

The Study of Regulations in Relation to Environmental Problems Arising from Factory

Worakarn Kanitakul*

ABSTRACT

This Independent Study Paper is about the purpose of identifying the problems of the regulations in relation to environmental problem arising from the factory according to the Factory Act B.E. 2535 and the Promotion and Conservation of National Environment Quality Act B.E. 2535. The writer examines on both legal and practical problems by comparing with the similar the regulations. And it focuses the legal of Singapore to figure out the ways of solutions to solve the problems which is caused.

This Independent Study Paper found out that there are two complications. They consist of the regulation enforcement and the regulation compliance. The regulation enforcement, there are two government sectors to protect environmental protection of the factory namely: the Ministry of Industry and the Ministry of Natural Resources and Environment. Both of the Ministries are in charge of control the factories in relation to environmental protection. It can lead to cause the problem such as double government' budget, lateness in management. In addition, the regulation compliance, theses law will enforce the factory operator. It can make the confusion of compliance in the factory operator. The factory operator shall carry double burdens to comply repetitive laws. The writer studies the legal of Singapore. It can found that Singapore has only one law to enforce a factory in relation to environmental protection. Therefore, Singapore has no problem in repetitive laws. Thus, the guideline and model of Singapore law will help improve laws in relation to environmental protection are not repetitive.

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Introduction

During the period when Thailand initially established its industrial sector, the private industrial sector could carry on businesses freely. The government did not intervene much on business operations and management. However, the industrial sector increasingly expanded. Many machines, equipment and dangerous chemical substances were used. Wishing to maximize profits, factory operator then became negligent towards environmental protection measures.

At the present, Thailand has two environmental protection legislation which are the Factory Act B.E. 2535)1992 (and the Promotion and Conservation of National Environmental Quality Act B.E. 2535 .(1992)These laws will be applied in same manner. The Factory Act B.E.2535)1992 (sets the standards of environment protection and regulates and supervises factory .For the Promotion and Conservation of National Environmental Quality Act B.E. 2535 (1992), factory must comply with this act by observing the environment. When these laws are applied, there is an overlap between enforcement and compliance. Unfortunately, these laws cannot help to protect the environment from industrial factory pollution release. They merely create a burden to the state by imposing duties to control, regulate and supervise factories upon the Ministry of Industry along with the Ministry of Science and Technology. Moreover, these two Acts also impose various duties upon factory operators and occupiers. They have to comply with two different standards of applicable laws which results in the overlapping of law. This overlap can create many disadvantages such as high costs of operations, uncertainty of factory operator, and unnecessary delays. These pose as significant problems on the state and private sector.

In foreign countries, especially Singapore, there is only one law which deals with environmental protection against pollution from factory operations. It imposes duties of the state and factory operators or occupiers under the Environment Protection and Management Act 1999. The Factory Act of Singapore does not prescribe any provision in relation to environment protection. Instead, the Environment Protection and Management Act is applied to regulate factories to conserve the environment and requires factory operator to comply with duties under only one Act on environmental issue. As a result, there are no such problems as with Thai laws.

The objective of this research is to study the problem of overlapping laws in Thailand and to examine foreign law as an approach to solving problems and finding appropriate solutions to solve the problems posed by environment protection laws in Thailand.

The Problem of the Study

Laws and regulations are ways to control, regulate, enforce, and supervise factories. In enacting laws and regulations, they have to be clear and consistent. The government officials are the people who control and regulate factory operations with the laws and regulations related to environmental protection of factory. The occupier or owner of factory may cause environmental pollution. They are against the law so the government uses penalties to punish offenders. For one offence, it is regulated and supervised by many different government agencies. Therefore, an overlapping of laws occurs.

The study of regulations for the environmental protection of factories examines two laws which are the Factory Act B.E. 2535)1992(and the Promotion and Conservation of National Environmental Quality Act B.E.) 25351992 .(Moreover, this Independent Study examines the Ministerial Regulations under the Factory Act.

