

Item No.03:

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

Original Application No. 163 of 2020 (SZ)

(Through Video Conference)

IN THE MATTER OF

Tribunal on its own motion-SUO MOTU

Based on the News item in Dinamalar Newspaper, Chennai

Edition dated 21.08.2020, “Halfwits dumped Aluminium waste in Canal”

...Applicant(s)

Versus

- 1) The Chief Secretary to Govt. of Tamil Nadu,
Govt Secretariat, Fort St. George
Chennai, Tamil Nadu – 600009
- 2) The Secretary to Govt. of Tamil Nadu,
Department of Environment,
Govt. Secretariat, Fort St. George
Chennai, Tamil Nadu - 600009
- 3) Additional Chief Secretary to Govt. of Tamil Nadu,
Municipal Administration and Water Supply Department,
Govt. Secretariat, Fort St. George
Chennai, Tamil Nadu - 600009
- 4) The Principal Secretary to Government,
Public Works Department,
Govt. Secretariat, Fort St. George,
Chennai – 600009.
- 5) The Principal Secretary to Govt. of Tamil Nadu,
Industries Department,
Govt. Secretariat, Fort St. George
Chennai, Tamil Nadu – 600009
- 6) The Chairman,
Tamil Nadu Pollution Control Board,
No.76, Anna Salai, Guindy,
Chennai, Tamil Nadu - 600032

7) The District Collector,
Erode District,
First Floor, Collectorate,
Erode – 638011.

(8) The Commissioner,
Erode City Municipal Corporation Office,
New No.246, Old No.894 Brough Road,
Erode – 638 001.

...Respondent(s)

Date of hearing: 23rd December, 2020.

CORAM:

HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER

HON'BLE MR. SAIBAL DASGUPTA, EXPERT MEMBER

For Applicant(s): Suo Motu by Court

For Respondent(s): Sri. Dr. V.R. Thirunarayanan for R1 to R5, R7 & R8.
Sri. Kasirajan through Ms. Meena for R6.

Judgement

1. The above case has been Suo Motu registered by this Tribunal on the basis of the news paper report published in the Hindu Tamil Thisai dated 07.10.2020 under the caption “*நிர்ணயிக்கப்பட்ட அளவைவிட அதிகமான உலோகங்கள் கலப்பால் மாசுபடும்: நொய்யல் ஆறு பாரதியார் பல்கலைக்கழக ஆய்வில் அதிர்ச்சி தகவல்*” and also Dinamalar daily Chennai edition dated 21.08.2020 under the caption “*கால்வாயில் அலுமினிய கழிவு கொட்டி சென்ற ‘அறிவிலி’கள்*” (**Halfwits dumped aluminium waste in Canal**) and this Tribunal by order dated 01.09.2020 appointed a Joint Committee comprising of **1)** the District Collector, Erode District **2)** a Senior officer/Scientist deputed by the Chairman, Tamil Nadu State Pollution Control Board **3)** The Municipal Commissioner, Erode City Municipal

Corporation 4) The Superintending Engineer, Public works Department (PWD) and Water Resources Organisation (WRO) of that respective area to inspect the units in question which are situated in and around that Kalingarayan canal area in Erode district and submit a factual as well as action taken report, if there is any violation committed by the any of the industries including imposition of environmental compensation and other regulatory actions to be taken provided under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981.

2. The committee was also directed to inspect the units mentioned above and ascertain as to whether they have provided all necessary infrastructure and mechanism to avoid such things and whether they are following the terms and conditions imposed in the consent or other clearances granted.
3. The committee was also directed to take the water samples from the Kalingarayan canal to ascertain the water quality in respect of Bio Chemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD), and also presence of heavy metals like Copper, Ammonia, Mercury, Arsenic, Chromium, Aluminium and Lead etc., and also the Total Coli Form and Fecal Coli Form.
4. They were also directed to trace the sources of such pollution and suggest the ways and means to remedy the situation, if water is contaminated with heavy metals or other materials affecting its quality.
5. They were also directed to ascertain the inlet and outlet water qualities of effluent treatment plant if any, situated in the units and if they are not confirming to the standard provided, then the remedial measures to be taken by the respective units to remedy the same should also be mentioned in the report.

