

Report of the Joint Committee on Suo Motu application taken by the Hon'ble NGT (SZ), Chennai based on the News Published in the Dinakaran dated 02/08/2017 on the caption of "Toxic Foam formation in Mettur Dam".

1. Back Ground

The Hon'ble National Green Tribunal(SZ), Chennai in the matter of original application No. 174/2017 Suo Motu proceedings initiated based on the basis of the News paper report published in the Dinakaran Tamil Daily under the caption " Toxic Foam formation in Mettur Dam" directed on 06/01/2020 as in point 10 & 11 (Annexure-I) that,

10. *Under such circumstances we feel it appropriate to constitute a joint committee comprising of the District Collector, and the Tamil Nadu Pollution Control Board to inspect the industries in question and also service stations and other units who are also responsible for discharge of untreated effluent 6 in the Dam which ultimately reaches Cauvery River and the Mettur Dam and contaminating the water and submit a present status report and also take action if any taken, if there is any violation found, within a period of one month.*

11. *They are also directed to take sample of the water in Mettur Dam and drain and analyse the same and submit report about its quality as well. Tamil Nadu State Pollution Control Board (TNSPCB) will be the nodal agency for this purpose. They are directed to submit the report to this Tribunal through email ngtszfling@gmail.com within a period of one month as mentioned above.*

In compliance of the above mentioned order, the Tamil Nadu Pollution Control Board constituted a Committee with the following officials. The Committee members were communicated vide proceedings dated 03/02/2020 (Annexure-II).

Sl.No	Name and designation of the Officer	Committee
1.	The District Collector, Salem	Member
2.	The Joint Chief Environmental Engineer (M) TNPCB, Salem Zone	Member
3.	The District Environmental Engineer, TNPCB, Salem	Member/Convener
4.	The Assistant Director(Lab), AEL, TNPCB, Salem	Member

Based on the above, the Committee met at the District Collectorate on 14/02/2020 and briefed about the purpose of the Committee. The District Collector, Salem authorized the Sub-Collector, Mettur to inspect the units along with the

Committee on behalf of the District Collector, Salem. The joint committee report was submitted to the Hon'ble NGT.

Further, the Hon'ble NGT (SZ) in its order dated 26.03.2021 has directed the following

*“The Joint Committee is also directed to inspect the area in question again and find out the present status and whether recommendations made by them to rectify the pollution caused by the erring units have been complied with and whether any improvement caused in the water quality in that area after making analysis of the water from different locations where the possibility of magnesium particles in the sludge that is being stored in the manufacturing units being carried by the water body. So, the Committee as well as Pollution Control Board are directed to file the further report as directed on or before 30.04.2021”.*

Subsequently, the Hon'ble NGT (SZ) in its order dated 20.09.2021 has directed the following

*“The Committee as well as Pollution Control Board are directed to submit the respective reports as directed by this Tribunal on or before 07.10.2021”*

Now, the case is posted on 01.12.2021.

## **2. Field Observation of Joint Committee.**

The District Collector, Salem authorized the Sub-Collector, Mettur to inspect the units along with the Committee on behalf of the District Collector, Salem. The Committee started inspection on 04/08/2021 & 05/08/2021 in SIDCO area and inspected 36 No's of the Magnesium sulphate units.

Further, the Committee inspected the entire public drain located in the SIDCO area and water samples were taken from the public drain.

