## CHALLENGES FOR THE IMPLEMENTATION OF SOCIO-ENVIRONMENTAL VARIABLES ON THE ENFORCEMENT OF INVESTMENT PROJECTS IN CHILE

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## 1. Significance of the Article

This paper analyses the Chilean Environmental Framework Institutions since the implementation and entry into force of the Environmental Superintendence (SMA, hereinafter). Among its functions are enforcing impact and environmental commitments associated to life systems and usual behavior of humane groups. This article emphasizes the introduction of enforcing methodologies for socio-environmental aspects, with the main aim of presenting learning experiences throughout this institution's first year of functioning.

## 2. Introduction

Recent modifications in the environmental Chilean legislation -through the enactment of the Law N°20.417- introduced structural changes on the Chilean environmental framework since January 2010. In this regard, the Ministry of the Environment, the Service for the Environmental Assessment and the Superintendence of the Environment were created.

The new environmental Chilean framework addresses key dimensions of the environmental regulations: first, through the Ministry of the Environment, which defines political guidelines and environmental regulations; second, the Service for the Environmental Assessment (SEA) is responsible for managing the Environmental Impact Assessment System (SEIA); and finally, SMA, doing the enforcement and compliance of the environmental management instruments contained in the Law, including the environmental licenses coming from the SEIA process <sup>1</sup>.

## 3. Environmental Impact Assessment in Chile

The SEIA is the main instrument of environmental management established in the current Chilean environmental law, whose main objective is to predict and prevent environmental impacts generated by activities or projects which are susceptible to cause impact on the environment. This instrument enables the system to consider the environmental dimension in the design and implementation of projects and activities carried out in the country. It makes possible to assess and certificate that the projects and initiatives -as per the public and the private areas- fulfill all applicable environmental legal requirements.

The environmental impact assessment (EIA) of projects or activities considers, among the different variables to be assessed, the so called social-environmental impact, through aspects referred to "human groups and their life systems" which include cultural heritage, land use and touristic and landscape value of territories.

<sup>&</sup>lt;sup>1</sup> Guzmán, Rodrigo (2012), Derecho Ambiental Chileno. Principios, instituciones, instrumentos de gestión. Editorial Planeta Sostenible, Chile.

At the end of the EIA process, SEA issues an environmental license denominated in Chile Environmental Qualification Resolution (RCA hereinafter), which is an environmental authorization granted to the projects or activities. This document sets out norms, conditions and monitoring programmes that the owner of the project or activities it is committed to developing.

# 4. The Superintendence of the Environment

The SMA is an organization created through law N° 20.417, whose objective is to enforce the environmental management instruments to encourage compliance with environmental obligations and, at the same time, dissuade the compliance through sanctions and incentives<sup>2</sup>.

Among the main functions of the SMA are the enforcing of the norms, conditions and measurements established in the RCAs through inspections, controls, measuring and analysis<sup>3</sup>.

The procedure through which SMA verifies compliance with the environmental management instruments is through the view of the relevant environmental aspects related to the possible significant effects that the projects or activities can generate.

The RCAs, as a regulated environmental management tool, should incorporate aspects such as definition of the environmental component subject to the measure; the associated environmental impact; specification of the kind of measure; description and measure justification; indicating when it must be implemented and pointing out indicators of compliance; thus allowing an effective enforcement.

# 5. Human groups and their life systems

The Environmental Law N°19.300, modified through Law N° 20.417, defines environment as "a global system made up by natural and artificial elements of a physical, chemical, biological, or sociological nature and their interactions, in permanent modification by human or natural action, and that regulates or conditions the existence and development of life in their multiple manifestations"<sup>4</sup>.

According to that definition, the environment is constituted by natural, constructed or artificial, and sociocultural elements, which not work in isolation, but interconnected and reciprocally, thus constituting a dynamic global system.

According to the Law N° 19.300, the criteria of effects, characteristics or circumstances related to socio-environmental aspects, that defines whether or not project or activities must be submitted to SEIA, include<sup>5</sup>:

- Re-settling of human communities or significant alteration of human groups and their life systems.
- Location in/or close to indigenous settlements, protected areas or resources.
- Significant alteration of the landscape or touristic value of an area.

<sup>&</sup>lt;sup>2</sup> Guzmán, Rodrigo (2012), Derecho Ambiental Chileno. Principios, instituciones, instrumentos de gestión. Editorial Planeta Sostenible, Chile.

<sup>&</sup>lt;sup>3</sup> Art. 3a) Ley Orgánica de la Superintendencia del Medio Ambiente (LOSMA)

<sup>&</sup>lt;sup>4</sup> Art. 2ll) Ley de Bases Generales del Medio Ambiente (LBGMA)

<sup>&</sup>lt;sup>5</sup> Art. 11 LBGMA

 Alteration of landmarks, places with anthropological, archaeological, historical value and in general, those belonging to cultural heritage.

Furthermore, according to the Regulations of the SEIA (Act N°40/2013, of the Ministry of the Environment) we understand human communities as "all group of people who share a territory, in which they permanently interact with each other, thus giving birth to a life system, formed by social, economic and cultural relationships, which eventually generate traditions, common interests and feelings of settlement. These human groups may belong to indigenous people acknowledged by the law, independently from their organization"<sup>6</sup>.

