COORDINATED AUDIT OF ENVIRONMENTAL LIABILITIES Executive Report October 2016

Special Technical Commission for the Environment

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- Sanitary Landfill, Municipality of Rafaela.
- Treatment Sheds.

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Special Technical Committee on the Environment

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Special Technical Committee on the Environment

1. Foreword

Dear reader:

The Technical Commission on the Environment (COMTEMA), of the Organization of Latin American and Caribbean Supreme Audit Institutions (OLACEFS), is very pleased to present the result of the Coordinated Audit of Environmental Liabilities. The audit was carried out under the coordination of the Superior Audit of the Federation of Mexico and of the Office of the Comptroller General of the Republic of Peru.

The topic is related to the management of solid and hazardous waste produced by economic activities such as manufacturing, mining, health care services, and agriculture, as well as its effects on the preservation of the environment.

This joint work included nine Supreme Audit Institutions (SAIs). They were Brazil, Chile, Colombia, Ecuador, Honduras, Mexico, Paraguay, Peru, and the Dominican Republic; as well as the Audit Entities (EF, in the Spanish acronym) of the Argentine Provinces of Buenos Aires and Santa Fe.

On that occasion, technical teams of the participating institutions evaluated the design and implementation of government policies designed to address the public problem posed by environmental liabilities generated by the inadequate management of solid, mining, and hazardous waste.

The findings of the Coordinated Audit show that the policy of attention to environmental liabilities designed and implemented by the evaluated institutions has not been consolidated. This limits the contribution to preserving the environment, to actions designed to prevent and control the generation of environmental liabilities, and to remediating existing liabilities.

In view of the above, by promoting joint evaluations, SAIs foster the consolidation of public policies such as, in this case, policies related to Environmental Liabilities, based on which compliance with the international "polluter pays" principle is evaluated. This will have an effect on the improvement of the services provided by the Public Administration and will bring benefits to countries taking part in the audit and, consequently, to their citizens.

In conclusion, it is worth mentioning that the coordinated audit is based on the year 2014 and considers previously available information according to the type of audit that was carried out. The methodology applied makes it possible to evaluate state management with regard to integral management of environmental liabilities, as well as its effects on the preservation of the environment.

We appreciate the generous collaboration of the participating teams.

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CONTENTS

- 1. Foreword
- 2. Introduction
- 3. Results
- 4. Design
- 5. Prevention
- 6. Control
- 7. Remediation
- 8. Opinion
- 9. Social consequences10. Good practices
- 11. Recommendations
- 12. Challenges

2. Introduction

The management of solid and hazardous waste that results from economic activities, such as mining waste, is of great relevance given the negative effects its lack of or inappropriate management can cause for populations, natural resources, and ecosystems. This increases the risk of such activities producing environmental liabilities¹ in the form of sites with water or soil contaminated by some type of waste. Usually, the lack of adequate management of hazardous waste and resulting generation of contaminants is a problem associated with some productive activities related to manufacturing, mining, health care services, and agriculture. In the first place, the production of waste must be avoided. When this is not possible, waste must be treated and properly disposed of to mitigate risks of generating environmental liabilities.

In this context, the coordinated audit in which the SAIs of 9 countries and two Audit Entities (EF) of two Argentine provinces took part evaluated how government is managing waste with a view to preventing environmental liabilities and ensuring their integral management.

The audit evaluated actions carried out by government agencies in charge of managing (for prevention/control and/or restoration purposes) environmental liabilities and their effect on mitigating damages that they might cause to the environment.

This evaluation made it possible to analyze the results of actions carried out by 88 public institutions responsible for environmental liabilities in 9 countries of Latin America and the Caribbean and in 2 Argentine provinces.

3. Results

The management of solid and hazardous waste that results from economic activities, such as mining waste, is of great relevance given the negative effects its lack of or inappropriate management can cause for populations, natural resources, and ecosystems. This increases the risk of such activities producing environmental liabilities² in the form of sites with water or soil contaminated by some type of waste.

(Captions of the photo: Las Mercedes bauxite mine in the Pedernales province, Dominican Republic. Photo provided by the SAI of the Dominican Republic)

To address this problem, based on the "Polluter Pays Principle or PPP" established by the Organization for Economic Cooperation and Development (OECD), a large number of countries, among which those that participated in this coordinated audit, established in their Constitutions that "Everyone has the right to a healthy environment" and that "environmental damages and deterioration shall generate liability for those who cause them," Therefore, their governments drew up public policies that contemplate the implementation of actions designed to prevent and control the generation of environmental liabilities and, in cases where they cannot be avoided, to remediate them and thereby contribute to reducing damages to the environment.