6. The Public Works Department will be the nodal agency for co-ordination and for providing all necessary logistics for this purpose.
7. The case was posted for filing the report from time to time and it was adjourned to today lastly by notification dated 09.11.2020.
8. When the matter came up for hearing today through Video Conference, Sri. Dr. V. R. Thirunarayanan represented respondents 1 to 5, 7 and 8 and Sri. Kasirajan through Ms. Meena represented 6th respondent. Service is complete.
9. We have received two reports, one signed on 29.10.2020 and other signed on 21.12.2020 which is titled as the report of the Joint Committee and comprehensive report of the Joint Committee respectively which read as follows:-

“Report of the Joint Committee constituted by the Hon’ble NGT (SZ), Chennai in respect of Suo Motu Case O. A. No. 163 of 2020 regarding Kalingarayan Canal Water Pollution

I.Back Ground of the Case:

Hon’ble National Green Tribunal (SZ), Chennai has taken up a Suo Motu O. A. No. 163/2020 based on the News published in Dinamalar Daily Newspaper Dated: 21.08.2020 Chennai Supplementary under the Caption “Halfwits dumped Aluminium waste in Canal” regarding Kalingarayan Canal Water Pollution. The Chief Secretary to Government of Tamil Nadu, the Secretary to Government of Tamilnadu, Additional Chief Secretary to Government of Tamilnadu, Municipal Administration and Water Supply Department, the Principal Secretary to Government, Public Works Department, the Principal Secretary to Government of Tamilnadu, the Chairman, Tamilnadu Pollution Control Board, the District Collector, Erode and the Commissioner, Erode City Municipal Corporation are the respondents in this case.

The Hon’ble NGT (SZ), Chennai has constituted a Joint Committee comprising the District Collector, Erode, a Senior officer or Scientist deputed by the Chairman, Tamilnadu Pollution Control Board, the Municipal Commissioner, Erode City Municipal Corporation, the Superintending Engineer, Public Works Department (PWD) and Water Resources Organisation to inspect the units which are situated near Kalingarayan Canal area in Erode District and submit a factual as well as action taken report on the violation if any committed by any of the industries. Also, the Committee was directed to collect water samples from the Kalingarayan Canal to ascertain the water quality and to submit a report within a period of two months i.e., on or before 09.11.2020. The Public Works Department has been nominated as Nodal Agency for co-

ordination and for providing all necessary logistics for the case.

The District Collector, Erode and Joint Committee members have inspected Kalingarayan Canal Stretch and the industries located in the close vicinity of Kalingarayan Canal on 21.09.2020, 22.09.2020 & 16.10.2020. The Report of the Joint Committee is submitted as below.

II. A brief introduction of Kalingarayan Canal in Erode District:

River Bhavani originates from Western Ghats in Nilgiris District and flows through Coimbatore District, then enters into Erode District at Bhavanisagar Dam. It flows through Bhavanisagar Town Panchayat, Sathyamangalam Municipality, Gobichettipalayam Taluk, Bhavani Taluk and finally reaches Kalingarayan Anaicut at Bhavani. From the Kalingarayan Anaicut, Kalingarayan Canal is branched out from the River Bhavani and it flows through Erode District for about 92 Km. The remaining part of River Bhavani confluences with River Cauvery at Kooduthurai, Bhavani near Sangameshwarar Temple.

Kalingarayan Canal is a major irrigation canal. There is no drinking water intake well in the canal. The Kalingarayan Canal is lined with RCC upto Konavaikkal (20 Km). Due to concrete lining of Kalingarayan Canal, access of industrial effluent into canal is prevented. Baby Canal is constructed along the right side of the Canal to prevent the entry of sewage, sullage and industrial effluents into canal. Kalingarayan Canal water quality is monitored by TNPCB by analysing water samples collected from the Canal at R. N. Pudur and Vairapalayam in Erode Taluk.

