

Technical Committee meeting (for desiltation of reservoirs) – Draft Minutes of the meeting convened by Chief Engineer (I&A) on 10-10-17 at 11.00 am in the Mangalam dam premises.

The meeting started at 11am. Members/ representatives from various departments of the Technical Committee, field officers of Mangalam and Chulliar dams, staff from KERI, Peechi attended the meeting.

At the onset of the meeting, the Chief Engineer, (I&D), IDRB informed that Expression of Interest (EOI) for “Preparation of EMP for the Desiltation of reservoir of Mangalam dam and Chulliyar dam has been e-mailed to 50 consultants. Also he informed that implementation program for desiltation of reservoirs has been emailed to all TC members and field officers and that strict compliance of the schedule is necessary for ensuring that the time limit set by the Hon’ble Chief Minister is adhered to.

If the bore hole samples are taken at a grid size of 50m X 50m, 400 samples are to be taken for 1 Sq Kilometer. For Mangalam dam, the water spread area is 3.96 sq.km. at F.R.L. After excluding the area near the dam structure, 1350 <sup>bore holes</sup> samples are to be taken. For Chulliar dam, the water spread area of 1.65 sq.km. at F.R.L and hence 640 <sup>bore holes</sup> samples are to be taken. The silt deposit in the Mangalam reservoir is about 5.605 Mm<sup>3</sup> and that of Chulliar reservoir is 0.50 Mm<sup>3</sup>. The collection of soil samples are to be finished within 45 days. After deducting holidays, only 32 days will be available. Hence 20 samples/day for Chulliar reservoir and 43 samples/ day for Mangalam reservoir are to be collected if the work is to be completed within the time limit.

After detailed discussions, the following decisions were taken.

1. Any modifications/ suggestions in the implementation program which has been emailed to all TC members and field officers must be intimated soon.
2. Management of aquatic life to be included in EMP (for self purification of large water bodies).
3. Chief Engineer (I&A) directed KERI to find the original bottom profile of Chulliar reservoir at the earliest.
4. Wherever required, observed data to be prepared and the minimum rate certificate to be produced.
5. The modified investigation estimate incorporating the soil testing estimate from KERI, to be submitted by 16<sup>th</sup> of October in PRICE for TS, in anticipation of AS.
6. The schematic drawing of the places where the sediments are to be dumped are to be prepared soon, for the preparation of EMP, in GIS platform.
7. The sample size of 0.5 m can be treated as one sample for lab tests and hence when the bore hole depth is more, more samples are to be taken.
8. Chief Engineer (I&A) suggested to fix the depth of silt at each points where the samples are to be taken in the 50x50 m grid and also its co-ordinates. The points where optimal depth is available are to be identified and demarcated.
9. The building for the soil testing lab to be set up at the site itself. The same to be identified at the site. The setting of the lab to be included in the tender.

10. For investigation works, only registered contractors can be selected. ~~EOI, EPC model tendering can be adopted.~~ The work of Mangalam dam can be entrusted to any Government institutions in Kerala.
11. KERI, Peechi was entrusted with the investigation works of Chulliar dam. All the officers of KERI can be utilized for the work. All vacancies of staff will be filled by CE (I&A). The collection and testing of the samples must be finished within the stipulated time.
12. The yards where the sediments are to be dumped and separated are to be identified on the upstream of the reservoir and plotted in GIS platform with the use of Google map/ actual site identification.
13. Technical committee visited 5 sites for dumping the desilted sediments for Mangalam dam and 6 sites for Chulliar dam. Two sites of Chulliar were already handed over to KEMDEL for soil collection and extraction. The merits and demerits of each site were discussed in detail. The detailed report of the sites visited should be submitted from field offices within 2 days