GOVERNMENT OFFICE



POLICY IMPACT ASSESSMENT REPORT OF THE LAW ON CHEMICALS PROJECT (AMENDED)

(Enclosed with Proposal No....dated....of the Government)

SOCIALIST REPUBLIC OF VIETNAM Independence – Freedom – Happiness

Policy Impact Assessment Report of the Law on Chemicals Project (Amended)

I. BACKGROUND

1. Context of policy development

Law on Chemicals No. 06/2007/QH12 passed by the 12th National Assembly, in the 2nd session on November 21, 2007, and taking effect from July 01, 2008, is to institutionalize, realize and quickly and promptly concretize the guidelines, policies of the Party and the State. The development of the Law on Chemicals is considered as an important milestone for building and creating an official and unified legal corridor for the chemical-related activities across the country.

In general, the Law on Chemicals is relatively comprehensive and progressive, containing the regulations designed in conformity with the specific circumstances and economic conditions of Vietnam's chemical industry, and also, the general development trend of chemical management in the world. The Law on Chemicals has been amended and supplemented once under Law No. 28/2018/QH14 amending and supplementing a number of articles of 11 planning-related Laws, accordingly, this amendment only includes the abolition of contents related to chemical industry planning in conformity with the Law on Planning, without change in the subject, scope or chemical management policies of the Law. Thus, the Law on Chemicals has been stably implemented for 15 years, it can be said to be one of the specialized laws which has been stably implemented for the longest period.

Implementing the provisions of the Law on Chemicals No. 06/2007/QH12, continuing the Strategy for developing Vietnam's chemical industry by 2010 with a vision towards 2020¹, Planning for developing Vietnam's chemical industry by 2020, taking into account 2030² has been implemented and brought the positive effects.

Although the chemical industry has not fully achieved its set goals, it has also made the strong progress. Up to now, the researchers, manufacturers and traders in various fields of the chemical industry have been formed, and the

¹ Strategy for developing Vietnam's chemical industry by 2010 (taking into account 2020) approved by the Prime Minister in Decision No. 207/2005/QD-TTg dated August 18, 2005.

² Planning for developing Vietnam's chemical industry by 2020, with a vision towards 2030, approved by the Prime Minister in Decision No. 1621/QD-TTg dated September 18, 2013.

management apparatus and chemical management tools have been increasingly improved. The chemical industry has maintained its stable growth over the years with a series of large projects coming into operation. In the early years of the 2010s, the chemical industry achieved an average growth rate of 16%/year and at 7-8% in the last years of the decade, with high labor productivity (equal to 1.36 times higher than average labor productivity of the entire industry). Some fields of the chemical industry have basically met the domestic demand such as: fertilizers, pesticides, tires, common paints, cleaning products, explosive precursors (NH₄NO₃). The types of products as produced domestically are more diverse. Most projects in the recent period have used the advanced technology, approaching the regional and world levels, with improved safety and environmental factors. A number of petrochemical industrial complexes and a number of industrial parks, clusters with many chemical enterprises have been initially formed.

The Law on Chemicals and its by-laws have formed a relatively comprehensive system of chemical management regulations in the fields from central to local levels. Along with the efforts of the state management agencies, import-export, production, business, and use of chemicals have been initially strictly managed, contributing to minimizing the negative impacts of the chemicals to people, environment and assets, ensuring the social order and security, specifically:

- Raise the awareness of the enterprises, people about the direct and long-term hazards of the chemicals, thereby proactively implement the solutions to minimize the risks, hazards and ensure the safety.
- The chemical management activities under the Chemical Weapons Convention are carried out relatively well, contributing to ensuring the order and security and fully implementing the roles and responsibilities of Vietnam as a member of the Convention.
- Strict management of legal activities related to industrial precursors (chemicals used as raw materials, solvents, accelerators in production, scientific research, analysis, testing, and also as indispensable chemicals in the preparation, production of narcotics) in order to prevent the criminals from taking advantage of them to produce the illegal narcotics, contributing to improving the effectiveness of prevention and control of drug crimes, helping to strengthen the national security, order and social safety.
- Strict management of explosive precursors prevents bad guys from being used to produce the explosives illegally, affecting the national security, order, safety and socio-economic development (explosive precursors are dual-use chemicals that serve both as raw materials for many manufacturing industries and as raw materials for the production of industrial explosives, because the explosive *Unofficial translation*

precursors are hazardous chemicals with strong oxidizing properties, their potential for fire and explosion is very large and can occur at any time if there is an explosive agent).

- Chemical incidents are able to cause widespread harm to human health and the environment, even leading to disasters for people in surrounding areas and the ecosystem. The chemical incident prevention and response activities implemented at all levels contribute to limiting the risk of incidents, strengthening the response capacity of the forces, and contributing to minimizing the consequences of chemical incidents.

However, in recent times, many new legal regulations such as the Law on Planning, the Law on Investment, the Law on Promulgation of Legal Documents, the Law on Drug Prevention, and the Law on Management and Use of Weapons, Explosives and Support Tools, the Law on Environmental Protection are issued later with many innovations compared to the time of the Law on Chemicals. These changes, along with the trend of shifting the management system from pre-inspection to post-inspection, administrative reform and modernization, have led to the documents guiding the implementation of the Law on Chemicals to be changed, gradually reducing the harmony and unity of the entire system of regulations on chemical management.

And also, in the context of the administrative reform program widely implemented, and Vietnam's economy increasingly integrating deeply and widely with the world economy, the system of regulations on chemical management needs to change appropriately and in harmony with the management systems of other countries.

Implement the provisions of the Law on Promulgation of Legal Documents in 2015; Law amending and supplementing a number of articles of the Law on Promulgation of Legal Documents in 2020; Resolution No. 95/NQ-CP dated July 7, 2023 of the Government at the thematic meeting on law making in June 2023 and Resolution No. 41/2023/UBTVQH15 dated December 18, 2023 of the National Assembly Standing Committee on amending the Law and Ordinance Development Program in 2024, the Ministry of Industry and Trade is assigned to preside over and coordinate with the relevant agencies to develop the Law on Chemicals project (amended).

2. Objectives of policy development

2.1. Overall objectives

- Set up a legal base to promote the development of the chemical industry in accordance with the Party's policies, orientations stated in the 10-year Socio-Economic Development Strategy, in period of 2021 - 2030 (extract from the Documents of the 13th National Congress of the Party), specifically: "*Focus on*

developing a number of core industries to meet the needs of basic production materials of the economy such as energy industry, mechanical engineering, metallurgy, chemicals, fertilizers, materials..."; "fast and sustainable development based mainly on science and technology, innovation and digital transformation"; "Responsible, economical, effective and sustainable management, exploitation and use of resources; take protecting the living environment and people's health as the top objectives; Resolutely eliminating projects that pollute the environment, ensure the quality of the living environment, and protecting the biodiversity and ecosystems; building a green, circular, environmentally friendly economy", thereby further strengthening the Party's leadership in the management of chemicals and the chemical industry.

