BEFORE THE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE BENCH AT CHENNAI

Original Application No. 131 of 2020 (SZ)

1. M. Jayachandran
   Son of Murugesan Naidu
   Gangaiamman Kovil Street,
   Puliyankannu- Navlock Village,
   Ranipet, Ranipet District – 632 401.
   9789052084; saisathyajith@gmail.com

2. B. GopiSathiyarajan
   Son of S. Balan,
   No. 4/36B, Bajanai Koil Street,
   Thandalam – Ranipet, Ranipet District – 632401 …Applicants
   9789052084; saisathyajith@gmail.com

Vs.

1. The Ministry of Environment
   Forest and Climant Change, Rep by its Secretary
   3rd Floor, Prithvi Wing
   Indira Parvayaran Bhawan
   JorBagh, New Delhi – 110003
   Phone. No. + 91 11 24695262, 24695265,
   24695132
   Email- secy-moef@nic.in

2. The State of Tamil Nadu
   Rep.by.its Secretary
   Environment and Forest Department
   Secretariat, Fort.St. George, Chennai 600 108
   Phone No:- 044 25671511
   Email Id:- forsec@tngov.in

3. The District Collector,
   District Collectorate
   District Institution of Education and Training
   (DIET) Campus,
   Kellys Road, Navalpur,
   Ranipet – 632401
   Email: collr-rpt@gov.in
   Phone No. – 8300310130

4. The Sub-Collector
   Cum Revenue Divisional Officer,
   Office of the Revenue Divisional Officer
   Ranipet – 632 401.
   Email : rdorpt.tnvlr@gmail.com
   Phone No. – 9445000416

5. The Member Secretary
   Tamil Nadu Pollution Control Board
   No. 76, Mount Salai, Guindy, Chennai 600 032
   Phone No.- 04422353145
   E-mail- tnpcb-chn@gov.in

6. The District Environmental Engineer,
   Tamil Nadu Pollution Control Board,
   Ranipet, Tamil Nadu

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7. The Chief Engineer,
Public Works Department, WRO
State Ground and Surface Water Resource Data Centre,
Tharamani, Chennai – 600 113
Phone No. 044 28410402
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8. M/s. Thirumalai Chemicals Limited
Rep. by its Chairman & Managing Director
25-A, SIPCOT Industrial Complex,
Ranipet, Tamil Nadu – 632 403
Ph. No:- 91471 244441
Email Id:- mail@thirumalaichemicals.com ...Respondents

REPLY FILED ON BEHALF OF THE 8TH RESPONDENT TO THE REPORT OF THE JOINT COMMITTEE DATED 13.12.2021

I, Ramya Bharathram, aged about 49 years, representing the 8th Respondent, having office at 5th Floor, SPIC House, 88, Mount Road, Chennai - 600032, do hereby solemnly affirm and sincerely state as follows:-

1. I am the Executive Director of the 8th Respondent (the "**Answering Respondent**") and as such well acquainted with the facts of the case and competent to swear to the present Affidavit.

2. The present Affidavit is being filed to place on record the Answering Respondent's reply/ observations along with the objections, to the Report dated 13.12.2021 filed by the Joint Committee constituted by this Hon'ble Tribunal vide Order dated 30.07.2020 ("**the Report**"). The Answering Respondent has also filed a Counter Affidavit to the Applicant's Reply dated 05.11.2021 and it is humbly submitted that the contents thereof be read as part and parcel of the present Reply.

3. At the outset, the Answering Respondent states that the Joint Committee has certified that the Answering Respondent had complied with the outstanding recommendations contained in its earlier report dated 11.02.2021. The Joint Committee has rightly observed that the Unit had submitted the Status Report on Environmental Audit of TCL prepared by IIT, Madras after commissioning of the upgraded ETP. Since the IIT Report certifying the adequacy of the upgraded ETP has been submitted, the condition regarding

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Ramya Bharathram

reduction in production by 50% stood complied with. Further, Respondent No.8 had submitted the DPR regarding soil remediation prepared by IIT, Madras, also submitted an action plan setting out the timeline for execution of work and the site in question has been developed with trees, shrubs and grass. Therefore, all the recommendations in the earlier report dated 11.02.2021 had been complied with and there was nothing pending to be done on the part of the Answering Respondent.

