The Institutional of Environment Management on Textile Industry: A Case study on the textile industry in Bandung regency, West Java–Indonesia

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The Institutional of Environment Management on Textile Industry: A Case study on the textile industry in Bandung regency, West Java-Indonesia

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ABSTRACT: The textile industry is often associated with environmental pollution problems. The purpose of this study was to describe the institutions of environmental management in the textile industry in Bandung Regency, Indonesia. This study used a qualitative approach and the inductive method. Data collection was conducted by interview, observation, and documentation. The results showed that the institutions of environmental management on textile industry in Bandung Regency is characterized by the occurrence of transactional law in the implementation of environmental management between the company and apparatus. This condition is caused by the costs of implementing the rule more than the cost to transact violation so that institutional governance tends to lead to unethical business practices. This study concludes that the institutions of environmental management in the textile industry in Bandung regency plagued by opportunistic behavior that causes appear various cost components that are categorized as transaction costs.

KEYWORDS: Behavior opportunistic, business ethics, transaction costs.

I. INTRODUCTION

Environmental Management is one of the obligations and social responsibilities that must be performed by each company. These obligation and social responsibility lead to administratif and financial consequences. Administrative consequences is the obligation of the company to have an environmental permit before starting business. While the financial consequences require companies to allocate funds in amounts large enough to create and operate an industrial waste treatment plant produced. The financial consequences not only in the context of waste management, but also in the context of licensing that must be met. This could happen because in order to obtain an environmental permit, there are many requirements that must be met and the parties involved. Thus, the licensing process and waste treatment are carried out by the same company consequences, namely financial. The textile industry is one industry that has the potential to generate pollutants in liquid and solid form. Parvathi, et al (2009) says that "the main environmental issues associated with the textile industry is the contamination of water bodies caused by untreated waste." This is due to every stage of textile processing requires chemicals and a fairly large water source that at the end of the process becomes waste that must be disposed. Referring to the Law No. 32 Year 2009 on Environmental Management, each company must treat waste industry, which is safe and does not pollute the environment when discharged into rivers or other media.

Bandung Regency is one of the areas in West Java where there are many textile companies operating here. Based on data from Bandung Regency Government, in August 2013 there were 407 and 423 units are categorized as formal and non-formal textile company. The textile industry has the potential to generate waste and pollute the surrounding environment. One indicator of high levels of environmental pollution caused by waste textile industry in Bandung Regency is the poor quality water of Citarum river. Although the Citarum river pollution is not only caused by the textile industry wastes in Bandung Regency but the textile industry make a significant contribution to the occurrence of this condition. This of course raises huge questions about environmental management undertaken by the textile company in Bandung Regency. Therefore, if the textile industry has made environmental management in accordance with Law No. 32 of 2009, the problem of pollution in the river of Citarum should have been reduced.

1 This article is part of a dissertation of author entitled Kelembagaan Aturan Formal dan Informal Industri Tekstil di Jawa Barat (Studi di Kabupaten Bandung dan Sumedang)
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II. THEORITICAL FRAMEWORK

Good environmental management and responsibility are part of the ethics that should be owned by a business entity. Nordic Fashion Association in 2012 issued NICE (Nordic Initiative Clean and Ethical) Code of Conduct and Manual For the Fashion and Textile Industry. There are three principles relating to environmental management, namely 1) Businesses must support a precautionary approach to environmental challenges, 2) Undertake initiatives to promote greater environmental responsibility, and 3) Encourage the development and diffusion of environmentally friendly technologies. Based on these principles, environmental management becomes a part of Corporate Social Responsibility (CSR). This means that environmental management should be based on the rule of law as the formal institutional rules. North defines institutions as "the humanly devised constraints that structure political, economic and social interaction. They Consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (Constitutions, laws, property rights). Further North also said that the institution is composed of formal rules and informal rules. Eriksson Skoog defines institutions as 'rules' that are crucial impact on how individuals and organizations behave and interact, and how the community develops socially, politically and economically. These interactions have consequences on the structure of incentives in human exchange conducted.