The Problem of Departments and Persons authorized in accordance with the Act

Under the Factory Act B.E. 2535 provides measures for environmental protection of factory .The Minister of Industry shall take charge of the execution of this Act and shall have power to appoint the authorized person and to prescribe the Ministerial Regulations.¹ In the other hand, under the Promotion and Conservation of National Environmental Quality Act B.E. 2535 prescribes the measures in environmental

¹ Section 6 of the Thai Factory Act B.E. 2535

protection of factory. The Ministry of Natural Resources and Environment shall have power to issue the Ministerial Regulations and determine the standard of measures.²

The factory's administration, environmental protection is included in the two acts as mentioned above. This results in factory operators under the Factory Act B.E. 2535 becoming the occupiers or owners under the Promotion and Conservation of National Environmental Quality Act B.E. 2535, who will be required to comply with two laws issued by different ministers and authorized persons.

Therefore, it is seen that there is an overlapping of laws and Ministerial Regulations. Therefore, the Minister of Industry and the Ministry of Natural Resources and Environment are in charge of controlling, regulating, enforcing and supervising at the same time for the same issue. The result is that the government will have double expenses for such managements. The two legislations empower the government officials to have the same power and duty, but only in different titles of legislation.

The Problem of Authorized Officials appointed under the Acts

Under the Factory Act B.E. 2535 provides that the Minister of Industry shall have power to appoint officials to enter a factory to inspect the condition of the factory, or any act that may violate the provisions of this Act, to take the specimens of products suspected of their quality in a reasonable quantity for inspection of their quality, to inspect, search, detain, seize or attach the products or any relevant articles in a case where there is a suspicion that the factory may cause harm to the people or property in the factory.³ Moreover, when it appears that any person has committed an offence under this Act or there is a reasonable ground to suspect, a competent official who is appointed by a government official not lower than rank 4 of position classification shall have the power to arrest such person in order to hand over the arrestee to an inquiry official for further legal action.⁴ In addition, if the competent official can find out any factory operator violates or decline to comply this Act or engages in factory operations in such a manner as to cause harm, injuries or distress to

² Section 11 of the Thai Promotion and Conservation of National Environmental Quality Act B.E. 2535

³ Section 35 of the Thai Factory Act B.E. 2535

⁴ Section 36 of the Thai Factory Act B.E. 2535

people or property in the factory or its vicinity, the competent official shall have the power to order such person to stop such violating act or to rectify or improve the same or comply accordingly or appropriately within a specified period of time.⁵

Under the Promotion and Conservation of National Environmental Quality Act B.E. 2535, this Act prescribes Section 11 which prescribes the Minister of Natural Resources and the Environment shall have power to appoint Pollution Control Officials and other competent officials. In addition, the Pollution Control Official has powers to enter the site of an industrial factory or a source of pollution, to inspect the functioning process of any systems, to examine the notes, statistics or data functioning of such system or when there is a reasonable reason to suspect that there is a non-compliance with this Act. However, if the source of pollution is a factory, the official under the law on industrial plants shall be notified so as to proceed with respect to his powers and duties. If such official fails to do so, the Pollution Control Official shall have the power to proceed in accordance with this Act. Moreover, the source of pollution is a factory, the competent official under the law on industrial plants shall be notified so as to issue and order an imposing fine to the owner or possessor of such factory. The competent official under the law on industrial plants shall be deemed the Pollution Control Official under this Act. If, however, the designated competent official fails to issue the penalty order within a reasonable time, the Pollution Control Official shall then have the power to issue the order imposing such fines on the owner or possessor of such sources of pollution which is a factory.⁶

Therefore, it is seen that the two legislations empower government officials to the same powers to inspect the source of pollution. However, in issuing a written order directing an owner or possessor to correct, change, improve or repair the environmental pollutions, or charging a fine, the law on industrial factories shall be applied. However, the designated competent official fails to issue the penalty order within a reasonable time, the competent official under the Promotion and Conservation of National Environmental Quality Act shall have power to order. Therefore, there are two provisions regarding the same matter. As a result, the government has to waste

⁵ Section 37 of the Thai Factory Act B.E. 2535

⁶ Section 82 of the Thai Promotion and Conservation of National Environmental Quality Act B.E. 2535.

time in supervising the same matters, causing the government budget to double in the same matter also.

The Problem of Provisions in Environmental Protection prescribing Factory Operators' Duties

In consideration environmental protection in factories, the related provisions prescribe the factory operator's duty, it consists of the Acts and Ministerial Regulations. They are to manage the environmental pollution such as waste removal, polluted air emission, wastewater discharge, wastewater treatment system, noise from factory and hazardous substance.