4. In so far as the Joint Committee's observations relating to the allegations of effluent discharge raised by the Application vide his reply dated 05.11.2021, the Answering Respondent states that the same are wholly incorrect and unscientific and also in contravention of law for reasons that are set out hereinbelow.

   a. That the samples were not collected in accordance with the procedures prescribed under law.

   b. That the results of the analysis are inconclusive and questionable.

   c. That some of the samples are well within the prescribed parameters.

   d. That the results of the analysis are unscientific.

5. **That the samples were not collected in accordance with the procedures prescribed under law**

   a. The Answering Respondent submits that Section 21 of the Water (Prevention and Control of Pollution) Act, 1974 ("**Water Act**") prescribes a detailed procedure to be followed for the purpose of collecting samples. The law *inter alia* requires a notice to be provided to the owner/ occupier of the industry, mandates that the samples are collected in the presence of the owner/ occupier and/ or their representative, the samples are divided into two parts and that the samples collected are sealed in containers in the presence of the owner/ occupier and/ or their representative and their signatures obtained. The Act also makes it clear that samples so collected and the results thereof will not be admissible in evidence unless the procedure set out therein has been followed. A combined reading of the provisions goes to show that the procedures set out therein are not just an empty formality but require scrupulous adherence. The provisions of the Water Act also

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provide the owner/ occupier with an option to have the second sample tested by the State Water Laboratory.

b. However, in the present case, the samples collected on 24.10.2021, 25.10.2021, 11.11.2021, 01.12.2021 were obtained without issuing a notice in the form set out under the Act. Further, the most crucial sample, i.e., the sample obtained on the date of the incident on 24.10.2021 was not even collected in the presence of the Answering Respondent and/ or its authorized agent. The samples were not divided into two parts and consequently, the Answering Respondent had no opportunity to make a request for reference of any of the samples collected, i.e., on 24.10.2021, 25.10.2021, 11.11.2021 and 01.12.2021, for testing by the State Water Laboratory.

c. The Answering Respondent submits that when the law mandates an act to be done in a particular way, it is the duty of the officials to execute the actions in the same way and there cannot be any deviations whatsoever. In the present case, the samples have been collected in a manner that is in complete contravention of the prescribed procedure. Further, the Answering Respondent has been deprived of its valuable statutory right to have the samples independently analysed by the State Water Laboratory. Since the samples have not been collected in a manner set out under law, the results/ analysis thereof cannot be admissible in evidence and ought to be disregarded on this ground alone.

6. **<u>That the results of the analysis are inconclusive and questionable</u>**

a. The Answering Respondent states that reports suffer from various fallacies thereby rendering the results highly inconclusive and questionable. For instance, while other reports in Annexure-1 clearly specify the location from which the samples were collected, the Report pertaining to the samples collected on the date of the incident, i.e., 24.10.2021 does not specify the location/ site at which the samples were collected from. The Answering Respondent submits that this is a crucial piece of information since the very credibility of the result stands compromised if the samples were not collected from the area/ site in dispute. This is the reason why law mandates the presence of the owner/ occupier or their agent

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at the time of collection of samples. However, the same was done without any notice to and in the absence of the Answering Respondent. In the absence of a clear identification regarding the source site of the sample, the result pertaining to the sample collected on 24.10.2021 ought to be disregarded entirely.

b. The samples collected have not been handed over for analysis in a timely manner. For instance, the sample collected on the date of the incident, i.e., on 24.10.2021 was handed over for analysis nearly 2 full days (45 hours) after collection. If results of analyses of samples are to be meaningful, then the sample collection and preservation must be done properly. Proper preservation and immediate analysis is of utmost importance in order to retard the chemical and biological changes in the sample. If not, the analysis of will not render a correct and accurate result. Since there have been procedural lapses and failure to analyse the samples in a timely manner, the credibility of the results is highly questionable and uncertain.

c. The Joint Committee appears to place heavy reliance on the samples collected on 01.12.2021 and the consequent report issued by one third party laboratory, M/s. Glens Laboratory to arrive at the conclusion that there was discharge of materials. However, the Joint Committee has failed to either hand over the report prepared by Glens Laboratory to the Answering Respondent or annex the same to the Report. On the contrary, only certain extracts are set out in the Report. In the absence of perusing the complete report issued by the third party laboratory, the Answering Respondent is not in a position to comment on the results/ conclusions derived therein. Until such time as the complete report is provided and the Answering Respondent has the opportunity to respond to the same, it is submitted that the findings in this regard be completely disregarded.