Theoretically, institutional and organizations is different. The institutional are rules of the game, while the organization is the players, the group of individuals who are committed to achieving the same goal. Further North (1993) distinguishes the rules of the game (institutions), the players of the game (individuals and Organisations) and the way the game is played. Ollila says that as the rules, institutions are the rules of the game of right. While the organization "is much more difficult. Organizations have features such as common goals, borders between members and non-members, perhaps a common management and organizational culture." In general, institutional aims the creation of order in society. This was confirmed by Ferriero and Serrano who says that the general institutional objectives is to guide individual behavior. But the institution is not always and even created not to be efficient. There are factors of uncertainty that must be faced associated with incomplete information and bounded rationality in exchange by humans. The institutional created to reduce this uncertainty. Uncertainty in contrast to the asymmetric distribution of information in terms of the source of the problem. The problem of uncertainty comes from lack of information about upcoming events obtained by the agent. While the problem of asymmetric information distribution occurs because of the party holding the information, but the information is there.

Back to the institutional concept, as previously described, there are three main components of the institutional, namely the rules of the game, players, and how the game is played. To see how the rules of is played, we have to look at the interaction between the player and the player with the rules of the game. The actor is the player of the game, they may be individuals or organizations. Rules guide the actions of the actors. When actors are faced with the problem of recurring interaction, facilitate decision-making rules and behaviors

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4 This principle is a principle to 7, 8, and 9 of the NICE Code of Conduct Principles
12 Ollila (2009: 19)
14 North (1993: 3)
15 North (1993: 2)
16 Ferriero and Serrano (2011: 73)
by shaping expectations about how to behave in the situation successful, thus reducing the uncertainty of their behavior and rules establish incentives for behavior.  

To observe the behavior of actors as defined by Eriksson Skoog can be done from the perspective of agency theory. Jensen and Meckling, define an agency relationship as a contract in which one or more persons are the principal (s) and engage another person (agent) to perform some service on their behalf by delegating some decision-making authority to the agent. Problems also arise in an agency relationship as a result of capacity constraints and limitations of information held by the principal on the one hand, and on the other is the presence of opportunistic behavior by the agent. The tendency of the agent to behave opportunistically and irregularities that resulted in principal as the owner must pay the monitoring to ensure that the agent will always be in the path that has been agreed upon. These costs referred to as the institutional costs because it is generally not possible for the principal or the agent at zero cost to ensure that the agent will make optimal decisions from the viewpoint of the principal.  

In the context of industry, agency costs can arise in a variety of situations, both in the relationship between the owners of capital to the manager, the company with the bureaucracy, as well as between the company and the parties involved in a transaction. Agency costs arising in any situation involving the collaborative efforts by two or more although there was no clear relationship principal–agent. Therefore, to observe the institutional an industry have to do with observing the rules of the game and the behavior of the players who played by entrepreneurs, bureaucracy, and agents that exist within the industry.Institutional governance does not always run smoothly so that it can reduce uncertainty and create growth. There are many aspects that hinder the achievement of the goals of an institution, that is what is referred to as institutional barriers. Institutional barriers are obstacles in the institutional environment that prevents the market selection mechanism works fine.  

The last aspect is related to the institutional institutional practice is not created to be efficient, but there is the cost of the transaction to be paid by the actors in the implementation of the rules. There was also the costs that come from the asymmetric distribution of information between agents. Costly information is key for transaction costs. Transaction costs are the costs of resources used for the creation, maintenance, use, and change the rules and organization. Cheung have called "institutional costs". Cheung defines transaction costs as "any costs that are not conceivable in a economy-in other words, any costs that arise due to the existence of institutions.  

Currently, the cost of economic transactions is used to describe a number of differences in behavior that occurs in the exchange process. This behavior is not only seen in cases of purchase and sale transactions, but also the day to day emotional interactions, informal gift exchange, and so on. Williamson states that transaction costs occur due to (1) uncertainty, (2) frequency, (3) and specific. This condition is reinforced by the assumption that agents have bounded rationality and at least some of them there is a tendency for opportunistic behavior.

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18 Eriksson Skoog (2005: 19)
20 Jensen and Meckling (2000: 6)
21 Ibid
22 North (1993: 2)
25 Ibid
26 Ferriero and Serrano (2011: 76)
27 North, 1990: 27)
31 Ibid
In the context of the textile industry, the institutional governance of environmental management should have a positive impact on the quality of the surrounding environment. However, as described above, institutional governance is also characterized by the presence of opportunist behavior of the parties related to environmental management which resulted in the emergence of transaction costs.

