

Country Name	<b>Project for Strengthening Chemicals Management in Vietnam</b>
Socialist Republic of Viet Nam	

**I. Project Outline**

Background	<p>The Vietnam Chemicals Agency (VINACHEMIA) was established in the Ministry of Industry and Trade (MOIT) in 2009. At the time of the ex-ante evaluation, VINACHEMIA was in charge of designating chemicals subject to regulations (e.g., hazardous chemicals), assessing import and manufacturing declarations for regulated chemicals, and handling accidents at chemical plants. However, the existing chemicals management system had many problems, such as chemicals not being regulated in a way that reflected the actual import, manufacture, and use of chemicals in Viet Nam; information on chemicals not being sufficiently collected, compiled, and analyzed; and the system of declaration, notification, and registration for use of chemicals and the assessment of new chemicals not being well developed.</p>								
Objectives of the Project	<p>This project aims to establish a risk-based industrial chemicals management system through introducing scientific risk-based assessment and management into the chemicals management system and developing a national chemicals database, thereby contributing to the achievement of the 2020 goals set in the World Summit on Sustainable Development (WSSD) and the use and production of chemicals in a manner that minimizes their impact on health and the environment.</p> <p>1. Expected Goals through the Proposed Plan<sup>1</sup>: The risk-based chemicals management system in line with the WSSD 2020 goals is operationalized, and chemicals are properly managed, especially in the industrial sector.</p>								
Activities of the Project	<p>1. Project Site: industrial areas mainly in Hanoi and Ho Chi Minh City (HCMC)  2. Main Activities: (1) Develop a conceptual design of the chemicals management system and action plans for VINACHEMIA; (2) Conduct an investigative survey on industrial chemicals; (3) Develop the national chemicals inventory and database; (4) Develop a risk-based industrial chemicals management system and prepare manuals and conduct trainings to operationalize the system; and (5) Conduct awareness seminars on the chemicals management system, etc.  3. Inputs (to carry out above activities)</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Vietnamese Side</td> </tr> <tr> <td>1) Mission Members: 7 persons</td> <td>1) Staff Allocated: 7 persons (task team for developing the national chemicals inventory and database)</td> </tr> <tr> <td>2) Hiring of supporting staff to summarize information of import/manufacturing declaration VINACHEMIA owns and subcontracting an investigative survey on industrial chemicals</td> <td>2) Budget for database development, project office space</td> </tr> </table>			Japanese Side	Vietnamese Side	1) Mission Members: 7 persons	1) Staff Allocated: 7 persons (task team for developing the national chemicals inventory and database)	2) Hiring of supporting staff to summarize information of import/manufacturing declaration VINACHEMIA owns and subcontracting an investigative survey on industrial chemicals	2) Budget for database development, project office space
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Project Period	(ex-ante) October 2014 – September 2017 (36 months) (actual) 19 April 2015 – 18 April 2019 (48 months)	Project Cost (Japanese side only)	(ex-ante) 350 million yen, (actual) 345 million yen						
Implementing Agency	Vietnam Chemicals Agency (VINACHEMIA), Ministry of Industry and Trade (MOIT)								
Cooperation Agency in Japan	EX Research Institute Ltd.								

**II. Result of the Evaluation**

1 Relevance/Coherence
<p>[Relevance]</p> <p>&lt;Consistency with the Development Policy of Viet Nam at the Time of Ex-Ante Evaluation&gt;</p> <p>The project was consistent with the development policy of Viet Nam at the time of ex-ante evaluation. The “Socio-Economic Development Strategy 2011-2020” and the “Socio-Economic Development Plan 2011-2015” prioritized environmental protection. In addition, in the “National Strategy on Environment Protection to 2020,” safety measures related to chemicals included registration of chemicals, accident prevention and handling, and establishment and application of technical standards and fulfillment requirements for safety.</p> <p>&lt;Consistency with the Development Needs of Viet Nam at the Time of Ex-Ante Evaluation&gt;</p> <p>The project was consistent with the development needs of Viet Nam at the time of ex-ante evaluation. In Viet Nam, it was necessary to strengthen chemicals management administration by introducing a risk-based management system in line with the actual import, manufacture, and use of chemicals. In addition, as an initiative of the Vietnamese government as a whole, it was expected that information from the national chemicals database developed by the MOIT would be utilized for the Pollutant Release and Transfer Register (PRTR) system planned by the Ministry of Natural Resources and Environment (MONRE), thereby contributing to the establishment of an environmental risk assessment system in the country.</p> <p>&lt;Appropriateness of Project Design/Approach&gt;</p> <p>The project design/approach was basically appropriate. The direction of the risk-based industrial chemicals management system was</p>

