ERAW

## NAJAF PLYWOOD PLANT

The Najaf plywood plant saw the light in May 1976 to initiate economic development in Al Manathera district, Najaf province.

The plant, making use of palm leaves for raw material, provided incentive for citizens to concentrate on palm planting. And by employing a considerable proportion of local manpower it enhanced the district's economic, social and cultural development.

In May 1974 the plant was approved and the contract for its construction was signed. Palm leaves are used to produce plywood known domestically as "fiber" making it the first of its kind to use non-conventional raw materials. The plant can also utilise other raw material for production purposes. It has a plant can also utilise other raw material for production purposes. It has a capacity of 60 tons per day and is designed to produce multi-sized sheets of plywood.

The palm leaves are obtained through contracts with farmers in the area creating an economic incentive to use these leaves for industrial purposes.

Since its operation, the plant rapidly improved production methods and expanded its capacity. With increasing demand for plywood, new production lines were added some of which are using reed as a raw material after conclusive laboratory test.

Other processes were also added to treat produced wood to meet the highest standards. New technology has been used to polish the end wood sheets making them ready for use in decoration and other purposes.

The plant has maintained a high standard of product quality thanks to the relentless efforts by technicians and workers. The plant has also teams for maintenance, programming and quality control which have turned promising results in developing production quantitatively and qualitatively.

## NEW WATER SUPPLY PROJECT

Karkh water supply plant, the construction contract of which was signed in 1980, is regarded a significant achievement in the field of public services. To shed light on this plant, the Director General of Baghdad Water Supply Authority said that the plant was designed to provide about two million residents in Karkh with drinking water.

It will be implemented in two stages: the first would have a production capacity of 910 million litres per day, while the second is to have a total capacity of 1365 million litres per day, the Director General said.

The plant takes raw water from the Tigres River near Al-Bazara Village 30 kilometres north of Baghdad. The raw water feeding is done by 14 pumps of different capacities, pumping the water through many gates, barriers, and valves.

The water is then transferred to the purification stations through two main pipes of 180 cm. diameter each. Through the purification stage, crude water is distributed among eight basins for initial precipitation. This process is done by two mud sweepers in each basin. Precipitated mud then is discharged mechanically through special pipes to the Tigres River while the purified water is preliminary taken to other basins to be treated with chlore and alum.

The purified water is then taken to six secondary basins of spherical shape with a diameter of 56 metres. The Director General added that the purified water is then pumped to filtering installations each having a dimension of 15x13 metres. The ground of each filtering installation is covered with layers of pebbles and sand to get rid of unprecipitated suspended substances. The filtrate is then transferred to underground tanks to be treated with

lime in order to adjust its acidity. Before transerring to the pump station the water is injected with chlore. This process is the final sterilizing stage. The Director General added that there are four tanks north and south of Baghdad, in Abu Ghraib, and in Al-Taji, containing pump stations, power generators, and fuel's stores.

This is in addition to the central distribution tank of an area of 175x250 metres with a capacity of 215 million litres per day. It has been decided to expand this tank to raise its capacity to 235 million litres per day.

From this tank, the previously mentioned four tanks take the purified water

About pumping drinking water, the Director General of Baghdad Water Sypply which is suitable for drinking. Authority explained that that was done through a high pressure station with a capacity of 300 million gallons per day and 68m/in. pressure. The Director General said that the plant is supplied with electric energy from a transformer station which would be built in Tarmia under the supervision of the General Organization of Electricity. There are also additional electric generators to secure reserved electric energy in case of black-outs.

Distribution of drinking water is done through two pipes each 40 kilometres long with control valves. These pipes were put at different depths under the ground, the Director General said. When completed the plant would be able to respond to the entire needs of the population it covers, the Director General of Baghdad Water Supply Authority concluded.

## NEW OIL PIPELINE PLANNED

Oil Minister Qassim Ahmed Taqi was quoted recently as saying he hoped a final decision would be taken soon to start work on 860-km oil pipeline through Jordan to the Red Sea. Press reports quoted him as saying Iraq planned to export 1 million barrels per day (bpd) of oil through the pipeline. The pipeline would run from the Iraqi oil fields near Kirkuk through Jordan to the Red Sea port of Aqaba, enabling Iraq to boost oil exports without using the Gulf, closed to Iraqi shipping since the start of its war with Iran.

Press reports also said the U.S. firm Bechtel would complete the pipeline 18 to 24 months after construction began. A spokesman for the U.S. Export-Import Bank said in Washington the bank was considering a request filed by Bechtel for financial aid to help build the pipeline. The bank makes low interest loans to countries buying U.S. goods and services.

Earlier reports said the first phase would connect an Iraqi pipeline with an existing Saudi pipeline which runs to Yanbu on the Red Sea. The second phase provides for construction of a separate Iraqi pipeline right through to the

The Minister also said Iraq's crude oil reserves totalled 65 billion barrels. These would eventually rise to 100 billion barrels, he added, but did not say over what period.