

LEMNA FACILITY IN POLAND RECEIVES NATIONAL “OUTSTANDING CONSTRUCTION” AWARD

One of 28 Lemna wastewater treatment facilities in Poland

St. Paul, Minnesota, USA - The Lemna[®] natural wastewater treatment facility in Barwice, Poland recently received the “Outstanding Construction Award”. This award, given each summer by the Ministry of Construction and Public Works and the Polish Society of Engineers and Construction Technicians, recognizes exceptional quality in buildings and public works. The “Outstanding Construction” award was given to Hydro, Lemna International’s Polish partner, to the Town Council of Barwice, and to the construction company responsible for building the town’s Lemna Wastewater Treatment Facility in recognition not only of the facility’s high quality, but also for the efficiency with which the project was realized.

Barwice is a small town located in northwestern Poland close to the Drawski National Park. Its Lemna natural wastewater treatment facility is designed for a flow of 700 m³ per day (185,000 gallons per day). Because of the town’s proximity to the national park and to a recreation zone filled with lakes, the facility discharge limits are rather strict by Polish standards. The limits are 20 mg/l (milligrams per liter) or less of BOD (Biological Oxygen Demand); 20 mg/l or less of TSS (Total Suspended Solids); 25 mg/l or less of Total Nitrogen and four mg/l or less of Total Phosphorus.

The technology used in this project is one of a number of technologies developed by Lemna International. It uses aquatic plants in a low-cost, completely natural wastewater treatment method with very low electrical energy requirements. The facilities are simple to operate, so highly trained technicians are not needed. Local personnel are trained to operate the facilities. These characteristics make the technology particularly well-suited to Poland’s rural and semi-urban areas.

The Lemna[®] natural wastewater treatment system uses floating duckweed plants (Latin name *Lemnaceae*) to treat domestic wastewater and some types of industrial effluents. The duckweed plants are managed like a crop and periodically harvested. The harvested duckweed, having absorbed nutrients from the wastewater, becomes an excellent resource and can be used as fertilizer.