Overcoming Environmental Pollution Due to Waste from the Soun Noodle Processing Industry

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ABSTRACT
Pollution is not only caused by large and medium scale industries, but can also be caused by small-scale industries, one of which is the glass noodles noodle industry which also produces liquid waste and solid waste. The problem in this research are: How is control environmental pollution caused by the production of cottage industry "soun noodles" in the district of Klaten regency Tulung, and What are the constraints experienced in the process of controlling environmental pollution caused by the production of cottage industry "soun noodles" in the district of Klaten regency Tulung. This research is empirical laws, the data obtained through interviews with respondents and informants, and supported by secondary data. Waste liquid emanating from the exhaust process chlorine and solid waste in the form of starch fibers discharged into rivers, causing pollution of river water. In this case the maximum BLH not deal with the issue because of the lack of supervision and budget. Most of the small-scale glass noodles noodle industry, and are not required to have TDI, so that apart from oversight. In addition, the socialization of the impact of industrial activities on the environment pollution is not maximized, due to limited funding and the number of officers BLH. Based on these results, it recommends that the Office of the investments and unified licensing and BLH should be continuous monitoring and counseling to perpetrators of the business activities and BLH encourage businesses to conduct joint IPAL

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INTRODUCTION
Environmental pollution occurs when the material cycle in the environment changes so that the balance in structure and function is disrupted. The imbalance of the structure and function of the
material cycle occurs due to natural processes or also due to human actions. In modern times, there are many human activities or actions in meeting biological and technological needs so that many arise resulting in environmental pollution. In an effort to change the human environment to improve the welfare of his life can cause pollution. The government made regulation No.82 of 2001 regarding the definition of water pollution. Article 1 (11) reads: "Water pollution is the entry or inclusion of living things, substances, energy and / or components into water due to human activities that make water quality decline to a certain level that can cause water cannot function as it should or for its purpose". The purpose of managing water quality is so that the quality of water is maintained and guaranteed as desired for its designation, while the purpose of water control is to ensure water quality to remain in accordance with water quality standards through efforts to prevent and overcome water pollution and restore polluted water quality.

In Tulung District, Klaten Regency, there are many household industries of industrial factories "Mie Soun" which in the processing process uses chemicals. Most cottage industries are small-scale that do not have permits, which can cause problems with local authorities. Currently, the palm flour industry produces liquid waste and solid waste. The liquid waste comes from the palm starch soaking process which uses chlorine so that it causes an unpleasant odor in the Kali Bendo River, the community feels very disturbed by the presence of B3 waste that has the potential to cause river water pollution. Even though in the Bendo area of Tulung District also built tourist attractions such as Janti water tourism which is famous for fish fishing, a place to swim, which is not taken seriously will cause pollution impacts.

Meanwhile, control over environmental pollution, especially in river flows in Klaten Regency, especially in Tulung District, Bendo village, where there are many cottage industries processing "Mie Soun" is considered ineffective. This can be seen from the lack of supervision by the Environmental Law Agency (BLH) of Klaten Regency on the disposal of "Mie Soun" industrial waste in Tulung District, Bendo village so far. More and more cottage industries are causing problems, in the sense that waste has not been managed properly.

METHODS
The approach method used in this study is juridical-normative, with a type of dogmatic research, a form of perscriptive research on legal relations. The specification of this study is descriptive-analytical. The data collection method used through the library research method by testing the document materials and library materials used in this study. Data are analyzed qualitatively-normatively, examining by interpreting and constructing statements contained in statutory documents. Qualitative analysis method, built based on secondary data in the form of theory, meaning and substance from various literature, laws and regulations then analyzed with normative laws, and related theories, so that conclusions are obtained.

RESULTS AND DISCUSSION
A. Overview of the Soun Noodle Industry
1. Understanding the Soun Noodle Industry
   In Article 1 point 2 of Law Number 3 of 2014 concerning Industry, what is meant by industry is all forms of economic activities that process raw materials and / or utilize industrial resources so that they can produce goods that have added value or higher benefits including industrial services. Meanwhile, Mie Soun is a smooth noodle made from starch and shaped like a bird's nest.