- Set up a legal base to implement the main tasks, solutions stated in Resolution No. 29-NQ/TW dated November 17, 2022, the 6th Conference of the 13th Party Central Committee to continue to promote the industrialization and modernization of the country by 2030, with a vision towards 2045, specifically: "Prioritize the resources and have strong enough incentive mechanisms, policies to develop the priority fields of the core industries: chemicals (prioritize the development of basic chemicals, petrochemicals, pharmaceutical chemicals, fertilizers)"; "Encourage the development of mechanical, chemical and biotechnology industries to serve the agricultural production and agricultural, forestry and fishery processing."
- Improve the effectiveness, efficiency of state management for the development of the chemical industry and chemical management, minimize the risks of chemical-related activities to people's health and the environment, assets, society.
- Develop a system of legal documents to manage basic chemical-related activities stably in the coming years.
- Harmonize the legal system on chemical management with regulations of the countries around the world, contributing to creating an open environment and attracting the investment from multinational corporations and large chemical corporations with modern technologies, management systems, and high-value products in the world which expand their operations in Vietnam, while creating favorable conditions for Vietnamese enterprises in international trade.

2.2. Specific objectives

- Inherit and develop the regulations of the Law on Chemicals in 2007, avoid causing difficulties in the implementation process for the state management agencies and enterprises, and meet the practical requirements in chemical-related activities.

- Approach the trends and harmonize with chemical management systems of the countries around the world but must ensure the feasibility in terms of Vietnam's level of development, infrastructure, and human resources.
- Design the administrative procedure system towards synchronization and simplification while still ensuring the management effectiveness; Create maximum conditions for the enterprises to carry out the administrative procedures, along with development of an enforcement monitoring mechanism and effective post-inspection.
- Promote the administrative reform, reduce and simplify the business investment conditions, create a favorable business environment, and increase national competitiveness; Implement the e-Government, enhance the application of information technology in chemical management.
- Make maximum application of information technology, keep up with digital transformation trends, maximum application of science and technology, advantages of the network environment in management activities to avoid creating too large workload for the state management agencies from central to local levels in the context of limited human resources, thereby focusing on improving the management quality.
- Make the chemical management orientation based on risk assessment to select chemicals to be strictly managed to optimize the use of resources of the state management agencies and society in minimizing risks and hazards of chemicals. Apply strict management regulations in conformity with the chemicals with different levels of risk in a uniform manner throughout the entire life cycle from import, export, production, business, and transportation, use and disposal.
- Strengthen the role and responsibility of the local state agencies in chemical management.

II. POLICY IMPACT ASSESSMENT

The Ministry of Industry and Trade evaluates the following issues:

- 1. Policy 1: Sustainable development of the chemical industry into a modern, foundational industry.
- 2. Policy 2: Synchronized chemical management throughout the entire life cycle.
 - 3. Policy 3: Management of hazardous chemicals in products.
 - 4. Policy 4: Improvement of efficiency in ensuring the chemical safety.

For each policy, the Ministry of Industry and Trade evaluates according to the following process:

(i) Background (describe the current situation of the problem, analyze the shortcomings, consequences and causes).

- (ii) Problem solving objectives.
- (iii) Proposed solutions (some solutions maintain the current status).
- (iv) Evaluate the impact of the proposed solutions (assess the positive (benefits) and negative (costs) impacts of each policy solution on the State, people, and enterprises).
- (v) Recommendation and selection of solutions based on analysis and comparison of positive and negative impacts of each solution.

Policypromulgated by: National Assembly.

1. Policy 1: Sustainable development of the chemical industry into a modern, foundational industry

1.1. Background

a) Identified problems including:

While the implementation of the current Law on Chemicals is summarized, a number of inadequacies which are unclear or unregulated regarding the development of the chemical industry are discovered, specifically:

- The Law on Chemicals only regulates the chemicals (including substances, compounds, mixtures), roughly understood as basic chemicals. Therefore, the provisions for chemical projects in the Law only apply to basic chemical projects. However, according to the industrial subsectors, the chemical industry includes 10 fields: fertilizers, basic chemicals, pharmaceutical chemicals, petrochemicals, rubber products, paint printing ink, industrial gases, chemical power sources (batteries, accumulators), pesticides, detergents, consumer chemicals. Therefore, "chemical projects" in the development of the chemical industry need to be more specifically regulated.
- Currently, according to the provisions of the Law on Planning in 2017, the chemical industry planning, chemical product planning have expired. Article 8 and Article 9 of the Law on Chemicals have been abolished according to the provisions of Law No. 28/2018/QH14 dated June 15, 2018 of the National Assembly amending and supplementing a number of articles of 11 planning-related laws. The investment and development activities in the chemical industry are carried out according to the development strategies, so the regulations on responsibility for setting up and implementing the strategies shall be supplemented.
- The reality shows that chemicals play an important role and are present in most economic activities, especially in the industrial field. However, due to the characteristics of the chemical industry, normally, the industrial projects are provided with large investments, use large number of workers, have long operating period, and the potential risk of or chemical incidents or releases affecting the human health and causing the environmental pollution, so many localities have issued the policies not to attract the investment in the chemical

projects, the investors face many difficulties, leading to their hesitation. Therefore, it is necessary to have attractive and stable incentive mechanisms and policies to attract the investment in chemical-related activities.

- In addition, developing the chemical industry in a modern and environmentally friendly direction plays an important role. To do this, the Law on Chemicals needs to contain specific regulations on chemical project management, from choosing the locations, the technologies, developing the plans to ensure the safety and environment protection... right from the project construction stage. These regulations play an important role in determining the effectiveness and sustainable development of the project.

However, the regulations on requirements for the chemical production and business projects in the Law on Chemicals in 2007 mainly focus on requirements to ensure the chemical safety and environmental protection, not contain requirements for industry development orientation, product quality or green chemistry requirements.