¹ The term environmental liabilities has multiple definitions, some of which coincide with one another while others do not; however, the concept has an accounting origin, based on the costs of environmental effects for society in terms of spending on health care services, remediation, compensation and indemnification.

² The term environmental liabilities has multiple definitions, some of which coincide with one another while others do not; however, the concept has an accounting origin, based on the costs of environmental effects for society in terms of spending on health care services, remediation, compensation and indemnification.

4. Design

The audit found that, when designing public policies for environmental liabilities, the institutions in charge of managing them in the Latin America and Caribbean countries that took part in the ACPA, did not always incorporate the environmental liability concept into their regulatory framework to avoid legal gaps and provide for liabilities for environmental damages and their remediation. They lacked institutions with specific objectives and duties and with sufficient personnel to carry out prevention, control, and remediation actions. Their domestic, sectoral, and institutional planning was marked by shortcomings in addressing this issue in line with diagnoses to measure damages to the environment and to people resulting from liabilities; they had not developed and implemented computer systems to address this issue. This limited the information available to governments for decision-making purposes.

MAP 1. ADVANCES IN THE REGULATORY FRAMEWORK OF 8 LATIN AMERICAN COUNTRIES AND 2 ARGENTINE PROVINCES, 2015

REGULATORY FRAMEWORK

Not implemented, 20.0% Low level of implementation, 30.0% Medium level of implementation, 30.0% High level of implementation, 20.0%

Source: Prepared by COMTEMA based on domestic information provided by 8 countries and 2 Argentine provinces

MAP 2. ADVANCES IN THE DEFINITION OF INSTITUTIONS FROM 8 COUNTRIES OF THE SAIS AND OF THE TWO IFS OF ARGENTINA, 2015 INSTITUTIONS

Not implemented, 0.0% Low level of implementation, 40.0% Medium level of implementation, 30.0% High level of implementation, 30.0%

Source: Prepared by COMTEMA based on national reports prepared by 8 SAIs and two IFs.

MAP 3. ADVANCES IN THE ALLOCATION OF HUMAN AND MATERIAL RESOURCES TO ADDRESS ENVIRONMENTAL LIABILITIES IN 8 LATIN AMERICAN COUNTRIES AND 2 ARGENTINE PROVINCES, 2015

HUMAN AND MATERIAL RESOURCES

Not implemented, 80.0% Low level of implementation, 20.0% Medium level of implementation, 0.0% High level of implementation, 0.0%

Source: Prepared by COMTEMA based on national reports prepared by 8 countries and two Argentine provinces.

MAP 4. ADVANCES IN THE PLANNING OF 8 LATIN AMERICAN COUNTRIES AND 2 ARGENTINE PROVINCES, 2015

PLANNING

Not implemented, 20.0% Low level of implementation, 40.0% Medium level of implementation, 0.0% High level of implementation, 40.0%

Source: Prepared by COMTEMA based on national reports prepared by 8 SAIs and two IFs.

MAP 5. ADVANCES IN THE INFORMATION SYSTEMS FOR ENVIRONMENTAL LIABILITIES OF 8 LATIN AMERICAN COUNTRIES AND 2 ARGENTINE PROVINCES, 2015

SYSTEMS

Not implemented, 70.0% Low level of implementation, 10.0% Medium level of implementation, 20.0% High level of implementation, 0.0%

Source: Prepared by COMTEMA based on national reports prepared by 8 SAIs and two IFs.

5. Prevention

These shortcomings have a negative impact on the implementation of public policies designed to enhance attention to environmental liabilities; in terms of prevention, it was seen that highly polluting projects and activities lacked an obligatory environmental impact assessment, as well as management programs and plans for contaminant waste to be used by those in charge of managing it, meaning that it poses a latent risk of generating environmental liabilities; and oversight and monitoring actions are not sufficiently robust to appropriately identify works or activities that violate environmental regulations.

MAP 6. ADVANCES IN PREVENTION IN 6 LATIN AMERICAN COUNTRIES AND 2 ARGENTINE PROVINCES, 2015

PREVENTION

Not implemented, 0.0%
Low level of implementation, 37.5%
Medium level of implementation, 25.0%
High level of implementation, 37.5%

Source: Prepared by COMTEMA based on national reports prepared by 8 countries and two Argentine provinces

Captions of the photo: *Estrutural* garbage dump, near Brasilia, Brazil. Photo provided by the Brazilian SAI.

