

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
SOUTH ZONE, CHENNAI**

**Original Application No.262 of 2017 (SZ) &**

**M A No. 215 of 2017 (SZ)**

Appellant : K K Muhammed Iqbal

Versus

Respondents : The Kerala State Pollution Control Board & Others

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Dated this the 22<sup>nd</sup> day of February 2021

**Rema Smrithi. V. K., Advocate  
Standing Counsel for the 1<sup>st</sup> Respondent**

**BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL**

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**REPORT FILED BY THE SENIOR ENVIRONMENTAL ENGINEER,  
KERALA STATE POLLUTION CONTROL BOARD, ENVIRONMENTAL  
SURVEILLANCE CENTRE, ELOOR, ON BEHALF OF THE 1<sup>st</sup> RESPONDENT**

Standing counsel for the 1<sup>st</sup> respondent

**Rema Smrithi. V. K., Advocate  
Additional Standing Counsel,  
National Green Tribunal, (SZ), CHENNAI**

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**REPORT FILED BY THE COMMITTEE CONSTITUTED BY THE HON'BLE**  
**TRIBUNAL AS PER THE ORDER DATED 20.01.2020 IN THE ABOVE**  
**APPLICATION**

We the Committee constituted by the Hon'ble National Green Tribunal vide order dated 20.01.2020 in O.A.No.262 of 2017. We know the facts and circumstances of the case. The factual submission made here under is true and correct to the best of our knowledge, information and belief. In these circumstances, it is just and necessary that this Hon'ble Tribunal may be pleased to accept the accompanying status report as submitted by the committee constituted by the Hon'ble Tribunal and it is so humbly prayed in the interests of justice in this case.

The assessment of efficiency of the ETP/CETP and ZLD implementation in the industrial clusters of Greater Kochi along the banks of river Periyar was also a directed activity of the committee on OA. No. 262 of 2017 dated 20.01.2020.

However, in the last order dated 29-01-2021 it is confined only to the dumped plastic waste by the 4<sup>th</sup> respondent. It is placed before the Hon'ble Tribunal that the pollution of industries along Periyar river already is entrusted upon Supervised Committees formed under OA.396/2013. Hence it is requested to guide if the study needs to be undertaken by this committee of OA.262 of 2017 along with OA 396/2013 or the committee shall confine its activity only to the plastic waste pollution assessment due to 4<sup>th</sup> respondent.

- 1) It is respectfully submitted that the committee constituted as per the Hon'ble NGT in its order dated 20.01.2020 in OA 262/2017 conducted its first meeting on 19.02.2020 followed by site visit to Sree Sakthi Paper Mills and understood that the huge quantity of plastic waste dumped in its site had been removed and sent to M/s. KEIL, Ambalamugal for disposal. However during that inspection the committee observed that the area of Sree Sakthi Paper Mills, where once plastic waste was dumped is contaminated with disintegrated plastics. The committee on O.A. 262/2016 decided to carry out detailed investigation in its immediate next visit planned during March 2020 to conduct soil sampling in plastic contaminated area along with the study of ETP and CETP in the industrial clusters of Greater Kochi along river Periyar. However due to the COVID Pandemic, the plans were postponed indefinitely as Kerala was the first state started reporting with high number of COVID cases around March 2020. In that condition the study had to be postponed as the committee could not progress as per the proposed schedule.

- 2) It is submitted that the Hon'ble Tribunal in its order dated 23.09.2012 directed the committee constituted on OA No.396 of 2013 to look into the issues of OA No.262/2017 and OA 242 of 2016 as well. Accordingly a combined meeting was conducted among the members of all three aforementioned committees on 22.10.2020 and in the meeting it was decided to carry out the Periyar River pollution investigation along with the issues of Sree Sakthi paper Mills in three phases.
- 3) It is humbly submitted that the study initiated with participation from members of all three committees – OA No.396 of 2013, OA NO.262 of 2017 and OA No.395 of 2013, with monitoring of all drains/streams/tributaries of Periyar river and industries along Periyar river in Idukki district carried out during 18.11.2020 to 21.11.2020 and monitoring of all drains/streams leading to Periyar river in Ernakulam District and Thrissur District was carried out during 15.12.2020 to 19.12.2020. As per the recent Order on OA No. 396/2013, OA 242/2016, OA 262/2017 dated 19.01.2021, the Hon'ble Tribunal had delinked OA No.262/2017 from the other two cases, as it is in respect of certain violation committed by Sree Sakthi Paper Mills and directed the KSPCB to submit an independent report regarding the present status of the 4<sup>th</sup> respondent company in OA NO.262 of 2017 and posted it to 29.01.2021 for the next hearing.
- 4) It is respectfully submitted that accordingly the KSPCB had submitted a report and the Hon'ble Tribunal in its order dated 29.01.2021 on OA No.262 of 2017, it was directed the committee constituted by the Hon'ble NGT under OA No.262/2017 to file a report by carrying out soil investigation and assessment on environmental compensation for the