III. METHODS

In accordance with the research objectives of this study the kind of type descriptive exploratory study. This type is used to explain and explore in depth the institutional practices of environmental management in the textile industry in Bandung Regency. The approach used an inductive approach to qualitative methods. In this study, institutional environmental management is defined as the formal and informal rules in environmental management in the textile industry in West Java. Practically, the selection Bandung Regency is based on fact that most of the textile industry in West Java is located in Bandung Regency. And theoretically, the selection of study sites was based on the opinions of Neuman that there are several steps in conducting field research, including the choice of location and ease of access. There are three (3) factors that are relevant when selecting the location of the study, namely (1) richness of the data, (2) unfamiliarity, and (3) suitability. In terms of ease of access, Neuman said the need for the role of Gatekeepers, that is someone who has formal and informal authority to control access to a site. Informants of this study consists of a textile company owner or representing the company, the Secretary BPLH Bandung regency, Chairman of API West Java. Sources of data in this study were obtained through interview, observation, and documents on environmental management. Testing the validity of the data is done by means of triangulation. While reliability testing performed by (1) Check the transcript to ensure that no mistakes are made during the process of preparation of the transcript, and (2) Ensure that there is no error in giving the code and interpret the code. Data obtained through this research is analyzed through three stages, namely data reduction, data display, and conclusion.

IV. RESULTS AND DISCUSSION

The rules of the game in environmental management was based on Law of Republic of Indonesia number 32 of 2009 about The Protection and Environmental Management. On Article 22, paragraph 1 of this Act says that "Every business and/or activities that impact on the environment are required to have environmental impact analysis." Textile industry is one of the types of industries that conduct business and / or activities that have a significant impact on the environment. Construction of a textile factory not only result in the transfer of land use but more importantly is the potential for the impact on the environment both technical impact, social, and security as a result of textile processing. Parvathi, et al (2009) says that: "The processing of the textile industry is characterized by high consumption of resources such as water, fuel and various chemicals in the sequence of the long process that produces large amounts of waste. Practice low process efficiency resulting in a huge waste of resources and severe damage to the environment."

The magnitude of the potential damage caused in the processing of textiles led the government to require companies to conduct environmental management environment by crafting a document that is a requirement for obtaining environmental permits and a prerequisite for obtaining a business license. In Article 1, paragraph 35 of Law No. 32 of 2009 said that: "Environmental permit is a license granted to any person doing business and / or activities that must Environmental Impact Analysis (EIA/Amdal) or Environmental Management Efforts and Environmental Monitoring Efforts (UKL-UPL) for the protection and management of the environment as a prerequisite for obtaining a business license and / or activities." The importance of EIA and UKL UPL as an instrument for the prevention of pollution and / or damage to the environment was not understood by most businessmen engaged in textile processing. The results showed that the environmental document is only partially owned by a large company. While the majority of small and medium enterprises do not have the environmental document. In many cases, even though the company already has the environmental documents, but they are not carried out so that the practice of industrial waste treatment is still not in accordance by provisions of the law. Common reasons why businessmen do not have the environmental document is due to rule on environmental management in recent years. While they were standing textile mills long before the rule was there. To enforce the rules on the environmental permit, the Regional Local Government to make regulations that require environmental documents for companies that will extend the operating license. But it is certainly not easy because not all businessmen understand these rules. In practice, the requirements of the environmental document can be "held" by unscrupulous officers by pay a sum of money as the institutional

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33 Neuman (1997: 351)
34 Ibid
costs.\textsuperscript{35} In this case, each party benefits from this transaction so there is incentive compatible\textsuperscript{36} they earn Pollution problems and poor quality of the environment around the plant are just some of the many environmental aspects associated with the operation of a textile mill. There are many other aspects such as cultural and social aspects dan public health shows that the cumulative implementation of Law 32 of 2009 and its supporting regulations have not been effective. The textile industry in this case contributed greatly over the ineffectiveness of the environmental management efforts.

Environmental issues associated with the textile industry not only in terms of wastewater discharged into the river but also as a solid waste residue in the production process. During this time, the solid waste that is always at issue is that coal waste is also widely used by the textile industry as an alternative energy source to replace fuel more expensive price. The issue of solid waste is becoming increasingly complex as a category B3 waste(toxic and hazardous materials), waste coal must be managed and for it to be must obtain permission from the minister, governor or regent/mayor in accordance with their authority.