MAP 7. ADVANCES IN OVERSIGHT AND MONITORING IN 8 LATIN AMERICAN COUNTRIES AND 2 ARGENTINE PROVINCES, 2015 OVERSIGHT AND MONITORING Not implemented, 30.0% Low level of implementation, 60.0% Medium level of implementation, 10.0% High level of implementation, 0.0%

Source: Prepared by COMTEMA based on national reports prepared by 8 countries and two Argentine provinces

6. Control

In terms of control, the legal mandates to issue sanctions are insufficient. This limits the ability to avoid generation of environmental liabilities and the effectiveness of compliance with the international "polluter pays" principle.

MAP 8. ADVANCES IN CONTROL OF ENVIRONMENTAL LIABILITIES IN 8 LATIN AMERICAN COUNTRIES AND 2 ARGENTINE PROVINCES, 2015 CONTROL

Not implemented, 55.6% Low level of implementation, 33.3% Medium level of implementation, 11.1% High level of implementation, 0.0%

Source: Prepared by COMTEMA based on national reports prepared by 8 SAIs and two IFs.

7. Remediation

As regards remediation, the participation of the players in charge is only marginal; there is no subsequent evaluation to check the results of remediation actions and, where appropriate, the programming of complementary activities, and no evaluation or estimate is made of the cost of environmental liabilities. In view of the above, the effect of public policy on mitigating environmental liabilities is unknown, since the ACPA results showed there is not enough of information to evaluate how much prevention, control and remediation actions contribute to mitigating environmental liabilities. This causes a lack of awareness in the Latin American and Caribbean region regarding the extent to which environmental liabilities affect natural resources and ecosystems.

MAP 9. ADVANCES IN REMEDIATION IN 8 LATIN AMERICAN COUNTRIES AND 2 ARGENTINE PROVINCES, 2015

REMEDIATION

Not implemented, 30.0% Low level of implementation, 60.0% Medium level of implementation, 11.1% High level of implementation, 0.0%

Source: Prepared by COMTEMA based on national reports prepared by 8 SAIs and two IFs.

Captions of the photo: Remediation at the Puyango river watershed in Ecuador.

8. Opinion

COMTEMA considers that the environmental liabilities policy in the countries of the SAIs that took part in the ACPA is not consolidated and that this limited the contribution of actions designed to prevent and control the generation of environmental liabilities and to remediate existing liabilities. This is compounded by lack of awareness of the effects of such policy on mitigating damages caused by environmental liabilities.

9. Social consequences

The prevention, control, and remediation actions carried out by the agencies in charge of addressing environmental liabilities in the countries of the SAIs that took part in the ACPA were not sufficiently robust to mitigate damages caused to the environment and to the health of their populations and this prevented them from ensuring the human right to a healthy environment.

10. Good practices

In this scenario of raising awareness about the importance of integral management of environmental liabilities, it is still premature to extract good practices in this area. However, in the nine countries of the SAIs and in the two Argentine provinces of the IFs (Buenos Aires and Santa Fe), a common principle established by the OECD has been adopted, namely, the "polluter pays principle." The constitutional norms of each country contemplate this principle by providing for the right of people to enjoy a healthy environment, as well as for the liability of those who cause environmental damages or deterioration. Given the relevance of this topic, the regulations adopted in countries such as Ecuador, Peru, and Mexico, as well as in the Argentine provinces of Buenos Aires and Santa Fe, provide for the concept of environmental and mining liabilities. This serves as a benchmark to clarify the regulations of countries in the region that may decide to take coordinated actions to address the liability problem.

In addition, Ecuador, Mexico, and Peru, as well as the province of Santa Fe, developed a robust plan for managing environmental liabilities in which the public problem, its causes and effects were identified, as well as the effects of environmental liabilities per economic activity. Programs and plans were also established with strategies, objectives, goals, actions, and indicators for environmental liabilities and accountability mechanisms.

Moreover, both Ecuador and Mexico developed and implemented information systems for environmental liabilities, such as control mechanisms that make it possible for their governments to collect necessary information for decision-making oriented to processes for planning, developing, and strategically monitoring actions designed to reduce damages caused by liabilities, besides disseminating information on their geographical location. To implement these systems, Mexico has relied on the support of the German Agency for International Cooperation (GIZ) since 2010.