1. Disposal of Wastes, Sewage and Unusable Materials

The Factory Act B.E. 2535 prescribes in the Ministerial Regulation No.2 B.E. 2535 Clause 13 prescribes that a factory shall be kept clean and a waste container or waste disposal facility shall be provided as necessary and appropriate. Moreover, wastes shall be collected and stored separately, especially for wastes that are mixed with toxic substances or pieces of cloth contaminated with flammable substance which shall be collected separately in a closed container. Such material shall be disposed of in such a safe way and not cause nuisance.⁷

In the other hand, under The Promotion and Conservation of the National Environment Quality Act B.E. 2535 prescribes that In the disposal of wastes, sewage, and unusable materials, this Act prescribes that where there is an emergency or a public danger arises from a natural disaster or pollution caused by dispersion of pollutants which will, if no action is undertaken, seriously endanger the life, body, or health of the population, or cause immense damage to property of the population or the State, the Prime Minister shall have the power to order, as deemed appropriate, government agencies, state enterprises or any person, including people who are or may be victims of such danger or damage, to take action, individually or jointly, which will result in the prompt control, suspension, or mitigation of the adverse effects of such danger or damage. If the initiator of such pollution is known, the Prime Minister shall have the

⁷ Clause 13 of the Ministerial Regulations No.2 B.E. 2535 issued pursuant to the Thai Factory Act B.E. 2535

power to order such person to refrain from any act which may result in the aggravation of the pollution during the occurrence of such dangerous incident.⁸ In addition, the Minister of Natural Resources and the Environment shall prescribe preventive measures to prevent, remedy, extinguish or mitigate under Section 9.⁹ Moreover, the enhancement and conservation of environmental quality, the National Environment Board shall have the power to prescribe by publishing in the Government Gazette.¹⁰

Therefore, it is seen that under the Promotion and Conservation of the National Environment Quality Act, the environmental pollution or diffusion of pollution is meant the waste, sewage, and unusable material because these things can impact human health. So, Section 10 of the Promotion and Conservation of the National Environment Quality Act also means the disposal of waste, sewage or unusable materials. Section 32 of the Promotion and Conservation of the National Environment Quality Act also gives power to the Natural National Environment Board to prescribe Environmental Quality Standards. These provisions determine officials involved in the environmental protection. They have a duty to manage in accordance with the Environmental Quality Standard. Therefore, it can overlap with the Factory Act in practice. Nevertheless, if the Factory Act determines the Environmental Quality Standard by themselves, and this standard is not lower than the National Environment Quality Act of the Promotion and Conservation of the National Environment Quality Act, they can be enforced by the Factory Act.

To conclude, both laws contain the same words. Interpreting and exercising discretion are carried out by different persons and entities. Therefore, the interpretation and use of discretion may be different. The factory operators will become confused as to which standards they have to comply because one entity has determined one standard, while another entity determines another standard for the same matter.

⁸ Section 9 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

⁹ Section 10 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

¹⁰ Section 32 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

2. Discharge of Polluted Air

The Factory Act B.E. 2535 prescribes in the Ministerial Regulation No.2 B.E. 2535, Clause 16, prescribes that discharge of polluted air from a factory shall be prohibited unless there is any treatment, other than dilution applied to such polluted air so that its characteristics meets the requirements prescribed by the Minister of Industry in the Government Gazette.¹¹

The Promotion and Conservation of the National Environment Quality Act B.E. 2535 prescribes that For the discharge of polluted air from the factory, the Promotion and Conservation of the National Environmental Quality Act prescribe that in the case that there is an emergency or a public danger arises from a natural disaster or the pollution caused by dispersion of pollutants which will, if no action is undertaken, seriously endanger the life, body, or health of the population, or cause immense damage to property of the population or the State, the Prime Minister shall have the power to order, as deemed appropriate, government agencies, state enterprises or any person, including people who are or may be victims of such danger or damage, to take action, individually or jointly, which will result in the prompt control, suspension, or mitigation of the adverse effects of such danger or damage. If the initiator of such pollution is known, the Prime Minister shall have the power to order such person to refrain from any act which may result in the aggravation of the pollution during the occurrence of such dangerous incident.¹² Also, to prevent, remedy, extinguish or mitigate any emergency or danger from the pollution as prescribed in section 9, the Minister of Natural Resources and the Environment shall prescribe preventive measures and draw up an emergency plan to remedy the incidence in advance.¹³

¹¹ Clause 16 of the Ministerial Regulations No.2 B.E. 2535 issues pursuant to the Thai Factory Act B.E. 2535

¹² Section 9 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

¹³ Section 10 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

Moreover, the Minister can prescribe the standard of polluted air emission from sources into the environment with the advice of the Pollution Control Committee and approval of the National Environment Board ¹⁴.

