained (so that optimal decisions can be made from the various available alternatives), as well as to consider the possible consequences in order to prepare steps to overcome negative impacts and develop possible positive impacts. This study aims to describe regulations in Indonesia related to EIA. The method used is qualitative-descriptive-library. The results obtained are that there are several regulations regarding environmental conservation in Indonesia, namely Law No. 32/2009 concerning Environmental Protection and Management, PP No. 27/2012 concerning Environmental Permits, Permen LH No. 8/2006 concerning Guidelines for the Preparation of the EIA, and Permen LH No. 5/2012 concerning Types of Business and/or Activities Plans Required to Have an EIA.

Keywords:
Regulation; environment; EIA

Introduction
Utilization of natural resources must be environmentally sound in order to maintain its sustainability. Poor management allows damage to system resources and cannot be recovered (irreversible) (Harahab, 2010). General Explanation of Law No. 32/2009 states, the state and all stakeholders are obliged to protect and manage the environment. The protection and management of the environment demands a policy that must be implemented obediently and consistently from the center to the regions. Social burdens are very vulnerable to occur due to uneven natural resource limitations, the risk of pollution, and environmental damage as other impacts of development activities.
The impact of utilization and sustainability problems are some of the problems in natural resource management (Wachid, n.y.). General Explanation of Law No. 32/2009 states, the principle of sustainable development must be the basis and be integrated into development, with the consequence that all businesses and/or activities that have exceeded the carrying capacity of the environment are not allowed to operate, so that it is hoped that optimal results will be obtained from development.

Natural resource management raises a complex problem between material living standards and the carrying capacity of the environment (Hill, 1996). Quality of life will inevitably decline (Kotler, 1987). Those who design or analyze a business and/or activity plan must also consider the issue of adverse environmental impacts (Gittinger, 2008). Development should be endeavored so as not to result in unaccountable impacts (Mubyarto, 2010). One important solution to the problem of externalities is regulation (Bishop, 2010). General Explanation of Law No. 32/2009 states, the effort to control these impacts early is through an Environmental Impact Assessment (EIA). EIA is also one of the main requirements in obtaining environmental permits for business and/or activity permits. Preventive efforts in the form of supervision and licensing need to be maximized, while repressive efforts for pollution and environmental destruction are effective and consistent law enforcement.

Not all of these natural resources can be used directly, but must be processed in a production activity and can often cause negative impacts so that it must be done with careful calculations and considerations (Isgiyarta, 2012). Production results (output) include goods and services (Partadiredja, 2002). Some are used as production materials in industry and the rest are goods or services for the needs of the community (Panggabean, 2013).

The use of science and technology in production is fundamental (Saud, 1992). The potential of natural resources must be managed with high technology in order to increase the added value generated (Rachbini, 2001). Technological progress can accelerate economic growth, because it produces efficiency based on innovation (Beik & Arsyianti, 2017). A production system is said to be more efficient if it can minimize costs to produce the same amount or produce maximum production with the same amount of costs (Sudarsono, 2002).

Industrial growth has a very important role in the prosperity of the country’s economy (Rahman, 1995). At the beginning of development, the industry was built as a separate
process unit from the environment. This kind of industrial process tends to dump waste in the environment. Pollution prevention strategies that focus on improving the process system (preventive efforts) will provide better and more economical environmental performance (Kristanto, 2013). The level of industrialization determines the level of environmental damage (Grossman, 1995).

In addition, efficiency and effectiveness gave rise to the idea of rationalism, including instrumental ratios, juridical ratios, and scientific ratios, in order to increase productivity (Kamil, 2016). Pollution and environmental damage are the result of emphasizing the efficiency aspect as a way to measure progress, so that sometimes we forget about costs or other sacrifices that must be paid (Rahardjo, 1990). Economic activity is always associated with the principle of cost-benefit and the principle of benefit for oneself (Minarni, 2015). The goal is to make a profit (Soeharno, 2007). This often raises ethical and social responsibility issues, because of the neglect of externalities (Rozalinda, 2016).

