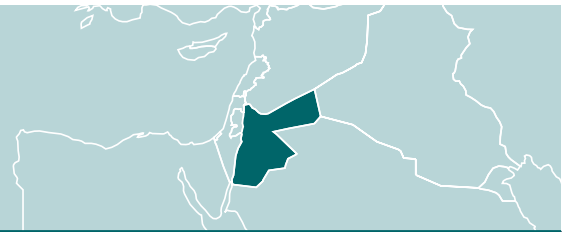


New Plant in Aqaba - KEMAPCO

Potassium Nitrate and Dicalcium Phosphate



Jordan



Client

Kemira Arab Potash Company LTD,
(KEMAPCO), Jordan

Services Provided

- Basic and detailed design
- Tender documents
- Project management
- Procurement services
- Supervision of construction

Dates

- Design: 2000 - 2001
- Construction: 2000 - 2002

Project Data

- Total site area: 140,000 m²
- Digestion and ion exchange unit (ION)
- Dicalcium phosphate unit (DCP)
- Nitric acid plant (NA)

- Nitric acid tank: 2,700 m³
- Pressure vessels auxiliary boiler (AB) and demineralized water unit (DW)
- Potassium nitrate unit (NOP)
- Single and twin belt conveyors, 205 m-long.
- Bagging, palletizing and storage (BS)
- Heavy fuel and light oil atmospheric storage tanks (OF)
- Workshop & spare parts storage (MW)
- Control and laboratory building (CR)
- Staff facilities, clinic and cafeteria
- Main substation (HV switchgear)
- Weighing scales (bridges)
- Construction cost (2002): US\$ 100 million.



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Background

The project is a joint venture between Kemira Agro Co. of Finland (KA) and Arab Potash Co. of Jordan (APC), targeting the production of 150,000 t/y of potassium Nitrate (NOP) and 75,000 t/y of dicalcium phosphate (DCP).

The built-up area of structures and buildings is 127,000 m²; all concrete surfaces are coated with protection material specifically designed for aggressive chemical attack and heavy traffic circulation.

Facilities and Off-Site Works

- Seawater intake, pumping station, supply and return lines
- Wastewater pumping station, conveyor, booster station and evaporation ponds
- Maintenance road
- Solid waste dump area
- Power supply and distribution; and overhead power supply for wastewater booster station
- Ammonia supply system from the cold storage facilities at the nearby JPMC plant (Jordan Phosphate Mines Company)

Site and Related Infrastructure

- Process water reservoir (10,000 m³) and distribution
- Evaporation ponds
- Solid waste handling
- Pipe support racks
- Fire water supply network and fire protection system
- Domestic water supply
- Sewage/sanitary waste system
- Stormwater drainage system
- Compressed air outside production units
- Site, street, security and emergency lighting, UPS
- Grounding system
- Telephone, sound and fire alarm
- Cabling (low and high voltage)
- Road network, car park, landscaping and fencing
- CCTV and security
- Computer and data management networks
- 33 kV and 11 kV switchgears and 2 transformers 33/11 kV.