<sup>1</sup> The degree of achievement of expected goals is not to be assessed in principle at the time of ex-post evaluation, since it is defined as the medium-to-long-term goals which will be attained as a result of crystallizing the proposed plan (“output” of the project).

appropriate, and the project succeeded in developing a national chemicals inventory and database, which are essential for a more scientific approach to chemicals management. In addition, during the project implementation, lessons learned from past similar projects, which were (1) to create a mechanism for information sharing with related ministries and agencies and (2) to incorporate awareness-raising activities to promote understanding on the part of companies and elicit cooperation in providing necessary information, were applied to this project. In terms of the project approach, the project was implemented within a limited timeframe, and it was mainly led by the JICA team, while initiatives from their Vietnamese counterparts to tailor measures to the local context were not sufficient to expedite the institutionalization process. Nonetheless, efforts were made to lay the groundwork for institutionalization of the risk-based industrial chemicals management system, which is expected to progress further with continued commitment from the Vietnamese side. Therefore, the project design was generally appropriate, while there was a room for improvement in terms of the project approach.

<Evaluation Result>

In light of the above, the relevance of the project is ③<sup>2</sup>.

[Coherence]

<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation>

The project was consistent with Japan's ODA policy to Viet Nam at the time of ex-ante evaluation. This project falls under the priority area of "Response to Fragility" in Japan's "Country Assistance Policy for the Socialist Republic of Viet Nam (2012)," which states that in order to deal with the negative aspects of the growth, Japan supports Viet Nam in addressing emerging environmental issues caused by rapid urbanization and industrialization.

<Collaboration/Coordination with JICA's Other Interventions>

No collaboration/coordination between the project and JICA's other intervention was clearly planned at the time of ex-ante evaluation and during the project period.

<Cooperation with Other Institutions/ Coordination with International Framework>

The cooperation/coordination with Japan's Ministry of Economy, Trade and Industry (METI) was planned at the time of ex-ante evaluation and implemented as planned, and the positive effect was confirmed at the time of ex-post evaluation. This project was one of the activities under the Memorandum of Cooperation between METI and MOIT in the field of chemicals management. During the training sessions for VINACHEMIA and at the study tours in Japan which were conducted separately from this project, lectures from METI and National Institute of Technology and Evaluation (NITE) on topics such as Chemical Substances Control Law (CSCL), Chemical Risk Information Platform (CHRIP), e-reporting system, etc. were provided. Such lectures were very helpful to develop the inventory and the database and to understand the risk assessment methods including screening assessment.

<Evaluation Result>

In light of the above, the coherence of the project is ③.

[Evaluation Result of Relevance/Coherence]

In the light above, the relevance/coherence of the project is ③.

2 Effectiveness/Impact

<Status of Achievement for the Objectives at the Time of Project Completion>

The project objectives were achieved as planned by the project completion. The final report that includes project outputs ((1) Short and medium term action plans of VINACHEMIA, (2) Investigative survey report on industrial chemicals, (3) National chemicals inventory (NCI), (4) National chemicals database (NCDBS), (5) Risk-based industrial chemicals management system, and (6) Operating manual for the risk-based chemicals management system) was officially accepted by VINACHEMIA.