### **i. Inspection of the industries.**

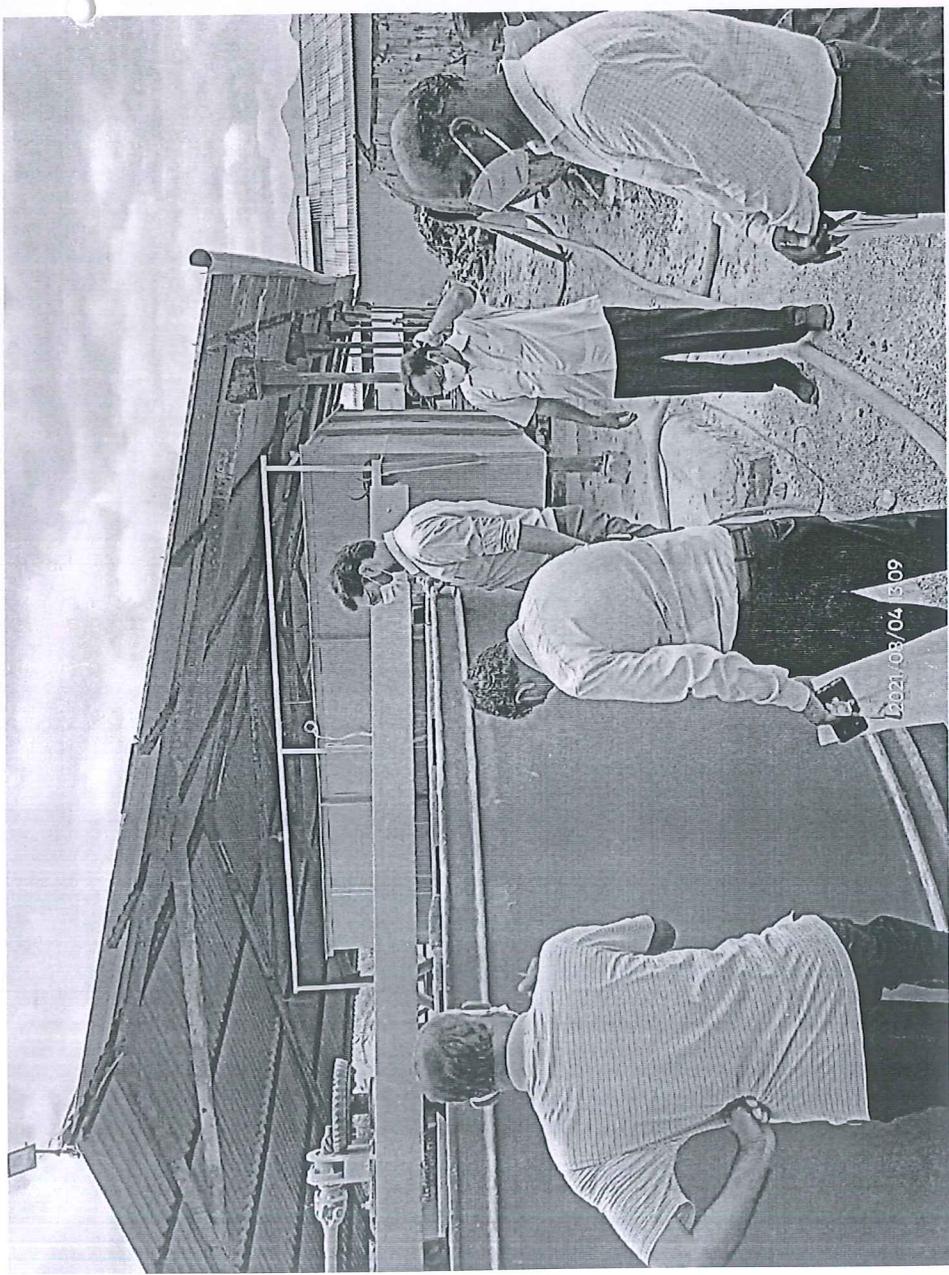
The Committee has inspected 36 Nos. of magnesium sulphate units for which directions were issued. The inspection reports are submitted vide Annexure-III.

The Committee observed that there are no trade effluent/sewage discharge into the public drain which flows through the SIDCO industrial area. All are small scale industries. In a magnesium sulphate unit, the magnesium ore (Magnesium Carbonate ( $MgCO_3$ ) or Magnesium Oxide ( $MgO$ )) are reacted with sulphuric acid ( $H_2SO_4$ ) to get Magnesium Sulphate solution (10%). The solution is filtered through filter press and evaporated to get crystal of magnesium sulphate.

The Magnesium ore contains Magnesium and silica. The untreated ore and silicates were generated as sludge which contains 4 to 5% of magnesium sulphate. The sludge is being pulverized by the units and sent for agriculture use.



Inspection of the Magnesium Sulphate manufacturing units located in SIDCO, Mettur by the joint committee.



## ii. Inspection of the public drain.

The public drain starts from Raman Nagar area and flows through the SIDCO industrial area where the Magnesium sulphate units are located. Another one public drain starts from Karumalaikoodal area is joined with this drain. The public drain joins in the surplus course of the River Cauvery and finally it confluences with

River Cauvery. Water samples were collected on 04/08/2021 from the public drain from Raman Nagar area, middle of the SIDCO area, Karumalaikoodal area drain, near M/s.Rajewari Industries, Plot No.34 C and at the end of the drain.