2. Various Industries
   Various industries consist of:
   a. Home Industry
   b. Small Industry
3. **Industrial Activity Licensing**

A permission is a statement of granting or consenting that allows. According to Mr. N. M. Spelt and Prof. M. J. B. J. M. ten Berge, a permit is an approval from the authority based on laws or government regulations to in certain circumstances deviate from the provisions of the statutory prohibition (permit in the narrow sense).

4. **Impact of Industrial Activities**

The development of industry is often associated with the development of a region. This is due to the multiplier effect and innovation caused by industrial activities interacting with potential and constraints. Industrial growth in a region, in reality may not necessarily have a positive impact on the people in the area, if in reality the growth of the industry has no relationship with the local economic sector, as stated by Irawan and Suparmoko (1992) in Utama (2002) which occurred in Pakanbaru and Dumai where there are capital-intensive activities such as oil mining. What the company produces is only for export and its relationship with the country is only in the form of payment of workers' wages. There is no link to local economic activities, thus causing the area to become a worm enclave (the foreign enclave).

The development of the agricultural sector in Indonesia to date is quite encouraging, but the level of people's income from agricultural businesses has not increased as expected. Therefore, the Government has launched development targets in Indonesia must refer to the Five Main Pillars, namely: 1) people-based economic development; 2) human resource development and development; 3) health/sports development; 4) cultural arts development/activities; and 5) development in order to increase faith and piety. People's economic development is focused on empowering farmers, especially in rural areas, fishermen, craftsmen, and small industry entrepreneurs.

The following are the positive and negative impacts of industrial activities:

1) Positive impact of industrial development:
   a. increase population income
   b. produce miscellaneous goods
   c. expanding employment opportunities
   d. reduce dependence on other countries
   e. enlarging the usefulness of raw materials
   f. increase in foreign exchange of the State

2) Negative impact of industrial development:
   a. the occurrence of urbanization flows
   b. the occurrence of environmental pollution
   c. the existence of consumerism
   d. Less Agricultural Land
   e. people's way of life is changing
   f. industrial waste causes soil pollution
   g. the occurrence of livelihood transition

B. **Overview of Waste and Environmental Pollution**

1. **Definition of Waste**

Waste is a substance produced from a production process, both industrial and domestic. Waste can be in the form of garbage, toilet water, and wastewater from various other domestic activities. Solid waste is better known as garbage, toilet water, and wastewater from various other domestic activities. Solid waste is better known as waste, which is often undesirable because it has no economic value.
According to Article 1 number 20 of the UU PPLH, what is meant by waste is the rest of a business and/or activity. What is meant by residue/or an activity is the rest of an activity and/or production process which among others is produced from household activities, hospitals, industry, mining, and other activities.

2. Types of Waste
   According to its characteristics, waste is divided into:
   a. Liquid waste
   b. Waste Particulate Matter/Gas
   c. Solid Waste

3. Waste Impact
   Waste as a result of industrial activities will have a negative impact on:
   a. Health
   b. Milieu

4. Environmental Pollution
   Environmental pollution is a major change in environmental conditions due to economic and technological developments. Changes in these conditions exceed the threshold limit of ecosystem tolerance, thereby increasing the amount of pollutants in the environment.

   Factors that cause environmental pollution include an increase in population and uncontrolled natural exploitation activities, as well as industrialization that is not managed properly. In addition, environmental pollution in reality can also be caused by natural processes themselves.

   The definition of environmental pollution in Article 1 point 1 of the UU PPLH is the entry or inclusion of living things, substances, energy, and/or other components into the environment by human activities so as to exceed the established environmental quality standards.