III. Action taken on the disposal of Aluminium Waste in Kalingarayan Canal

Based on the news telecasted in Polimer News Channel and news published in the Dinamalar and Kaalaikathir daily newspapers on 21.08.2020, the said location was inspected by the Engineers of O/o. District Environmental Engineer, TNPCB, Erode on 22.08.2020 and the TDS level at the Kalingarayan Canal was found to be 110 mg/l. There is no discharge of trade effluent from industries situated near the canal. During investigation, it was reported by the nearby public that an unknown vehicle has dumped the waste Aluminium Powder in Kalingarayan Canal. This waste aluminium powder has given an external coating to the waste materials floating in the canal. However, the waste material floating in the canal was removed by the PWD, Erode on the same day (20.08.2020). There is no Aluminium based industries located in the vicinity of Kalingarayan Canal. Immediately after the removal of the floating waste coated with Aluminium powder, the canal water retained its normalcy,

IV. a. Details of Trade Effluent generating industries located and in operation at 0 to 5 Km from Kalingarayan Canal:

In Erode in the vicinity of Kalingarayan Canal, industries such as Textile Dyeing - 104 Nos., Bleaching - 225 Nos., Tannery - 30 Nos. are under operation. All these industries have obtained consent of Tamilnadu Pollution Control Board. No unauthorized dyeing/bleaching/tannery industries are under operation in Erode. All these industries have provided individual effluent treatment plants for the treatment of waste water generated. Recovered water is reused in the process. Sludge generated is transported to cement industries for co-processing.

b. Kalingarayan Canal Water Quality Assessment done by TNPCB from January 2019 to September 2020

Consolidated report of analysis of the Kalingarayan canal water for the period 2019 - 2020 (through MINARS) is enclosed as Annexure - I. The range value of the Kalingarayan canal water quality parameters collected and assessed by TNPCB between January 2019 to December 2019 and from January 2020 to September 2020 is submitted as below.

Kalingarayan Canal Water Quality Range Values:

Sl. No.	Parameters	Point of Sample Collection / Values (January 2019 – December 2019)		Point of Sample Collection / Values (January 2020 – September 2020)	
		Kalingarayan Canal U/s at R. N. Pudur	Kalingarayan Canal D/s at Vairapalayam	Kalingarayan Canal U/s at R. N. Pudur	Kalingarayan Canal D/s at Vairapalayam
1.	Temperature (°c)	28 - 40	28 - 40	25 - 32	28 - 32.6
2.	pH	6.88 - 8.18	7.11 - 8.15	7.02 - 8.39	7.28 - 8.39
3.	TSS (mg/l)	8 - 40	8 - 48	4 - 28	8 - 28
4.	TDS (mg/l)	190 - 372	184 - 408	252 - 348	248 - 364
5.	COD (mg/l)	16	8 - 16	16	16
6.	Conductivity (µmhos/cm)	224 - 525	221 - 622	337 - 640	346 - 506
7.	Dissolved Oxygen (mg/l)	6.1 - 7.9	6 - 8.6	5.6 - 6.8	5.7 - 6.9
8.	Bio Chemical Oxygen Demand (mg/l)	0.4 - 2.2	0.4 - 2.2	0.3 - 5	0.1 - 1.4
9.	Nitrates - N (mg/l)	0.017 - 0.39	0.028 - 0.42	0.15 - 0.236	0.164 - 0.268
10.	Nitrite - N (mg/l)	0.004 - 0.029	0.001 - 0.03	0.006 - 0.049	0.007 - 0.11
11.	Total Coliform MPN/100 ml	94 - 790	84 - 840	70 - 210	94 - 220
12.	Fecal Coliform MPN/100 ml	26 - 330	25 - 330	21 - 63	22 - 70

Water Samples have been collected from Kalingarayan Canal at the following locations during joint committee inspection and the ROA is submitted as below:

Sl. No.	Sampling Locations at Kalingarayan Canal
1.	Kalingarayan Canal at NTADCL Water Intake Point (NGT/KC – 1)
2.	Kalingarayan Canal near M/s. India Dyeing Mills Pvt. Ltd., (NGT/KC – 2)
3.	Kalingarayan Canal Opposite to Christhu Jothi Matric. Hr. Sec. School (NGT/KC – 3)
4.	Kalingarayan Canal at Vendipalayam (NGT/KC – 4)

Report of Analysis of the samples collected at the above locations in Kalingarayan Canal

Sl. No.	Parameters	Kalingarayan Canal at NTADCL Water Intake Point (NGT/KC-1)	Kalingarayan Canal near M/s. India Dyeing Mills Pvt. Ltd., (NGT/KC-2)	Kalingarayan Canal Opposite to Christhu Jothi Matric. Hr. Sec. School (NGT/KC-3)	Kalingarayan Canal at Vendipalayam (NGT/KC-4)
1	Turbidity NTU	4.1	2.8	1.4	1.1
2	Colour ml	< 5	< 5	< 5	< 5

3	Conductivity at 25°C µmhos/cm	502	472	498	520
4	pH at 25°C	7.94	7.94	7.96	7.85
5	Total Suspended Solids at 103°C - 105°C mg/l	20	12	4	8
6	TDS at 180°C mg/l	328	308	328	344
7	Chloride as CL mg/l	37	37	37	43
8	Sulphate as SO4 mg/l	27	29	27	35
9	Oil & Grease mg/l	< 4	< 4	< 4	<4
10	BOD (at 27°C for 3 days) mg/l	< 2	< 2	< 2	<2
11	COD mg/l	16	16	16	16
12	Ammonical Nitrogen as NH ₃ - N mg/l	< 2	< 2	< 2	<2
13	Total Kjeldhal. Nitrogen mg/l	2.24	2.8	2.8	2.8
14	Fluoride as F mg/l	0.086	0.075	0.115	0.150
15	Total Hardness as CaCO ₃ mg/l	206	194	192	200
16	% Sodium	23	23	24	25
17	Iron Total as Fe mg/l	0.204	0.167	0.223	0.241
18	Total Residual Chlorine* mg/l	<1	<1	<1	<1
19	Total Chromium mg/l	< 0.05	< 0.05	< 0.05	< 0.05
20	Alkalinity as CaCO ₃ mg/l	208	204	200	204
21	Ph.Compounds mg/l	< 0.05	< 0.05	< 0.05	< 0.05
22	Nitrate Nitrogen as NO ₃ mg/l	0.142	0.164	0.235	0.264
23	Nitrite Nitrogen as NO ₂ mg/l	0.035	0.038	0.025	0.063
24	Sulphide * mg/l	<1	<1	<1	<1
25	Total Phosphorus mg/l	0.879	1.111	1.064	0.833
26	Phosphate as PO ₄ mg/l	0.361	0.328	0.3	0.495
27	Cyanide mg/l	< 0.05	< 0.05	< 0.05	< 0.05
28	Hexavalent Chromium mg/l	< 0.05	< 0.05	< 0.05	< 0.05
29	Copper * mg/l	< 0.0015	< 0.0015	< 0.0015	< 0.0015
30	Zinc* mg/l	< 0.0015	< 0.0015	< 0.0015	< 0.0015
31	Lead* mg/l	< 0.015	< 0.015	< 0.015	< 0.015
32	Cadmium* mg/l	< 0.0008	< 0.0008	< 0.0008	< 0.0008
33	Nickel* mg/l	< 0.006	< 0.006	< 0.006	< 0.006
34	Arsenic* mg/l	< 0.01	< 0.01	< 0.01	< 0.01
35	Mercury* mg/l	< 0.003	< 0.003	< 0.003	< 0.003
36	Aluminium* mg/l	< 0.006	< 0.006	< 0.006	< 0.006

37	Dissolved Oxygen mg/l	6.7	6.7	6.6	6.2
38	Faecal Coliform MPN/100 ml	27	46	9.3	17
39	Total Coliform MPN/100 ml	79	170	34	48

