



Luxembourg, 13 November 2023

Environmental and Social Completion Sheet (ESCS)¹

Overview

Project Name: Blominmaki Wastewater Treatment Plant
 Project Number: 2014-0618
 Country: Finland
 Project Description: Construction of a wastewater treatment plant in Espoo, Finland.

Summary of Environmental and Social Assessment at Completion

EIB notes the following Environmental and Social performance and key outcomes at Project Completion.

The EIB Project concerned the construction of a new underground Wastewater Treatment Plant (WWTP) at a new location in the bedrock in Blominmäki, Helsinki region, Finland. The new plant with a capacity of 550,000 population equivalents allowed for the closure of the ageing Suomenoja plant whose capacity was insufficient to treat the wastewater generated by the residents in the Municipalities of Espoo, Kauniainen, Kirkkonummi, Siuntio and Western Vantaa. The project included inlet and discharge tunnels, and one new water supply main.

At Project Completion stage the Promoter reported that during the excavation phase, vibration damage caused by the excavation remained minor. The work progress was largely communicated, which may have largely contributed to the low number of disturbances complaints. In the work contract following the excavation of the treatment plant, a total of 27 accidents occurred on the construction site, and the accident frequency was approximately 8.5 accidents per million working hours which is well below (17.4-19.4) the average accident frequency in the Finnish construction sector.

The treatment objectives set out by the Promoter were far more strict than those imposed by the Urban Wastewater Treatment Directive (91/271/EEC) and the local standards (HELCOM's Recommendation 28E/5, 2007), considering the sensitivity of the Baltic Sea ecosystem. Biological secondary and tertiary treatment stages are applied to enhance nutrients removal ensuring effluent concentrations of total nitrogen and phosphorus at exceptionally low levels.

The Blominmäki WWTP was commissioned gradually, starting on 5 November 2022 when the first share of the wastewater from the drainage area, amounting to approximately 25%, was redirected to the treatment plant. The next 25% was redirected at the end of November 2022 and the rest of the wastewater on 24 January 2023.

In the first year of operation ie 2023, the volume of treated wastewater was 37.1 m³, or an average of 102,000 m³/d and the estimated number of drainage area connection is approximately 400,000 residents.

The Promoter confirmed that the Blominmäki WWTP in 2023 met the requirements of the environmental permit, both in terms of the periods and the annual average. In addition, Promoter confirmed that the land acquisition plan was implemented as planned.

¹ The template is for ILs and FLs



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Overall, the project is improving the health of the population by properly collecting and treating the wastewater, and at the same time contributes significantly to the reduction of the Baltic Sea by discharging treated effluent at exceptional low levels of total nitrogen and phosphorous.

Moreover, the project also reduces significantly GHG emissions by applying enhanced improved wastewater secondary and tertiary treatment stages so as to ensure self-sufficiency of the plant in heat. At the same time, the sludge is digested, dewatered and applied in agriculture after composting. Therefore, the project has a significant contribution to Climate Change Mitigation.

Finally, the Promoter confirmed that during the construction phase, the project's employment effect amounted to approximately 2,700 person-years whereas no permanent new jobs were created.

Summary opinion of Environmental and Social aspects at completion:

EIB is of the opinion based on the progress reports provided by the Promoter during construction and at completion stage that the Project has been implemented in line with EIB Environmental and Social Standards, applicable at the time of appraisal.