



KERALA STATE ELECTRICITY BOARD LIMITED

(Incorporated under the Companies Act, 1956)

CIN:U40100KL2011SGC027424

Vydyuthi Bhavanam, Pattom, Thiruvananthapuram – 695004, Kerala

Tel:+914712448720 Email: dgkseb@kseb.in

Web site: www.kseb.in

ABSTRACT

Desiltation of Reservoirs of KSEBL – Approval for Standard Operating Procedure for reservoirs of KSEBL and obtaining sanction from the Government -orders issued.

CORPORATE OFFICE (SBU-G/C)

BO(FTD)No. 558 /2021(DGC/AEE-II/Desiltation/2015)Thiruvananthapuram, dtd.19 .07.2021

Read

1. Minutes of the meeting convened by the Secretary (Power), Government of Kerala on 31.05.2021.
2. BO (FTD)No. 449/2021 (DGC/AEE II/Desiltation/2015) dated 17.06.2021
3. G.O.(Ms) No. 79/2017/WRD dated 26.09.2017
4. GO (Ms) No. 14/2019/WRD dated 14.05.2019
5. Note No.DGC/AEE-II/Desiltation/2015 dated 12.07.2021 of the Director(Generation-Civil)(Agenda Item No.35/7/2021)

ORDER

The Secretary, Power Department, Government of Kerala has convened a meeting to review the status of readiness of Dam Safety Wing for the smooth and effective operation of reservoirs of KSEBL on 31st May 2021. Among the various aspects discussed in the meeting with regard to the projects, the Secretary highlighted the necessity and importance of carrying out the desiltation of reservoirs of KSEBL to restore their original capacity. The Irrigation Department has prepared Standard Operation procedure (SOP) for the desiltation of their reservoirs and desiltation of some of the reservoirs was already commenced. It was suggested to prepare a tailor-made SOP for the desiltation of reservoirs of KSEBL after incorporating necessary improvement to the SOP of Irrigation Department considering the specific requirements and directed to prepare and submit the SOP specific to KSEBL to the Government for according sanction.

Accordingly, the SOP of Irrigation Department & other related orders issued by the Government were reviewed and a site visit was conducted at Mangalam Reservoir of Irrigation Department where desiltation is progressing. Discussion was also made with the field Officials of Mangalam Dam. Based on the information gathered from the above, a draft SOP for the desiltation of reservoirs of KSEBL is prepared after making appropriate changes in the form of additions, deletions & modifications to the Clauses of SOP of the Irrigation Department.

Major additions, deletions & modifications made to the clauses of SOP of Irrigation Department are attached as Annexure.

The Standard Operating Procedure (SOP) for the Desiltation of Reservoirs of KSEBL prepared after incorporating addition, deletion and modification incorporating minor modifications wherever found necessary, was submitted for approval of the Board by the Chief Engineer(Civil- Dam Safety & DRIP).

The matter was placed before the Full Time Directors as per note read as 5th above. Having considered the matter in detail, the Full Time Directors in the meeting held on 12.07.2021 resolved to approve the Standard Operating Procedure (SOP) for the Desiltation of Reservoirs of KSEBL prepared after incorporating addition, deletion and modification wherever found necessary.

Further resolved to take up the matter before the Government for obtaining sanction.

Orders are issued accordingly.

By Order of the Full Time Directors

Sd/-

Company Secretary i/c

Acc: Annexure I


To

The Chief Engineer(Civil- Dam Safety & DRIP)

Copy to:

1. The Financial Adviser
2. The Chief Internal Auditor
3. The Deputy Chief Engineer (Research & Dam Safety Organisation), Pallom
4. The RCAO/RAO
5. The Deputy Chief Engineer(IT)
6. TA to CMD /TA to[Dir(GC) /Dir(GE&SCM) /Dir(T&SO) / Dir(D&HRM)/Dir(Plg&S)]
7. PA to [Dir (F) / Company Secretary i/c/Secretary(Administration)]
8. FC Supt/ Librarian
9. Stock file / File

Forwarded / By Order


Assistant Executive Engineer

Annexure I to BO(FTD)No.558/2021(DGC/AEE-II/Desiltation/2015) dated 19.07.2021

(As approved by the FTD vide Agenda Item No. 35/7/21)

