



WASTEWATER PLANT FOR METHANOL REFINING, IBN SINA

WOG Technologies designed, constructed, and commissioned an 840 KLD wastewater treatment plant at National Methanol Company (IBN SINA, SABIC).

The plant uses advanced technologies Advance Sequence Batch Reactor (ASBR), Dual Media Filter, High-Recovery Ultra-Filter and Ultraviolet (UV) disinfection to treat methanol refining effluent and recycle wastewater as DM (deionized) water for production. The project focused on energy-efficient treatment, extensive biological purification and maximizing water recovery for sustainable industrial operations.

✉ info@woggroup.com
 🌐 www.woggroup.com

Challenges

- High-strength methanol effluent with complex organics
- Energy-efficient treatment needed to cut costs
- Water recovery required for industrial reuse
- Conventional methods ineffective and costly

Solutions

- **ASBR:** Single-vessel biological treatment with >98% TOC removal.
- **Dual Media Filter:** Removes turbidity and particles.
- **Ultra-Filter:** Produces utility-grade water, removes micron particles & >99% bacteria.
- **UV Disinfection:** Ensures safe, compliant effluent.
- **Scope:** End-to-end design, supply, installation and commissioning.

Results

PARAMETER	INLET	OUTLET
Flow Rate m ³ /day	840	<840
pH	10.5-11.5	6.5-8.5
TSS (mg/l)	<20	Nil
TOC (mg/l)	<800	<10

Reduced energy consumption and operational costs through integrated, high-recovery processes.

For detailed techno-commercial proposal or site visit coordination,

✉ **Drop us an e-mail at:**
info@woggroup.com

Impact

- Treated high-strength methanol effluent efficiently.
- Reduced energy consumption and operational costs.
- Supported sustainable industrial water management and compliance.