Regarding the management of environmental liabilities, which correspond to regulatory actions to prevent their generation, only four countries (Chile, Honduras, Mexico and the Dominican Republic) have taken adequate regulatory measures to ensure that economic activities that can cause environmental liabilities are carried out in line with sustainability criteria.

Even though most of the 8 countries and the 2 Argentine provinces have not established criteria to enhance attention to environmental liabilities, actions to remediate them are being carried out through programs designed to mitigate their effects due to contamination.

11. Recommendations

Considering the degree of development of the design and implementation of the public policy for environmental liabilities, the SAIs reported the situation found and issued recommendations to the national governments to improve the prevention and control of environmental liabilities. There were also recommendations regarding restoration of control, aiming to strengthen its effect in mitigating damages caused to the environment by this problem in the countries of the participating SAIs and IFs. The recommendations focused on the following aspects:

- Strengthen the regulatory framework for environmental liabilities by establishing a concept of environmental liability based on which a public policy can be developed to reduce the risk of dispersed, heterogeneous, and spontaneous actions that can pose risks to control and remediation of environmental liabilities and to mitigation of their negative effects on ecosystems and their natural resources.
- Actions to prevent, control, and restore environmental liabilities and mitigate their negative effects on the environment should be placed under the responsibility of consolidated entities with specific objectives and duties, clear-cut rules for their proper interrelationship and a clear mandate.
- The entities in charge of preventing or restoring environmental liabilities should be endowed with the necessary human and material resources for implementing public policies on environmental liabilities.
- Develop a consistent planning process at the national, sectoral, and institutional level to ensure integral management of environmental liabilities based on an initial diagnosis designed to measure the public problem and ensure effective attention to it.
- Develop and operate information systems to identify and take stock of environmental liabilities or potential environmental liabilities by generating information for planning and decision-making purposes.
- Render environmental impact assessments mandatory, as well as effective plans or programs for managing polluting waste and actions designed to ensure strict compliance with environmental regulations based on the idea that it is better and more economical to avoid environmental liabilities than to eliminate them.
- Identify those who generate environmental liabilities and issue corresponding sanctions and measures against violators of environmental regulations with the aim of fighting the risk of generating liabilities and contributing to their remediation by applying fines in line with the "polluter pays" principle.
- Have a solid regulatory framework to enable development of programs designed to address environmental liabilities, thereby minimizing the risk of lack of attention to this problem and, consequently, its non-remediation.
- Define the scope of the audit and monitoring of plans and actions designed to mitigate contamination by environmental liabilities.
- Ensure efficient management of funds earmarked for actions designed to address environmental liabilities.

12. Challenges

The concern of SAIs regarding sustainable environmental management is relatively new. A mounting series of negative effects on ecosystems and their resources accumulated and that progressively led it to become a global concern. This, however, did not receive the same level of priority and attention.

The challenge faced by the participating SAIs in conducting the ACPA was that of addressing an unprecedented or minimally developed aspect for governmental control, namely, the issue of environmental liabilities. The involvement in the audit of a plurality of audit institutions from different countries and at varying stages of development vis-

à-vis the environmental topic made it possible for them to engage in a shared knowledge exercise on government actions before and after environmental liabilities occur, which apart from favoring the acquisition of technical knowledge also produces national and regional information on the subject of environmental liabilities that was not available in the past previously or was not appropriately disseminated.

The challenge facing SAIs right now is that of submitting their reports to the competent agencies for them to respond to the situations detected and follow up on the implementation of the recommendations. It is also a fundamental task to disseminate the reports to a wide range of external stakeholders so that they may, within their competences, act as a sounding board and supporting element to be used as a methodological benchmark for training their staff to monitor environmental liabilities and that the competent governmental bodies may take the necessary actions to prevent and restore environmental liabilities.

Although the ACPA was limited to checking the management practices adopted by entities in charge of preventing and restoring environmental liabilities, their effects involve other areas of government management that are also subject to government control, such as the health care sector, vulnerable populations affected by environmental liabilities in their living conditions, and the agricultural and tourism sectors, among others that can also produce economic effects as a result of environmental liabilities.

Captions of the photo: Abandoned mining site in El Membrillo, Alhué district, Metropolitan Region, Chile. Photo provided by the SAI of Chile.

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