The report of analysis of the water sample is submitted vide Annexure-IV

There was no foam in the entire stretch of the public drain flows in the SIDCO area during inspection on 04/08/2021 and 05/08/2021. Also, the public reported that there is no foam in the drain for the last three and half years.



### 3. Inspection of service stations

Three numbers of service stations namely M/s. Venkateshwarra Service Station, M/s. PMV Service Station and M/s. Paramasivam Water Service Station was inspected by the District Environmental Engineer, TNPCB, Salem and found that the effluent treatment plant were not in operation and discharging acid bearing effluent from tankers into the river Cauvery through public drain. Closure direction has been issued by the Board for all the above mentioned three service stations.

### 4. Monitoring Results and Discussions.

During filed visit, the Joint Committee collected water samples on 04/08/2021 from the following locations and analysed in Advanced Environmental Laboratory, Tamil Nadu Pollution Control Board, Salem.

S.No	Date of sample collection	Location of sample collection	Latitude & Longitude
1.	04.08.2021	Storm water drain running in north direction of Mettur SIDCO.	11.805797, 77.828236
2.	04.08.2021	Storm water drain at the rear side of M/s. Abirami Chemicals, Plot No.30, Mettur SIDCO.	11.798701, 77.828512
3.	04.08.2021	Karumalaikoodal odai at rear side of M/s.Abirami Chemicals, Plot No.30, Mettur SIDCO.	11.798629, 77.828525
4.	04.08.2021	Odai at rear side of M/s. Rajeswari Industries, Plot No.34 C, Mettur SIDCO.	11.796495, 77.827063
5.	04.08.2021	Odai adjacent to Mettur SIDCO under the Periyar palms bridge confluencing with surplus course of River Cauvery.	11.790089, 77.820900

The report of analysis (copy enclosed) indicates that the maximum concentration of the magnesium has reduced to 362 mg/l from 544 mg/l between samples collected on 04.08.2021 and 11.03.2020 respectively. Also, the sulphate is measured as 1544 mg/l in the public sewer flows through the magnesium sulphate units.

Further, the quality of the River Cauvery is being monitored by the Advanced Environmental Laboratory, Salem. Magnesium is in the range of 11 – 108 mg/l for the period April 2020- April 2021. Whereas the desirable magnesium limit is 30 mg/l and permissible limit in the absence of alternate source is 100 mg/l as per specification of drinking water standard IS 10500:2012.

Sulphate is in the range of 7.7– 204 mg/l for the period April 2020- April 2021. Whereas the desirable sulphate limit is 200 mg/l and permissible limit in the absence of alternate source is 400 mg/l as per specification of drinking water standard IS 10500:2012.

It is observed that the magnesium and the sulphate level are higher in the public sewer which flows thorough magnesium sulphate units.

#### **5. Environmental compensation:**

The Hon'ble NGT in its order dated 27/07/2020 directed in para 6 as follows  
*“The committee is directed to assess the environmental compensation for the violation found by them and possible cause of pollution being caused to the water and further they are also directed to ascertain the source for existence of excess Magnesium and Sulphate in water which reflects in the report and if so what are the remedial measures to be taken to rectify the same and who has to do the same and that must also be form part of the compensation to be assessed. The committee is given two more months time to submit the report as directed and they are directed to submit the report on or before 22.9.2020 to this Tribunal through e-mail or e-filing at [ngtszfiling@gmail.com](mailto:ngtszfiling@gmail.com)”*

Based on the above mentioned order, Environmental compensation has been assessed for the violation found by the committee and based on the recommendations of the committee, TNPC Board issued directions to 38 No's of Magnesium Sulphate manufacturing units, Mettur SIDCO area, Mettur Taluk, Salem District to pay the levied amount towards recovery of Environmental Compensation to Tamil Nadu Pollution Control Board vide Procs dated 19.09.2020.

Aggrieved by the direction, Magnesium sulphate manufacturing units approached the Hon'ble NGT against the environmental compensation levied on the units without giving opportunity. The Hon'ble NGT (SZ) vide its order dated 24.02.2021 in OA.No. 174 of 2017 and I.A. No. 127 of 2020 has “dismissed those applications stating that they are not maintainable and they will be getting a statutory remedy of challenging the final order that is likely to be passed by the Tamil Nadu Pollution Control Board (TNPCB) raising all the contentions raised by them in the Original Applications”

In view of the above, the Board has issued direction under Section 5 of the Environment (Protection) Act, 1986 as amended so as to recover environmental compensation from the 38 magnesium sulphate manufacturing units, located at Mettur SIDCO area, Mettur Taluk and Salem District vide Proc dated 18.03.2021.

