

# Efficient Implementation of NaOH Drainage Systems



Profertil and the Adaptation to New Chemical Processes with Pexgol.

## Pluspetrol Argentina | 2023

### • Working Conditions

Temperature: Ambient  
Pressure: Atmospheric  
Flow Rate: 50 liters/hour  
Fluid Components: 50% Sodium Hydroxide

### • Pexgol Pipe

Pexgol 160 mm, class 15

### • Application

Sodium Hydroxide Discharge

### • Length

10 m / 32 ft

### The Challenge

Profertil, a leading company in the production and commercialization of soil nutrients in Argentina, faced a significant challenge at its plant. With the recent modification of their processes to include the discharge of 50% sodium hydroxide (NaOH), it became imperative to develop suitable infrastructure to handle this highly corrosive chemical. The original unloading system was not designed for NaOH, necessitating the creation of a completely new system capable of handling the unique specifications of this chemical.

### The Solution

Profertil decided to implement a solution using a 10-meter Pexgol pipe, leveraging pipes that the company had already acquired for another project. Pexgol was chosen due to its high resistance to chemicals, durability against corrosion, and ease of handling and installation. The project involved excavation and civil works necessary to install and connect the new piping to the collection chambers, followed by paving the surface to ensure the system's integrity.

The installation of the Pexgol pipe was successfully completed, connecting the collection chambers in the truck unloading area. This system now efficiently handles the excess NaOH and wash water, combining and draining them without incidents. Since its commissioning four months ago, the infrastructure has operated without issues, demonstrating Pexgol's ability to adapt to Profertil's specific industrial chemical handling needs.

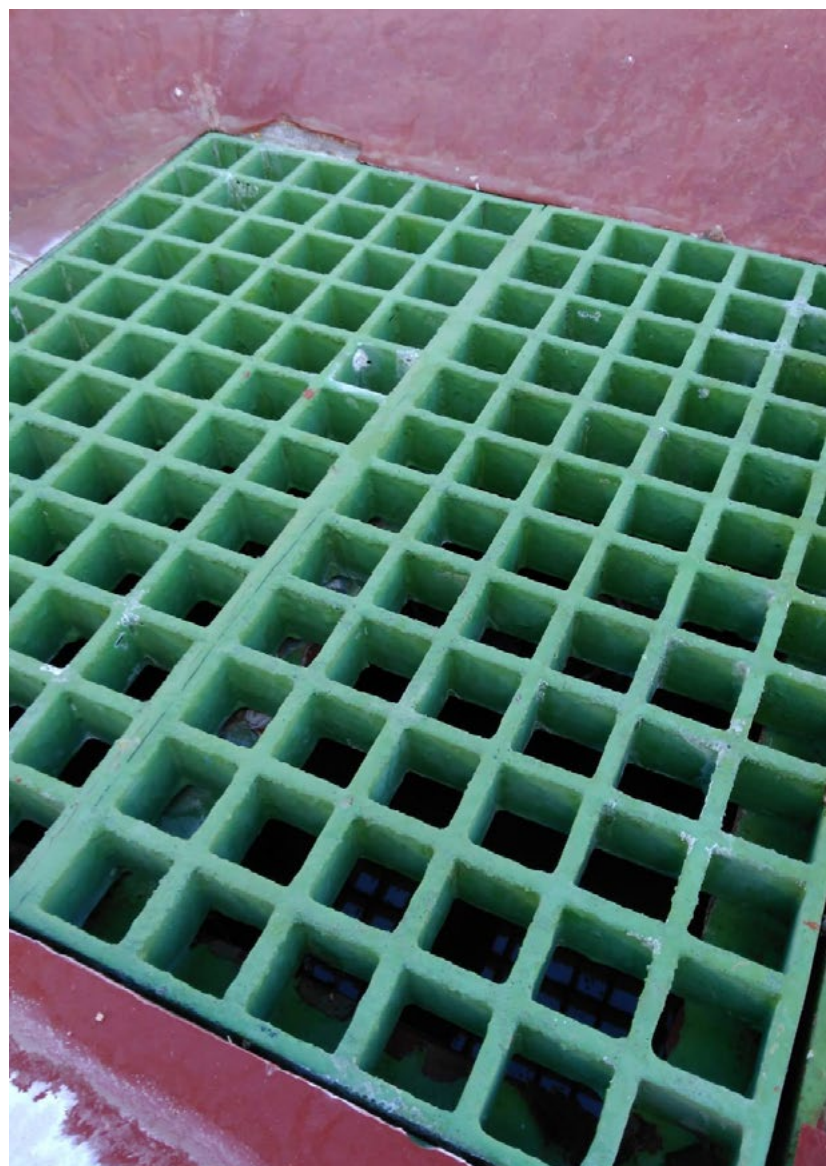
The client, Profertil, expressed satisfaction with the versatility and effectiveness of the solutions provided by Pexgol, highlighting the quick installation and reduced risks associated with handling corrosive substances.



Unloading Platform and First Chamber



Unloading Platform and First Chamber



Reinforced plastic (FRP) grate

# The Advantages of Pexgol Pipe Systems



## High resistance to wear

Pexgol is the preferred solution for abrasive materials transportation. Typically resists three times more than HDPE and twice more than steel.



## Superb internal and external corrosion resistance

Our pipes are proven to withstand decades of exposure to corrosive environments, with nonstop performance in some of the world's harshest environments.



## Excellent chemical and corrosion resistance

Pexgol pipes can resist a wide range of chemical agents, slurries, toxic and radioactive materials.



## Long pipe sections

Pexgol pipes can be supplied in long coil lengths, reducing number of joints, installation time and risks.



## High temperature resistance

Working temperatures can range from  $-50^{\circ}\text{C}$  /  $-58^{\circ}\text{F}$  up to  $110^{\circ}\text{C}$  /  $230^{\circ}\text{F}$ .



## Creep and impact resistance

Pexgol pipes can withstand high amounts of axial and radial stresses and are highly resistant to impact, fracture and fatigue. Furthermore, Pexgol pipes are completely resistant to cracks even when dragged over sharp rocky terrain and coagulated salt crystals.

For more information please visit:  
[pexgol.com](http://pexgol.com)

