

Gangtok Tour Report

By Mr. P. Kapur (Team Leader, PMMC) 3rd to 6th September 2012

The objective of the tour was to:

- (1) Make a site visit and assess the progress of Tranche-I project
- (2) To discuss plans for making up for lost time in Tr-I project
- (3) To review the plans for fast-track completion of Tr-II bidding
- (4) Other matters.

1. Progress of Tranche-I Project: - WS in Burtuk & Chandmari:

During the visit, the work on the project was in full swing. It was heartening to see the progress of this project, which had been lagging behind schedule for a long time. Mr. Goel had reported the completion of the pump house building earlier during his visit in June 2012. Since then, the progress on the other element of the project i.e. construction of reservoir has been impressive, especially given the unexpected major impediments that had to be overcome (described below). Similarly the laying of 250 mm and 200 mm DI pipe is also going apace and about 17% of laying has been completed.

It is to the credit of the contractor that he continued with the work throughout the rainy season, whereas in the work schedule it was assumed that work would have to be suspended during the rains!

1.1 Construction of the reservoir (24m x 14m x 4.5m h):

The reservoir for supplying water to Burtuk-I and Chandmari has been under construction for quite sometime. Initially, the work involved site grading and cutting of mountainside by 4m-15m to get a flat surface required for tank construction. While doing this work, there were unforeseen difficulties e.g.

- Loose earth from the cuttings of mountainside fell down in the form of a landslide and nearly 1000 trucks of excavated earth had to be moved 35 Kms away.
- Thereafter, a retaining wall of about 4 m had to be built to stabilize the site.
- While excavating the site, huge boulders were in the way. These had to be broken manually as blasting was not permitted since the site is in zoo area.

Currently, the soling has been completed and PCC flooring (100mm) has to be cast. Thereafter a raft and reinforced RCC (200mm) has to be cast. A few photographs of the site are appended below:

Photographs



Site work at initial stages



Retaining Wall after landslide



Soling of the reservoir floor completed, ready for casting PCC

Considering that the reservoir site is more than 10m high from the road, the contractor is proposing to use RMC (ready-mix-concrete), which can be pumped from the roadside. This will not only avoid carrying the RCC mix on head loads but also improve the quality of RCC floor to be cast. The contractor is to investigate the possibility of getting RMC from some local factories.

1.2 Laying of pipeline:

Currently work is going on for laying DI distribution pipeline from the reservoir and the pump house to the consumption areas. A total of about 45 Kms of pipe has to be laid as per details given below:

Area	D.I. Pipe Km	PE Pipe Km	GI Pipe Km
Chandmari	8	9	3
Burtuk-I	8	5	2
Burtuk-II	5	3	2
Total	21	17	7

The pipe laying is currently confined to DI pipe, which is the most time consuming of the three types of pipes. As of now, around 4.5 Km DI pipe has been laid. The plan is to

lay about 3.0 Km of DI pipe per month, i.e. complete by Feb 2013. As of now about 17% of pipe laying is complete vs revised target of 9%.

The laying of DI pipe has had its share of difficulties. There was representation from the community that the pipe should not be laid on the valley side since in the event of a leak the foundations of valley side houses would be endangered. After discussions with the community, it was decided to shift the pipe to be laid henceforth on the mountainside.

The pictures below show the laying of pipelines.



The pipework includes building of about 7 Break Pressure Tanks (BPTs). Of these 2 are under construction. We understand there is some difficulty in obtaining land for construction of the BPTs. SIPMIU should take advance action to finalize the location of BPT tanks and arrange land. In case of difficulties, they may consider substituting the BPTs with pressure reducing valves. The picture below shows construction of break pressure tanks.



The contractor has still to procure and commence laying PI pipe and GI pipe. In his view these can be laid very quickly, and can be taken up later on. However, we have advised SIPMIU not to delay this work, as there could be more objections from the community regarding the route of laying of these pipes, which may have to be resolved and could impact the schedule adversely.

1.3 Construction of Pump House:

The pump house construction is nearly complete, however the ordering of pumps has still not been done, as Contractor feels that pumps are required much later and by ordering now, their warranty period will lapse. We have advised them not to delay ordering and installing the pumps, as there can be unforeseen delays at that time. The contractor may instead request the manufacturers that the guarantee

period be reckoned from the date of commissioning (to be done by the supplier) and not from the date of purchase.