Government regulations are indispensable as standards of quality and behavior accepted by the community with the aim of protecting the public interest (Chapra, 1999). Governments can overcome externalities by prohibiting or requiring something through regulation. Pollution is an unavoidable effect of production activities, so what must be sought is to limit pollution to a certain threshold (so that it is not too damaging to the environment but also does not hinder production activities), not the total elimination of pollution (Mankiw, 2003). The important role of government in economic development is to create conditions suitable for the growth and development of the business world. Global environmental sustainability is included as a global public good or service so that it becomes the common interest of the world community (Sipayung, 2012).

Law No. 32/2009 states, EIA must be owned by every business and/or activity that has an important impact on the environment. EIA is a study of the possible major and significant impacts of a plan and/or activity on the environment. The EIA study covers various aspects and the results are very well used as material for making decisions on the feasibility of a business plan and/or activity (Sucipto & Asmadi, 2011).

By including EIA in the planning process of a business and/or activity, a broader and deeper view will be obtained (so that optimal decisions can be made from the various available
alternatives), as well as to consider the possible consequences in order to prepare steps to overcome negative impacts and develop possible positive impacts (Raharjo, 2021).

EIA as one of the requirements in environmental permits is a study of activities that are systematically and scientifically regulated using an interdisciplinary and even multidisciplinary approach, so EIA research must be structured in a coherent and comprehensive-integral way. It is undeniable that the EIA and/or UKL-UPL documents must cover all stages, namely the construction, implementation, and monitoring stages. The main objective of EIA is to ensure that business or development activities can operate in a sustainable manner without destroying and compromising the environment or in other words, the business or activity is feasible from an environmental perspective. In addition to the environmental feasibility of EIA documents as a control system of activities or businesses (Yakin, 2017).

**Methods**

This study uses a qualitative method, more descriptive, with the type of library research. Based on the method and type of this research, in terms of data collection using the documentation method, so that a detailed description will be obtained. In order to be more proportional and representative, the data obtained is processed by editing and data organizing methods. Furthermore, the analysis process is carried out by the deduction method, and then drawn into a final conclusion obtained from the results of the analysis process.

**Results and Discussion**

**EIA in Law No. 32/2009**

Environmental Impact Assessment, hereinafter referred to as EIA, is a study of the significant impact of a planned business and/or activity on the environment which is required for the decision making process regarding the operation of a business and/or activity. Every business and/or activity that has a significant impact on the environment must have an EIA.
The EIA document is the basis for making environmental feasibility decisions. The EIA document was prepared by the proponent with the involvement of the community. In preparing the EIA document, the proponent can ask for assistance from other parties. EIA compilers are required to have an EIA compiler competency certificate. The EIA document is assessed by the EIA Assessment Commission which is formed by the Minister, Governor, or Regent/Mayor in accordance with their respective authorities. Based on the results of the EIA Assessment Commission’s assessment, the Minister, Governor, or Regent/Mayor shall make a decision on the feasibility or inadequacy of the environment in accordance with their authority. The central government and local governments assist in the preparation of EIA for businesses and/or activities of the economically weak groups that have an important impact on the environment.

Environmental Management Efforts and Environmental Monitoring Efforts (UKL-UPL) in Law No. 32/2009

Every business and/or activity that is not included in the mandatory EIA criteria, must have UKL-UPL. Businesses and/or activities that are not required to be equipped with UKL-UPL are required to make a statement of ability to manage and monitor the environment. Every business and/or activity that is required to have an EIA or UKL-UPL must have an environmental permit. The Minister, Governor, or Regent/Mayor in accordance with their respective authorities must refuse the application for an environmental permit if the permit application is not accompanied by an EIA or UKL-UPL. The Minister, Governor, or Regent/Mayor in accordance with their respective authorities must announce every application and decision for environmental permits. An environmental permit is a requirement to obtain a business and/or activity permit.