5. Types of Pollution
   a. Water pollution
   b. Air Pollution
   c. Noise Pollution

C. Environmental Pollution Control due to Mie Soun Industry waste in Klaten City.
   1. The condition of the soun noodle industry in Klaten Regency
      Klaten Regency is one of the regencies located in the province of Central Java. Geographically, Klaten Regency is located between 7°32’19” S to 7°48’33” S and between 110°26’14” E to 110°47’51” E, with the following boundaries:
      a. North of Klaten City bordering Boyolali Regency (Central Java)
      b. East of Klaten City bordering Sukoharjo Regency (Central Java)
      c. South of Klaten City bordering Gunung Kidul Regency (DIY)
      d. West of Klaten City bordering Sleman Regency (DIY)

   2. Soun noodle industry waste in Klaten Regency
      Waste is the remainder of a business and/or activity. A by-product of noodle soun industry activities in Klaten Regency is waste. The waste of the soun noodle industry is in the form of liquid and solid waste. Solid waste is in the form of ongkok (palm starch), while the liquid waste comes from the palm starch soaking process. The solid waste and liquid waste are not treated first, but are directly discharged into the sewer that flows into the Bendo River, the process of disposal of the waste is directly discharged into the river which causes public health problems. Based on the results of the study, it can be stated that some people complain about the quality of river water polluted due to the soun noodle waste. The remaining waste of the noodle soun industry should be made WWTP to process waste to be environmentally friendly. The problems that befall small business actors
cannot be separated from the existence of waste. The average business actor is unable to make a waste treatment plant according to the specified standards.

3. Impact of Mie Soun industrial waste in Klaten Regency

Noodle soun industrial waste also has a negative impact on health, because industrial waste can cause disease. Based on the results of the study, according to BLH Klaten Regency, Mie Soun industrial waste has polluted and made water quality decrease, because waste disposal is directly discharged into the river without any waste collection. Handling waste problems has actually been carried out by providing counseling to business actors, but until now it has not produced maximum results, due to the lack of personnel to carry out routine supervision.

4. Control Measures

Measures to control pollution and/or damage to the environment based on Article 14 of Law No. 32 of 2009 concerning Environmental Protection and Management:
   a. Prevention
   b. Countermeasures
   c. Recovery

5. Obstacles Faced in Handling Waste that Pollutes River Water Due to Mie Soun Industrial Waste

Based on observations and analysis results, it is known that there are obstacles in overcoming environmental pollution as a result of noodle soun industry waste are as follows:
   a. Many business actors in the soun noodle industry with small capital are not required to have a TDI (Industrial Registration Certificate), so there is no supervision from the Integrated Investment and Licensing Office.
   b. Most of the soun noodle industry is small-scale, so it cannot afford to make WWTP, because the cost is very expensive.
   c. The Integrated Investment and Licensing Office does not dare to firmly sanction industry players who violate the provisions

CONCLUSION

1. Measures to control pollution and/or environmental damage based on Article 14 of Law No. 32 of 2009 concerning Environmental Protection and Management including prevention, mitigation and recovery are still not sufficiently carried out properly and optimally due to the lack of supervision from the government.
2. The obstacles faced by industrial owners are:
   a. Many business actors in the soun noodle industry with small capital are not required to have a TDI (Industrial Registration Certificate), so there is no supervision from the Integrated Investment and Licensing Office.
   b. Most of the soun noodle industry is small-scale, so it cannot afford to make WWTP, because the cost is very expensive.
   c. The Integrated Investment and Licensing Office does not dare to firmly sanction industry players who violate the provisions

REFERENCES

Law Number 32 of 2009 concerning Environmental Protection and Management.

Constitution of the Republic of Indonesia Year 1945.
Government Regulation Number 4 of 2001 concerning Control of Environmental Damage and / or Pollution Related to Forest and / or Land Fires.


Jidny Izham Al Fasha et al, "Law Enforcement Against Illegal Trade in Protected Bird Species in Indonesia", 2023, Vol 7 No. 2, Community Development.


Wahyu Wiriadinata, "Forestry in Indonesia in Economic, Ecosystem and Legal Perspectives", 2012.