Environment Management Obligations by Enterprises

Article 1, paragraph 35 of Law No. 32 of 2009 says that the environmental clearance granted to any person doing business and / or activities that must environmental impact analysis or UKL-UPL for the protection and management of the environment as a prerequisite for obtaining a business license and / or activities. Request for an environmental permit must be equipped by a) the document EIA or UKL-UPL form; b) document the establishment of Business and / or Activity; and c) business profile and / or activities. This shows that the importance of EIA and UKL UPL as a binding document for companies committed to environmental management.

There are two obligations that must be made by the employer relating to environmental management, that is the first, to have environmental permits and environmental documents in the form of EIA or UKL UPL or SPPL. According to Article 1, paragraph 11 and 12 of Law No. 32 of 2009, environmental impact analysis, which is hereinafter referred to as the EIA, is an important study on the impact of a business and / or planned activities on the environment necessary for the decision-making process concerning the implementation of business and/or activity. While the efforts of environmental management and environmental monitoring efforts, hereinafter referred to as UKL-UPL, is the management and monitoring of the business and / or activities that do not impact on the environment necessary for the decision-making process regarding business and / or activity. SPPL (Statement letter of environmental management) is sealed statement letter signed by the businessmen to perform environmental management related to business and/or activity they are doing.Second, conduct environmental management in accordance by the environmental documents that have been approved by the government in this case is BPLH (Agency for environmental management). Thus, the company's obligations in terms of environmental management can be divided into two: first, administrative liability and technical obligations.

a. Administrative Obligations

The results showed that the administrative obligation to have environmental permits and environmental documents are not met by most of the companies due to “complicated and expensive.” Data from the Department of Industry, Trade, and Cooperation Bandung regency showed that of the 432 formal textile companies, only 25 companies that have environmental document. It showed low compliance casement to have environmental documents and to conduct environmental management in Bandung regency that in fact have more textile companies. These data as well as answer questions about the causes of the high levels of environmental contamination that occurred in Bandung Regency. Associated with many textile companies that do not have environmental clearance, "environmental audit should be done because the activities are already in place”. But environmental audit is very difficult, in addition to requiring a long time, the cost is too expensive so could lead to bankruptcy. Therefore, BPLH prefer the guidance in performing supervisory duties. This offered a middle way should be greeted positively by textile businessman in Bandung Regency. This will provide opportunities for companies to demonstrate their commitment to environmental management through clean production (Cleaner Production) as a strategy of preventive environmental management and integrated.\textsuperscript{37}

However, as the findings in this study, the problem of the high cost to make environmental documents and the processing of waste into the reasons for employers to not fulfill this obligation.Regarding the length of time required to prepare the environmental documents, especially EIA, it is associated with a number of procedures

\textsuperscript{35} Jensen and Meckling (2000: 6)

\textsuperscript{36} Bos, Dieter. 2001. Regulation : Theory and Concepts. University of Bonn (p.11)

that must be passed to be approved by an EIA document. The number of documents that must be prepared and the process is so lengthy assessment by a review commission, it is **reasonable at all if it can be approved for an EIA document could spend up to 120 days. This is in accordance with Government Regulation No. 27 of 2012 which states that the EIA review commission was given 30 working days to assess the terms of reference (Article 23) and 75 working days to assess the RKL and RPL documents Andal (article 31). "There were several meetings, public hearings, presentations terms of reference, the presentation Andal, RKL, RPL, team presentation techniques. The length of time to get the document EIA and UKL-UPL and the amount of costs to be incurred by the company for the preparation and implementation makes many entrepreneurs ignore this obligation.

b. Technical Obligations

The second obligations companies in environmental management is to manage the industrial waste generated. Waste generated from textile processing very nature of pollutants. The high use of chemicals and energy resources of coal in the production process results in most of the textile industry waste is classified as hazardous and toxic materials (B3). Textile company that does not have its own waste treatment plants dispose of production waste directly into the environment, both rivers, fields, or other media. As a result, at certain times of the population rice can be colored red, blue or yellow, depending on the colors used by textile mills discharge effluent. Similarly, the river water, the color can be changed 2 or 3 times a day. Environmental pollution is not only due to the many companies that do not have waste treatment plants such as WWTP (Waste Water Treatment Plants) but also by companies that have a treatment plant and waste management permits, but doing so incorrectly.