Photograph of the pump house



2. Progress against targets (Tr-I)

A bar chart showing the progress as also the original and revised targets was prepared by SIPMIU and discussed. A copy of the same is enclosed. It can be seen that:

- DI pipe laying- completed 17% against the revised target of 9%
- HDPE pipe laying-target 9% but work deferred till DI pipe completed
- Break pressure tanks-target 0%, achieved 9%
- Construction of pump house-target 100%, achieved 75%
- Construction of reservoir-target 19%, achieved 20%

SIPMIU has been advised not to delay laying of DI and GI pipes because as trenching work starts, it is possible that there may be some objections from the community which may take time to resolve.

3. Progress of Tranche-II bidding:

After the decision to rebid for both the SWM and WS package due to very high bids, fresh bids were received and opened on 3rd September 2012. A copy of the Record of Bid Opening is enclosed. The response has been better this time, as below:

Package	No. of bids-1 st bidding	No. of bids-rebidding
SWM	3 (only 1 qualified)	3
WS de-bunching	2 (only 1 qualified)	3

At first look, the (new) bidders seem well qualified. SIPMIU is fast tracking the technical evaluation process and hope to send their technical evaluation to ADB within a week and open the financial by 3rd week of September.

4. Other issues:

4.1 Gender Action Plan:

Detailed discussions were held with the Safeguard Specialist of DSMC Sh. Arup Khan. A GAP has been prepared and the same has been shared with us. The Gender Sensitization workshop is slated for Mid-October 2012 and ward level consultations will be taken up thereafter in Dec-Jan. There were queries regarding the budgets.

We have advised them that this has to be met either from the unallocated sums of DSMC or from SIPMIU budget.

Regarding survey and listing of FHH, it has been decided that this work will be clubbed with property survey and carried out by IDC.

4.2 Recruitment of Staff

SIPMIU has been advised to recruit the staff as per budget from the market as the State Government is unable to spare more staff. Only one DE for SW will be allocated. Other staff such as JEs, AEs, Procurement expert, Social and environmental specialist etc. have to be recruited and an advertisement has been released for the same.

5. Conclusion and Action Points:

In summary it may be concluded that Gangtok has shown good progress over the last 3 months, which has been possible because they have continued the work during rainy season.

Lesson learnt: The progress in Gangtok has been possible because of posting of a full time Dy. Project Director who has vigorously followed up with all concerned. Further, the Contractor has posted a senior person for site supervision, who is able to take decisions for hiring of labor as also for ordering of material. This also helps in quick action.

Action Points:

- To arrange for RMC this can be pumped for preparing the flooring of the tank. This will speed up the casting of the reservoir.
- Sufficient DI pipe should be procured to not have any break in the laying of DI pipe.
- Work should be started on laying HDPE pipe immediately, even though laying it is relatively easy and fast. This will bring out any community concerns and allow time to resolve them.
- Technical and Financial evaluation for Tr-II should be done as per the fast track schedule prepared.
- The order of pumps for the pump house should not be delayed. It should be negotiated with the supplier that the guarantee period should start after commissioning of the pumps and not from the date of delivery, especially since commission is to be done by the supplier only.
- The timetable for recruitment of staff and posting of DE for SWM should be adhered to.

Team Leader

PMMC

10-09-2012

SO (NERUDP)

Director (UD)

NORTH EASTERN REGION CAPITAL CITIES DEVELOPMENT INVESTMENT PROGRAM (NERCCDIP)

TRANCH-II - WATER SUPPLY-Part - 1

Programme for the work - De-bunching of Secondary Distribution System, Extending Water Supply to Peripheral areas in Gangtok, Under Sikkim and Solid Waste Management

Sl No	Activities	2012												2013												2014																							
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan																											
(A)	Inviting tenders and award of work																																																
(B)	Survey Work																																																
	2) Procurement of Materials																																																
	a) DI Pipes																																																
	b) HDPE Pipes																																																
	c) GI Pipes																																																
	3) Laying																																																
	a) DI Pipes																																																
	b) HDPE Pipes																																																
	c) GI Pipes																																																
	4) Construction of Break Pressure Tanks																																																
(C)	a)(i) Construction of Ground Level Storage Reservoir (press Tank)																																																
	(ii) Construction of Ground Level Storage Reservoir (Bazar Tank)																																																
	(iii) Construction of Ground Level Storage Reservoir (Sichey Tank)																																																
	(vi) Construction of Ground Level Storage Reservoir (New Enchey Tank)																																																
	(v) Construction of Ground Level Storage Reservoir (TNSS Tank)																																																
	b) Procurement Installation of Bulk flow meters																																																
	c) Procurement of Installation of Domestic (Consumer) meters																																																
	d) Road Restoration																																																
(D)	Commissioning and Handing Over																																																
	Note :																																																