

Item No. 01 & 02

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
(Through Video Conferencing)**

Original Application No. 560/2018
(M.A. No. 1808/2018)
Earlier O.A. No. 396/2013 (SZ) (THC)

And

Original Application No. 561/2018
Earlier O.A. No. 242/2016 (SZ) (THC)

Shibu Manuel, Secretary, Green Action Force Applicant(s)

Versus

The Govt. of India & Ors. Respondent(s)

and

K. Muhammend Iqbal Applicant(s)

Versus

Kerala State Pollution Control Board Respondent(s)

Date of hearing: 11.10.2019

**CORAM : HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. SATYAWAN SINGH GARBYAL, EXPERT MEMBER**

For Applicant(s): Mr. Prakhar Khanna, Adv and Mr. Baby Aagustine,
Adv

For Respondent (s): Ms. Shavmila Upadhyay, Adv and Mr. Sarvjit Pratap
Singla, Adv for CPCB
Mr. Sarashwathy , Adv for R-1
Mr. G Prabhu for E.K. Kumaresa, Adv for R-2 and R-
3
Ms. Rema Smirithi, Adv for KSPCB
Mr. D.S. Ekambaran, Adv for CPCB

ORDER

1. These applications have been originally taken cognizance by High Court of Kerala and thereafter transferred to this Tribunal regarding the remediation to be taken for the pollution caused to river Periyar and also to clean Kuzhikandam Thodu, Panachithodu, Pallipuramchal and Unthithodu which are small streams meeting the river Periyar. This Tribunal by order dated 21.01.2019 considered all the aspects and constituted a five members Committee with representatives from the CPCB, NEERI, SPCB, State Environment Impact Assessment Authority (SEIAA) and the District Magistrate Ernakulum District to study the aspects and find out the remediation work by which the pollution cause to the above river stretch can be removed.

2. The Committee was also directed to undertake the work including extensive survey and remediation of the entire affected river bodies/stretches. The first meeting of the Committee was directed to be held within one month and the interim report of the progress achieved be forwarded to this Tribunal within three months. There was also a direction that the Interim report shall undertake the preparation of action plan and indicate the timelines of the action plan. If there are other affected areas and more funds are required, the Committee would be entitled to take up such work and additional plan may be prepared by preparing an extra budget.
3. As per order dated 03.07.2019, this Tribunal had considered the Interim Report received from the Committee through e-mail dated 25.05.2019 which was not received but handed over by learned counsel appearing for CPCB considered the observation and it has been reproduced as follows:

“7. With regard to implementation of Detailed Project Report (DPR) for remediation, the Supervised Committee has made following observations:

i) Heavy flood occurred in the year 2018, might may have resulted in flushing of containments from contaminated sites into the river/sea mouth and accordingly, Committees expressed the need for re-verifying the concentrations of contamination in the subject area. Therefore, Committee suggested limited sampling at Kuzhikandom Thodu and its downstream areas for confirming presence of containments. Revision of DPR would be necessary in case concentration of contaminants vary.

ii) Tender process for remediation of M/s HIL premises as suggested by Kerala SPCB may be taken up after general elections.

8. With regard to recommendation s of Supervised Committee for revision of Detailed Project Report (DPR) based on re-assessment of Kuzhikandom Thodu; Central Pollution Control Board is of the following view:

i) Changes in concentration of contaminants is expected due to heavy floods, however concentration of containments are not expected to have reduced to less than remediation targets levels.

ii) Re-assessment of the site and revision of DPR may take substantial time and financial resources and may also delay the process of remediating the site, which is already delayed for more than a decade.

4. Based on the recommendation of the Supervised Committee and Action Plan proposed by Kerala SPCB, the following, action points have been considered by the CPCB for assessment of polluted stretches of Periyar River and execution of remediation works as per DPR as follows:

i) The existing DPR for remediation can be executed by incorporating suitable changes on tender document, wherein payment for remediation of sediments, soil and groundwater may vary as per prevailing concentrations in Kuzhikandom Thodu (KT) are less than

remediation target values, such stretches may be eliminated at the time of remediation and at the same time, downstream stretches may be included for remediation, if the concentrations exceed criteria value.