<Utilization Status of the Proposed Plan at the Time of Ex-post Evaluation>

The proposed plan has been partially utilized by the time of ex-post evaluation. VINACHEMIA has managed to amend some legal documents to increase safety in managing, trading, and transporting hazardous industrial chemicals by specifying measures to prevent and deal with chemicals-related incidents (amended legal documents are Decree No.82/2022/ND-CP and Circular No.17/2022/TT-BCT). VINACHEMIA has also continued to collect information on hazard and risks of exposures, and still uses and maintains the NCI and NCDBS. However, circulars or external announcement documents regarding the start of operation of the risk-based industrial chemicals management system (Indicator 1) have not been issued by the time of the ex-post evaluation, as an institutional change requires political determination and usually takes time for various preparations. Accordingly, the NCI and international inventories have not been officially approved, and the screening assessment (priority matrix) for reviewing of regulated chemicals has not been updated after the project completion.

<Status of Achievement for Expected Goals through the Proposed Plan at the Time of Ex-post Evaluation>

The expected goals through the proposed plan have been partially achieved at the time of ex-post evaluation. As no numerical target was set for Expected Goals indicators at the time of ex-ante evaluation, it is difficult to judge whether each indicator has achieved targets as planned. Nonetheless, it can be said that targets were mostly achieved in Indicators 1 and 2, since VINACHEMIA has maintained and updated the NCDBS and the list of regulated industrial chemicals. However, data for Indicator 3 was unavailable, and targets were not achieved in Indicator 4, as a new chemicals management system, i.e. risk-based one, has yet to be established.

<Other Impacts at the Time of Ex-post Evaluation>

No other positive or negative impacts have been observed for this project.

<Evaluation Result>

In light of the above, the effectiveness/impact of the project is ②.

<sup>2</sup> ④ : very high, ③ : high, ② : moderately low, ① : low

Status of Achievement of Utilization Status of the Proposed Plan and Expected Goals through the Proposed Plan

Aim	Indicators	Results	Source
(Utilization Status of the Proposed Plan) Industrial chemicals management system, which adopted risk-based assessment and reflects the status of industry, is approved.	Indicator 1: Circular and external announcement documents, etc. regarding the start of operation of the risk-based industrial chemicals management system	Status of Achievement: Partially achieved (Ex-post Evaluation) The risk-based industrial chemicals management system has not yet been approved and officially started, although VINACHEMIA has continued some of the project activities.	Interview with VINACHEMIA
(Expected Goals through the Proposed Plan) The risk-based chemicals management system in line with the WSSD 2020 goals is operationalized, and chemicals are properly managed, especially in the industrial sector.	Indicator 1: Number of data collected and status of operation of the NCDBS	Status of Achievement: Mostly achieved as planned (Ex-post Evaluation) 36,777 chemicals are included in the NCDBS as of March 2022, while the number was 31,000 at the time of project completion. In addition, approximately 5,000 business enterprises are registered in the NCDBS, while the number was 270 at the time of project completion. The NCDBS is operated and maintained by VINACHEMIA.	Interview with VINACHEMIA
	Indicator 2: Updated status of regulated industrial chemicals and designated number of updates	Status of Achievement: Mostly achieved as planned (Ex-post Evaluation) VINACHEMIA has updated the list of regulated industrial chemicals annually.	Interview with VINACHEMIA
	Indicator 3: Number of declarations, notifications, and registrations of designated chemicals	Status of Achievement: Unverifiable (Ex-post Evaluation) The number of declarations made on regulated industrial chemicals in 2023 was 4,425. However, data on the number of regulated industrial chemicals and the number of notifications made on regulated industrial chemicals at the time of ex-post evaluation (in 2023) was unavailable.	Interview with VINACHEMIA
	Indicator 4: Number of new chemicals management systems in use	Status of Achievement: Not achieved (Ex-post Evaluation) While the full establishment of the new chemicals management system is still underway (a new chemicals management system has not yet been established at the time of ex-post evaluation), several foundational activities introduced by the project have been sustained and expanded.	Interview with VINACHEMIA

### 3 Efficiency

The project cost was within the plan (the ratio against the plan: 99%) and the project period exceeded the plan (the ratio against the plan: 133%). Reasons for the actual project period exceeding the plan were that the project faced events that affected the implementation of the project, such as revision of decrees and circulars, restructuring of MOIT and VINACHEMIA, and reduction of state budget during the second year of the project. During the period when the project was facing difficulties in implementation due to budgetary issues, METI provided its support by communicating with VINACHEMIA, which resulted in project extension for a year and the start of the NCDBS in the fourth year.

