

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI
IN
ORIGINAL APPLICATION NO. 143 of 2020(SZ)**

Applicant : K. K Muhammed Iqbal

Versus

Respondents : The Kerala State Pollution Control
Board & Others

**AFFIDAVIT FILED BY THE CHIEF ENVIRONMENTAL
ENGINEER, KERALA STATE POLLUTION CONTROL
BOARD, ON BEHALF OF THE 4TH RESPONDENT**

Adv. Rema Smrithi.

ADDITIONAL STANDING COUNSEL FOR THE 4TH RESPONDENT:

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Original Application No.143 of 2020 (SZ)

Applicant : K.K. Muhammed Iqbal

Vs

Respondents : The Kerala State Pollution Control Board
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**AFFIDAVIT FILED BY THE KERALA STATE POLLUTION CONTROL BOARD,
THE 4TH RESPONDENT**

I, Baiju M.A, aged 54 years, working as Chief Environmental Engineer, Regional Office, Kerala State Pollution Control Board, Ernakulam do hereby solemnly affirm and sincerely state as follows:

1. I may humbly submit that the facts and circumstances of the case are known to me. The factual submissions made hereunder are true and correct to the best of my knowledge, information and belief. In the circumstances, it is just and necessary that this Hon'ble Tribunal may be pleased to accept the accompanying report on file and it is so humbly prayed in the interests of justice in this case.
2. It is respectfully submitted that this appeal is primarily with respect to the implementation of the remediation of heavy metals contaminated sites Edayattuchaal and Chakkarachaal due to the operation of M/s Edayar Zinc (formerly M/s Binani Zinc, Edayar) and also to take action on the safe disposal of jarosite stored inside the industry.
3. It is respectfully submitted that the Central Pollution Control Board (CPCB) under Ministry of Environment, Forest and Climate Change (MoEF & CC), Government of India has been entrusted as the implementing agency for the project which comprises remediation of 12 priority hazardous waste contaminated areas spread across the country. The hazardous sites which




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pose risks to human health and the environment were selected to be remediated as part of this initiative. Such an identified site is the Eloor-Kuzhikandom Thodu at Eloor and Edayattuchaal and Chakkarachaal paddy fields at Edayar in Ernakulam District. The remediation projects of above two contaminated sites were taken up under National Clean Energy Fund (NCEF) project initiated by MoEF & CC with support from the State Pollution Control Boards. The funding pattern under NCEF was limited to 40% of the total project cost and the remaining 60% to be borne by the State Governments through polluter pays principle / Public-Private Partnership/ State share etc. Being an implementing agency of the project, the Central Pollution Control Board, Delhi invited proposals from the consultants for the Remediation of contaminated sites. The CPCB had entrusted M/s ERM India Pvt Ltd for preparation of Detailed Project Report (DPR). The DPR prepared by the consultant M/s ERM India Pvt Ltd after conducting sampling, analysis of surface water, ground water, sediments and soil of the affected areas were submitted to CPCB. The prepared DPR consists of two phases, phase 1- Eloor Kuzhikandam thodu and Phase-2, Edayar Chakkarachaal and Edayattuchaal. The Kuzhikandam thodu is contaminated with Pesticides and Heavy metals due to the operation of M/s Hindustan Insecticides Ltd , M/s Fertilizers and Chemicals Travancore Ltd and M/s Merchem and Edayar site (Edayattuchaal, Chakkarachaal) is found to be contaminated with heavy metals due to the operation of M/s Edayar Zinc (formerly M/s Binani Zinc). Though the project of remediation was started with fund sharing by State Govt and Central Govt in 60:40 ratio under NCEF scheme, the Central govt thereafter informed that the NCEF was discontinued in the year 2017. Therefore, the CPCB approved DPR of Eloor Edayar was handed over to the state Govt for implementation in the year 2019. Now, the whole fund for remediation has to be raised by the State Govt. As per the DPR, total project cost for remediation of contaminated sites at Eloor and Edayar are Rs 25.08 Cr and 47.88 Cr respectively. The Board had initiated action for the implementation of first phase of DPR i.e, remediation of Kuzhikandam thodu by using the financial support of above mentioned polluter industries, state Govt and the Board. The remediation works with respect to Edayar- Edayattuchaal, Chakkarachaal is not started till date except its DPR preparation.

4. It is respectfully submitted that the action already taken towards the remediation of Edayar – Edayattuchal and Chakkarachal are illustrated as follows




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i). Action taken to collect the money from industry for the remediation

