



# Case Study



**Caleta Tortel, Chile**

**Caleta Tortel is a coastal village in Chile's southern region of Aisen. It is located at the mouth of Baker River, Chile's largest river, between North and South Ice Fields where glaciers cover an area of 4,000 km<sup>2</sup>.**

## The Challenge

Caleta Tortel is surrounded by protected and preserved wildlife habitats across forests, fjords and islands providing the location with historic and tourist value. The village has unique architecture built around its steep coastal geography, with houses sitting on stilts connected by wooden walkways instead of conventional streets. In 2003, Austral Road was built to connect the village to the rest of the country, increasing the village's population and tourist activity. The increasing number of citizens and tourists demanded an efficient and reliable sewer system to prevent contamination of Baker River and prevent environmental degradation in the area. Houses on stilts at the shoreline, steep and rocky terrain, the lack of streets, and an environmental sensitive area posed a challenge for the installation of a sewer system.

## The Solution

Only Airvac vacuum sewers were able to address all the technical challenges with a resilient, reliable and efficient sewer system. The entire project was served by only one Airvac vacuum station. The houses at the shoreline had its wastewater collected by compact Airvac collection sumps, while houses from other areas used conventional Airvac valve pits. Schools and public buildings used Airvac buffer tanks. The mains were installed under the wooden walkways. Due to the lifting capability of vacuum sewers, laterals in areas with rocky soil were installed above ground, which reduced the need for expensive trenching in difficult terrain.







## Additional Information

---



[Tortel\\_Chile.2020.pdf](#)  
[Download \(PDF, 2 MB\)](#)



[Airvac Vacuum Sewer System in Caleta Tortel, Chile -Case Study](#)  
[YouTube Video](#)  
[RunTime: 2 min 31 sec](#)



**Airvac, Inc.**  
4217 N Old US Highway 31  
Rochester, IN 46975 | USA  
[www.airvac.com](http://www.airvac.com)  
[info@airvac.com](mailto:info@airvac.com)  
1-800-AIRVAC9



**Roediger Vacuum GmbH**  
Kinzigheimer Weg 104  
Hanau, Hessen 63450 | Germany  
[www.roediger-vacuum.com](http://www.roediger-vacuum.com)  
[info@roediger-vacuum.com](mailto:info@roediger-vacuum.com)  
+49 6181 309 275