

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, SOUTHERN  
ZONE, CHENNAI CIRCUIT BENCH AT KOCHI**

**Application no. 20 of 2016 (SZ)**

Applicant(s) :: Sri. Santo P.L., S/o P.D. Louis,  
Pellissery House, Edakkunni &  
Others  
Vs.  
Respondents :: The State of Kerala represented  
by the Chief Secretary & Others

**REPORT FILED BY THE ENVIRONMENTAL ENGINEER, KERALA  
STATE POLLUTION CONTROL BOARD, DISTRICT OFFICE,  
THRISSUR, THE 4<sup>TH</sup> RESPONDENT**

1. It is respectfully submitted that the 4th respondent is representing the 2<sup>nd</sup> and 3<sup>rd</sup> respondents also in this application.
2. In compliance with the order of this Honourable Tribunal dated 02.06.2020 in O.A. no.20 of 2016 (SZ), Board had co-opted Ground Water Department to conduct hydro geological study in and around the Ollur Industrial Estate and to analyse the reason for ground water contamination in the area. The Director of Ground Water Department submitted the report of study and copy of the same is produced herewith and marked as Annexure R4 (a).
3. The report concludes as follows: "The samples collected from the wells of the industrial estate close to the electroplating units are showing higher pH values, i.e. of lesser acidic nature. Whereas the samples collected from the open wells outside the industrial area and close to the boundary of the estate are showing higher acidic nature. Hence sampling during peak summer season and also the study of heavy metal concentration in the ground water source will provide much more refined information on the ground water quality.

  
**SUSEELA NAIR. V.A**  
**ENVIRONMENTAL ENGINEER**



In order to arrive at a realistic conclusion on the pollution caused by the electroplating related industries in the estate and also to establish base flow direction from the industrial area, a detailed study using tracer techniques or similar advanced methods should have to be engaged through competent agencies”.

4. It is respectfully submitted that Board conducted enquiry and came to know that Centre for Water Resources Development and Management (CWRDM), a premier Research & Development (R&D) institute in the water sector is a competent agency to conduct study using tracer techniques method. They were requested to undertake the study. Reply is awaited.
5. It is submitted that the units of respondents R(8), R(9), R(10), R(11), R(12), R(13), R(15), R(22), R(23), R(24) and R(26) were inspected on 30.11.2020 and treated effluent samples were collected. The effluent treatment plants of these units were found functional and the treated effluent was found to be reused in the process. Treated effluent samples from the final treated effluent collection tanks of these units and water samples from the nearby wells were collected and analysed. The units, R (7) and R (14) were found closed during the time of inspection and hence treated effluent samples could not be collected.
6. It is submitted that according to the analysis reports of the treated effluent samples collected, quality of the treated effluent of R(22), R(15), R(9) and R(13) units is not complying with the standards prescribed in the consent. Hence action has already been initiated to forfeit the amount of bank guarantee submitted by these units.
7. It is submitted that even though these units are not discharging treated effluent to outside and are completely reusing in the process, standards have been specified for the quality of treated effluent in the consent to operate, as a matter of abundant caution. If these standards are not achieved, amount of Bank guarantee submitted by these units will be forfeited. Once the amount is forfeited, fresh bank guarantee worth double the amount of the previous bank guarantee is to be submitted.

  
SUSEELA NAIR. V.A  
ENVIRONMENTAL ENGINEER



8. Recently the amount of bank guarantee submitted by R (13) and R (15) was forfeited, on notice of variation from the prescribed standards, on the basis of the analysis report of the treated effluent samples collected on 17/03/2020. These units submitted fresh bank guarantee worth double the previous amount and the amount was forfeited again when variation from the standards was noticed again in the analysis reports of the treated effluent sample collected by Board officers on 17/08/2020.
9. It is further submitted that all the respondent units have submitted the hazardous waste manifest in the form prescribed in Rule (8) of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
10. It is submitted that according to the analysis reports, there is no improvement in the water quality of the nearby wells. The pH is still acidic and varies from 3.5 to 5.0 and presence of heavy metals was detected in some of the wells. Cadmium is present in 13 wells, copper and nickel are present in the well of KSEB and nickel is present in 7 wells. But Cyanide is not present in any of the wells. The results of the analysis are appended in tabular form and copy of the analysis reports received from Central laboratory, Ernakulam, Regional laboratory, Kozhikode and District Laboratory, Thrissur are produced herewith and marked as R4 (b), R4 (c) and R4 (d) respectively.
11. It is submitted that a study using advanced techniques is essential, as stated in the report of Ground water department, to identify the source of contamination of well water and to conclude whether the discharge of effluent from the units has caused any well water contamination in and around the industrial area. Action has already been initiated by the Board to conduct such a study with the help of CWRDM.

Dated this the 11<sup>th</sup> day of December, 2020



*Suseela Nair V.A.*  
**FOURTH RESPONDENT**

**SUSEELA NAIR. V.A**  
ENVIRONMENTAL ENGINEER