



**Cielos**  
**de Tarapacá**

**Chapter 6**

**Potential Risks to the Health of the Population referred to in Letter a) of  
Article 11 of Law 19,300**

**EIA Cielos DE TARAPACÁ**

**November 2014**

---

## Chapter 6

### Potential health risks for the population referred to in (a) of article 11 of law 19,300

#### EIA Photovoltaic Park Cieslos de Tarapacá

---

#### Content

1	INTRODUCTION.....	3
2	POTENTIAL HEALTH RISKS FOR THE POPULATION REFERRED TO IN (A) OF ARTICLE 11 OF LAW 19,300.....	5

#### CONTENTS INDEX

FIGURE 1. WORKS OF THE PROJECT.....	4
-------------------------------------	---

## 1 Introduction

The project submitted to the Environmental Impact Assessment System (SEIA) consists of the construction and operation of a photovoltaic park whose name is "*Skies of Tarapacá*", located 80 km southeast of the city of Iquique, Pozo Almonte commune, El Tamarugal province, Tarapacá region.

This project corresponds to one of the stages of the project "*Espejo de Tarapacá*", submitted through an environmental impact study (EIA) to the environmental impact assessment system on August 18, 2014. The project "*Espejo de Tarapacá*" It consists of generating energy through a reversible hydraulic pump/generation plant, And It is located in the coastal sector of the Caleta San Marcos, about 100 km south of the city of Iquique.

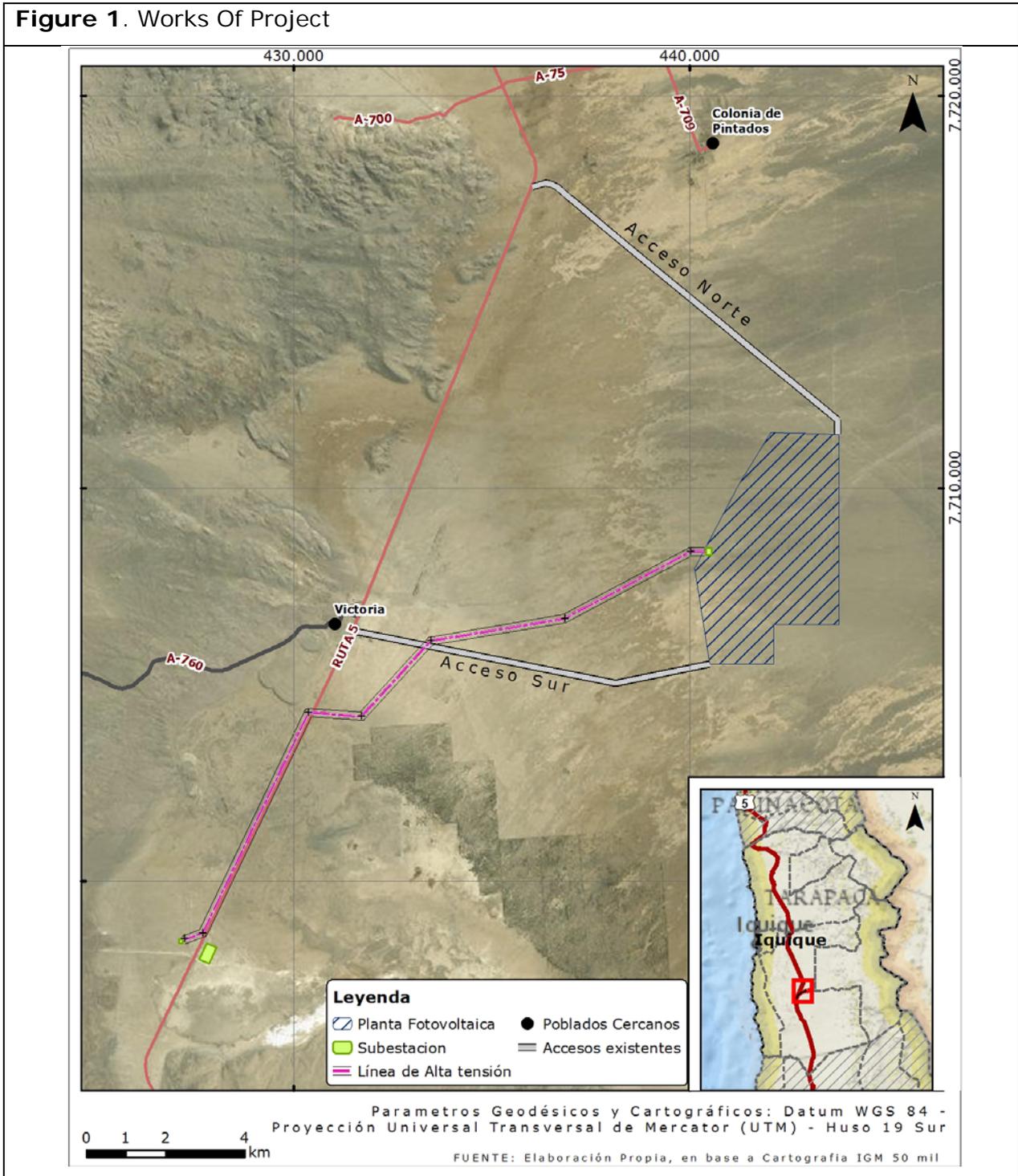
The EIA "*Espejo de Tarapacá*" He declared at the time of undergoing evaluation to the SEIA, that within its execution was considered a possible stage of generation of energy through a photovoltaic park, in order that this park gives him the necessary energy for sea water during the day, at night, generate hydropower. On the other hand, he stated that if this stage were to materialize, the form of income would be through an environmental impact study, which would contain a plan of environmental measures appropriate to take charge of the possible significant impacts that are generated in that Stage.