- There are no regulations for consultants on chemical project construction. Currently, the Ministry of Construction only issues the construction certificates to organizations, individuals operating in industrial, light industry, and heavy industry projects, not specifically for the chemical field. Meanwhile, the chemical projects are specific and highly specialized, so it is necessary to contain separate regulations for consulting activities on chemical project construction.

b) Consequences if the problem is not resolved:

- Currently, the world's demand for chemicals is decreasing, causing the orders to decline, exports to slow down, and selling prices to be lowered while the production costs have increased sharply. Chemical export markets such as China and the US are forecast to decrease further until the end of this year, causing a negative impact on the enterprises, reducing the revenues and profits. Domestic chemical enterprises are facing many difficulties, challenges in terms of electricity costs, when the chemical production is one of the industries that consume the most energy, electricity costs can account for 20-30% of the total production cost of basic chemicals. Importing chemical raw materials at high prices is also considered as a big difficulty.
- The characteristics of the chemical industry are often industrial projects with large investments, using large workforces, long operating period, and also the risk of chemical emissions affecting the human health, the risk of polluting the environment or emitting substances that cause the climate change. Large investment costs and environmental protection costs are obstacles for the enterprises.
- Many enterprises have not yet accessed the opportunities of free trade agreements, the raw materials still depend heavily on imports, have not created a supply chain between chemical products, and do not have many high value-added products (such as technical rubber, high-quality basic chemicals, rare gases,

plastics and high-quality materials...). Therefore, the attraction and implementation of many chemical projects is still slow, many projects in the chemical industry development planning have not been implemented. The products in the chemical industry currently focus mainly on traditional products for domestic market demand.

c) Causes of the problem:

- The Law on Chemicals only regulates the chemicals (including substances, compounds, mixtures), roughly understood as basic chemicals. "Chemical projects" in the development of the chemical industry are not widely understood by the subsector.
- Currently, the chemicals are not the industries, fields with special investment incentives and are not specifically regulated in Clause 1, Article 16 of the Law on Investment in 2020 on industries, fields with investment incentives. On March 26, 2021, according to Decree No. 31/2021/ND-CP dated March 26, 2021 of the Government detailing and guiding the implementation of a number of articles of the Law on Investment, the production of petrochemicals, pharmaceutical chemicals, basic chemicals and rubber has just been included in the list of industries, fields with investment incentives. In fact, almost only large projects or investment projects in the difficult areas which the local authorities give maximum priority to attracting the industrial development receive the incentives.
- Currently, according to the provisions of the Law on Planning in 2017, the chemical industry planning, the chemical product planning have expired. Article 8 and Article 9 of the Law on Chemicals have been abolished according to the provisions of Law No. 28/2018/QH14 dated June 15, 2018 of the National Assembly amending and supplementing a number of articles of 11 planning-related laws.
- Regulations on requirements for chemical production and business projects in the Law on Chemical focus on ensuring the chemical safety and environmental protection, not contain requirements on industry development orientation, product quality or green chemistry requirements.
- The Law on Chemicals does not have the regulations on chemical project management.
- Currently, the construction capacity certificates are not issued specifically for the chemical field. Instead, the Ministry of Construction only issues them to organizations, individuals operating in industrial, light industry, and heavy industry works, the implementation only applies to organizations, individuals recognized for the industrial works.

1.2. Problem solving objectives

- Create appropriate mechanisms, policies to promote the development of the chemical industry into a modern, foundational industry.
- Develop the chemical industry in the right direction, ensure the sustainable development, green growth, safety and environmental friendliness.

- Ensure the safety for people, assets, ecosystems and the environment, aiming to integrate the green chemistry criteria and realize the sustainable development objectives.

1.3. Proposed solutions for problem solving

There are two proposed solutions to this problem:

- (i) Option 1: Maintain the current regulations on chemical industry development.
- (ii) Option 2: Amend and supplement the regulations related to chemical industry development, specifically:
- Regulate the State's policies on the development of the chemical industry in the direction of inheriting the provisions in Article 6 of the Law on Chemicals in 2007, while also amending, supplementing according to the development viewpoints, goals, and orientations of the chemical industry developed into the Strategy for developing Vietnam's chemical industry by 2030, with a vision towards 2040 approved by the Prime Minister in Decision No. 726/QD-TTg dated June 16, 2022.
- Supplement the regulations on setting up and implementing the chemical industry development strategy in the direction of clearly specifying requirements for the strategy's content; strategy planning phase; Responsibility for developing, authority of approval and responsibility for organizing the implementation of the chemical industry development strategy (Article 8).
- Develop specific regulations for chemical projects including responsibilities of chemical project investors; Contents that need to be considered and evaluated during the investment policy decision stage, the chemical project investment decision stage to meet the requirements of technology, chemical safety and environmental protection, towards integrating the green chemistry criteria and implementing the sustainable development goals (Article 9). The Government will detail the green chemistry principles, detail the implementation of specific regulations for the chemical projects, and ensure maximum integration into investment processes, procedures, built in the Law on Investment, Law on Construction.
- Regulate the key chemical industry fields that are entitled to special incentives and investment supports, including the fields that produce the products that need priority for development to provide raw materials for many production industries, fields, investment projects in specialized chemical industrial parks, specialized chemical industrial clusters, chemical complexes... in order to create appropriate mechanisms, policies to implement the Party's policies, guidelines on promoting the development of the chemical industry into a modern, foundational industry (Article 10).
- Chemicals are a field with a high risk of incidents, affecting the environment, people and assets, so the Draft supplements the regulations on professional conditions and certificates for a number of consultancies directly related to technology and chemical safety to improve the effectiveness of chemical safety, ensuring the rights of project investors, choosing the technology

solutions, construction, appropriate safety, efficiency, and cost savings (Article 11).

- Abolish the regulations on the responsibilities of investors in chemical production and business projects in coordinating with the local authorities to collect the opinions from the residential communities where the projects are implemented on environment protection measures according to the provisions of the law on environmental protection (Clause 4, Article 10 of the Law on Chemicals in 2007) because the regulations on environmental protection for investment projects have been stipulated in the Law on Environmental Protection.
- 1.4. Evaluating the impact of solutions on subjects directly affected by the policy and other relevant subjects
- 1.4.1. Impacts of option 1: Maintain the regulations on chemical industry development
 - a) Economic impacts
- Positive impact: Relevant subjects do not have to spend the resources or time to study, amend, or organize the implementation of new legal regulations.
- Negative impact: If the current status remains, existing problems, shortcomings (discovered) will not be resolved; it is difficult to attract the domestic investors to develop the chemical industry; The chemical industry is difficult to develop in the right direction, failing to promote the role of a core industry to support the development of other economic sectors.
 - b) Social impacts
 - Positive impact: Not detected.
- Negative impact: If current problems, shortcomings are not resolved, it may cause the concern for the investors. Failure to attract investment will not create more jobs for the workers. The projects pose many potential safety risks for the workers and the resident communities.
 - c) Gender impacts

Not available.

- (iv) Impacts on administrative procedures
- Positive impact: No new administrative procedures arise.
- Negative impact: Not detected.
- d) Impacts on the legal system
- Positive impact: There is no impact on the legal system because the regulations do not change.
- Negative impact: The Party and State's guidelines, policies are not fully institutionalized. Referring to many legal documents leads to problems, overlaps in applying the law; Some regulations are not suitable for the specific characteristics of the chemical industry.