- ii) Kerala SPCB to proceed with tendering process for remediation of Eloor contaminated sites without any review of the approved Detailed Project Report (DPR) and as per prevailing site conditions of post flood by incorporating suitable changes in Tender document.*
- iii) Kerala SPCB may engage a suitable agency or an institution to conduct studies at identified stretches along Periyar river the earliest. For this purpose, funds collected by Kerala SPCB for remediation of contaminated soils, sediments and groundwater in Eloor area may be utilized.*
- iv) As per recommendations of Supervised Committee, limited re-sampling at Kuzhikandom Thodu (KT), may be included as part assessment study proposed for Periyar River.*
- v) Kerala SPCB may initiate the process of tendering for remediation of sites without waiting for funds yet to be received from polluter industries. Meanwhile, Kerala SPCB to follow-up with concerned industry for remittance of due amount from them”*

5. This Tribunal also reproduced the action plan in the tabulated form submitted by the KPPCB which reads as follows:

S No	Action to be taken by KSPCB	Time Frame
1.	To identify the expert organisation/NABL Laboratory to carry out preliminary investigation by taking water and sediments samples from River Periyar.	KSPCB informed that they will engage NABL accredited laboratory for analysis of sediment samples of Periyar river. The sampling and analysis is proposed to be completed within three month i.e, before 30.06.2019
2.	Submission of time bound action plan for sampling, analysis and final report of preliminary investigation.	
3.	Time bound action plan for taking samples from contaminated area to re-verify the concentration of containments in Kuzhikandom Thodu, Unnathi thodu, swamp area and paddy field.	
4.	Steps taken for exploring possibility of mobilising fund through Polluter Pays Principle	KSPCB informed that the funds remitted by polluter, M/s HIL is expected to cover the costs of remediation of A1 area (inside HIL Premises). In case of shortfalls, it is proposed recovered from polluter company. Similar procedure will be adopted for A2 site (M/s Merchem Premises). The remediation of A-3 site (Off-site residential area) will be carried out with funds already proved by the FACT, IREL, Board & Government of Kerala. Shortfall if any, required cost will be recovered from all polluters.
5.	The KSPCB vide their letter dated 09.04.2019 that the remediation of the site A1 (priority 1) will be taken for tendering immediately. But, tender shall be only after the election as model code of conduct is existing. Time bound action plan will be submitted after the election procedures completes and model code of conduct is withdrawn.	

6. It is also noted in the order that this Tribunal is expecting KSPCB adhere to the action plan and the time line specified in the table strictly and complete the work before 30.06.2019. It is also mentioned in the order that DPR for remediation which had been prepared earlier may not be reliable as the contaminants might have been flushed out into the river/sea mouth and therefore there was need to re-verify the concentration of contamination in the area and after getting fresh particulars, DPR will have to be revised accordingly. This Tribunal also expressed its concern about the pendency of the matter from 2013 and without much improvement in the process of remediation and directed the process to be completed within a period of three months and posted the case to 09.10.2019.

7. Second Interim Report by five members supervise Committee constituted by this Tribunal dated 07.10.2019 was received and it has been considered today wherein they have noted the following observation regarding the river stretch namely Periyar River, Kuzhikandom Thodu and Unthi Thodu which reads as follows:

- (i) In Periyar River, all parameters of water samples were found within the prescribed standards of Inland surface water. However, the concentration of heavy metals viz mercury, Lead, Arsenic, Iron and Manganese were observed higher than the drinking water standards. The concentration of OCPs/COCs in sediments taken from Periyar river were found less than the screening values (Dutch Interventions). However, the concentration of Total Chromium was found exceeding the Dutch Intervention in only one location. Hence, committee recommended for re monitoring in order to re confirm the observed values.
- (ii) The Committee noted that even though the concentration of contaminations (Pesticides) in Kuzhikandam Thodu was found to be less than the concentration reported in the original DPR. However, the present observed concentration of pesticides was found higher than the Site Specific Target Level (SSTLs) arrived in the DPR. Hence, the Committee felt that remediation work may be executed by incorporating suitable changes in the tender document.
- (iii) In Unthi Thodu, the concentration of OCPs found higher than the Screening value as well as Site Specific Target (SSTLs) in one location. Hence, it is recommended to re-monitor to in-order to ensure the concentration and to include the respective stretch for remediation.

8. The Committee also reviewed the analysis report of Periyar River and Kuzhikandam Thodu with respect to screening criteria viz inland surface water standards for water sample and Dutch Intervention for sediment samples (as per the procedure followed by CPCB by preparing the DPR) and discussed the following issue in detail and observed as follows:

- i) *In Periyar river, all parameters of water samples were found within the prescribed standards of Inland surface water. However, the concentration of heavy metals viz. mercury, Lead, Arsenic, Iron and Manganese were observed higher than the drinking water standards. The concentration of OCPs/COCs in sediments taken from Periyar river were found less than the screening values (Dutch Interventions). However, the concentration of Total Chromium was found exceeding the Dutch Intervention in only one location. Hence, committee recommended for re monitoring in order to re confirm the observed values.*
- ii) *The committee noted that even though the concentration of contaminants (pesticides) in Kuzhikandam Thodu was found to be less than the concentration reported in the original DPR. However, the present observed concentration of pesticides was found higher than the Site Specific Target Level (SSTLs) arrived in the DPR. Hence, the Committee felt that remediation work may be executed by incorporating suitable changes in the tender document.*
- iii) *In Unthi Thodu the concentration of OCPs found higher than the Screening value as well as Site Specific Target Level (SSTLs) in one location. Hence, it is recommended to re-monitor in order to ensure the concentration and to include the respective stretch for remediation.*

9. They also made the following conclusion regarding the matter which reads as follows:

- a) *Committee concluded that remediation of Kuzhikandam Thodu shall be carried as per DPR of CPCB and tendering procedure and award of the work shall be completed as per the time frame given by Hon'ble NGT.*
- b) *The Committee observed that the concentration of heavy metals were slightly higher than the prescribed standards in few locations of Periyar River (water as well as sediments). Although, the concentrations of Pesticides were found lesser than screening values, the committee decided to re-perform the sampling and analysis of water and sediments in-order to ensure the observed concentration of pesticides and heavy metals.*
- c) *Re-monitoring of water and sediments samples from Periyar river shall be carried out in the presence of committee members and sample required to be analysed from CPCB laboratory and any other Government recognized laboratory to take further decisions.*

10. The Committee again met on August 29th and 30th,2019 for re-monitoring and it was revealed during the meeting that officer representing the KSPCB had expressed their inability to carry out the work by themselves and so they sought the assistance of Kerala Industrial and Technical Consultancy Organisation (KITCO) and they submitted a detailed proposal for calling the tender along with their willingness and they also stated that they will have to obtain necessary administrative sanction and also technical sanction for the tender document, BOQ drawings etc. as per Government rules as it is a part of procedure for executing big budgetary projects. So the Committee observed that the KSPCB could not invite tender as undertaken by them earlier on account of this development and KSPCB was directed to get the necessary administrative sanction and technical sanction for this purpose and finalize the tender in the website in first week of September 2019 in order to comply with the order of the NGT order dated 03.07.2019.

11. The Committee again met on 01.10.2019 and reviewed the status and directed the KSPCB to finalize the tender document and to post the tender document in the website in the first week of September. However, the Committee observed that the tender document was not prepared by KSPCB and the Committee asked the status of progress made with respect to award of work to the successful bidder. The KSPCB had explained to the Committee regarding the necessity of obtaining technical sanction and administrative sanction for such projects as per the Kerala Government Rules as requested by the KITCO and that process is in progress. It is also mentioned in the report that the KSPCB had submitted a revised action plan on the basis of subsequent development which has been reproduced in the report as follows:

Sl NO.	Actions to be taken	Committed Time
1	Execution of Agreement between KSPCB and M/s KITCO Ltd. for preparation of Tender document, BOQ, drawings etc.	On or before 15.10.2019
2	Preparation of a draft BOQ & drawings by KITCO from the date of agreement	30 days i.e, on or before 14.11.2019
3	Scrutiny of BOQ and drawings by KSPCB/Supervised Committee	10 days i.e, on or before 25.11.2019
4	Submission of final BOQ and drawings by M/s KITCO	07 days i.e, on or before 07.12.2019
5	Obtaining Technical/Administrative sanction by KSPCB	14 days i.e, on or before 16.12.2019
6	Preparation of tender document along with the BOQ and drawings for A1 area	07 days i.e, on or before 07.12.2019
7	Uploading tender document in the government Portal	07 days i.e, on or before 30.12.2019

8	Last date of receiving technical and financial bid	20.01.2020 (21 days)
9	Evaluation of technical and financial bid for selection of qualified bidder	14 days i.e, on or before 03.02.2020
10	Award of work to qualified bidder	14 days i.e, 17.02.2020

12.The Committee also came to the following conclusion and made recommendations as follows:

“After detailed discussion about identification of polluted stretches of Periyar river and action plan for remediation of contaminated sites, following conclusions were drawn by Supervised Committee:

a) Identification of polluted river stretches of Periyar river:

Since the committee observed the concentration of heavy metals slightly higher than the prescribed standards (drinking water standards for water and Dutch intervention for sediment) in few locations of Periyar River, although the concentration of Pesticides were found lesser than screening values, the committee decided to re perform the sampling and analysis of water and sediments in-order to ensure the observed concentration of pesticides and heavy metals. Accordingly re monitoring was completed on receipt of results of analysis, the committee will review and decide the further course of action regarding identification of polluted stretches.

b) Remediation of Eloor contaminated site;

The Hon’ble NGT directed the KSPCB to revise the DPR and the entire tender documents be completed within three months including award of the work to the successful bidder. In view of the above the committee reviewed and recommended to execute remediation work by incorporating suitable changes in the tender document as per the DPR prepared by CPCB without revising the DPR since the concentration of OCPs/COCs were observed higher than the Site Specific Target Level.