If standards have been prescribed by virtue of other laws relating to polluted air emission, and that standards are not less stringent than the emission standards set by the Minister by virtue of Section 55, such standard can continue to remain effective.¹⁵

So, in determining the Environmental Quality Measure, this can cause the overlapping of laws in both Acts. The standards can be determined by the Minister with the advice of the Pollution Control Committee and the approval of the National Environment Board. As the laws prescribes the standard for sources of polluted air emissions, sometimes this standard has already been prescribed in the Factory Act. As Section 56 explains that if the Factory Act prescribes the standard of polluted air emission that is not less stringent than the standard of the Promotion and Conservation of the National Environmental Quality Act, such standard can be enforced.

In addition, the law gives power to the competent government agency can determine the standard of polluted air emission in higher of the standard of the Promotion and Conservation of the National Environmental Quality Act. If the competent government agency does not use power to determine, the standard will be deemed as the same. Therefore, the determination of powers and standards can cause an overlapping of laws.

Furthermore, in case the law prescribes the power to the competent government agency to determine the standard, and the agency does not use that power. The Minister with the advice of the Pollution Control Committee and the approval of the National Environment Board has power to determine the standard by publication in the Government Gazette. In the case that it is deemed reasonable, the provincial governor has power to determine more stringent emission standards. This standard shall be applied in the pollution control area.

¹⁴ Section 55 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

¹⁵ Section 56 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

As the law states, in case of emergency or a public danger arising from...¹⁶, the Prime Minister shall have power to order government agencies, state enterprises or any person to take action, individually or jointly, which will result in the prompt control, suspension, or mitigation of the adverse effects of such danger or damage.

It is seen that in providing power to the Prime Minister to order government agencies, state enterprises or any person to take something, it means that the Division of the Industrial factory)Government Agency(can prescribe the standard of polluted air emission. In other words, these are laws which are overlapped. Although, the details are not similar, they are considered under the same issue. Likewise, Section 10 gives power to the Minister to determine the standard of measure in accordance with Section 9.

To conclude, each principle of law can prescribe different, similar or identical rules. Each principle of law is the law that a government agency is required to comply with. However, when a government agency does not comply with other laws, the result is that government agencies do not comply with the same law. It causes an overlapping in consideration. So, even the rules or controlling of law in same issue, overlapping issue, different government agency will create different standards in enforcement and regulation.

3. Discharge of Wastewater Effluent

The Factory Act B.E. 2535 prescribes that the law prescribes that discharge of wastewater effluent from a factory shall be prohibited unless there is any treatment, other than dilution, applied to such wastewater so that its characteristics meet what is prescribed by the Minister of Industry in the Government Gazette.¹⁷

The Promotion and Conservation of the National Environment Quality Act B.E. 2535 prescribes that According to the discharge of wastewater under the Promotion and Conservation of the National Environmental Quality Act, the law prescribes that when there is an emergency or public danger from the pollution, the

¹⁶ Section 9 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

¹⁷ Clause 14 of the Ministerial Regulations No.2 B.E. 2535 issues pursuant to the Thai Factory Act B.E. 2535

Prime Minister can order government agencies, state enterprise or any persons to promptly control, suspend, or mitigate the danger or damage of pollutions.¹⁸ In prevention, the Minister of National Resources and the Environment shall have power to determine the standard measure as prescribed in Section 9.¹⁹ In addition, the National Environment Board has power to prescribe the Environmental Quality Standards.²⁰

The Prime Minister can also order for persons to prevent the pollution. This pollution in Section 9 covers discharge of wastewater which is regarded as water pollution.

The National Environmental Board can also prescribe any standard which is overlapped because Section 32 prescribes environmental quality standards for other matters. The sentence “*environmental quality standard for other matters*” is also covered in the quality of discharge of wastewater. Therefore, there is an overlap within the same Act.

