
ENVIRONMENTAL POLLUTION PREVENTION EFFORT**SOUN Noodle INDUSTRY WASTE IN TWO(2) VILLAGE, TULUNG DISTRICT, KLATEN REGENCY**

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ABSTRACT

Pucang Miliran Village and Daleman Village are the largest buckwheat noodle industry/SME centers in Tulung District, Klaten Regency, Central Java.

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 vermicelli noodle industry which also produces liquid waste and solid waste. The problems in this study are how to prevent environmental pollution due to the production of home-based "soun noodles" in Tulung District, Klaten Regency, and what are the obstacles experienced in the process of preventing environmental pollution caused by the production of home-based "soun noodles" industries in 2 villages, namely Pucang Miliran Village and Daleman Village, Tulung District, Klaten Regency.

This research is an empirical legal research, data obtained through interviews with informants. Liquid waste originating from the chlorine disposal process and solid waste in the form of starch fiber is discharged into the river, causing river water pollution. In this case, BLH is not optimal in handling this problem due to lack of supervision and budget. Most of the small-scale vermicelli noodle industry, are not required to have a TDI, so they are free from supervision.

In addition, the impact of industrial activities on environmental pollution has not been maximized, due to limited funds and the number of BLH officers. Based on these results, it is recommended to the Investment Office and Licensing Unit and BLH to continue to monitor and provide counseling to business activity actors and BLH to encourage business actors to conduct joint IPAL together.

Keywords: Soun noodles, Industry, Waste

PRELIMINARY**Background**

Tulung District is in the northern part of the Kab. Klaten, along the border with Boyolali Regency. In the west of this sub-district, it has entered the mountainous area towards Mount Merapi. There is a main road that divides the east and west of this district. This road connects to the south to Kec. Jatinom, and to the north towards the city of Boyolali. This road is getting crowded as an alternative route from Semarang to Yogyakarta or vice versa. Most of the residents of Tulung District work as farmers. On the east side of the road, more and more rice is planted, while on the west side of the road, more and more crops are planted, vegetables and are used as private plantations. However, there are several villages where most of the residents work as entrepreneurs of palm flour as the basis for making vermicelli noodles. This palm flour industry is located in Kel.

Pucang Miliran and Ex. dalemen. Every day, trucks of palm trunks are transported from the mountains in Central Java and even from West Java.¹

In industry it is impossible if it does not produce waste, the vermicelli noodle industry produces waste in the form of liquid, solid, and gas. The waste causes environmental pollution, and damages the natural surroundings. The results of this waste are the background to the problem of this paper, how will the efforts taken to condition/prevent the indiscriminate disposal of waste and what are the obstacles that occur when these efforts are carried out. In this effort, the role of the community and related institutions is very important, as well as the level of awareness of protecting the environment.

The existence of vermicelli noodle industry waste must be managed properly in an effort to anticipate the occurrence of pollution in the local environment and minimize losses experienced by the local people and surrounding areas. In the 1945 Constitution it has been observed, in Article 33 paragraph (4) that the national economy is organized based on economic democracy with the principles of togetherness, efficiency, justice, sustainability, environmental insight, independence, and by maintaining a balance of progress and national economic unity. Based on Article 87 paragraph (1) of Law Number 32 of 2009 concerning Environmental Protection and Management (UUPPLH) every person in charge of a business and/or activity commits an unlawful act in the form of pollution and/or environmental destruction that causes harm to others or the environment must pay compensation and/or take certain actions. In this case, the responsibility for environmental pollution by the activity of the vermicelli noodle industry in Pucang Miliran and Daleman Villages, Tulung District, Klaten Regency is the obligation of the perpetrators of these industrial activities. activity industry can conducted on form implementation right and obligation law by perpetrator activity sound noodle industry the on environmental pollution control.

In fact, the perpetrator business activity sound noodle industry until moment this not yet carry out environmental pollution control so that cause waste activity this industry always becomes complaint public local and surrounding and also loss. Lossthe due to waste disposal which streamed by exclusive (directly) to the ditch or to the river which impact on waters which worn for irrigate agriculture create farmland as polluted. This issue until now not yet there is solution because implementation right and obligation law by perpetrator activity the vermicelli noodle industry has not been done, this thing cause impact pollution and loss for people.

