

i. Comments on defect inspection

(1) Reservoir

Baravat water supply system is composed of two reservoirs, which are 2,000m³ and 3,000m³, and of the water distribution pipe to connect Baravat municipality's network. It is found that the Baravat water distribution system has not been operational because 3,000m³ reservoir and installation of distribution pipe, which is being implemented by WSCK, has not come to the finish. WSCK mentioned that the remaining work will be finalized in two to three months.

The construction progress of the 3,000m³ reservoir and distribution pipe has been delayed and as the result, the completion of the 2,000m³ reservoir has been affected and delayed. The major remaining work of 2,000m³ reservoir is connection of outlet pipe from the reservoir to the distribution pipe. The main cause of delay is the slow progress of 3,000m³ reservoir construction and design change of outlet pipe connection.

The constructed buildings, a gate house and a chlorination house, are found to have no defect but they are being used by the contractor and its worker for 3,000 m³ reservoir. Two sets of chlorination facility have been procured, yet one set is used in other pump house. The pump house No 3 has a problem of waterproof. A hole on the roof was made by the order of WSCK after turning over of the house on March 2005. The structure of the roof has been damaged when making the hole on the roof by cutting a beam in the middle; therefore, the roof strength cannot be guaranteed. There is possibility that the water leakage from the roof resulted from this activity.

Chlorination house, where gas chlorination facility was supposed to be installed, has been demolished because of poor construction and quality by the order at WSCK. WSCK mentioned that the house will be constructed in four months. The gas chlorination facility has been stored by the WSCK's warehouse except gas chlorination tanks. The gas chlorination tanks are being used for Bam reservoirs.

The Team found the major remaining work items are as follows:

Inlet pipe

inlet pipe connection to chlorination house and facility

Installation flow gage

installation of valve box covers (near chlorination house and beside reservoir)

Outlet pipe

Installation of outlet pipe from reservoir to distribution pipe

Construction of valve box

Connection of drainage pipe
Connection of overflow pipe

Those work items are included in the original contract, yet it is difficult to make the contractor fully responsible for those remaining works, because the main cause of remaining works is the delay of Baravat water distribution system and 3,000m³ reservoir construction. The consultant cannot instruct the contractor on implementing remaining work now based on the contract as the contract with JICA and the contractor expired on September 8, 2005. In conclusion, WSCK shall be responsible for the said remaining works. Consultant made a comment that WSCK and the contractors make close cooperation for the completion of the remaining works. The work may be completed according to the progress of the construction of distribution pipeline to Baravat and 3,000m³ reservoir.

(2) Distribution pipe installation

Since distribution pipe construction has been delayed in Bam, the installed pipes has not been utilized. The reasons for delay are slow progress of pipe installation and of concentration of main pipe installation. WSCK policy for household connection is prioritized next to main pipe construction. Pavement along the installed pipes has been covered by the Bam municipality in the sections of heavy traffic. Bam Water Company pointed out that valve was buried in the pavement, although the contractor placed valves with iron cover.

2. Remaining works for contractors

(1) Reservoir

There are several minor repair items on the reservoir and the pump house:

Paint of steel for ladders at manholes

Cleaning of boxes and removal of wire with sealing at manholes

Installation of pipes 90 degree at the end of inlet pipes inside reservoir

Completion of embankment

Installation of waterproof sheet and its protection sheet on the pump house roof

Installation of cover on the pump house roof opening


The contractor shall carry out those work items immediately in accordance with ARTICLE 7 of the contract.

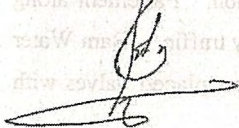
(2) Distribution pipe installation

During defect inspection, the Team found that the valve boxes are not clean. The contractor shall remove soil and substance from the valve boxes. At one of the valve boxes, water and soil come from vacant hole for future pipe extension. The contractor shall provide temporary water stop, such as sand bags, to prevent water flow into valve box.

Kerman, September 21, 2005

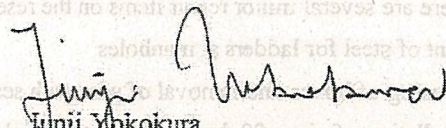
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