	Project Cost (Japanese side only, yen)	Project Period (months)
Plan (ex-ante)	350 million yen	36 months
Actual	345 million yen	48 months
Ratio (%)	99%	133%

Outputs were produced as planned.

In the light above, the efficiency of the project is ③.

### 4 Sustainability

#### <Policy Aspect>

At the time of ex-post evaluation, the risk-based industrial chemicals management system has yet to be officially approved. However, environment protection is continuously confirmed in SEDP (2021-2025), which makes industrial chemicals management remain important. In addition, as stated above, a decree and a guiding circular have been amended to promote preventive measures and deal with chemicals related incidents (Decree No.82/2022/ND-CP and Circular No.17/2022/TT-BCT).

#### <Institutional/Organizational Aspect>

As the risk-based industrial chemicals management system has been considered but is yet to be officially approved, the operation of VINACHEMIA mainly serves for activities of industrial chemicals management, such as categorizing industrial chemicals based on the associated risk and maintaining the NCI and the NCDBS (the NCI and the NCDBS are utilized for reference (whenever applicable) and support the works of VINACHEMIA). Regarding required personnel, the Vietnamese government has targeted to decrease the number of officers in the public sector due to budget limitations. Consequently, VINACHEMIA has faced difficulties in managing the increasing workload without a sufficient increase in personnel.

#### <Technical Aspect>

VINACHEMIA officials are regularly trained through chemicals management courses in Viet Nam and other countries. In addition, VINACHEMIA officials have attended various international conferences and workshops related to chemical management annually, which helps them keep updating their knowledge and good international practices.

<Financial Aspect>

VINACHEMIA carries out activities of industrial chemicals management within the limit of its allocated budget, but it has yet to be allocated a state budget for the risk-based industrial chemicals management system because the system has not been officially approved.

<Environmental and Social Aspect>

No issue on environmental and social aspects has been observed, and it has not been necessary to take any countermeasures.

<Evaluation Result>

In light of the above, some problems have been observed in terms of the institutional/organizational and financial aspects of the implementing agency. Therefore, the sustainability of the project effects is ②.

5 Summary of the Evaluation

The project prepared the final report that includes project outputs ((1) Short and medium term action plans of VINACHEMIA, (2) Investigative survey report on industrial chemicals, (3) National chemicals inventory (NCI), (4) National chemicals database (NCDBS), (5) Risk-based industrial chemicals management system, and (6) Operating manual for the risk-based chemicals management system). After the project completion, the proposed plan has been partially utilized. VINACHEMIA has managed to amend some legal documents to increase safety in managing, trading, and transporting hazardous industrial chemicals by specifying measures to prevent and deal with chemicals-related incidents. VINACHEMIA has also continued to collect information on hazard and risks of exposures and maintained the NCI and the NCDBS. Concerning sustainability, some issues have been observed in the institutional/organizational and financial aspects, largely due to the fact that the risk-based industrial chemicals management system introduced by the project has been considered but is yet to be officially approved.

Considering all of the above points, this project is evaluated to be partially satisfactory.

### III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

The risk-based industrial chemicals management is a good international practice for the management of chemicals. VINACHEMIA should further study and prepare for adoption in the future based on the action plans supported by the JICA project.

Lessons Learned for JICA:

For the risk-based industrial chemicals management system to be institutionalized in Viet Nam, the project should have been designed with a more gradual approach and stronger ownership of the recipient country, as an institutional change requires political determination and institutional preparation and usually takes time. When a project involving an institutional change is implemented in the future, it should be carefully designed with a gradual approach and a sufficient period, and implemented with careful attention to promote initiatives of the recipient country.