1. In Clause (iii) of the SOP of Irrigation Department, a list of State and Central Government Agencies for the collection and analysis of sediment samples is given. In the 9th Empowered Committee meeting on desiltation held on 04.12.2020, it was recommended to take the technical assistance from NITs & IIT Palakkad for various tasks of desiltation. Hence it is recommended to amend the list by adding IIT Palakkad & NIT Kozhikode also. (Draft KSEBL SOP cl 2.2)
2. Clause (iv) of the SOP of Irrigation Department details the constitution of Technical Committee (TC). It is recommended to modify the constitution of TC by including Technical Examiner (Civil), Finance Department, Government. of Kerala as member of the committee, as consultation with the Technical wing of Finance Department is required for the approval of DPR. (Draft KSEBL SOP cl 2.5.1)
3. Clause (iv) of the SOP of Irrigation Department details the constitution of Empowered Committee (EC). It is recommended to modify the constitution of the committee by adding the Chairman & Managing Director, KSEBL and the Director (Finance), KSEBL in the committee. The Additional Chief Secretary, Finance and the Additional Chief Secretary, Water Resource Department are removed from the list as they do not have significant role as far as desiltation of KSEBL reservoirs is concerned. The total number of members in the committee is retained as five. (Draft KSEBL SOP cl 2.5.2)
4. Clause (iv) of the SOP of Irrigation Department details the procedure for vetting and acceptance of the estimated quantity of components, scrutiny of DPR and recommending DPR for administrative sanction (AS), according AS for DPR etc. The roles and responsibilities of the committee are not defined with clarity. Hence it is recommended to specify clearly the roles and responsibilities of each committee for recommending/ according sanction for the various activities involved in the desiltation process. In order to streamline the review and approval process and to reduce the time required for the multistage approvals, it is suggested to adopt the review and approval process of DPR as follows; KSEBL shall prepare the draft DPR including all the components of desiltation and submit the draft DPR to the TC for the technical review. The TC shall review the DPR and if any comments are there, KSEBL shall modify the DPR after complying the comments of the TC. The modified DPR will be submitted to the TC and the TC will submit the DPR to the EC with their recommendation. The EC shall scrutinize and approve the DPR and recommend to the Power Department for Administrative Sanction. (Draft KSEBL SOP cl 2.6 & 2.7)
5. Clause (xi) of the SOP of Irrigation Department under the section 'Responsibility of Bidder' details the project duration. It is suggested to modify the project duration as follows;

Quantity of sediments to be removed (Mm ³)	Duration (Month)
0 - 5	36
5 - 15	42
> 15	48

Duration of projects for removing sediments upto 5 Mm³ as per the SOP of Irrigation department was 12 months. The quantity to be removed as per the bid for desiltation of Mangalam reservoir is 2.95 Mm³ and the period of contract is 36 months. Hence the project duration for removing sediments for a quantity upto 5 Mm³ is modified to 36 months from 12 months. In line with the above, duration for other range of quantities also modified.(Draft KSEBL SOP cl 10)

6. Clause (v) of the SOP of Irrigation Department states that the land required for the desiltation shall be provided by the Government on lease subject to the availability or arranged by the contractor. It is suggested to modify the above as follows;

The contractor shall submit request to the Forest/ Revenue department for permissive sanction within seven days for utilizing the land on lease required for transportation of extracted sediments and processing of it etc. along with a layout sketch of the land with the recommendation of KSEBL, and

The contractor shall arrange private land required for the project by his own, if land from Forest/ Revenue department is not available to spare for the project.

A new clause is introduced in this regard as;

Permissive sanction shall be issued by the Forest and Wildlife /Revenue department for the temporary use of land on lease, required for transporting and processing the deposited sediments and to access the process yard, within twenty-one days from the date of request.

The above changes are made as most of the reservoirs of KSEBL are either in Forest/Revenue land.(Draft KSEBL SOP cl 6)

7. Clause (xii) of the SOP of Irrigation Department stipulates that the successful bidder shall pay the amount to the Government in advance in installments.

This clause is modified as;

KSEBL shall remit the revenue from desiltation of reservoirs to the Government after deducting the expenditure incurred by KSEBL for carrying out the pre activities.

The modification is made because;

KSEBL will have to incur expenditure for carrying out the pre activities including conducting bathymetric survey, estimation of quantity of each component of deposited sediments, preparation of ESMP, preparation of DPR etc. More over KSEBL is inviting the bid and arranging the work. Further the work will be implemented under the supervision of KSEBL. (Draft KSEBL SOP cl 7)

8. Clause (xii) of the SOP of Irrigation Department says two methods of contracting, Turn Key method and Work contract method.

Irrigation Department has invited the bid for Mangalam Dam using Turn Key method and the work is progressing.

The procedure involved in Work Contract method is cumbersome and requires more manpower for supervision etc. Hence it is proposed to adopt Turnkey method.(Draft KSEBL SOP cl 8)

9. Clause (vii) of the SOP of Irrigation Department mentions that No stacking/processing of desilted materials shall be carried out in the reservoir/project area.

It may not be always possible to identify an area for stacking as mentioned above. It is noticed that even in Mangalam project processing plant is located in the reservoir area with separating bunds, may be due to practical constraints. Hence the statement ' No stacking/processing of desilted materials shall be carried out in the reservoir/project area.'is deleted from SOP. (Draft KSEBL SOP cl 2.3,4 &6)

10. Clause (xiii) of the SOP of Irrigation Department says that desilting adjacent to the dam structure shall be under the close monitoring of Kerala Dam Safety Authority.

It is modified that, KSEBL shall closely supervise the removal of sediment from the nearby vicinity of the dam and appurtenant structures.

It may not be practically possible to have a close monitoring of desiltation near dam structure by Kerala Dam Safety Authority as it may require a good number of days for desilting near dam structure.(Draft KSEBL SOP cl 12.1)