- 1.4.2. Impacts of option 2: Amend and supplement the regulations related to chemical industry development
 - a) Economic impacts
- Positive impact: Supplementing, amending the regulations related to the development of the chemical industry in a more favorable direction for the investors can promote the development of the chemical industry in accordance with right orientations, support the development of other economic sectors, contributing to the socio-economic development of the localities and the whole country.
 - Negative impact:
- + For the state agencies: generate the resources to study, develop and complete the relevant legal regulations.
- + For the investors: Resources can be generated to meet the requirements for chemical projects.
 - b) Social impacts
 - Positive impact:
 - + Attracting investors will create more jobs for the workers.
- + Projects must meet regulatory requirements, minimizing the risk of unsafety for workers and the residential communities.
 - + Contribute to the effective use of natural resources and social resources.
 - Negative impact: not detected.
 - c) Gender impacts

Not available.

- d) Impacts on administrative procedures
- Positive impact: Not detected.
- Negative impact: Procedures for issuing the operating certificates to organizations, individuals engaged in consulting activities in the chemical field arise.
 - e) Impacts on the legal system
- Positive impact: Resolve the current shortcomings of the Law on Chemicals, institutionalize the guidelines and policies of the Party and State, ensure the synchronization with relevant laws.
 - Negative impact: Not detected.
- f) Evaluating the impacts of the solution on subjects directly affected by the policy and other relevant subjects

The policy will have positive impacts on state management agencies, investors, organizations and individuals involved in chemical investment activities.

- For the investors: Create better investment conditions, access to investment incentive mechanisms.
- For the State: Encourage the investment in the chemical field to contribute to increasing the state budget revenue and socio-economic development of the country...; Strengthen the effectiveness of State management of investment activities in the chemical field; contribute to ensuring the safety and social order.

1.5. Recommendations for options

Based on the analysis, comparison of the impacts of the options, it shows that the proposed amendments and supplements to regulations related to chemical industry development in the new Law on Chemicals have positive impacts on many subjects in the society, for the state management agencies, enterprises and other relevant subjects. Therefore, the Ministry of Industry and Trade proposes to choose Option 2.

2. Policy 2: Synchronized chemical management throughout the entire life cycle.

2.1. Background

- a) Identified problems including:
- Regulations on chemical management in the Law on Chemicals in 2007 mainly focus on chemical production, business and import activities. The enterprise trading in a type of chemical which may have to declare when importing, must have a license or certificate for its business, and must prepare a control sheet for buying, selling toxic chemicals with each purchase or sale. Meanwhile, the regulations on chemical use do not ensure the management effectiveness, regulations on transportation, disposal of chemicals are still general and have not been paid attention to, leading to management gaps in the life cycle of chemicals.

Current regulations on chemical use are not commensurate with the level of risk when compared to chemical production and business activities. The enterprises that use the chemicals operate in many different industries, the units that use chemicals in large quantities, potentially causing risks, in fact, there have been many chemical incidents at the facilities where the chemicals are used. Currently, the chemical users are less bound and regulated by the legal regulations on chemicals, so the level of interest and understanding of regulations on chemical management is not high and does not meet the chemical management objectives.

Many hazardous chemicals are used for the wrong purposes (industrial chemicals used in food processing; industrial precursors with the risk of being used in the illegal preparation of drugs; chemicals in the industry and food abuse in entertainment...).

- The Law on Chemicals and its guiding documents lack appropriate regulations to manage the chemical producers and traders with specific characteristics such as: i) small-scale chemical production and business (difficulties in applying general regulations on chemical production and business conditions); ii) chemical trading intermediates, not storing chemicals; iii) chemical storage activities at bonded warehouses, seaports, river ports... iv) chemical mixing and dilution activities (as regulated, chemical production activities) for use only in the enterprise's internal operations, do not create commercial products for circulation on the market.
- Currently, the lists of chemicals developed as based on the level of chemical hazard have revealed the limitations, the lists of chemicals are both redundant and deficient, and many hazardous chemicals are not included in any list, while many chemicals in the list are rarely present in Vietnam. Lists of chemicals are only based on the hazard level of chemicals and not on actual chemical-related activities, which will disperse and consume the resources of state management agencies and enterprises, leading to lack of focus on high-risk chemicals.
- Chemical-related activities take place in many different industries, fields. The Law on Chemicals in 2007 assigns the chemical management responsibilities to the ministries, branches according to chemicals used in each field. Although the fields of health, agriculture... all have legal documents related to chemical management and are effective in practice, the methods of chemical management in these documents are different and have not been closely followed according to the regulations in the Law on Chemicals to be consistent with the Law on Promulgation of Legal Documents in 2020, leading to inconsistent implementation among the ministries, branches. In addition, a chemical can be used in many different industries, the assignment of chemical management responsibilities among the industries according to purpose and field of use is not consistent with the versatility of the chemical, it is very difficult to determine in which fields chemicals circulating on the market will be used. In reality, the enterprises currently import urea as a chemical input to produce the industrial glue but must comply with fertilizer import regulations. Or N₂O is used for the wrong purpose as laughing gas in entertainment but the origin of N₂O used in industry or as a food additive or medicine cannot be determined. In many cases, the enterprises declare the purpose of use in the fields with more "open" management regulations but then use it for prohibited, restricted or specially controlled purposes. Therefore, it is necessary to have general, comprehensive regulations for all types of chemicals, thereby appropriately assigning tasks among the industries, fields to unify and coordinate the management, ensuring no overlap but also no gaps to minimize the risk of chemicals as misused.
- According to the current regulations, only chemicals on the List of chemicals subject to declaration must be declared upon import, leading to the possibility of many hazardous chemicals imported into Vietnam while the

management agencies don't know and can't monitor, leading to many potential risks. Along with the diverse development of industrial activities, many new chemicals are imported into Vietnam for the first time, making the List of chemicals that must be declared be unable to be adjusted or changed in a timely manner, leading to difficulties in identifying new chemicals to apply the management procedures.