Preparation of EIA and UKL-UPL in PP No. 27/2012

Every business and/or activity that has a significant impact on the environment must have an EIA. Every business and/or activity that is not included in the mandatory EIA criteria must have UKL-UPL. The EIA is prepared by the proponent at the planning stage of a business and/or activity. The preparation of the EIA is stated in the EIA document which consists of Terms of Reference, Andal, and RKL-RPL.
In preparing the EIA document, the proponent must use a single, integrated, or regional study approach. The proponent, in preparing the EIA document, includes the affected communities, environmentalists, and/or those affected by all forms of decisions in the EIA process. The initiator in compiling the EIA document can be done alone or ask for help from other parties.

The preparation of the EIA document must be carried out by the EIA compiler who has an EIA compiler competency certificate. Civil servants who work at the central, provincial, or district/city environmental agencies are prohibited from being drafters of the EIA.

Businesses and/or activities that have a significant impact on the environment are exempt from the obligation to prepare an EIA if: (1) The location of the planned business and/or activity is in an area that already has a regional EIA; (2) The location of the planned business and/or activity is in a district/city that already has a detailed district/city spatial layout plan and/or district/city strategic area spatial plan; or (3) The business and/or activities are carried out in the context of disaster emergency response.

UKL-UPL is prepared by the initiator at the planning stage of a business and/or activity. UKL-UPL preparation is done through filling out the UKL-UPL form with the format determined by the Minister.

Ministries or non-ministerial government agencies can prepare technical guidelines for the preparation of UKL-UPL based on guidelines for the preparation of UKL-UPL. In the event that the planned business and/or activity is more than 1 (one) business and/or activity and its planning and management are interrelated and located within a single ecosystem overlay; and/or guidance and/or supervision of businesses and/or activities carried out by more than 1 (one) ministry, non-ministerial government agency, provincial government work unit, or district/city government work unit; the initiator only compiles 1 (one) UKL-UPL. Civil servants who work at the central, provincial, or district/city environmental agencies are prohibited from being drafters of UKL-UPL.

Terms of Reference for Environmental Impact Assessment (KA-Andal) in Permen LH No. 8/2006
Terms of Reference for Environmental Impact Assessment (KA-Andal) is the scope of the environmental impact assessment study which is the result of the scoping agreed upon by the EIA Proponent/Preparator and the EIA Assessment Commission. Guidelines for the preparation of KA-Andal are used as the basis for the preparation of KA-Andal, both for single activity KA-Andal, integrated/multi-sectoral KA-Andal, and KA-Andal for activities in the area.

The purpose of preparing the KA-Andal is to define the scope and depth of the Andal study; directing the Andal study to run effectively and efficiently in accordance with the available costs, manpower, and time. The function of the KA-Andal document is as an important reference for the initiator, the agency in charge of business and/or activity plans, and the compilers of the EIA study regarding the scope and depth of the Andal study to be carried out; as one of the reference materials for the Andal document assessors to evaluate the results of the Andal study.

The basic considerations for the preparation of the KA-Andal include diversity, limited resources, and efficiency, the determination of inputs in the form of highly relevant data and information is then compiled and formulated in the KA-Andal.

The parties directly involved in the preparation of the KA-Andal are the initiator, the responsible agency, and the compilers of the Andal study. This KA-Andal is an important document to provide a reference on the depth of the Andal study to be achieved.

EIA is part of the feasibility study of business and/or activity plans. Another part of the feasibility study of the business and/or activity plan is the technical aspect and the economic-financial aspect.

The results of the feasibility study are for the decision-making process and can be used as material for regional development planning. The KA-Andal compiler needs to follow the Andal drafting flow chart below so that it can finally provide the input needed by planners and decision makers.

<table>
<thead>
<tr>
<th>Collecting data and information on business plans and/or activities; environmental baseline; other activities around the planned business and/or activity; suggestions, feedback and public opinion.</th>
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</thead>
<tbody>
<tr>
<td>Projection of changes in environmental baseline as a result of business plans and/or activities.</td>
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<tr>
<td>Determination of the magnitude and significance of the impact on the environment caused by the</td>
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</table>
planned business and/or activity.

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Evaluation of significant impacts on the environment.