Note: The presence of Faecal Coliform and Total Coliform indicates the discharge of sewage into Kalingarayan Canal at one location (20 Km)

1. The Report of Analysis of the samples collected reveals the presence of Faecal Coliform and Total Coliform indicates the discharge of sewage into Kalingarayan Canal. The comparison of Kalingaryan canal water quality prior to the disposal of Aluminium waste and after the disposal of Aluminium waste remains the same which reveals that the quality of canal water due to the disposal of Aluminium waste is not altered.
2. Konavaikkal is a small water stream joining with Kalingarayan Canal. Residential, Railway junction and industrial areas are located along this stream stretch.
3. Random inspections were carried out in the dyeing and tannery industries located at the Kalingarayan Canal stretch at Erode as below

Sl. No.	Name of the industry & location	Type of Industry	Observations
1.	M/s. India Dyeing Mills Pvt. Ltd., Erode	Dyeing	The unit was found operating ZLD System satisfactorily.
2.	M/s. Sri Ranga Tannery, Erode	Tannery	The unit was found operating ZLD System satisfactorily.
3.	M/s. Pioneer Processing India, Erode	Dyeing	The unit was found operating ZLD System satisfactorily.
4.	M/s. Armstrong Process, Erode	Dyeing	The unit was found operating ZLD System satisfactorily.
5.	M/s. Pushpam Tex, Erode	Dyeing	The unit was found operating ZLD System satisfactorily.

4. On the instruction of TNPCB, the textile association have proposed Five Common Effluent Treatment Plants (CETPs) at Erode for the existing processing industries having individual effluent treatment plants (IETPs) for the effective implementation of Zero Liquid Discharge. The Association of All Textile Processors at Erode has purchased 27 Acres of land and has obtained Consent for Establishment (CTE) from TNPCB for establishing CETPs during 13.02.2020 & 10.03.2020.

V. Status of Sewage Treatment Plant (STP) in Erode City Municipal Corporation limit:

Erode City Municipal Corporation has 60 Wards and has the population of 4,98,121 (based on 2011 Census), having 1.00 lakhs households. 33.75 MLD of sewage is generated from Erode City Municipal Corporation limit. The Corporation has installed a sewage treatment plant of capacity 50.55 MLD at Peelamedu Village, Vendipalayam. At present, 15000 Households are connected to sewage

treatment plant through UGDSS. 6.00 MLD of Sewage generated from these 15000 Household is conveyed to Sewage Treatment Plant (STP). The treated sewage after meeting the standards is discharged into Perumpallam Odai which finally joins with River Cauvery. The Corporation has reported that the UGDSS for another 75000 households will be completed before May 2022.

TNPCB has issued directions among the other directions to the Commissioner, Commissionerate of Municipal Administration, Chennai to instruct Commissioner, Erode Corporation as below vide Board's Proc. Dt. 01.08.2018.

"The local authorities of villages, towns and cities along the river Cauvery shall ensure proper channelization and proper treatment of domestic sewage generated from the villages/ towns along the bank of River Cauvery and Kalingarayan Canal through sewage treatment plants and shall ensure to comply with the sewage discharge norms notified under the Environmental (Protection) Act, 1986".

Most of the houses in UGDSS uncovered area have provided septic tanks for the treatment and disposal of sewage generated. Hence, after the implementation of UGDSS for the remaining areas, the disposal of sewage through a stream namely Konavaikkal to Kalingarayan Canal will be prevented.

VI. Solid Waste Management by Erode City Municipal Corporation:

Status of Solid Waste Management at Vairapalayam MSW Dump

Site:

On the right bank of River Cauvery at Vairapalayam, the erstwhile Municipal Solid waste dump site of Erode City Municipal Corporation is located. Earlier, the Corporation had dumped about 80,850 m³ of Municipal Solid Waste (MSW) in that site and the leachate generated from this site was mixed with river Cauvery.