Based on the description of the background above, the author is interested in researching environmental issues related to industrial waste with the title "EFFORTS TO PREVENT ENVIRONMENTAL POLLUTION OF SOUN Noodle INDUSTRY WASTE IN 2 VILLAGES, TULUNG DISTRICT, KLATEN REGENCY".

RESEARCH METHODS

Research methods

The method chosen by the author based on the case that was appointed as the title is the research method Empirical Law, which is a legal research method that uses empirical facts taken from human behavior, both verbal behavior obtained from interviews and real behavior through direct observation.

Research sites

The research location is in Pucang Miliran Village and Daleman Village, Tulung District, Klaten Regency, Central Java Province.

Research subject

The research subjects of this paper are residents of Pucang Miliran Village and Daleman Village, Tulung District, Klaten Regency, which have small and large scale vermicelli noodle industries.

Object of research

The object of research in this paper is the results of the Soun Noodle industry and its waste.

RESULTS AND DISCUSSION

- **Definition and Kinds of Industry**

According to Law Number 5 of 1984 on Industry, Industry is an economic activity that processes raw materials, raw materials, semi-finished goods, and/or finished goods into goods with a higher value for their use, including industrial design and engineering activities.

The various industries consist of the following:

- a. Big industry
- b. Medium/medium industry
- c. Small industry
- d. Domestic industry

- **Definition of Soun Noodles**

Soun (suun) or vermicelli are smooth noodles made from starch. After boiling or soaking, the vermicelli is clear, has a chewy texture, and has a smooth surface. Among the various types of starch that can be used as raw materials are mung bean starch, tubers (potatoes, sweet potatoes, tapioca), sago, palm sugar, and midro (canna). Vermicelli is different from vermicelli. Sold dry and folded like a bird's nest, vermicelli are boiled or soaked until slightly soft before being used for various stir-fry dishes and soups. Vermicelli has almost no taste, but absorbs the broth and flavors of the other ingredients it's cooked with. Without soaking the water first, the vermicelli can be directly fried until crisp, and used as a base or food decoration. (Wikipedia)

- **Impact of Industrial Activities**

In industrial activities, there must be impacts, both positive and negative impacts. The following are the positive and negative impacts of industrial activities:

Positive impact :

- 1) Creating job opportunities for the local community
- 2) Can add income to the community thereby increasing prosperity.

Negative impact :

- 1) Produce waste and cause environmental pollution/natural damage, and can result in death for animals, as well as humans can be affected by diseases caused by the waste.

- **The Condition of Soun Noodle Industry in Pucang Miliran Village and Daleman Village**

The condition of the vermicelli noodle industry, which is located in 2 villages in Tulung sub-district, Klaten Regency, until 2021 is still quite stable, considering that it has been affected by Covid-19 for almost 2 years. Even though there has been a decline in the level of sales, so far none of the MSMEs from the two villages have closed their businesses. Because the vermicelli noodle industry is a food industry which will definitely one day continue to be used. There are still many trucks that go in and out of the 2 village roads to transport the vermicelli noodle industry products.

- **Soun Noodle Industry Waste in Tulung District**

According to Article 1 number 20 UUPPLH, what is meant by waste is the remainder of a business and/or activity. It is impossible if an industry does not produce waste from its industrial products.

The vermicelli noodle industry produces waste in the form of liquid, solid, and gas. Solid waste is in the form of onggok (palm starch), while the liquid waste is originated from palm starch soaking process. Solid waste also liquid waste the not preprocessed, however direct thrown into the ditch which flows into the Bendo River, the waste disposal process the direct thrown into the river which cause public health disorders.

Based on results research, it was stated that some inhabitants sigh about river water quality which polluted because the vermicelli noodle waste. Should remain derive vermicelli noodle industry waste in make WWTP for process waste to be environmentally friendly. Problem which hit the perpetrator SMEs don't free from existence the waste. Average perpetrator effort no able make sewage treatment plant in accordance standard which determined.