Again aggrieved, the unit's filed Appeal No. 11 to 48/2021 before the Hon'ble NGT (SZ) to challenge the proceedings of the Board in which environmental compensation levied vide TNPC Board Procs dated 18.03.2021.

The Hon'ble NGT in its order dated 22/06/2021 disposed the Appeal No. 11 to 48/2021 directing the following

(i) The impugned orders under challenge passed by the Tamil Nadu Pollution Control Board dated 18.03.2021 are hereby set aside and the matter is remitted back to the Tamil Nadu Pollution Control Board for a fresh disposal in accordance with law.

(ii) The Tamil Nadu Pollution Control Board is directed to serve the copy of the Joint Committee report to the appellants which is the basis for assessing the environmental compensation and give them an opportunity to file their objections to the same and then conduct a personal hearing and pass appropriate orders afresh, by giving reasons as to why they are accepting or not accepting/ modifying or not modifying the amount of compensation assessed by the Joint Committee, after considering the question as to whether the appellant units have violated any of the conditions or any of the act committed by them had resulted in the alleged pollution and that must be reflected in the order that is going to be passed by them.

(iii) The Tamil Nadu Pollution Control Board is directed to complete the entire proceedings within a period of 45 (Forty Five) days from the date of receipt of this order.

(iv) The Tamil Nadu Pollution Control Board is also directed to fix the date of hearing in such a way that they do not have a cluster meeting as they have done earlier, instead they can divide the number of persons into small groups, so that proper individual hearing can be conducted and sufficient time can be given to the parties to submit their case as well.

Based on the above order, the magnesium sulphate units were requested to appear for personal hearing vide the District Environmental Engineer letter dated 06.08.2021. The magnesium sulphate units in their reply letter requested the copy of the joint committee report. In view of the above, all the 38 magnesium sulphate units were communicated with the copy of the joint committee report vide District Environmental Engineer letter dated 21.09.2021.

Further, personal hearing to the magnesium sulphate units is proposed to be conducted during December 2021 by the District Environmental Engineer, TNPCB, Salem.

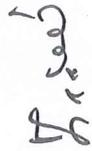
## 6. Remarks of the committee inspection:

The joint committee inspected the SIDCO Industrial estate, Mettur on 04.08.2021 & 05.08.2021 and the following were observed during inspection. The copy of the inspection reports are annexed vide Annexure-III.

1. 12 numbers of units have completed the joint committee earlier recommendations (Inspection reports Sl.No's. 3,4,8,18,20,22,23,24,27,28,29&32).
2. 24 numbers of units have partially completed the joint committee earlier recommendations (Inspection reports Sl. No's. 1,2,5,6,7,9,10,11,12,13,14,15,16, 17, 19,21,25,26,30,31,33,34,35&36).
3. In some area, the public sewer which flows through the industrial estate is encroached by the magnesium sulphate units.

In view of the above, the following are recommended by the joint committee

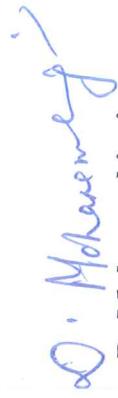
1. All the Magnesium Sulphate manufacturing units in the SIDCO area Mettur, shall comply with the joint committee recommendations and directions issued by the TNPC Board within three months.
2. The TNPC Board shall monitor the units located in SIDCO area Mettur for any illegal discharge of effluent/solid waste into the public sewer.
3. The TNPC Board shall monitor the quality of the River Cauvery water and the public sewer which flows through the industrial estate.
4. The revenue authority shall remove the encroachments made by the magnesium sulphate units.
5. The TNPC Board can forfeit the Bank performance guarantee deposit of Rs. 2,00,000 for the non compliance of the joint committee recommendations which should be completed before 02.01.2021.
6. Further bank guarantee of Rs. 2,00,000 should be given to the Board to complete the recommendations of the joint committee within three months.
7. The magnesium sulphate units shall not store the sludge outside the unit to avoid rain water runoff. If it is found, TNPCB can issue closure direction to the unit.

  
S. Karmegam  
I.A.S.,  
District Collector  
Salem

(Expired)

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