past violation committed by the 4<sup>th</sup> respondent M/s. Sree Sakthi Paper Mills.

- 5) It is submitted that in compliance of the direction of the Hon'ble NGT, the nodal agency convened a meeting for the committee members on 19-02-2021, followed by site visit to investigate the alleged plastic dumped area. As per the KSPCB report dated 27-01-2021 huge quantity of about 6713.25 Metric Tonnes of Plastic waste had been removed. However due to dumping of plastic waste in its premises had resulted in contamination of partially disintegrated plastics which were confirmed both visually and by investigation of soil samples in four locations in the said area. Site location map is enclosed herewith and marked as Annexure R1(A). Based on the laboratory segregation of the total soil quantity sampled, 4.5% (w/w) is plastic material that exists as partially disintegrated plastic shreds and it is apprehended that some of the plastic may exist as microplastics. Photographs of laboratory segregation is enclosed herewith and marked as Annexure R1(B). The quantity of plastic waste in the sample location close to river (SR-3) seems to be less compared to the other sample locations.
- 6) It is respectfully submitted that the segregated plastic waste has been presented to Central Institute of Plastics Engineering and Technology (CIPET), Cochin, for analysis of the samples using Fourier-Transform Infrared Spectroscopy (FTIR) and Differential Scanning Calorimetry (DSC) for characterisation of plastic wastes samples collected. Further the committee during its site visit followed by discussion suspected the plastic waste contamination in the soil had gone to some depth and it is very much necessary to carry out a thorough investigation followed by

sampling to ascertain the plastic contamination extent in the depth of soil and also further to quantify the plastic waste existing still within the contaminated site/space. Since the activity requires drilling/excavation at certain points of the contaminated site which may require machinery and equipment, the activity is proposed to be carried out with necessary arrangements in the next visit. Hence it is humbly requested the Hon'ble Tribunal to provide extension to carry out the aforementioned activities to determine the extent and depth of plastic contamination in the soil of M/s. Sree Sakthi Paper Mills premises.

7) It is humbly submitted that it can also be anticipated that the microplastics present in the soil over due course of time might get transported to the nearby water bodies. Removal/segregation of micro plastics from soil or carrying out any remediation of plastic contaminated soil is a time consuming and requires further studies. Hence, in order to avoid the risk of microplastic transport into the Periyar river, the 4<sup>th</sup> respondent may take immediate action to construct a dyke wall to contain the contaminated soil in the site and to develop plantation of trees in its border close to the river as a plastic pollution containment activity.

8) It is humbly submitted that the Hon'ble Tribunal may direct the 4<sup>th</sup> respondent with one of the following options to contain microplastic contamination to river bodies in over longer course of time.

- a) To frame an action plan and remove the plastic contaminated soil/segregate the plastic from soil, under the supervision of KSPCB and dispose the same to authorized agencies, or

- b) To approach a technical consultant agency for remediation of the plastic contaminated soil in a scheduled time frame.
- 9) It is respectfully submitted that the committee in its next sitting shall carry out the proposed activities to quantify the plastic waste including the microplastics present in the soil and shall arrive at the environmental compensation based on the extent and nature of plastic pollution in the contaminated site.
- 10) It is respectfully submitted that in order to calculate the environmental compensation in a fair manner for alleged storage of plastic waste, the Tribunal may kindly grant more time, as the committee is working on a methodology to arrive at the compensation amount.

Dated this the 22<sup>nd</sup> day of February, 2021.



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Dated this the 22<sup>nd</sup> day of February 2021

**Rema Smrithi. V. K., Advocate  
Standing Counsel for the 1<sup>st</sup> Respondent**



Sampling locations

Partially disintegrated plastic materials in soil samples



*Plastic shreds segregated from soil samples*



*Tiny shreds of plastics in soil sample*