- **Impact of Soun Noodle Industry Waste**

The activity/activities of the vermicelli noodle industry will have a negative impact (loss) on:

- a. Health

The impact of the vermicelli noodle industry waste in the form of liquid will be polluted and contaminated, causing various dangerous diseases.

The impact of waste in the form of gas / air will cause an unpleasant odor.

- b. Environment

The impact of the vermicelli noodle industry waste on the environment is that the environment becomes dirty and polluted, causing an unpretentious environment.

- **Agency/Institution that Manages Soun Noodle Waste**

In an effort to prevent pollution of vermicelli noodle waste in Tulung sub-district, Klaten Regency, of course there is interference from the relevant agencies/institutions regarding the vermicelli noodle industry and its waste. Relevant institutions are:

1. Environmental Agency (BLH) / DLHK (Department of Environment and Forestry)

Article 4 of the Klaten Regency Regulation Number 25 of 2008 concerning the Organization and Work Procedure of the Environmental Agency, contains the duties and authorities of the Environmental Agency to carry out the preparation and implementation of regional policies in the environmental sector.

2. Integrated Licensing and Investment Office

Integrated Licensing and Investment Office In Article 4 of the Klaten Regency Regional Regulation Number 13 of 2007 concerning the Establishment of the Organizational Structure and Work Procedure of the Integrated Service Office, that the duties and authorities of the Integrated Licensing and Investment Office are to manage licensing and non-licensing services with a one-door system.

- **Steps of Efforts to Prevent Soun Noodles Waste**

The stages of controlling pollution and/or environmental damage based on Article 14 of Law No. 32 of 2009 concerning Environmental Protection and Management include:

- a. Prevention

- b. Countermeasures

- c. Recovery

Prevention

In the KBBI the definition of prevention is a process of steps to prevent something from happening. The prevention stage can be done by:

Countermeasures

Countermeasures are actions that aim to overcome and deal with the consequences that arise from the occurrence of something. The countermeasures stage can be done by:

Recovery

Recovery is an activity stage to restore the condition of the community and the environment affected by the disaster by re-functioning infrastructure and facilities. The recovery phase can be done by:

- **Obstacles / Obstacles Faced**

In the process of preventing environmental pollution from the vermicelli noodle industry waste, there will definitely be obstacles/obstacles encountered when it is impossible if everything goes smoothly. These barriers include:

- a. Many actor efforts on noodle industry which capitals small no must have TDI (Industry Registration Certificate), so that no there supervision from Investment Office and Integrated Licensing.
- b. Part big large-scale vermicelli noodle industry small, so that no capable for create WWTP, because very expensive.

Environmental Agency (BLH) no bold give punishment for industry players which violate the provisions.

CONCLUSION

The conclusion that the author got from this paper based on the description above, namely:

- 1) Implementation and obligation on environmental pollution control becomes impact activity on noodle industry in Pucang Miliran Village and Daleman Village, Tulung District, Klaten Regency with good accordance with regulation which already set. BLH already give education on industrial waste management before disposal direct to the river. However still not yet could held in accordance with provision which apply.
- 2) Control and pollution recovery impact vermicelli noodle industry waste yet could held because existence obstacle land. Village Cash which not qualified or adequate in WWTP manufacture the, as well as presence of chlorine which there still is in Pucang Miliran Village and Daleman Village, the cause no can WWTP rounding is done because it will affect the WWTP processing process, and no existence punishment which concrete and tough on industry players which already pollute the environment and no in accordance with provision which already set.

SUGGESTION

Based on the conclusion, the author can provide suggestions that the community and related agencies/institutions should be very concerned that this waste is not trivial, because the effect is not now but in the years to come. Communities and related institutions must do everything possible so that this waste does not have an impact on humans and the surrounding environment, for the sake of creating a developed village and a beautiful environment

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Constitution :

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- Perda Klaten
- UUPPLH