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Follow-up recommendations/suggestions for decision makers, environmental planning and managers in the form of alternative business and/or activity components; Environmental Management plan; Environmental Monitoring plan.

The KA-Andal document must clearly and unequivocally reflect environmental insights that must be considered in the development of a business and/or activity plan.

Scoping is the most important process in the preparation of KA-Andal. The better the scoping results, the firmer and clearer the direction of the Andal study will be. Scoping of significant impacts is carried out through the following series of processes, identification of potential impacts, evaluation of potential impacts, and classification and priority of significant impacts.

The determination of the scope of the study area is intended to limit the area of the Andal study area according to the results of the scoping of significant impacts, and by taking into account the limitations of resources, time, and energy, as well as suggestions for opinions and responses from interested communities. The scope of the Andal study area is determined based on the following considerations of spatial boundaries, project boundaries, ecological boundaries, social boundaries, administrative boundaries, and boundaries of the scope of the Andal study area.

The scope of the time limit for the Andal study is determined based on the consideration of the time limit for the implementation of the business plan and/or activity. The study time limit is the study time limit that will be used in forecasting and evaluating the impact in the Andal study. The minimum time limit is carried out during the life of the planned business and/or activity. The determination of the time limit for this study is then used as the basis for determining changes in the environmental setting without a business and/or activity plan or with a business and/or activity plan. For the record, the time limit used in the EIA review is not a time limit to declare the expiration or not of an EIA study.

**Environmental Management Plan (RKL) in Permen LH No. 8/2006**

Environmental Management Plan (RKL) is an effort to handle significant impacts on the environment caused by business and/or activity plans. The RKL document is a document
that contains efforts to prevent, control, and overcome significant negative environmental impacts and increase the positive impacts that arise as a result of a business plan and/or activity.

Considering that the EIA document is part of the feasibility study, the RKL document will only provide the main points of direction, principles, criteria or requirements for impact prevention/mitigating/controlling.

Environmental management plans can take the form of preventing and overcoming negative impacts, as well as increasing strategic positive impacts. The environmental management plan must be described clearly, systematically, and contains 4 main characteristics. First, the environmental management plan contains the main directions, principles, guiding criteria, or requirements to prevent, mitigate, control or increase strategically significant negative and positive impacts; and if deemed necessary, also complete with references to the literature on the design of the mitigation of the intended impact. Second, the intended environmental management plan needs to be formulated in such a way that it can be taken into consideration for the manufacture of detailed engineering designs and the basis for implementing environmental management activities. Third, the environmental management plan also includes efforts to increase the knowledge and ability of employees initiating businesses and/or activities in environmental management through courses required by the initiator along with the number and qualifications to be trained. Fourth, the environmental management plan also includes the establishment of an organizational unit responsible for the environment to implement the RKL. Aspects that need to be addressed in this regard include the organizational structure, scope of duties and authority of the unit, as well as the number and personal qualifications.

To deal with the significant impacts that have been predicted from the Andal study, one or several known environmental approaches, such as technology, socio-economics, and institutions, can be used. Considering that the RKL document is prepared simultaneously with the Andal and RPL documents, and all three are assessed at the same time, the RKL document format is directly oriented to the four main points of the environmental management plan.

Environmental Monitoring Plan (RPL) in Permen LH No. 8/2006
Environmental Monitoring Plan (RPL) is an effort to monitor environmental components that are significantly affected by the business and/or activity plan. Environmental monitoring can be used to understand phenomena that occur at various levels, starting from the project level (to understand the behavior of impacts arising from businesses and/or activities), to the regional or even regional level; depending on the scale of the problem at hand. Monitoring is an ongoing, systematic and planned activity. Monitoring is carried out on relevant environmental components to be used as indicators to evaluate compliance, trendline, and critical level of an environmental management.