- Confidentiality regulations are still general and not specific, making it difficult to develop the procedures to guide the implementation of administrative procedures or annual reports.
- In addition to the achieved results, the National Chemical Database operating in the early stages still has many contents, functions that need to be improved: lack of connection with the chemical database systems of other industries, fields such as medicine, agriculture...; Chemical data in the industrial sector, information on chemical-related activities of many enterprises and some Departments of Industry and Trade have not been notified; The lack of comprehensive and input data makes the functions of chemical risk assessment and supporting forces directly responding to chemical incidents not fully met.

b) Consequences if the problem is not resolved:

The lack of specific regulations for each specific chemical production and business subject (for example: small chemical production and business establishments; chemical trading intermediates, not storing chemicals; storing chemicals in bonded warehouses, ports...) will likely lead to some subjects not voluntarily taking advantage of gaps in the law to fail the compliance with state regulations, making overall chemical management less strict and difficult to control. In particular, many hazardous chemicals in industry with high dual-use properties as exploited for misuse, causing many difficulties in managing the chemical use (for example: industrial chemicals but used in food processing; solvents in the paint and printing industry are mixed with gasoline and oil; industrial precursors are used to make illegal drugs and stimulants...). Furthermore, due to dual uses, the chemicals are used in different industries, fields under the management of different laws, regulations, it is difficult to determine which ministry or sector the chemical management is under the management responsibility of, creating a big gap in management and control.

c) Causes of the problem:

- The Law on Chemicals and its guiding documents lack appropriate regulations to manage the chemical production, business subjects with specific characteristics such as: i) small-scale chemical production and business (difficulties in applying general regulations on chemical production and business conditions); ii) chemical trading intermediates, not storing chemicals; iii) chemical storage activities at bonded warehouses, seaports, river ports...
- Regulations are not specific enough for organizations, individuals mixing and diluting the chemicals (as regulated, chemical production activities) for use

only in the enterprise's internal operations, do not create commercial products for circulation on the market.

- Chemical import and export activities have not been strictly managed in terms of safety, risk limitation during storage at port warehouses, especially bonded warehouses.
- Current regulations on chemical use are not commensurate with the level of risk when compared to chemical production and business activities. Currently, chemical users are less bound and regulated by the legal regulations on chemicals, so the level of interest and understanding of regulations on chemical management is not high and does not meet the chemical management objectives.
- Many hazardous industrial chemicals are used for the wrong purposes (industrial chemicals used in food processing; solvents in the paint and printing industry mixed into gasoline and oil; industrial precursors used in the illegal preparation of drugs...) causing many difficulties for the management agencies and enterprises.
- There are no specific regulations on chemical transportation in the Law, the assignment of chemical transportation management to different Ministries, branches makes it difficult for the enterprises to comply with the regulations as well as consistency in the state management.

2.2. Problem solving objectives

- Increase the level and efficiency of management, ensure that the chemicals, depending on the level of hazard, will be controlled with various levels of strictness throughout the entire process from production, import to disposal.
- Create advantages for the enterprises in implementing synchronous administrative procedures, promote the development of safe chemical-related activities in accordance with legal regulations.

2.3. Proposed solutions for problem solving

- Option 1: Maintain the regulations on management of chemical-related activities as in the current Law on Chemicals.
- Option 2: Amend chemical management regulations towards strict, synchronous management throughout the entire chemical life cycle, specifically:
 - Regulations on management of banned chemicals:
- + Banned chemicals are chemicals that are particularly dangerous to human health, the environment, national defense and security and are specified in the List of banned chemicals promulgated under the Law on Investment or issued by the National Assembly.
 - + Organizations, individuals are not allowed to produce, trade, transport,

store or use the banned chemicals, unless in special cases for scientific research purposes, ensuring national defense and security, disease prevention and control. The Minister of Industry and Trade, Minister of Public Security, Minister of Defense, Minister of Science and Technology, Minister of Health, Minister of Agriculture and Rural Development report to the Prime Minister to allow to issue the Licenses to produce and import banned chemicals for organizations, enterprises.

- + Activities in the life cycle of banned chemicals must comply with strict conditions and regulations.
 - Regulations on management of specially controlled chemicals:
- + List of specially controlled chemicals issued by the Government, including: Specially controlled hazardous chemicals to implement the Rotterdam Convention, Minamata Convention on mercury, Stockholm Convention and other international treaties related to chemicals and chemical-related activities of which the Socialist Republic of Vietnam is a member; Specially controlled hazardous chemicals to ensure they do not cause the harm to national defense, security, social order and safety, human health, assets, and the environment;
- + Specially controlled chemicals are controlled in terms of technical safety, scope, type, scale, production period, business and purpose of use;
- + The Ministry of Industry and Trade unifies the management and licensing of production, business, import and export or confirmation of import declaration of specially controlled chemicals;
- + The specially controlled chemical users are responsible for declaring the type of chemical and the purpose of chemical use on the National Chemical Database before use. The Ministry of Construction shall detail the conditions and regulations governing the use of specially controlled chemicals within the scope of management and submit them to the Government for promulgation.
 - Regulations on management of conditional chemicals:
- + List of conditional chemicals issued by the Government, including chemicals with a high level of hazard;
- + The conditional chemical operators must comply with the conditions so as not to harm the national defense, security, ensure social order and safety, human health, assets, and the environment;
- + Specialized agencies under the Provincial People's Committee unify the management and issuance of certificates of eligibility to produce and trade the conditional chemicals;
- + The chemical importers must make the declarations automatically (without confirmation) through the Vietnam National Single Window; *Unofficial translation*

- + The Ministry of Construction shall detail the conditions and regulations governing the use of Conditional Chemicals within the scope of management and submit them to the Government for promulgation.
- The conditional chemical or specially controlled chemical keepers of many organizations, individuals must receive Certificates of eligibility for storage of chemicals issued by the specialized agencies under the Provincial People's Committee.
 - Supplement the regulations on management of hazardous chemicals:
- + Hazardous chemical-related activities must comply with safety conditions prescribed by the Law;
- + The hazardous chemicals importers must make automatic declaration (without confirmation) through the Vietnam National Single Window;
- + The Ministry of Construction shall detail the conditions and regulations governing the use of hazardous chemicals within the scope of management and submit them to the Government for promulgation.
- Inherit regulations in the Law on Chemicals in 2007 on registration, evaluation, and management of new chemicals; information of chemicals; classification, labeling and packaging of chemicals; Chemical safety data sheets; Confidentiality; National Chemical Inventory and National Chemical Database; Chemical advertising.
- Supplement the regulations on the responsibilities of organizations, individuals in complying with international commitments on chemical management of which Vietnam is a member; Assign a focal agency to implement international commitments on chemical management.
- 2.4. Evaluating the impacts of solutions on subjects directly affected by the policy and other relevant subjects

2.4.1. Option 1: Maintain the regulations governing chemical-related activities as in the current Law on Chemicals

- a) Economic and social impacts:
- Positive impact: Relevant subjects do not have to spend the resources or time to study, amend, or organize the implementation of new legal regulations.
- Negative impact: If it remains as it is now, existing problems, shortcomings (discovered) will not be resolved. The fragmented management consumes the resources, incurs the costs in implementing the management and supervision activities of state management agencies, and also generates the costs for the enterprises in implementing the regulations. The inconsistent management among the stages in the chemical life cycle leads to reduced effectiveness and efficiency of management, thereby increasing the risk of chemical incidents, chemicals used for the wrong purpose, affecting the safety and social order.

b) Gender impacts:

The policy does not affect the opportunities, conditions, and capacities to exercise and enjoy the rights and benefits of each gender because the policy is applied generally, without gender discrimination.

c) Impacts on administrative procedures:

The policy does not create new administrative procedures because current regulations remain as unchanged.

d) Impacts on the legal system:

The policy does not have an impact on the legal system because the regulations remain as unchanged.

