Completion Ceremony for "Application Study of Sulfur Concrete Technology" in UAE

A two-day ceremony to celebrate the completion of the preparatory phase of the UAE-JCCP joint technical cooperation project on "Application Study of Sulfur Concrete Technology" was held on May 10 and 11, 2009, at Marine Resources Research Center (MRRC) in the Emirate of Umm Al Quwain on the first day, and at UAE University in the Emirate of Abu Dhabi on the second day.

The project aims to demonstrate new uses of sulfur, which is produced in surplus as a by-product in oil refineries. More specifically, modified sulfur concrete, which is made of sulfur, sand, and aggregates, will be used to make artificial fish reef blocks and sewage pipes on a test basis to examine its commercial applicability in UAE. Expectations for the project are high in UAE, as its successful completion would not only provide effective uses of by-product sulfur, but could also create new employment opportunities in the country.

In the preparatory phase, a series of pipes have been installed in Al Ain City (removal of an 80-meter segment of an existing sewage pipeline and installation of sulfur concrete pipes and manholes) and await the commencement of a demonstration test for assessing durability, and the necessary preparations have been made for the installation of an artificial fish reef off the coast of Umm Al Quwain. With the preliminary groundwork thus completed, the ceremony was held on the said dates, with the attendance of dignitaries and officials from both UAE and Japan.

1. Ceremony at MRRC (May 10)

The ceremony held at MRRC was attended by Mr. Abdulrazzaq Anwahi, Advisor to the Ministry of Environment & Water; Dr. Ebrahim Jamali, Director of MRRC; Mr. Abdul Karim, President of Board of Directors, Umm Al Quwain Co-operative Society for Fishermen; and other relevant parties on the UAE side. The Japanese side was represented by Mr. Kazuo Sunaga, Minister, Japanese Embassy in UAE; Mr. Masahiro Yoshida, Director of Nippon Oil Corporation; Mr. Yasuji Kakimoto, Director of Penta-Ocean Construction Co., Ltd.; and Mr. Katsuo Yokoyama, Managing Director of JCCP. Nippon Oil Corporation and Penta-Ocean Construction Co., Ltd. are two companies participating in the project on the Japanese side.

Completion ceremony at MRRC

Dr. Osama Wahba, Marine Protected Area & Coral Reefs Specialist, MRRC, opened the event as moderator, then gave the podium to Mr. Abdulrazzaq Anwahi, who delivered an opening speech, followed by Mr. Sunaga, Mr. Yokoyama, Mr. Kakimoto, and Mr. Karim. All the speakers expressed their expectation that the project will further strengthen cooperative ties between UAE and Japan. Mr. Yokoyama also took a moment to briefly describe JCCP activities in UAE. After the opening speeches, Mr. Kota Nakase, Manager, Penta-Ocean Construction Co., Ltd., and Mr. Takeshi Kiyota, Senior Staff, Nippon Oil Corporation, gave a presentation on sulfur concrete technology and

the application of sulfur concrete to artificial fish reefs and sewage pipelines, which captured the attention of all participants. The session held in the auditorium, the tour of MRRC facilities, and the reception, all contributed to promoting greater understanding of the project.

2. Courtesy Call on H.E. Dr. Maitha Al Shamsi, Minister of State

H.E. Dr. Maitha Al Shamsi, Minister of State (seated second from right)

Preceding the ceremony at UAE University, Mr. Yokoyama and the Japanese delegation paid a courtesy call on by H.E. Dr. Maitha Al Shamsi, Minister of State, to thank her for UAE's understanding and support of JCCP activities. Dr. Al Shamsi said that Japan's technical cooperation is indispensable to upgrading technologies at UAE University as well as in UAE as a whole, and expressed her continued expectation of JCCP's support. As Minister of State who plays a central role in the development of science, technology, and education in UAE, Dr. Al Shamsi takes strong interest in issues related to education and technology in the country.

Prof. Rory Hume, Provost of UAE University, was also present to receive the Japanese delegation. In reference to the project, he said he has strong interest in the production of pipes and manholes using sulfur concrete, largely because it was his grandfather who invented the hume pipe.

3. Ceremony at UAE University (May 11)

The ceremony held at UAE University was attended by Dr. Maitha Al Shamsi, Prof. Rory Hume, Prof. Abdel-Mohsen Mohamed, and a representative from Abu Dhabi Sewerage Services Company (ADSSC), on the UAE side, and by H.E. Tatsuo Watanabe, Japanese Ambassador to UAE, in addition to members of the Japanese delegation who attended the ceremony at MRRC.

With Prof. Mohamed acting as moderator, the event began with opening speeches by Prof. Hume, Ambassador Watanabe, Mr. Yokoyama, Mr. Yoshida, and the representative from ADSSC.

As a friendly gesture and a sign of hospitality, the UAE University side prepared a cake decorated with the flags of UAE and Japan, and Dr. Al Shamsi, Ambassador Watanabe, and Mr. Yokoyama literally joined hands in cutting the first slice.

Completion ceremony at UAE University

Cutting a cake decorated with the flags of UAE and Japan

As in the ceremony held at MRRC, the presentations on sulfur concrete technology and the application of sulfur concrete to sewage pipelines and artificial fish reefs were received with strong interest by all participants. After the ceremony, the Japanese delegation, along with their UAE hosts, toured the site of the sewage pipe installation work and attended a reception, further promoting greater understanding of the project among all participants.

4. Sewage Pipe Installation

A sewage pipeline managed by ADSSC runs near UAE University in Al Ain, at a depth of approximately 5 meters. This January, a section of around 80 meters along this pipeline was removed, and new pipes and manholes made of sulfur concrete were installed. These components have been re-buried and are now being used as part of the regular sewage pipeline. UAE University is monitoring their applicability.

5. Artificial Fish Reef Installation

An artificial fish reef was installed in the waters off the coast of Umm Al Quwain about one month after the ceremony. A total of 215 fish reef blocks made of sulfur concrete (2.2 tons/block) were stacked three-deep at a depth of 15 meters, 6 kilometers off the coast of Umm Al Quwain. The blocks, which were stored in an MRRC facility, were transported to the port, loaded onto a ship by crane, and installed at sea.

Schools of fish appeared soon after the artificial fish reef blocks were installed and provided a clear indication of the blocks' effectiveness. Continuous observations will be made to assess the effectiveness and durability of the sulfur concrete fish reef.

On a final note, we would like to extend our deepest appreciation to UAE University, MRRC, the Japanese Embassy in UAE, Nippon Oil Corporation, Penta-Ocean Construction, and all relevant parties for their kind support and cooperation in making the ceremony possible.

<by Hiroshi Iida, Technical Cooperation Dept.>


منوعات
الفجر
22

Local newspaper article on the completion ceremony

Site of sewage pipe installation work in Al Ain (pipes and manholes before being buried)

School of fish swimming around the artificial fish reef installed on the ocean floor