Based on the directions issued by TNPCB to the Commissioner, Erode Corporation to stop dumping of municipal solid waste on the banks of River Cauvery at Vairapalayam, Erode and to comply with the Solid Waste Management Rules, 2016 vide Board's Proc. Dt. 01/08/2018, the Erode City Municipal Corporation has cleared and processed the entire MSW dumped at Vairapalayam MSW dump site. At present, no MSW is available at the Vairapalayam MSW dump site. This will prevent the flow of MSW leachate into River and carryover of municipal solid waste in river water during rainy seasons and flood.

Status of Solid Waste Management at Vendipalayam MSW Dump

Site:

On the right bank of Kalingarayan Canal at Vendipalayam, the erstwhile Municipal Solid Waste Dump Site of Erode City Municipal Corporation is located. The Corporation had dumped around 6,00,000 m³ of Municipal Solid Waste (MSW). The Erode City Municipal Corporation has commissioned biomining of legacy waste in that dump site through M/s Zigma Global Environ Solutions Pvt. Ltd., Erode and has processed 1,59,612 m³ of legacy waste so far.

Hon'ble National Green Tribunal (SZ), Chennai in its Order Dated: 09.10.2020 in O. A. No. 52 of 2020 (SZ) and O. A. No. 67 of 2020

has directed the Erode City Municipal Corporation, Erode to furnish the time bound action plan for the implementation of Solid Waste Management Rules, 2016. In this connection, Commissioner, Erode City Municipal Corporation has furnished a time bound action plan vide Annexure – II. As per this action plan, the Erode City Municipal Corporation will complete the bio-mining of remaining Municipal solid legacy waste at vendipalayam dump site before December 2021.

TNPCB is assessing suitable Environmental Compensation to be imposed to Erode City Municipal Corporation for non compliance of the directions issued by the Principal Bench of Hon'ble National Green Tribunal, New Delhi in O.A. No. 606/2018. Environmental Compensation will be imposed accordingly.

VII. Details of action taken by TNPCB and District Co-ordination Committee against the violating industries:

The details of action taken by O/o. District Environmental Engineer, TNPCB, Erode against the violating industries through TNPCB and DCC are submitted as below.

Formation of the District Co-ordination Committee at Erode:

Based on the Hon'ble High Court of Madras in its Order Dated: 04.07.2007 & 09.08.2007 in W. P. Nos. 5494/1998 & 30153/2003, District Co-ordination Committee (DCC) has been constituted in Erode District during the year 2009. Subsequently, it is reconstituted as per the G. O. Ms. No. 23, Dated: 01.03.2018 and is functioning till date.

The year wise details of action taken by TNPC Board against the violating industries through the District Co-ordination Committee, Erode is submitted as below,

Year	No. of industries issued with orders for disconnection of power supply			
	Dyeing	Bleaching & Printing	Tannery	Total
2016 – 2017	20	55	12	87
2017 – 2018	30	33	6	69
2018 – 2019	9	31	2	42
2019 – 2020	14	31	-	45
April 2020 – October 2020	9	15	1	25

VIII. Details of action taken by TNPCB against the violating industries after recommencement of industries during COVID-19 Lock down period and after Hon'ble NGT(SZ), Chennai filed Suo Moto Case O. A. No. 52 & 67 of 2020

After the National Lock down in the COVID-19 pandemic period, the industries were permitted to recommence their operation in phased manner. The following table shows the details of action taken against the violating industries during this period.

Sl. No.	Jurisdiction	No. of industries issued with disconnection of power supply through DCC (between March 2020 and October 2020)			
		Dyeing	Bleaching & Printing	Tannery	Total
1.	O/o. DEE, TNPCB, Erode	9	15	1	25

IX. Environmental Compensation collected:

Based on the Orders of Hon'ble NGT in O. A. No. 1038/2018 Dated: 10.07.2019 and in O. A. No. 593/2017 Dated: 19.02.2019 and 28.08.2019, Environmental Compensation from 77 violating industries has been collected by TNPCB and District Co-ordination Committee as detailed below:

S. No.	TNPCB District Office	Environmental Compensation Collected by TNPCB & DCC (in Rs.)	Total (in Rs.)
1.	O/o. DEE, TNPCB, Erode	45,05,000 /- + 1,27,87,335 /-	1,72,92,335 /-

XI. Formation of Textile CETPs in Erode District:

To further improve the quality of water bodies and to strengthen the monitoring mechanism to prevent illegal disposal of effluent by individual industries, on the instruction of TNPCB, the textile association has proposed five textile CETPs in Erode District. After commissioning of the CETPs, the individual effluent treatment plants provided by the existing units will be closed and effluent generated from these industries will be conveyed to CETPs for treatment.

S. No.	No. of CETPs proposed	GFA (Rs. in Lakhs)	Plant Capacity (MLD)	No. of member units	Consent status	Land available (acres)
1.	5* CETPs in Erode District	91085.8	22.2	249	CTE Issued	27

Note: * - 4 CETPs for the treatment of entire quantity of trade effluent generated from the existing textile member units and 1 CRMS is for the treatment of final reject generated from its member units.

Tamilnadu Pollution Control Board, Erode, Environmental Engineer (Flying Squad), Erode and District Administration, Erode are monitoring the industries operated in Erode District and is monitoring Kalingarayan canal as detailed above. Surprise and Night inspections are also being carried out. Violating industries found discharging effluent / not operating ETP are issued with orders for closure and disconnection of power supply immediately. Environmental Compensation is collected by TNPCB and District Co-ordination Committee.

Recommendations:

1. To construct baby Canal for the remaining stretch up to the distance of human settlements and industrial activities and to expedite the lining of Kalingarayan Canal for the remaining stretch up to the distance of human settlements.
2. The Erode City Municipal Corporation shall complete the UGDSS for the remaining areas on or before May 2022 as committed in the time bound action plan
3. The Erode City Municipal Corporation shall comply with the directions mentioned in the various Orders of the Hon'ble Principal Bench of National Green Tribunal, New Delhi in O. A. No. 606/2018 regarding implementation of the Solid Waste Management Rules, 2016 as committed. Erode City Municipal Corporation shall dispose the entire accumulated quantity of legacy waste at Vendipalayam dump site as per the time bound action plan.
4. As per G. O. Ms No. 23, E & F Department Dated: 01.03.2018, TNPCB and the District Co-ordination Committee shall collect hefty Environmental Compensation from the repeated violating industries found discharging untreated effluent into water streams/ land and shall be prosecuted.
5. The TNPCB shall have close monitoring of the industries. In case of any unauthorised units causing pollution to the environment, it shall be brought to the notice of either DCC / TNPCB Board office and action shall be taken for the disconnection of power supply, disconnection of water supply, seizure of materials, sealing of unit's premises/ machinery and eviction. Criminal case shall be filed against the land owner and environmental compensation shall be imposed on the land owners and occupier of the unit has already instructed by the TNPCB vide Circular Dated: 22.09.2020.
6. Online Continuous Monitoring system shall be provided in the Kalingarayan Canal for the effective monitoring of the quality of water at 2 to 3 locations using Environmental Compensation collected.
7. Environmental Compensation will be utilized for the green belt, awareness programmes as decided by the DCC.

“Comprehensive report of the Joint Committee constituted by the Hon'ble NGT (SZ), Chennai in respect of Sua Motu Case O. A. No. 163 of 2020 regarding Kalingarayan Canal Water Pollution & River Noyyal pertaining to Erode District

Back Ground of the Case:

Hon'ble National Green Tribunal (Southern Zone), Chennai has taken up a Sua Motu case vide O.A. No.: 163 of 2020 with respondents the Chief Secretary to Government of Tamil Nadu, the Secretary to Government of Tamilnadu, Additional Chief Secretary to Government of Tamilnadu, Municipal Administration and Water Supply Department, the Principal Secretary to Government, Public Works Department, the Principal Secretary to Government of Tamilnadu, the Chairman, Tamilnadu Pollution Control Board, the District Collector, Erode and the Commissioner, Erode City Municipal Corporation based on the News published in Dinamalar Daily Newspaper dated: 21.08.2020 Chennai Supplementary under the caption “Halfwits dumped Aluminium waste in Canal”.