In determining the government agencies involved in duties under the Environmental Quality Standards, the Minister of National Resources and the Environment has a duty to give advice to other government agencies. These management things, there is overlapping with the Factory Act. Because the managements which is meant the discharge of wastewater.

In particular, any law will have the same purpose of protecting the environment. However, the Promotion and Conservation of the National Environmental Quality Act has one section to avoid the overlapping. They can interpret that if the standard is not less stringent than another standard prescribed by another law, then it can continue to be effective. However, if such standard is less than stringent than what has been prescribed by the Promotion and Conservation of the National Environmental Quality Act, the relevant government agency must amend such standard.

¹⁸ Section 9 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

¹⁹ Section 10 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

²⁰ Section 32 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

Therefore, if the standard is higher than what is prescribed in this Act, they will not have to comply with this Act, and they will have to comply with another law. In case that the standard is lower than the Promotion and Conservation of the National Environmental Quality Act, it will be amended in accordance with this Act. In reality, they also have lower standard than the Promotion and Conservation of the National Environmental Quality Act, especially in the laws issued before the Promotion and Conservation of the National Environmental Quality Act. Furthermore, government sectors have to comply with their own standards prescribed by his Minister. As a result, the redundancy cannot be avoided.

4. Wastewater Treatment System

The Factory Act B.E. 2535 prescribes in a solution in wastewater treatment, the regulation prescribes that in case of a factory using chemical or biological substances in wastewater treatment system, a record of such use shall be kept daily, and proof of supply for such chemical or biological substances shall be available.²¹

The Promotion and Conservation of the National Environment Quality Act B.E. 2535

In case of wastewater treatment system, there is a rule that the Minister shall with the advice of the Pollution Control Committee and the approval of the National Environment Board prescribe the standard for control of wastewater discharge.²²

Furthermore, in determining the category of sources of pollution, this shall be controlled according to the level of discharge of wastewater into public water sources or into the environment outside the area where the source is located, and shall not exceed the standard set by the law.

Therefore, it is seen that in controlling wastewater discharge, there is a wastewater treatment system. Therefore, the redundancies appear in the disposal of the same wastes, that is, the discharge of polluted air and discharge of wastewater effluent.

²¹ Clause 15 of the Ministerial Regulations No.2 B.E. 2535 issued pursuant to the Thai Factory Act B.E. 2535

²² Section 55 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

5. Noise From Factory

The Factory Act B.E. 2535 prescribes that , the Ministerial Regulation Clause 17 prescribe that noise generating from factory operation shall not exceed a standard prescribed by the Minister of Industry in the Government Gazette.²³

The Promotion and Conservation of the National Environment Quality Act B.E. 2535 prescribes that by giving power to the National Environment Board this can determine appropriate standards for noise and vibration.²⁴

There are two laws to regulate noises from factories. So the redundancies happen at this point. It causes burdens to factory operators.

Even though, the Promotion and Conservation of the National Environment Quality Act has two sections to avoid the redundancies in Section 55 and 56, Section 55 prescribes pollutants from sources which cannot be interpreted to cover noise generating from factories. So, Section 56 cannot enforce in this matter. Therefore, prescribing the standard causes repetitiveness

6. Hazardous Substance

The Factory Act B.E. 2535 prescribes in Notification of Department of Industry prescribes that a factory operator shall assuage or eliminate hazardous substance within 15 days from date of receiving used Hazardous substance. Moreover, if a factory operator have to expand day for assuaging or elimination. They shall inform to Department of Industry with reasonable.²⁵

The Promotion and Conservation of the National Environment Quality Act B.E. 2535 prescribes that in the collection, transport, and other management for the treatment and removal of garbage and other solid wastes; the prevention and control of pollution from mining both on land and in the sea; the prevention and control of pollution from the exploration and drilling for oil, natural gas, and all kinds of

²³ Clause 17 of the Ministerial Regulations No.2 B.E. 2535 issued pursuant to the Thai Factory Act B.E. 2535

²⁴ Section 32(5) of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

²⁵ Notification of Department of Industry in rule and solution about elimination of sewage and unusable materials B.E. 2550

hydrocarbon both on land in the sea and the prevention and control of pollution resulting or originating from the discharge of oil and the dumping of wastes and other matters from sea-going vessels, tankers, and other types of vessel, shall be in accordance with the governing laws related thereto.²⁶