7. **<u>That some of the samples are well within the prescribed levels</u>**

On 25.10.2021, a sample was collected from the site identified as "stagnation water inside the premises of M/s. TCL near SBI ATM". The Answering Respondent states that this sample is extremely crucial since it was handed over for testing even before the sample collected on 24.10.2021 and therefore, the results of this sample would have been

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released prior in point of time and is not susceptible to deficiencies due to delayed testing. Further, the sample is the same as the water discharge that was observed on 24.10.2021 in as much as the 'stagnation' was due to an accumulation of the water as a result of a blocked outlet. The results of this sample clearly evidence that all the parameters are well within prescribed limits and therefore the conclusion that the Answering Respondent had discharged effluent, let alone untreated effluent, is wholly without any basis and ought to be disregarded entirely.

8. **That the results of the analysis are unscientific**

The analysis of the samples collected on 11.11.2021 is wholly unscientific for the following reasons:

a. Sample No. VLR – 244 -2 has been taken outside the Answering Respondent's Unit. As such, the site is one where there is a confluence of leachate waters from TN. Chromates and Chemicals, a closed oxidation pond and the rain water outlet from the Answering Respondent. The said sample shows a deviation in parameters like pH, BOD, COD and Suphides, all of which are maker contaminants of leachate from TN. Chromates and Chemicals and the closed oxidation pond.

b. Sample No. VLR - 245 shows a deviation in only one parameter i.e. sulphide. This sample has been collected close to the closed oxidation pond. The increase in level of sulphide is normally due to flooding and waterlogging of wetland soils (close to the closed Oxidation pond) and underwater sediments, all of which are not attributable to the Answering Respondent's Unit but from sources outside the Unit. Further, since the soil contains sulphide reducing bacterial, sulphates will also get converted into sulphides by bacterial action, as explained further hereinbelow.

c. Sample No. VLR - 246 shows only a marginal deviation in one parameter, i.e., pH Such an insignificant deviation may have occurred due to the reaction of rainwater with sulphur and nitrogen present in the surface soil. As such, since the deviation is *de minimis*, there arises no scope for any adverse effect on the environment.

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d. Sample No. VLR - 247 shows only a marginal deviation of TSS, COD and sulphides, all of which is bound to occur during when the flow of rainwater through surface soil is restricted or stopped at a particular place. Any stagnation of water in a particular place would naturally result in concentration of material and consequently higher levels of indicators. In the present case, since there was an uproar over discharge of rainwater, the Answering Respondent's Unit was constrained to the control the water flow and pump up the water to hold up tanks. During such periods, the accumulation of water would reflect as the marginally high levels of indicators. The Answering Respondent states that waterlogged areas are prone to contamination by sulphide (relevant extract from Encyclopedia of Soils in Environment, 2005 is set out below):

SULFUR IN SOILS | Overview

M.A. Tabatabai, in Encyclopedia of Soils in the Environment, 2005

Reduction of Sulfate in Waterlogged Soils

The reduction of sulfate to H2S is a process that occurs mainly by anaerobic bacteria; thus, it occurs only in anaerobic soils. This process is not important in aerobic agricultural soils, except perhaps in anaerobic microsites in soil aggregates. However, it is a major reaction in S cycling in waterlogged soils or periodic flooding, especially when in soils containing readily decomposable plant residues such as alfalfa (Medicago sativa). Bacterial reduction of sulfate involves either an assimilation or dissimilation process. In the former process, sulfate is reduced to the thiol (single bondSH) group of organic compounds for protein synthesis. In the latter process, the reduction leads to production of H2S under very low redox potential (Eh) values. Under normal conditions, however, H2S is not volatilized from soils, because it precipitates with Fe2+, Mn2+, Cu2+, Cu+, and/or Zn2+ present in soils. In the case of Fe2+, it forms ferrous sulfide (FeS), and pyrite (FeS2) is formed in severely reducing conditions by the reduction of sulfate to S2− by the bacteria Desulfovibrio desulfuricans, which reacts with FeS to produce FeS2.