2.4.2. Option 2: Amend the chemical management regulations towards strict, synchronous management throughout the entire chemical life cycle

- a) Economic and social impacts:
- Positive impact:
- + For the State: Focusing on strict management of chemicals with high levels of risk throughout the chemical life cycle contributes to saving resources and enhancing the management efficiency for the state management agencies;
- + For the enterprises, organizations: Increase the awareness and compliance of the enterprises with state regulations, thereby improving the safety in the enterprise's own chemical operations, minimizing the costs for overcoming the consequences of chemical incidents, losses (if any) and costs for implementing the regulations for low-risk chemicals;
- + For people: Strengthen the management effectiveness, ensure that the chemicals with high levels of risk will be strictly managed throughout the entire life cycle from production, import to disposal, thereby ensure the chemical safety, limit the situation of chemicals as used for improper purposes, causing loss of safety and social order.
 - Negative impacts:
- + For the State: Generate the resources to study, develop and complete relevant legal regulations;
- + For enterprises, organizations: Incur the costs to propagate and disseminate the amended and supplemented regulations;
 - + For people: There is no negative impact on people.
 - b) Gender impacts:

The policy does not affect the opportunities, conditions, and capacities to exercise and enjoy the rights and benefits of each gender because the policy is applied generally, without gender discrimination.

c) Impacts on administrative procedures:

- Positive impact: Reduce and simplify unnecessary administrative procedures for low-risk chemicals.
- Negative impact: New administrative procedures arise in the use, transportation, and disposal of high-risk chemicals.
 - d) Impacts on the legal system:
 - Positive impact:
- + The chemical management system is built synchronously throughout the life cycle of chemicals in accordance with hazardous properties, risk assessment results and requirements to ensure the safety and social order;
- + Amending the chemical management regulations towards strict and synchronous management throughout the entire chemical life cycle will increase the compatibility of chemical management regulations in Vietnam with management requirements of some special chemicals of conventions such as: Chemical Weapons Convention on the management of Scheduled chemicals, Stockholm Convention on the management of persistent organic substances (POP), Minamata Convention on the management of Mercury management, Rotterdam Convention on the Management of Certain Chemicals and Pesticides. This is also one of the obligations of member states when participating in international conventions.
 - Negative impact: Not detected.

2.5. Recommendations for options

Based on analysis, comparison of the impacts of the options, the Ministry of Industry and Trade decides to choose Option 2: Amend the chemical management regulations towards strict, synchronous management throughout the entire chemical life cycle.

The option for amending chemical management regulations towards strict, synchronous management throughout the entire chemical life cycle will have positive impacts on many subjects in the society and on state management agencies, enterprises and other relevant subjects will help solve existing problems, shortcomings over the years.

3. Policy 3: Management of hazardous chemicals in products

3.1. Background

a) Identified problems including:

In fact, today, there are many products such as paint, ink and glue, detergents... that contain hazardous chemicals, but the consumers have not been provided with information about the hazardous ingredients or the information is still general because there are no regulations, no danger warnings about fire and

explosion risks, and health risks for those exposed. Meanwhile, the above products containing hazardous chemicals are currently not regulated in the Law on Chemicals and are also not regulated in other specialized documents.

This is an important issue, a trend in chemical management in the world, so it is necessary to build a management mechanism and provide the information about hazardous chemicals in products, especially consumer products which can directly affect the people, causing a burden for waste treatment containing hazardous chemicals that can have long-term impacts on the environment.

b) Consequences if the problem is not resolved:

- Negative impact on consumer rights when the consumers are not provided with information about the substance content in the product and instructions on how to use the product so they can choose to use safe and effective products.
- The users are at risk of chemical exposure from products containing hazardous chemicals, and also, these chemicals can also pollute the environment and incur the costs for environmental treatment after this product is disposed of.

c) Causes of the problem:

- In fact, today, there are many products such as paint, ink and glue, detergents... that contain hazardous chemicals in their ingredients but there is no danger warning about the risk of fire, explosion, or health effects for those exposed (fire, explosion, irritant...). However, the above products containing hazardous chemicals are not currently regulated in the Law on Chemicals and are also not regulated in other specialized documents.
- Management of hazardous chemicals in products is an important issue affecting the human health, and is a trend in chemical management in the world (European countries, Japan, etc.). Therefore, it is necessary to build a management mechanism for the products containing hazardous chemicals, especially consumer products that can directly affect the people, or contain hazardous chemicals that can have long-term impacts on the environment.

3.2. Problem solving objectives

- Keep up with the trends of countries around the world on chemical management in products, especially consumer products that have a risk of exposure to hazardous chemicals for the users to enhance the health protection for users and the environment.
- Prevent the import into Vietnam of poor quality products and goods with high levels of hazardous chemicals that have been restricted for use in other countries around the world.
- Reduce the risk of emitting waste products that contain large amounts of hazardous chemicals into the environment.

3.3. Proposed solutions for problem solving

- Option 1: Maintain current regulations in the Law on Chemicals.
- Option 2: Supplement regulations on management of hazardous chemicals in products, specifically:
- Supplement and develop a List of hazardous chemicals in products to be managed.
- Supplement the regulations on how to manage the hazardous chemicals in products, including: controlling the risk of products containing hazardous chemicals by building a process for managing hazardous chemicals during the production process, publishing information about hazardous chemical content in products. Risk assessments will be carried out by the enterprises in their annual reports on hazardous chemicals in products.
- Supplement the regulations on responsibilities of producers, importers and traders of products containing hazardous chemicals.
- For hazardous chemicals in products that have technical regulations: Follow the provisions of the Law on Technical Standards and Regulations, the Law on Goods Quality and disclose information at the National Chemical Database.
- For hazardous chemicals in products to be managed without technical regulations: supplement the general regulations on building a list of hazardous chemicals in products to be managed; For these chemicals, it is necessary to develop a process for managing hazardous chemicals during the production process (Article 62) and publish information about the hazardous chemical content in the product at the National Chemical Database (Article 63). The above regulations are built in order to make information transparent to the public, protecting consumers, minimizing risks to safety and health, not increasing administrative procedures, and facilitating the business operations.
- Supplement the regulations on responsibilities for inspection and supervision of the implementation of regulations on management of products containing hazardous chemicals of ministries, branches and localities in the direction of strengthening post-inspection.
- 3.4. Evaluating the impacts of solutions on subjects directly affected by the policy and other relevant subjects
- 3.4.1. Option 1: Maintain the current regulations in the Law on Chemicals.
 - a) Economic and social impacts:
- Positive impact: Relevant subjects do not have to spend the resources or time to study, amend, or organize the implementation of new legal regulations.