And, in the case where there is no specific law applicable the Minister shall, with the advice of the Pollution Control Committee, have the power to issue ministerial regulations specifying the types and categories of hazardous wastes generated from the production and usage of chemicals or hazardous substances in the production process of industry.²⁷

It is seen that in both of act can manage hazardous substance in same time because in the Promotion and Conservation of the National Environment Quality Act give power to Minister to regulate although there is no prescribing in this act. It is to give full power to Minister of Natural Resources and Environment. As that power will be overlapped with the power of Industry.

Therefore, the redundancies happen at this point. The factory operator can get confusion of complying.

Conclusion

The factory law and the environmental laws have the same objectives which is to protect the environment, promote environmental quality, and conserve environmental quality, all of which are considered essential for the environment.

In regard to factory operation, the factory operator, who is comply the law for environmental protection is controlled, regulated, and monitored by many government sectors; especially the Ministry of Industry and the Ministry of Natural Resources and Environment. The Ministerial Regulations also concern factory operations, namely, the Factory Act B.E. 2535. Both laws are repetitive as they determine different

²⁶ Section 78 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

²⁷ Section 79 of the Thai Promotion and Conservation of the National Environmental Quality Act B.E. 2535

standards for enforcement which can lead to the doubling the government budget. The government will have more burdens to carry as a result of this. In addition, the duties of factory operators, occupiers or owners are also doubled in having to unnecessarily comply with both laws, and they become confused as to which law to comply with in the case that the two laws conflict or when they comply with the law which their Minister has prescribed. Examination and amendment of laws regarding repetitive contents should be carried out. This would not only benefit the government sector involved but also the private sector. The factory operator will know the precise scope of its duty. On the other hand, the government sector involved will be required to discuss or know about this issue in order to avoid the repetitiveness. In practice, the repetitiveness cannot be eliminated because the official will comply with its own regulations. So, there should be a solution immediately to reduce the problems that officials have to be enforced by both of laws to eliminate all repetitiveness or redundancies relating to environmental protection. From the past until now, the purpose of both of laws is to promote environmental quality and sustainability. Therefore, the law shall be precise, not conflicting and not repetitive. The result of this will be that persons complying with the law would easily be complied, and the enforcement by government will be more effective.

There are two laws for environmental protection, namely, the Factory Act B.E. 2535 and the Promotion and Conservation of the National Environment Quality Act B.E. 2535. There are many laws and many government sectors in charge the enforcement. Both laws are enforced at the same time over the same matters, despite that there are some provisions to eliminate the repetitive but this is not effective. Therefore, there should be an amendment of the law in the duties of both government and private sectors.

From the study, it is found that the repetitiveness of such laws double the duties of government and private sectors as follows:

1. Government departments and government officials empowered to supervise, regulate, and monitor, namely, the Minister who takes charge and responsible and officials under the Acts;

2. Law on environmental protection prescribing a factory operator's duty.

From the study, four repetitive points are found as follows:

- (1) Disposal of Wastes, Sewage, and Unusable materials;

- (2) Discharge of Polluted Air;
- (3) Discharge of Wastewater Effluent.
- (4) Wastewater Treatment System.
- (5) Noise from factory
- (6) Hazardous substance

However, in Singapore, there is no repetitiveness in the law because Singapore has one law to regulate the industrial sector, namely, the Environmental Protection and Management Act .1999Therefore, the government can apply the strategy of Singapore as a means of solving such problems.

Reccommendations

1. In environmental protection law, there should be only one government ministry which is responsible for the control and supervision of compliance of laws and regulations. For example, the environmental protection of industrial factories should be under the responsibility of the Ministry of Natural Resources and Environment.

2. To amend the law by setting minimum standards which is the international standard. All government departments and related laws should refer to this standard.

3. To amend the law for contents that overlapping by determining them clearly. The content of each law has to prescribe a specific government sector without any overlapping of another law.

4. From the study of Singapore's legislation, it is found that Singapore has been enforcing one legislation which is the Environmental Protection and Management Act 1999. Thus, Singapore dose not face the problem that Thailand is facing now because there is only one legislation and authority responsible for the compliance of such legislation.