Environmental, Social, and Health Impact Assessment (ESHIA) for Vista Onshore Operations

Area of Influence

10 June 2019

Project No.: 0510093
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### Document history

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Environmental, Social, and Health Impact Assessment (ESHIA) for Vista Onshore Operations

Area of Influence

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3. AREA OF INFLUENCE

According to IFC Performance Standard N° 1, where the project involves specifically identified physical elements, aspects, and facilities that are likely to generate impacts, environmental and social risks and impacts will be identified in the context of the project's area of influence. This area of influence encompasses:

- The area likely to be affected by:
  1. the project and the client’s activities and facilities that are directly owned, operated or managed (including by contractors) and that are a component of the project;
  2. impacts from unplanned but predictable developments caused by the project that may occur later or at a different location; or
  3. indirect project impacts on biodiversity or on ecosystem services upon which Affected Communities’ livelihoods are dependent.

- Associated facilities, which are facilities that are not funded as part of the project and that would not have been constructed or expanded if the project did not exist and without which the project would not be viable.

- Cumulative impacts that result from the incremental impact, on areas or resources used or directly impacted by the project, from other existing, planned or reasonably defined developments at the time the risks and impacts identification process is conducted.

3.1 Environmental Area of Influence

The Areas of Influence for direct impacts include the physical and biological components that are affected by the project footprint due to:

- The physical space across which all project activities occur.
- The part of the project located in Protected Areas or a Protected Areas Buffer Zone.
- Project activities which occur on territories of Native or Indigenous Communities.

Thus, the project area of influence is determined to encompass cumulative impacts that result from the incremental impact, on areas or resources used or directly impacted by the project, from other existing, planned, or reasonably defined developments at the time the risks and impact identification process is conducted.

3.1.1 Area of Direct Influence

Several direct environmental impacts were identified (see chapter 6). These were mainly related to the physical and biological environment that the project may impact directly. The area of direct influence, occurring in a cumulative impact scenario of previous oil&gas activities in the Vaca Muerta formation, is included in the project areas and limited by the specific interaction of the project and the physical and biological component (See map).
The area of direct influence consists of the total area of the two concessions, Entre Lomas and Bajada del Palo.

- The Entre Lomas area (AEL) will be occupied by the existing treatment plants (oil and water), and the gas complex (LPG-HRU), and corresponding pipelines. The Oil Treatment Plant (OTP) at AEL is to be revamped in order to support the production from the Bajada del Palo Oeste (BPO) future wells.

- The Bajada del Palo area (ABP), includes the Bajada del Palo Oeste (BPO) area where the drilling of the 110 wells will take place, and will be occupied by the new future oil treatment plant (PTC) planned in Borde Montuoso (BMo).

### 3.1.2 Area of Indirect Influence

The evaluation identified several indirect environmental impacts. The area of indirect influence refers to both concessions but regarding the cumulative interaction and VEC considerations of the cumulative impact section.

- The area of indirect influence consists of the transit routes used by vehicles, personnel and heavy machinery. The routes that are part of the area of indirect influence are two. The first is route RP 17, which runs from Neuquen to Añelo (paved route), which reaches a detour that connects the Bajada del Palo concession. The second route is 151 (paved) that goes from Neuquen to an access to the Entre Lomas concession, this route also connects with the town of Catriel.

- The area of indirect influence also includes areas close to the project where fauna can be disturbed and repelled during the construction and operational period. This may be the result of machinery noise, personnel movement, vehicle noise and / or generators, among others. The only protected natural area is more than 50 km from the project area, outside its area of influence.

In annex 3.1 Area of Environmental Influence, the areas of direct and indirect environmental influence of the project are shown.

### 3.2 Social Area of Influence

For social and community health impacts, it is useful to consider Area(s) of Influence for direct impacts and Area(s) of Influence for indirect impacts.

The Areas of Influence for direct impacts will include the households and communities that will be affected by the Project Footprint due to:

- their location within the Project Footprint (including footprint of associated facilities);
- their location within the Area(s) of Influence for environmental resources, such as air or water quality, noise and vibration, visual and landscape, etc;
- impacts on livelihood resources that will be affected by the Project (agricultural or grazing land, fisheries, forest resources); or
- their connection to cultural, social or health resources that will be impacted by the Project.

The Area(s) of Influence will also typically consider populations that will experience indirect or induced impacts that may not be within the direct control of the Project, such as:

- economic opportunities associated with employment and economic spend;
- interaction with the workforce;
- use of services by the workforce; and
- in-migration.

The Area(s) of Influence for indirect impacts may be far more geographically extensive than for direct impacts, but will commonly focus on larger population centres within this larger geographic extent.
3.2.1 Area of Direct Influence

Based on the direct social impacts identified in the field (see chapter 6), mainly related to the change in land use and landowners livelihoods, the direct area of influence is comprised by the Project areas. See map below.

- The Entre Lomas (AEL) area occupies an approximate area of 742.5 km², inserted in approximately 60% within the Province of Neuquén and the rest in the Province of Río Negro.
- The Bajada del Palo (ABP) area occupies an area of 452 km². It extends to the west of the AEL, at the height of the Borde Mocho deposit and is located entirely in the province of Neuquén.

3.2.2 Area of Indirect Influence

Followed by a political-administrative criteria and the indirect social impacts identified in this assessment (see 6.4.3), the area of indirect influence refers to both Provinces, Río Negro and Neuquén.

Specifically, political and administrative criteria refer to the applicable regulation, taxes and royalties received, extension of collective labor agreements and indirect impacts.

Within the Province of Río Negro, Catriel is the nearest town to Entre Lomas area (AEL), 45 km to the north. Catriel is a city located in the General Roca Department. Within this province, the Project impacts are related to local employment generation and increased demand of local goods and services.

When it comes to Bajada del Palo area (ABP), the town of Añelo is the nearest one, going up by the route 7 and then taking the 17, to the intersection with the access road to the Montuoso edge deposit, 7 kilometers away. Añelo is located within the Añelo Department, Province of Neuquén. Within this province, the Project impacts are related to local employment generation, increased demand of local goods and services and increased transit of vehicles.

In annex 3.2 Area of social influence, the areas of direct and indirect social influence of the project are shown.
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