

60 MILLION LITRES OF FUEL



SAFETY FIRST

Tanks under construction.

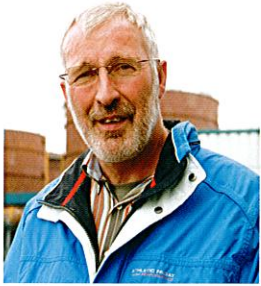
IN ORDER TO BECOME LESS DEPENDENT ON THE TANK TERMINALS OF OTHER OIL COMPANIES, GULF OIL NEDERLAND IS BUILDING ITS OWN TERMINAL IN AMSTERDAM FOR STORING AND TRANSHIPPING GASOLINE, DIESEL AND BIO-ETHANOL. AT THE SITE OF DAUGHTER COMPANY MAIN IN THE CITY'S WESTERN PORT AREA, NINE NEW TANKS ARE EMERGING. SAFETY AND PRECISION ARE OF THE ESSENCE DURING THE CONSTRUCTION PROCESS. KIWA IS PERFORMING CONTROL AND INSPECTION SERVICES.

The tanks are being built on a stretch of reclaimed land formerly belonging to the Petroleumhaven port. Rising to a giant twenty metres each, the tanks are the tallest in the area. At this point they've reached varying stages of completion: one tank's steel plates of up to 12 millimetres thick are still being welded together, in another the steel structure supporting the roof is being assembled, while a third has already been coated. 'Until now, Gulf always depended on other terminals', says Piet de Groot, head of Projects with MAIN. 'Having our own terminal means we can be more certain about supply and removal. We're glad we can achieve that at this site.'



GASOLINE, DIESEL AND BIO-ETHANOL

The new terminal has a capacity of 60,000 cubic metres (or 60 million litres, around 9 million litres per tank) and can be used for gasoline, diesel and bio-ethanol. Next to the large storage tanks a smaller one is being constructed for so-called slob, a mixture of gasoline and water. Once the two substances have been separated, the gasoline is fed into a distillation process and the water is purified and discharged. Through an ingenious system of pumps, valves and pipes, the fuel products can be moved from ships to tanks or vice versa, between tanks, or from tanks to tank trucks, which then carry them to Gulf fuel



Piet de Groot



Harm Prins

stations all over Europe. Ships approaching from the North Sea Canal will easily be able to manoeuvre into the port to load or unload oil products. A new quay measuring 500 metres will provide two berths for ships up to 130 metres long and 16,5 metres wide, as well as one for ships up to 200 metres long and 35 metres wide. The loading point for tank trucks has four docks for loading gasoline and two for diesel.

WATER TEST

Safety is a top priority, both during construction and when the terminal goes into operation. The storage tanks themselves, of course, are the first safety focal point. To find out whether they're liquid-proof and strong enough, a so-called water test is being conducted in which each tank will eventually be filled with water and checked all over for leaks. At the same time, the tanks will sink about 25 centimetres into the raised sand bedding on which they've been built, guaranteeing stability. Then the tanks will be tested for roundness, floor surface flatness and tilt. Automatic safety provisions built in at every crucial point in the process are to prevent anything going wrong during storage or processing. Fire prevention, detection and extinguishing systems are indispensable. 'Each tank has been fitted with five double fire detectors', says De Groot. 'For the sake of fire safety, storage will take place under slight nitrogen pressure, as the exclusion of oxygen obviously means there can be no fire. Also, there will be a supply of 30 cubic metres of extinguishing foam that can be used to blanket any possible fire. As for transshipping, a safety sequence is launched the moment a ship's hold, a storage tank or a truck tank has been filled, or if any irregularities occur in the pumping process.'

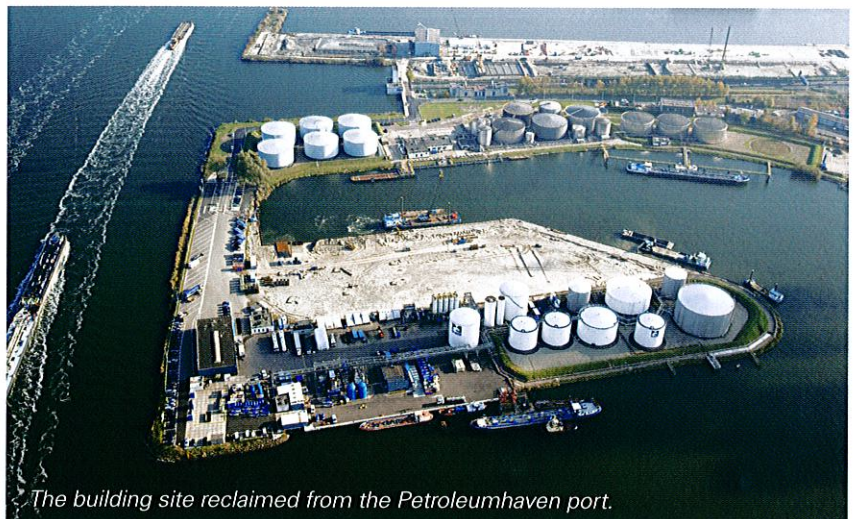


CONTROL AND SUPERVISION

Kiwa's Harm Prins is responsible for ensuring that the construction is in line with the NEN-EN 14015 norm for new constructions. If the tanks comply, Kiwa will issue a so-called 'Verklaring van eerste beproeving' or First Assessment Declaration. 'I visit the site regularly to see how the work is progressing and to check whether everything is in accordance with the relevant rules and requirements', says Prins. 'I look at the joints connecting the steel tank components, interior cladding, the joints between pipe parts, appendages, electric safety – a whole variety of things. It's in everyone's interest that everything is done with the utmost care. We're dealing with highly inflammable substances, large volumes and a terminal that will be running 24/7 once it has been completed. Safety is of the utmost importance.'

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www.1kiwa.com
 Read more online about Harm Prins' work and Kiwa's involvement with Gulf and MAIN.



The building site reclaimed from the Petroleumhaven port.