- Negative impact: If it remains as it is now, existing problems, shortcomings (discovered) will not be resolved. The products containing hazardous chemicals have the potential to seriously affect the users, especially consumer products. The users are at risk of chemical exposure from products containing hazardous chemicals. And also, these chemicals also are at the risk of polluting the environment and incur environmental treatment costs after these products are disposed of.

b) Gender impacts:

The policy does not affect the opportunities, conditions, and capacities to exercise and enjoy the rights and benefits of each gender because the policy is applied generally, without gender discrimination.

c) Impacts on administrative procedures:

The policy does not create new administrative procedures because current regulations remain as unchanged.

- d) Impacts on the legal system:
- Positive impact: There is no impact on the legal system because regulations remain as unchanged.
- Negative impact: Failure to realize the Party and State's guidelines and policies on sustainable development: "taking protection of the living environment and people's health as the top goal; Resolutely eliminating the projects that pollute the environment, ensuring the quality of the living environment, and protecting the biodiversity and ecosystems."

3.4.2. Option 2: Supplement the regulations on management of hazardous chemicals in products

- a) Economic and social impacts:
- Positive impact:
- + For the state management agencies: Have tools to manage the hazardous chemical content in products, prevent the import into Vietnam of poor quality products and goods containing high hazardous chemical content restricted for use in other countries around the world;
- + For relevant organizations, individuals: Minimize the impact of hazardous chemicals on human health, reduce the risk of emitting waste products containing large amounts of hazardous chemicals into the environment;
- + For people: Enhance the safety protection for the users through limiting and eliminating products containing hazardous chemicals circulating on the market; Reduce the risk of emitting waste products containing large amounts of hazardous chemicals into the environment.
 - Negative impact:

- + For the state management agencies: Generate the resources to study, develop and complete the relevant legal regulations;
- + For relevant organizations, individuals: Incur the costs to propagate and disseminate the amended and supplemented regulations;
 - + For people: No negative impact on people.
 - b) Gender impacts:

The policy does not affect the opportunities, conditions, and capacities to exercise and enjoy the rights and benefits of each gender because the policy is applied generally, without gender discrimination.

- c) Impacts on administrative procedures:
- Positive impact: Not detected.
- Negative impact: Administrative procedures arise on the management of hazardous chemicals in products.
- d) Impacts on the legal system: There is no impact on the legal system because the regulations remain as unchanged.
- Positive impact: Keep up with the trends of countries around the world on chemical management in products; synchronized with legal regulations on product and goods quality; consistent with the development policy of "taking protection of the living environment and people's health as the top goals".
 - Negative impact: Not detected.

3.5. Recommendations for options

Based on the analysis, comparison of the impacts of the options, it shows that the proposed amendments, supplements to regulations related to chemical management in products have positive impacts on many subjects in the society, for the state management agencies, enterprises and other relevant subjects. Therefore, the Ministry of Industry and Trade proposes to choose Option 2.

Authority for promulgating policies: Policies on chemical management in products are expected to be promulgated in the Law, the agency in charge of promulgating is the National Assembly; Detailed regulations and instructions for implementing the above policy are expected to be issued in a Decree, the authority for promulgating is the Government.

4. Policy 4: Improve the efficiency in ensuring the chemical safety

4.1. Background

- a) Identified problems including:
- The system of safety standards for equipment in chemical-related activities is still limited and has not fully regulated the activities related to

hazardous chemicals; Regulations on safety conditions in chemical-related activities lack specificity, making it difficult to enforce.

- Compliance with requirements for factories, warehouses, and management of hazardous chemicals is limited due to the promulgation of regulations and standards after the factories have been operating. This causes difficulties in modifying, amending the facilities of enterprises and in the guidance and appraisal of state management agencies on chemical-related activities, as well as making it difficult for the implementation of the enterprises.
- According to the current regulations, the development of chemical incident prevention and response measures and chemical safety training is carried out by the enterprises themselves, the management agencies only post-check, so many units overlook it and do not implement or implement carelessly, does not ensure the chemical incident prevention and response.
- Article 36 of the Law on Chemicals stipulates that the Investor can only put the project into operation after the Chemical Incident Prevention and Response Plan has been approved. In fact, the Plans are often evaluated when the project has completed the construction and before being officially put into operation. In some cases, the plan appraisal process requires the renovation of some items or the addition of technical solutions to ensure the chemical safety, leading to changes compared to the design documents and as-built documents, this leads to lack of uniformity in the management.
- Although the enterprises have been more proactive in developing the chemical incident prevention and response plans and measures, in reality, there are still some cases where the enterprises have developed the plans since before the Law on Chemicals in 2007 is issued, or during the construction process, does not comply with the regulations on ensuring the technical safety, leading to demolition and renovation, causing the economic loss and disruption to the operating process of organizations, individuals due to the plan appraisal process as carried out after the factory has been built.
- The quality of chemical safety training activities does not meet the requirements, many enterprises still carry out it in a formal way, the training content is sketchy and does not go into the actual work of the employees, the training for safety practices and response to chemical incidents for the employees in direct contact with chemicals are limited, and the quality of the trainers is not uniform and not guaranteed.
- In some countries in Asia, the chemical incidents response is of special interest because the impact of chemical incidents on human health, the environment and the economy is extremely large. Many countries have built the specialized training areas for the response when the chemical incidents occur. However, currently in Vietnam, the chemical incident response-related activities

of organizations, individuals involved in the chemical-related activities are still limited due to lack of capacity, knowledge in chemical incident response activities and especially, no unit or organization has enough professional capacity to provide in-depth training on this task.

- Approaching incident situations at the provincial and national levels has not received much attention, making large-scale chemical incident response drills not widely deployed nationwide.
 - b) Consequences if the problem is not resolved:
- Cause the difficulties in the guidance, appraisal of the state management agencies on chemical-related activities, as well as cause the difficulties for enterprises' implementation.
- The chemical incident prevention and response are not really taken seriously, and safety in chemical-related activities is not guaranteed.
 - c) Causes of the problem:

The Law on Chemicals and its guiding documents lack the regulations and requirements on ensuring the chemical safety (factories, warehouses...); There are no national technical standards and regulations on specific technical issues such as equipment systems, lighting, ventilation systems...