There are several factors that need to be considered in the preparation of the environmental monitoring plan document. First, the components/parameters of the environment that are monitored are only those that undergo fundamental changes or are affected by significant impacts. Second, the monitored aspects need to properly pay attention to the significant impacts stated in the Andal and the nature of the environmental impact management formulated in the RKL document. Third, monitoring can be carried out on the source causing the impact and/or on the affected environmental components/parameters. By monitoring these two things at the same time it will be possible to assess/test the effectiveness of the environmental management activities being carried out. Fourth, environmental monitoring must be economically feasible. Although the aspects to be monitored have been limited to important matters only (as described in the first to third factors), the costs incurred for monitoring need to be considered considering that monitoring activities continue throughout the life of the business and/or activity. Fifth, the design of data collection and analysis aspects that need to be monitored, including the types of data collected; monitoring location; frequency and duration of monitoring; data collection methods (including equipment and instruments used for data collection); data analysis method. Sixth, the RPL document needs to contain environmental monitoring institutions. The environmental monitoring institutions referred to here are institutions that are responsible for providing monitoring funds, implementing monitoring, users of monitoring results, and supervising monitoring activities.

**Types of Business and/or Activities Plans Required to Have EIA in Permen LH No. 5/2012**
Every business and/or activity that has a significant impact on the environment must have an EIA. Business plans and/or activities carried out within protected areas, and/or directly adjacent to protected areas, must have an EIA.

Types of business and/or activity plans that have a smaller scale than those listed in Appendix I; and/or not listed in Appendix I but have an important impact on the environment, can be determined as a type of business plan and/or activity that is required to have an EIA outside of Appendix I.

Types of business and/or activity plans that are required to have an EIA can be determined as a business and/or activity plan that is not required to have an EIA, if the impact of such business and/or activity plans can be managed based on the development of science and technology; and/or based on scientific considerations, does not cause significant impacts on the environment.

The types of business and/or activities plans that are required to have an EIA are determined based on the potential significant impacts and the uncertainty of the available technology capabilities to cope with the negative significant impacts that will arise.

Types of Business and/or Activities Plans Required to Have EIA, which include the multisectoral sector, defense sector, agriculture, fishery and marine sector, forestry sector, transportation sector, satellite technology sector, industry sector, public works sector, housing sector and residential area, the energy and mineral resources sector, the tourism sector, the nuclear sector, as well as the management of Hazardous and Toxic Waste (LB3).

**Flowchart of Screening Procedures to Determine Whether or Not a Business and/or Activity Plan Has an EIA in Permen LH No. 5/2012**
List of Protected Areas in Permen LH No. 5/2012

Protected Areas referred to in this Ministerial Regulation are as follows: protected forest areas; peat areas; and water catchment areas. Also the shoreline; river border; areas around lakes or reservoirs; wildlife reserves and marine wildlife reserves; nature reserves and marine reserves; mangrove forested coastal areas; national parks and marine national parks; grand forest park; natural tourism parks and marine nature tourism parks; cultural and scientific heritage areas; geological nature reserve area; groundwater recharge area; spring border; germplasm protection area; animal refuge area; coral reefs; and corridor areas for protected species of marine animals or biota.
The protected area as referred to is an area designated with the main function of protecting environmental sustainability which includes natural resources and artificial resources. The determination of the protected area is carried out in accordance with the provisions of the legislation.

**Conclusion**

There are several regulations regarding environmental conservation in Indonesia, namely Law No. 32/2009 concerning Environmental Protection and Management, PP No. 27/2012 concerning Environmental Permits, Permen LH No. 8/2006 concerning Guidelines for the Preparation of the EIA, as well as Permen LH No. 5/2012 concerning Types of Business and/or Activities Plans Required to Have an EIA. The discussion includes: (1) Environmental Impact Assessment (EIA); (2) Environmental Management Efforts and Environmental Monitoring Efforts (UKL-UPL); (3) Preparation of EIA and UKL-UPL; (4) Terms of Reference for Environmental Impact Assessment (KA-Andal); (5) Environmental Management Plan (RKL); (6) Environmental Monitoring Plan (RPL); (7) Types of Business and/or Activities Plans Required to Have EIA; (8) Flowchart of Screening Procedures to Determine Whether or Not a Business and/or Activity Plan Has an EIA; (9) List of Protected Areas.

**References**


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