This project then corresponds to the materialization of the second stage of the project "*Espejo de Tarapacá*" and it consists of the installation and operation of a photovoltaic park with an approximate power of 600 MwAc, installation and operation of a forklift substation from 33 to 220 Kv installation and operation of a substation section and, The construction and operation of a line of ToLTA Voltage 220 Kv, of approximately 18 KM long.

In The Following Figure Is Can Appreciate the Location Of The Works Of Project.

VAL0005 Noviembre 2014	Los contenidos que soporta el presente documento constituyen Propiedad Intelectual queda prohibida su reproducción, total o parcial, por cualquier medio, en forma íntegra o extractada	Página 3 de 6
---------------------------	---	---------------

**Figure 1. Works Of Project**



## 2 Potential health risks for the population referred to in (a) of article 11 of law 19,300

As Letter a) of article 11 of law N ° 19.300: *"Article 11.-The projects or activities listed in the preceding article will require the elaboration of an environmental impact study, if they generate or present at least one of the following effects, Carac Features or circumstances: A. Risk to the health of the population, due to the quantity and quality of effluents, emissions or residues "*;

The content of the particular is developed in the Article 18 literal h) of the Decree 40 Regalements of the System Environmental assessment. Indeed, the standard requires as an obligation Include a specific chapter on the potential risks that the project or activity could generate in people's health.

The same article 18 literal h) indicates the minimum contents of the chapter, requiring at least the following factors:

- Indication of which emissions, effluents or residues of the project or activity generate the effect referred to in (a) of article 11 of the Act, indicating its quantification and characterization, including its toxicological information which shall include, inter alia, the nature of the health effects that may occur from such exposure and reference doses (RfD) and/or reference concentrations (Rfc) for non-carcinogenic contaminants or the slope factors for carcinogenic pollutants (CSF);
- Description of the means and mechanisms for transporting and transforming such emissions, effluents or waste, as well as their final destination;
- Identification of the population potentially exposed, including the population of greater exposure and of greater susceptibility to exposure, its size, location and sociodemographic characteristics;
- Identification of potential and complete exposure routes of the population to pollutants, through the elaboration of a conceptual model that Incorporate

- potentially exposed sources, pathways, and population;
- Estimation of the level of exposure for each identified route of exposure that should consider the prediction of impacts on the physical components associated with such pathways, as well as the frequency, duration and contact rate of the population exposure;
  - For carcinogenic agents, the estimation of the incremental risk of developing cancer based on the slope factor, or equivalent, and the daily dose of chronic exposure;
  - For non-carcinogenic agents, the comparison of the level of exposure with the dose and/or reference concentration, or equivalent; And
  - Analysis of the uncertainty of the results, as well as the detail of the assumptions considered for the calculation.

Notwithstanding the foregoing, and in accordance with the provisions of the Analysis of income relevance Chapter 5 of this EIA, The project "*Heavens of Tarapacá* " Does not enter as an EIA pursuant to article 11 (a) of law N ° 19.300 in relation to article 5 of the SEIA regulation, since it does not generate or present any effects, characteristics or circumstances which imply health risks of Població N.

In particular, the emissions, wastes and effluents of the project during its phases, have primary standards of quality or emission, all in force in Chile. Indeed, and in direct Relation to the Chapter 5, In That part that discards the potential risk to the health of the population, verifies the identification of the emissions, effluents and residues derived by the project in all its stages, identification that allows to conclude that all of them are focused regulated by national regulations. The application and development of this chapter is therefore ruled out.