

Safety first!

As operator, Dow is responsible for the safety of its pipelines. At the Pipeline Management department, a team of specialists works full-time at Terneuzen and in the field to guarantee the highest level of safety. And there's a lot involved in doing that!

In the Benelux, Dow manages underground pipelines running from the production site in Terneuzen to Rotterdam and Antwerp. These pipes are used to transport various products to customers. For example, a pipeline containing propylene runs to the Botlek near Rotterdam. Ethylene flows through the Dow pipelines toward Antwerp. Many different safety regulations apply to underground pipelines.

24/7 Monitoring

All pipes have equipment to continuously measure the pressure and temperature in the pipe. All this data is received by the control room of Dow's Pipeline Management department in Terneuzen. Employees of the department monitor the pipelines there 24 hours a day, seven days a week.

Valve and booster stations

Valve and booster stations are located at various locations to pump the liquids through the pipes. At these stations, Dow can completely lock the pipes. For this purpose, the stations are equipped with a smart device; a Programmable Logic Controller (PLC). This device automatically controls the stations and can take action based on measurements. In addition, the pipes can be emptied from a station. This is sometimes necessary for maintenance or if there is a malfunction. The excess gases in the pipeline are then flared at a station.

Inspections

It is not only the technicians from the Pipeline Management department who carry out operational checks on the pipelines. Other departments at Dow also carry out regular inspections. Of course, all those inspections are there for a reason. It is very important to Dow that the pipes are safe for their surroundings. Therefore, all risks are taken into account. First of all, these could be third-party activities. If someone starts digging in the vicinity of pipelines without doing a KLIC notification first, they could easily damage the pipelines. Second, Dow takes into account the possibility of a pipeline becoming less sound. This means that the pipes must be checked for things such as wear and tear. Thirdly, checks must be carried out to ensure that no substances have been released during operations.

Most important are the pipes themselves

To check that the pipes are sufficiently sound, Dow carries out four different inspections. These are the inline inspection, coating inspection, visual inspection and cathodic protection inspection. All these inspections are necessary to monitor whether the condition of the pipelines still meets Dow's safety requirements. The Pipeline Management department meticulously records the results of the inspections and continuously evaluates the results. In addition, a comprehensive maintenance program should prevent wear and tear of the pipes. In this way, Dow achieves the highest level of safety for the pipes!