



NATIONAL FOODS LIMITED'S EFFLUENT TREATMENT PLANT (ETP) AT PORT QASIM (PQ) MANUFACTURING FACILITY

AN ESG SUCCESS STORY

DATA SHARED IN THIS CASE IS AS OF 27 SEP 2024

All data has been calculated based NFL's internal methods and calculations.

BACKGROUND & OVERVIEW

To meet environmental compliance, the NFL PQ team commissioned the **Effluent Treatment Plant (ETP)** on 22 April 2022, in accordance with the **Sindh Environmental Quality Standards**.

- Designed by WOG Group (www.woggroup.com)
- Design capacity 600 m³/day (24-hour operations)
- Has the latest GFS (Glass-Fused-to-Steel) tanks
- Adheres to international standards*, such as EN ISO, ANSI AWWA, EEA, and BS, covering both design and finish requirements

ETP Technology:

- Membrane Bio Reactor (MBR) / Air Lift MBR system capacity of 600 m³/day
- Activated Sludge System
- Dissolved Air Flotation



*References:

EN ISO (European Norms - International Organization for Standardization) <https://www.iso.org/>
ANSI/AWWA American National Standards Institute <https://www.ansi.org/> / American Water Works Association <https://www.awwa.org/>
EEA (Electrical and Electronic Assemblies) <https://www.iec.ch/> <https://www.ieee.org/>
BS (British Standards) / British Standards Institution (BSI) <https://www.bsigroup.com/>

ETP AT PQ



BRT (Bio Reactor Tank) buffer tank



MBR (Membrane Bio Reactor)



DAF (Dissolved Air Flotation)



Control Room



Plant Piping Layout



Equalization Tank blowers

ENVIRONMENTAL LABORATORY AT PQ

NFL PQ has an in-house ETP lab to conduct regular testing using international standards.

- Quarterly tests conducted by an external EPA-approved service provider
- All results comply with the Sindh Environmental Quality Standards
- Tests performed in the Environmental Laboratory include:
 - Temperature
 - pH
 - Total Suspended Solids (TSS)
 - Total Dissolved Solids (TDS)
 - Chemical Oxygen Demand (COD)
 - Biochemical Oxygen Demand (BOD)
 - Fat Oil and Grease (FOG)



Thank You



info@nfoods.com
nfoods.com

