

Completion of the Joint Project for Introduction of Produced Water Treatment in Iraq



Fiscal year-end reporting meeting for four projects under the Special Cooperation Program for Iraq

On March 4, 2013, a fiscal year-end presentation meeting on projects implemented by JCCP and the Petroleum Research & Development Center (PRDC) of the Ministry of Oil-Iraq was held in Istanbul. After a reporting of the results of the joint study on “Technical Support of Introduction of Produced Water Treatment for South Oil Company (SOC) in Iraq,” the front-end engineering design (FEED) for a practical-level water treatment facility was handed over to PRDC and SOC, from participating companies on the JCCP side, namely the Water Use Promotion Center and Swing Corporation.

it as wastewater, and JCCP responded to this need by providing technical support for produced water treatment based on Japan’s wastewater treatment technologies.

In December 2009, JCCP and the Ministry of Oil-Iraq reconfirmed the importance of resuming and stimulating greater exchanges with a reconstructed Iraq through training activities and technical cooperation projects, and signed a memorandum of agreement (MOA) to that effect. In line with the MOA, JCCP launched a special cooperation program for Iraq in fiscal 2010, and implemented two projects that address priority issues of

<Background and Overview of the Project>

1. Background

In Iraq, water that is produced in the crude oil production process is released and treated in an evaporation pond at present, but as a measure for environmental conservation, government policy is slated to prohibit the release of produced water into evaporation ponds from 2014. In anticipation of this policy, SOC sought to reutilize produced water in the water-flooding process in the production of crude oil, instead of treating



The pilot plant that has been transferred from Japan to North Rumaila Field DS-1



FEED presentation and project completion ceremony

the oil ministry—this project and technical support for asphalt production technology—as preliminary surveys for the implementation of a technical cooperation project. Thereafter, the project commenced in full in fiscal 2011 as a joint undertaking by JCCP and the Ministry of Oil-Iraq, following the signing of a project implementation agreement.

2. Overview

The joint project was implemented at SOC over a period of two years, from April 1, 2011 to March 31, 2013, with the participation of the Water Use Promotion Center and Swing Corporation. Its objectives were to draft a system for produced water treatment, and to implement and propose to the Iraqi side a front-end engineering design (FEED) for a practical-level water treatment facility.

In the first year of the project, a pilot plant was built in Swing Corporation’s Fujisawa Office, and pilot tests using simulated produced water were performed with the participation of two engineers from Iraq. After verifying the plant’s treatment performance and transferring operational technologies to the Iraqi engineers, the plant

was moved to a crude oil production plant operated by SOC in the North Rumaila oil field (North Rumaila Field DS-1).

In the second and final year, the Iraqi side performed a pilot test of the plant using produced water from North Rumaila Field DS-1, and confirmed its treatment potential. Based on the results of the test, the Japanese side produced and provided the FEED for the actual facility to the Iraqi side.

In the coming years, if everything goes smoothly, SOC will prepare a tender document for the water treatment facility based on the FEED provided by the Japanese side and the technologies it has acquired, call for bids, and select a contractor or vendor. Construction of the facility will begin thereafter.

3. Summary

In addition to the produced water treatment project described above, three other projects were also implemented under the Special Cooperation Program for Iraq, i.e. the study on “Development of asphalt industry and finding new applications in Iraq” (extended for a year; slated for completion in FY2013); “Technology cooperation for lubricating oil production” (undertaken as a joint project from FY2013); and the “Study on technical support of introduction of produced water treatment for NOC” (completed as a preliminary survey project). All projects have received high praise from the Ministry of Oil-Iraq for their contribution to addressing technical issues in Iraq.

It is also worth noting that the Water Use Promotion Center and Swing Corporation have again joined hands with the Ministry of Oil in implementing a new, preliminary survey project: “Study on technical support of introduction of formation water treatment for refineries in the southern region of Iraq,” slated to commence within this fiscal year.

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