The 9th respondent unit M/s. Edayar Zinc Ltd. (formerly M/s. Binani Zinc Limited) situated at Binanipuram, Kadungalloor Village, Paravur Taluk in Ernakulam District is a Zinc smelting unit where the Zinc concentrates (ores that contain Zinc) are converted into pure Zinc. The main processes include Roasting, Leaching, electrolysis etc. The 9th respondent company was having Board's Consent to Operate with validity up to 30.06.2015. The industry closed all of a sudden in the year 2014 due to financial crisis. The industry was attached by Punjab National Bank (PNB) and kept under their custody for auction. The industry had closed down the unit without utilizing their complete raw materials and thus left behind huge quantities of chemicals which included raw materials, intermediates etc. Some chemicals and acidic solutions (Zinc Sulphate) were stored in storage tanks at the bank of river Periyar. The storage tanks were on the verge of collapse and were found leaking. It came to the notice of Board that the acidic solution was leaking and reaching river Periyar through storm water drains. If the tanks were to collapse, the entire acidic solution would have reached river and resulted in high environmental hazard. The Board immediately on noticing this issued several directions to the industry to remove the chemicals from their premises. Since, the industry was attached to Punjab National Bank, Board also informed the bank about the removal of chemicals from the industry. Even after repeated directions of the Board, the company and Bank did not take any action for removal of chemicals. In view of the seriousness of the situation, and in order to protect the river and environment from a disaster, the Board initiated action as per the Section 32 of The Water (Prevention and Control of Pollution) Act, 1974, for the removal of chemicals by auctioning the chemicals for other industrial reuse purposes. The Board called tender for auction of chemicals and removed about 5000 MT of acidic Zinc Sulphate solution stored inside storage tanks of M/s Edayar Zinc and thus prevented the spillage of acidic solutions to Periyar river. The Board also informed the industry and the Punjab National Bank about the liability of 47.88 Cr towards the remediation of the mentioned site which was contaminated by the industry. But, the industry or Punjab National Bank had not replied to the Board's letter till date. The copies of letter no. PCB/ESC/CO-11/07 dated 07.06.2018, 05.12.2019 and copy of letter No. PCB/HWM/A/9/90 dated 27.06.2019 are enclosed herewith as **Annexure 1, Annexure-2 and Annexure-3** respectively. As per the polluter pays principle, the 9th respondent unit is liable to pay towards the remediation expenses.



A handwritten signature in blue ink, appearing to be "M. A. Baiju".

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The Board had also informed District Collector to include the amount of Rs. 47.88 Cr. as liability of industry for revenue recovery. District collector informed the Board to submit the liability amount in revenue recovery website of state Govt. Board will take further action in this regard.

ii). **Action taken to find out illegal discharges to the irrigation canal**

The Board had received many public complaints regarding the discharge of effluent to the canal/drain connecting Periyar river and Edayattuchaal paddy field. The canal is passing through the Edayar industrial area. The canal is laid by irrigation department for transport of water from Periyar river to Edayattuchaal paddy field. Since, the canal is concealed; Board officials could not verify whether any discharges/unauthorized pipelines are laid by the industries thereby discharging to the drain/canal. The canal is joining river Periyar at the upstream of Pathalam bund regulator. The discharge of sewage/trade effluent if any to this canal will ultimately reach the river Periyar at upstream of Pathalam bund causing the deterioration of river water quality. As per the order of Hon'ble NGT in OA No. 673/2018, the State had prepared an action plan for rejuvenation of polluted river stretch of Periyar which is under implementation stage by various departments. The Board had conducted detailed enquiry in the area and collected water samples from the drain. The analysis report shows presence of effluent in the canal suspecting illegal discharges. The sources of discharges to river if any shall be identified and stopped so as to prevent river pollution and improve water quality. Also, stringent actions need to be taken against the violator industries. The Board had issued direction to Superintending Engineer, Irrigation department to make canal/drain accessible for inspection or provide inspection chambers/manholes at definite intervals along the entire stretch of drain so as to identify unauthorized pipelines if any laid from the industries to the Canal. The copy of letter No. PCB/ESC/CM-33/08 dated 07.09.2020 is enclosed herewith and marked as **Annexure-4**.

iii). **Action taken for the utilization of Jarosite**

M/s Edayar Zinc Limited was involved in the manufacture of high grade electrolytic zinc including zinc ingots, alloy and by-product including Sulphuric acid and Cadmium metals. Jarosite is the process waste generated during the leaching and purification process of Zinc smelter. The jarosite mainly contains iron, sulphur, zinc, calcium, lead, cadmium and aluminium. The Jarosite are stored inside the secured land fill (Jarosite ponds) designed as per guidelines. Public complaints are existing against the



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leaching of the Jarosite from the SLF. As per the Hazardous and other Wastes (Management Transboundary Movement) Rules, 2016, "*The high volume low effect wastes such as fly ash, Phosphogypsum, red mud, jarosite, Slags from pyrometallurgical operations, mine tailings and ore beneficiation rejects are excluded from the category of hazardous wastes*". As per the rule, *Separate guidelines on the management of these wastes shall be issued by Central Pollution Control Board*". Hence, as per the rule, the Jarosite had been exempted from the Hazardous waste category and CPCB have to publish separate guidelines for the utilization of the Jarosite. Board can take necessary action to shift the Jarosite from ponds only based on the guidelines of the CPCB. It is pertinent to note that the CPCB had constituted a committee for preparation of guidelines for handling and management of Jarosite. The committee had inspected the Edayar Zinc factory on 19th November 2019 and collected samples of Jarosite. It may be noted that the CPCB have not published the guidelines till date. Once the guidelines are published by the CPCB, the Board will initiate action to utilize the Jarosite based on the guidelines.

5. It is also respectfully submitted that the Board is initiating actions to collect the remediation amount from the industry in question and the Hon'ble Tribunal may also kindly give specific directions to the 9th respondent unit M/s Edayar Zinc to remit the amount of 47.88 Cr towards the remediation cost and the CPCB may be directed to issue guidelines for the effective management of Jarosite.

All that is stated above are true to the best of my knowledge information and belief.

Dated this the 14th day of October 2020



Deponent

M. A. BAIJU
Chief Environmental Engineer