

<b>PROJECT NAME</b>	<b>Protection of the Little Danube</b>
<b>LOCATION</b>	Bratislava, Slovakia
<b>DURATION</b>	2013-2019
<b>OUTCOME</b>	Enhance the protection of Little Danube river against potential contamination by pollutants resulting from Slovnaft activities

## Project Description

### ▶ BACKGROUND

Slovnaft, a.s. is situated in the outskirts of Bratislava in close proximity of the River Danube and the River Little Danube, in the protected water area Rye Island. Due to this location and knowing our potential environmental impact, we take the necessary steps to find solutions to minimize the impact of our activities on the environment.

In 2013, we have launched a new project regarding the discharge of our waste water to the Little Danube, which is called “Enhance the Protection of the Little Danube” that goes beyond the legal requirements.

### ▶ HISTORY

The project is very complex and as such it was divided into two stages. The first stage has already been executed and put into use. The cost of the first stage has exceeded EUR 240,000.

In the first stage of the project, continuous oil analysers, connected to the company’s water management dispatching and operation system, have been attached to individual B1 and B2 collectors. By affixing the analysers, we have ensured that the quality of flowing through B1 and B2 collectors to C collector are monitored continuously. On C collector, we installed a floating barrage for catching floating hydrocarbons, which will be used only if the concentration of oil substances increases, as an additional protection system. Thus we have managed to reduce the load put on the waste water treatment facility at block 17-18. We have replaced a floating barrage and a skimmer with a more modern and effective type of equipment at the outlet leading from waste water treatment at block 17-18.

It is assumed that the second project stage will be completed in 2019. As a part of planned activities, the period of waste water retaining is going to be prolonged using a rain catch basin. The operation of waste water treatment at block 17-18 is going to be automatized to maximize the use of separator chambers. We will ensure that the quality of waste water is monitored using continuous analyzers and a video surveillance system along the whole length of C collector. The sampling equipment, a mobile multi-functional device and the laboratory equipment for determining oil concentration are going to be purchased. The Water Management Unit Operation Aromatic Extraction and unit operation HRP 5 are going to be connected to a circulation centre within the project as well. Doing so, we will ensure the transmission from a reverse flow cooling system to a circulation cooling system, and this will reduce the amount of waste water and pollutants discharged on the recipient Little Danube river.

### Project Results

#### ► MAIN RESULTS AND OUTCOMES (WHAT CHANGED?)

By completing the project successfully, we will:

- Be able to identify and localize a source of pollution quickly and precisely.
- Increase the retention volumes of the polluted waste water.
- Reduce the time necessary for identifying the source and decontamination.
- Be able to divert the waste water to the rain catch basin and pump it into a chemical sewer.
- Ensure that another production units are connected to a water circulation cooling system, which will reduce water consumption in the Refinery and it will also reduce the amount of the waste water discharged from waste water treatment at block 17-18.