From this viewpoint, the concept of human group is related to the territorial dimension of social life, that is to say, the common territorial space where life systems, people's customs and level of development becomes more important, therefore, explicitly acknowledging the indigenous people of Chile.

Regarding to the connection between this common territory and the location of projects or activities which generate environmental impact, it becomes necessary to identify those circumstances<sup>7</sup> that eventually might cause alterations in the human groups and its life systems: The intervention, use or restrict access to the natural resources used with economical and

traditional purpose by the human groups.

- The obstruction or restriction of circulation, connectivity or the significant increase of displacement time.
- The alteration of the access to quality goods, equipment, or basic service and infrastructure.
- Physical vulnerability or insecurity of the human group coming from the proximity or nature of the project's parts, works or actions.
- The difficulty or impediment for the free exercise or manifestation of traditions, culture or common interests which might have an effect on the group's settlement or social cohesion.

## 6. Methodology for the Socio-environmental enforcement variables

Once the SMA became fully operational, it began to enforce and sanction instruments of environmental management under its competence. From the point of view of the human groups and their life systems, the 2013 Program included 10 projects in which there was acknowledged that social-environmental variables could be impacted and therefore they were prioritized for inspection

The characteristics of those projects can be summarized in the following table:

#### Table 1.

Project typology	Entry route to SEIA	Administrative Macro Region	Human Group Measure Type
Mining projects	EIA*	North	Social management system Social Independent Audit
Mining projects	EIA	Center	Archaeological mitigation and compensation for damage

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<sup>&</sup>lt;sup>7</sup> Art. 7 Reglamento N°40

Project typology	Entry route to SEIA	Administrative Macro Region	Human Group Measure Type
Mining projects	EIA	North	Archaeological mitigation and compensation for damage
Transport infrastructure - Airports	EIA	South	Foundation nonprofit Noise mitigation
Environmental sanitation – submarine emissary (outfall)	EIA	South	Social management system Social Independent Audit
Transport infrastructure - highways	EIA	South	Human Relocation
Manufacturing facilities	EIA	North	Road management system
Power generating stations	DIA**	North	Archaeological mitigation and compensation for damage
Mining projects	EIA	North	Water resources management system Archaeological mitigation and compensation for damage
Hydraulic infrastructure	EIA	South	Human Relocation
Mining projects	EIA	South	Road management system Social management system

\* Environmental Impact Study (EIA)

\*\* Environmental Impact Statement (DIA)

Source: www.seia.cl

Following, the Methodology used to verify the compliance of the Socio-environmental Variables Regulation is described:

#### Figure 1.



#### First Stage: Planning the Enforcement

The enforcing procedure of RCA, considering the environmental component "human groups and its life systems" begins with the **planning of the inspection activity.** This stage includes a) identification of the relevant aspects of the project related to human groups; b) The review and analysis of the Measure Plans associated to this thematic; c) Identify the area of influence of the project or activities, the human groups and their settling territory, giving emphasis to the identification of the existent indigenous human groups; d) Definition of the human groups variables to be enforced; and if necessary the final point, that is (e) Preparation of primary information survey tool consisting in a semi-structural questions for interviews, including the definition of stakeholders, so that the instrument can be applied.

## Second Stage: Carrying out the Inspection

Once in the settlement, the **environmental inspection** stage is developed, including: a) visual verification of the physical work inside and outside of the project's installations, related to human group aspects; b) Require documents, agreements, monitoring or any other information that is useful to verify the compliance of environmental obligations in respect of human groups, established in the environmental license; c) Visual accreditation about socio-environmental measurements indicated in RCA; and d) Applying the primary information survey tool to the territory's stakeholders, to know the recipient's perspective of measure and efficiency.

### Third Stage: Verifying the Compliance

Finally, a socio-environmental variable report is elaborated, through which the information learnt in the field is systematized. The criteria to verify include: a) The stage of the project or activity; b) accreditation of the different procedures applied by the owner of the project or activity; and c) the qualitative view of the compliance through the compile and analysis of the results of semistructural interviews, based on the discourse analysis methodology.

## 7. Conclusions: Limitations, learning and challenges

Since SMA entrance into total functions in December 2012, the socio-environmental variable has been included in enforcement processes and activities. This has been possible through practical guidelines that have been developed which are used in different enforcement activities. The use of a qualitative methodological approach, combined with the revision and follow up of the project heads' reports regarding the introduction of socio-environmental measures, has allowed the triangulation of the information, therefore validating the results of the qualitative investigation, obtained from the use of the instruments.

This way, the presence of SMA in influential areas of investment projects, as its quantitative and qualitative approach to communities directly related to the territories, has allowed gaining information from the inhabitants' perspective, which eventually may receive effects or be affected by the projects or activities.

Finally, the incorporation of tools that allow the raising of quantitative information about the efficiency of socio-environmental measures in use remains pending. This could be possible, eventually, through the certification of third parties; such as consultants that follow the methodological standards that allow them to perform these activities for the SMA, as a way to complete qualitative information.

As the main challenge for the future, comes out the need to validate and replicate methodologies that have been used, as is necessary to initiate a process of permanent learning and updating for regulators regarding social information recollection methodologies. Also, it is necessary to improve the methodological procedures of SMA in this area, including the employees' commitment with the inclusion of this subject in the regulation procedures.

### References

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