Based on this study, identified several factors that led to the ineffectiveness of the production waste management effort required of the company, namely:

1. Takes a huge investment to build wastewater treatment plants.
2. Takes a huge cost to operate the waste treatment plant, both for maintenance of engines, procurement of chemicals for labor or operate it.
3. Number of permits that must be met businessmen associated with license management and environmental protection.
4. Attitude apparatus "selective" in performing control.
5. Lack of socialization to the company.

The amount of investment to build wastewater treatment plants and operations is a fundamental problem faced by most of the textile companies in Bandung regency. SSC Ltd for example, a company engaged in the field, spinning, dyeing, and weaving it must spend approximately IDR 20 million every month for operational wastewater treatment plants. This means that, within a year the company has to spend at least IDR 240 million. The cost of environmental management should be addressed by the company to internalize environmental costs. Internalization of environmental costs means include the costs of pollution and/or damage to the environment in the calculation of production costs or the cost of a business and/or activity. Thus, the cost of environmental management is not a stand-alone component costs that reduce the company's profits, but it is also a component of production costs must be borne by the consumer textile products. In addition to the high cost of investment and the cost of environmental management, licensing factors also influence the effectiveness of environmental management by textile companies in Bandung Regency. Companies that conduct waste treatment must have at least 12 permits associated with the waste generated. To meet this permission is certainly not easy. In addition to requiring a great energy to is arranged, of course, adds cost for the company, good for the levy or fee to get permission itself. Results showed that entrepreneurs know there are a lot of permissions associated with the environment, but not all do it. As said by the owner of SSC Ltd, "if all of the rules that may be implemented well in Citarum pollution levels would not be this bad. The problem is it does not all run, and that is always disputed is a company that already has a waste treatment permit."

It also was mentioned by the Chairman of API West Java. "Actually, a lot of industries that already have a lot of good waste management, it costs a lot. While there is also a similar plant not do it. "There has been no definitive data on the number of companies that already have permits and carry out environmental management processing production waste. Consequently BPLH can not perform supervisory duties on textile companies that do not have permits because they do not have the data. Companies that have permission finally feel a "victim" because it is always monitored and supervised by the government. While that does not have a license and do not process the waste instead "left". It is a portrait of the environmental management control of the textile industry in Bandung regency. Large companies that have permits environmental management became the target of control "They always supervised. there are a few errors immediately prosecuted. While many
companies do not have permission and do breach not receive attention of the regulatory authorities. "There are many issues that arise during the supervisory officer of the company to BPLH monitoring. This problem arises not only because of differences in treatment, but also driven by apparatus attitude that are often arrogant at the time of inspection. According to the businessman, there is the impression that they are finding fault with the company. Though they know that the quality standards that can be up and down, at the quality standard of our ride directly to blame. Another interesting thing that often happens in the examination of waste production is that the supervisor can not provide solutions to problems that occur in the company. Enforcement of environmental management are also often complained of by the employer. Memorandum of examination results should not be directly on the prosecution but should be gradual, ranging from a verbal warning, written warning, and so on prosecution. Repression is the last to be taken by BPLH. But the practice is not. Supervisory did not guidance and not want to know what the constraints faced by the company and how the solutions to the problems facing the company. Field test results directly used as basis for prosecution, or at least the threat of enforcement.