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e. As for Sample No.VLR-248, the parameters are well within the limits prescribed by the TNPCB.

f. As the Answering Respondent has previously stated in all the pleadings filed in the matter, the gradient of the land and the topography of the SIPCOT industry is such that the Answering Respondent's Unit receives run off from all other industries including TCCL. The Answering Respondent has also filed the hydrogeological reports prepared in this regard including the latest report dated 27.10.2021 issued by the Vellore Institute of Technology, which *inter alia* demonstrate the in-flow of contaminants from other industries into the Answering Respondent's Unit. It is therefore humbly submitted that the reports/ their analysis will have to be interpreted keeping in mind the potential pollution from other industries. The Answering Respondent repeats and reiterates that it is not the source of contamination, as would be evident from the pleadings and reports filed and therefore cannot be held liable for pollution, if any.

g. As for the samples collected on 01.12.2021, at the outset, the Answering Respondent states that the same is bereft of any substantiation whatsoever. The Joint Committee has failed to provide or annex the report prepared by the external laboratory but conveniently placed on record only selective portions of the report. The Answering Respondent is not in a position to comment on the analysis without a complete copy of the report. However, without prejudice to this argument, even a perusal of the Table-1 extracted in the report evidences that the conclusions are unscientific and illogical. The Joint Committee has completely overlooked the fact that the TNPCB has itself permitted the Answering Respondent's Unit to install run off pits for the purpose of collecting excess process effluent and rainwater, all of which are duly treated/ processed at the ETP before being disposed in the manner stipulated. The samples collected on this date appears to be at places before the water and/ or process effluent could be drained into the run off pit and therefore, the values taken before the treatment by the ETP would not strictly conform to the prescribed standards. Such a choice of sample itself is therefore incorrect and the samples that ought to have been collected are the ones post treatment at the ETP.

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9. The Answering Respondent states that after the incident forming the subject matter of the Applicant's present complaint, the Assistant Environmental Engineer TNPCB, District Environmental Engineer TNPCB, & Joint Chief Environmental Engineer TNPCB visited the Answering Respondent's Unit on 24.10.2021, 25.10.2021, 11.11.2021, 24.11.2021, inspected the functioning of the upgraded ZLD system and recorded that it was operating in a satisfactory manner and did not observe any deviations. If the ZLD system was functioning in a satisfactory manner and without any deviations, there arises no question of discharge of effluents in any manner whatsoever, much less in the manner alleged.

10. The Answering Respondent states that even though it denies the allegations regarding discharge of effluent wholly, the Answering Respondent, as a responsible and law abiding citizen, is willing to comply with the recommendations set out by the TNPCB vide its letter dated 20.11.2021. In particular, as part of the continuous technological improvements undertaken by the Unit, the Answering Respondent submits that it would provide a robust online check and monitoring system at all the run off outlets and also connect the same to the Water Quality Watch Centre of TNPCB so as to enable the officials to monitor rain water outlets during rains.

In the above circumstances, it is humbly submitted that this Hon'ble Tribunal consider and take on record the reply of Respondent No.8 to the Report and pass appropriate orders including setting aside the findings arrived at by the Joint Committee to the extent set out hereinabove and thus render justice.

Dated at Chennai on this 26th day of January, 2022.

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Counsel for 8th Respondent

8th Respondent

VERIFICATION

I, Ramya Bharathram, wife of V. Bharathram, aged about 49 years and having office at 5th Floor, SPIC House, 88, Mount Road, Chennai - 600032, do affirm that I am the Authorised Signatory of the Answering Respondent and hereby verify that the contents of this reply are true and based on legal advice, and that I have not suppressed any material fact.

Date: 26th January, 2022

Place: Chennai

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8th Respondent