13. As per the direction of NGT, the KSPSB could not complete the award of work within the stipulated time due to prevailing administrative procedures of Government of Kerala. The same was reviewed and discussed in detail about the new time line submitted by KSPCB for finalization of the tender document as well as for award order to qualified bidder by considering prevailing procedures of Government of Kerala. The Committee was of the opinion that the new time line proposed by the KSPCB may be considered and appropriate direction may be issued to the KSPCB to adhere strictly to the committed time line without any deviation.

14. The KSPCB had submitted an affidavit dated 03.10.2019 almost in similar lines as done by the Supervised Committee. They have also reproduced the same action plan for awarding the work. The officer of the CPCB present in court submitted that the time required for the remediation will depend on the extend of contamination of soil and water and nature of remediation to be undertaken for this purpose. At the most they hope they can complete the work within one year of awarding the work. It is also submitted by the official of CPCB that the DPR is now prepared for all the three Thodus. The timeline provided for the execution is only in respect of *Kuzhikandam Thodu alone* and only after completing this, they will take up the other two areas namely Unthi Thodu and Periyar.

15. It is also mentioned in the affidavit that the action to be taken for mobilisation of the balance fund for remediation was considered in the meeting held on 21.12.2017 and concluded that the cost of remediation has to be shared by four polluters namely FACT, HIL, IRE and Merchem Ltd. and the amount to be shared was also decided which reads as follows:

S.No	Unit	Total Share	Amount remitted	Balance amount
1	State Government	4.02 cr	4.02 cr	Nil
2	KSPCB	4.02 cr	4.02 cr	Nil
3	FACT	1.25 cr	1.25 cr	Nil
4	IRE	1.25 cr	1.25 cr	Nil
5	M/s HIL	3.59 cr	1.24 cr	2.35 cr
6	M/s Merchem	1.41 cr	Nil	1.41 cr
Total		11.79 cr		

16. It is mentioned in the report that the M/s HIL had to remit balance amount of Rs. 2.35 Cr M/s Merchem company had not remitted the amount till date as the company was under closure for last four years. Now the company M/s Merchem Ltd. is taken over by new management and the company produced the order of the NCLT dated 23.01.2019 (MA/515/2018 in CP/689/B/2017) and informed the Board that the National Company Law Tribunal had passed an order that all the claims of the government authorities in relation all taxes, liabilities, penalties, etc. for period pertaining prior to the date before the new management took over the company shall stand extinguished and company is not liable to pay any amount pending with old management of M/s Merchem Ltd.

17. If the board is aggrieved by the order it is for the board to challenge the order before the appropriate authority. We are not expressing any opinion regarding the same in this proceeding.

18. Considering the fact that the matter was pending since 2013 and it affects the health of the people, the State Government has the responsibility to look into the matter and expedite the process of remediation so that clean water can be provided to the people. If there is any relaxation required in obtaining certain technical sanction or administrative sanction in such matter it is for the Government to look into it and make such relaxation if required, in accordance with law, considering the urgency in the matter and also considering the fact that matter is being pending since 2013 and no improvement has been done so far in starting with the remediation process. So under such circumstances we direct the Chief Secretary, State of Kerala to look into the matter and see that the necessary sanctions are provided to the KSPCB and KITCO for the purpose of proceeding the matter at the earliest so that the direction given by this Tribunal to remedy the pollution caused to the Kuzhikandom Thodu where the water standard is much below the drinking level due to the presence of contamination and chemicals. Providing clean water to people is also a fundamental responsibility of the State in Article 21 of the Constitution of India. We hope that the State Government will look into it and take appropriate quick action in this regard within a period of one month. We hope that the Pollution Control Board also will proceed with the action plan at least and complete the same within the revised timeline provided without failure and without making any further excuses in the future.

19. The Registry is directed to communicate this order to the Chief Secretary of Government of Kerala for his appropriate action in this regard to implement the order passed by this Tribunal to remedy the situation. The Pollution Control Board as well as the Supervised Committee is directed to submit their further reports regarding the progress on quarterly basis.

20. List this matter on 17th January, 2020

K. Ramakrishnan, JM

Dr. S.S. Garbyal, EM

11th October, 2019
OA No. 560/2018
And
OA No. 561/2018
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