The Environmental Management Costs Borne by The Enterprises

There are some costs to be incurred by the company relating to the obligation to have environmental permits and waste treatment, namely 1) the cost of preparation of environmental documents in the form of EIA, UKL, UPL, or SPPL; 2) the cost of discussion and assessment of environmental documents by the environmental commission; 3) the cost of construction of waste treatment plants; and 4) the cost of waste treatment operations. The fourth component of these costs requires companies to spend money in an amount not less. In addition to these formal cost component, there is a component of informal costs associated with environmental management of the company, namely: 1) the cost to obtain environmental permits; 2) compensation to the affected communities and the surrounding community; 3) the cost to obtain a waste management license; 4) costs in order examination conducted by the government. The cost to obtain environmental permits are not cheap. Although this permits no retribution, but to obtain the necessary environmental permits technical recommendations all of which require money to roads. Component costs are quite large and difficult to predict is the compensation to be paid to communities affected by the construction of the plant and the people living around the plant. Other cost components that arise as a result of environmental management is the cost of the examination conducted by the supervisor. Although the cost of field trips in order to conduct control come from the government, however, it is possible that there are rogue persons and receive gratification from the company. As previously explained, the threat of prosecution is often experienced by companies that have environmental permits and perform processing production waste. The results showed that the threat of legal action related to money. The company will remain threatened legal action until they spend some money to local police officers, even though they have done a waste treatment properly. "Apparatus, instead of attacking companies that do not have waste treatment, but rather that it is correct, look for where the fault. As long as no outside money, the problem just continues. "Unscrupulous apparatus see a company that is able to perform waste treatment is a company that has substantial funds. Companies that have substantial funds be used to provide benefits to them. The most effective way that companies are willing to spend some money with the findings of violations and criminal threats. Although sometimes the violations found only minor violations, such as chimney no ladder, no junk, or even pictures of the skull were also blamed. Institutional practices like this clearly indicate the presence of opportunistic behavior of officials.

Game money made by apparatus not only to companies that have a waste treatment plant, which is even worse is the game with a company that does not do waste treatment. This is "fertile ground" being filmed actors who are technically knowing abuses by the company. As said Chairman of APIs West Java, "there is also a rogue businessman, without the knowledge of the front of the factory, he created the channel. People think this plant is waste of, in fact old ones ". When there are problems with the authorities, The must pay money each year. Each year out Rp 50 million, while other companies investing billions, tens of millions every month. "Rogue businessman existence is justified by the owner of SSC Ltd. He says that: "The awful had no WWTP, once busted out Rp 50 million. Still cheaper. "Nevertheless, although much cheaper, corporate actions which do not take over management of industrial waste in clear violation of the Law of Environmental management and business ethics. Since the objective of business ethics is that businesses be honest, do not cheat, be trustworthy, be prudent, be concerned about the well-being of others, and so forth.38 Thus, opportunistic behavior is not only owned by the apparatus but also by textile businessmen.

V. CONCLUSION

The study concluded that the institutional of environmental management in the textile industry in Bandung regency was marked by the implementation of the rules that are inconsistent by apparatus. It is

38 Murphy (2008: 124).
strongly associated with either opportunistic behavior by unscrupulous apparatchik and businessmen. On one side of the apparatus opportunistic behavior intended to benefit from environmental management practices undertaken by the company. On the other hand, businessmen also utilize these persons opportunist behavior by deliberately not implementing environmental management in their operations because financially cheaper compared to implement the rules. Thus, transaction costs arise not only because it does not implement the rules but while companies performing the rules still burdened with these costs. Although the cost to transact rules violations of environmental management is cheaper than the cost to implement it, but from the point of ethics, behavior like this is very wrong and unethical business

**RECOMMENDATIONS :** In the short term, to reduce the pollution caused from the disposal waste, local governments should establish an integrated waste treatment plant to accommodate the waste generated by textile companies of small and medium scale. Along with it, to create the governance of environmental management institutions better in the textile industry in Bandung District, local governments need to re-record all the textile companies and environmental permits as well as stern action against companies that violate its environmental permits. So in the long run will suppress opportunistic behavior of officials and businessmen

### REFERENCE

**A. Book**


**B. Journal and Electronic Sources**


C. Rules

Undang-Undang Republik Indonesia No 32 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup

Peraturan Pemerintah Nomor 18 Tahun 1999 Tentang Pengelolaan Limbah Berbahaya dan Beracun

Peraturan Pemerintah Nomor 16 Tahun 2012 Tentang Pedoman Penyusunan Dokumen Lingkungan Hidup

Peraturan Pemerintah Nomor 27 Tahun 2012 Tentang Izin Lingkungan

Peraturan Menteri Negara Lingkungan Hidup Nomor 11 Tahun 2006 Tentang Jenis Rencana Usaha dan/atau Kegiatan Yang Wajib Dilengkapi Dengan Analisis Mengenai Dampak Lingkungan

D. Others Source


Asosiasi Pertekstilan Indonesia (API) Jawa Barat

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