4.2. Problem solving objectives

- Improve the efficiency of state management, awareness of the enterprises, and skills of employees in ensuring the chemical safety.
- Improve the quality of technical infrastructure to ensure the safety, equipment to prevent and respond to chemical incidents from chemical facilities to the local and central government levels.

4.3. Recommendations for options

- Option 1: Maintain the regulations on management of chemical-related activities as in the current Law on Chemicals.
- Option 2: Supplement the regulations to improve the effectiveness of ensuring the chemical safety, specifically:
- The organizations, individuals must comply with the conditions on physical technical facilities, expertise and responsibilities to ensure the safety in production, business, transportation and storage of chemicals.
- Chemical incident prevention and response plan is implemented by the chemical project investors themselves or through a qualified consultant. The chemical incident prevention and response plan is implemented concurrently with the preparation of a feasibility study report or documents equivalent to the project's feasibility study report; The chemical project investors are responsible

for fully implementing the contents in the decision for approving the chemical incident prevention and response plan.

During the inspection for the acceptance of construction works when completed and put into use, the competent state management agency is responsible for checking the implementation of the contents in the Decision for approving the chemical incident prevention and response plan. The chemical project investors are responsible for integrating the environmental incident response plan into the chemical incident prevention and response plan.

- The organizations, individuals engaged in chemical-related activities that are required to develop chemical incident prevention and response plans and measures are responsible for reporting and updating their chemical incident prevention and response plans and measures to the National Chemical Database system.
- The organizations, individuals engaged in chemical-related activities are responsible for organizing the chemical safety training or sending the chemical-related workers to periodically participate in training courses of chemical safety training organizations every 02 years.
- The Ministry of Industry and Trade presides over and coordinates with relevant ministries, ministerial-level agencies to develop the contents, tasks, management mechanisms, and financial mechanisms of the National Program on chemical incident prevention and response to be submitted to the Prime Minister for approval.

4.4. Evaluating the impacts of solutions on subjects directly affected by the policy and other relevant subjects

- 4.4.1. Option 1: Maintain the regulations governing chemical-related activities as in the current Law on Chemicals
 - a) Economic and social impacts:
- Positive impact: Relevant subjects do not have to spend the resources or time to study, amend, or organize the implementation of new legal regulations.
- Negative impact: If the current status remains, existing problems, shortcomings (discovered) will not be resolved, and there is a risk of chemical incidents causing serious impacts on humans, assets and environment.

b) Gender impacts:

The policy does not affect the opportunities, conditions, and capacities to exercise and enjoy the rights and benefits of each gender because the policy is applied generally, without gender discrimination.

c) Impacts on administrative procedures:

The policy does not create new administrative procedures because current regulations remain as unchanged.

d) Impacts on the legal system:

The policy does not have an impact on the legal system because regulations remain as unchanged.

4.4.2. Option 2: Supplement the regulations to improve the effectiveness in ensuring the chemical safety

- a) Economic and social impacts:
- Positive impact:
- + For the State: Improved chemical safety assurance helps enhance management efficiency for the state management agencies;
- + For enterprises, organizations: Increase the awareness and compliance of the enterprises with the state regulations, thereby improving the safety of the enterprise's own chemical-related activities, improving technical infrastructure to ensure the safety, equipment for chemical incident prevention and response to minimize the risk of chemical incidents, limit the risk of chemical incidents affecting humans, assets and the environment; Minimize the incident recovery costs;
- + For people: Improve workers' skills to ensure the safety, equipment for to chemical incident prevention and response.
 - Negative impact:
- + For the State: Generate the resources to study, develop and complete relevant legal regulations;
- + For enterprises, organizations: Incur the costs to propagate and disseminate amended and supplemented regulations;
 - + For people: No negative impact on people.
 - b) Gender impacts:

The policy does not affect the opportunities, conditions, and capacities to exercise and enjoy the rights and benefits of each gender because the policy is applied generally, without gender discrimination.

- c) Impacts on administrative procedures:
- Positive impact: Not detected.
- Negative impact: Additional administrative procedures arise for developing the chemical incident prevention and response measures and chemical safety training courses.
 - d) Impacts on the legal system:
- Positive impact: Improve the state management efficiency in ensuring the chemical safety.
 - Negative impact: Not detected.

4.5. Proposed solutions for problem solving

Based on analysis, comparison of the impacts of the options, the Ministry of Industry and Trade decides to choose Option 2: Supplement the regulations to improve the effectiveness in ensuring the chemical safety.

The plan "Supplement the regulations to improve the effectiveness in ensuring the chemical safety" will have positive impacts on many subjects in society, on state management agencies, enterprises and other related subjects, will help solve existing problems, shortcomings over the years.

III. COMMENTS

The policy impact assessment report is a component of the proposal for the development of the Law on Chemicals (amended), which has been sent for comments to the agencies, units, and enterprises and posted on the Website of the Government and the Website of the Ministry of Industry and Trade. After the proposal for the development of a Law project is approved, during the development of the Law project, the agency in charge of drafting continues to conduct the extensive consultation with the agencies, organizations, and associations from the central to local levels, individuals, domestic and foreign experts, water exploitation and use organizations... for the contents related to approved policies, specifically as follows:

- The Ministry of Industry and Trade has held the meetings with the Drafting Committee, Editorial Team, and organized many seminars, discussions, and working sessions on the draft Law with relevant agencies, organizations, domestic and foreign experts, and scientists, organizing the seminars in three regions.
- On, the Ministry of Industry and Trade issued the Dispatch No. sent to the ministries, branches, localities, relevant organizations and units in the Ministries, organizations, enterprises, and experts; Dispatch No.... sent to the Website of the Government to collect the comments on the draft Law on Chemicals (amended). To date, the agency in charge of drafting has received comments from.../21 ministries and ministerial-level agencies; .../63 Provincial People's Committee/Department of Industry and Trade; .../28 ministerial units... socio-political organizations, large chemical users and ... comments on the Website of the Government.

Based on the opinions of ministries, branches and localities, the agency in charge of drafting has compiled, explained, received the comments, edited the draft Law, draft Proposal and completed the documents of the Law on Chemicals project (amended). The Ministry of Industry and Trade has also organized thematic seminars with the experts and scientists to study, explain, receive the comments from the ministries, branches and localities and complete the draft Law.

III. MONITORING AND EVALUATION

- 1. Agency in charge of organizing policy implementation: Ministry of Industry and Trade, ministries, branches, central agencies, People's Committees at all levels, local water resources management agencies, other relevant agencies, organizations and individuals.
- 2. Agencies in charge of supervising the policy implementation: National Assembly, People's Councils at all levels; Vietnam Fatherland Front, Fatherland Front member organizations; citizens.