The Hon'ble NGT(SZ) vide O.A No.163 of 2020 has appointed a Joint Committee comprising the District Collector, Erode, a Senior officer or Scientist deputed by the Chairman, Tamilnadu Pollution Control Board, the Municipal Commissioner, Erode City Municipal Corporation, the Superintending Engineer, Public Works Department (PWD) and Water Resources Organisation to inspect the units which are situated in and around Kalingarayan Canal area in Erode District and submit a factual as well as action taken report if there is any violation committed by any of the industries. Also, the Committee is directed to collect water samples from the Kalingarayan Canal to ascertain the water quality and shall submit the report within a period of two months i.e., on or before 09.11.2020. The Public Works Department has been nominated as Nodal Agency for co-ordination and for providing all necessary logistics for the case.

In continuation of the above, the Joint Committee has inspected Kalingarayan Canal Stretch and the industries located in the close vicinity of Kalingarayan Canal on 21-09-2020, 22-09-2020 & 16-10-2020 and the Joint Committee report has been e-filed on 05-11-2020.

Subsequently, based on the another news paper report published in the Hindu, Tamil Thisai, dated 07.10.2020 under the caption "(Contamination of metals in excess of prescribed limits: Noyal Aru Bharathiar University shocking information)", in which it was stated in the report that the Bharathiar University, Coimbatore had conducted some investigation regarding the pollution caused to River Noyyal in Tiruppur, Erode and Karur areas and they came to the conclusion that excess heavy metals were found in the river water which is likely to affect the soil fertility of agricultural land in those areas and it will have impact on its produce which will affect the income of the agriculturists.

In order to ascertain the above facts, the Hon'ble NGT (SZ) has advanced this case of O. A. No. 163 of 2020 on 19.10.2020 and has passed the following Orders as below:

"..... and informed the purpose of advancing the case today and wanted the same committee to look into this issue as well. Accordingly, the same committee is directed to look into this issue as well and to submit a comprehensive report regarding the allegations made in the present report regarding the allegation in respect of pollution to Noyyal River in Erode District".

"The Registry is directed to communicate this order to the members of the committee and also to the official respondents immediately by email, along with the copy of the present paper report referred to above, so as to enable them to comply with the direction of filing a comprehensive report and also to file their independent response regarding the allegation in the paper report.

In view of the above, it is submitted that the River Noyyal enters Erode District from Tiruppur District at Kodumanal, Chennimalai in Erode District at its 100th Km and leaves from Erode District at Marudurai Bridge, Kandappagoundenvalasu, Chennimalai at its 117th Km and enters Tiruppur District again. Then it flows through Karur District and finally confluences with River Cauvery.

The Joint Committee has inspected River Noyyal entering the Erode District at Kodumanal, Chennimalai, Erode District and also along the

stretches of River Noyyal flowing in Erode District on 17.12.2020 and the comprehensive report of the Joint Committee is as below.

1. It was found that there are no industrial clusters functioning near the banks of River Noyyal pertaining to Erode District.
2. It was found that the entire stretches of River Noyyal in Erode District are surrounded by agricultural lands.
3. River Water Samples were collected from the River Noyyal flowing in the Erode District at the following locations

Sl. No.	Sampling Points	Distance	Location
1.	River Noyyal at entry point at Kodumanal	100 th Km	Latitude – 11.112675 N Longitude – 77.496898 E
2.	River Noyyal at Orathupalayam Dam	104.3 th Km	Latitude – 11.108105 N Longitude – 77.540592 E
3.	River Noyyal at Unjakattuvalasu	111 th Km	Latitude - 11.1183888 N Longitude – 77.594715 E
4.	River Noyyal at Marudurai Bridge Kandappagoundenvalasu	117 th Km	Latitude - 11.115464 N Longitude – 77.6046214 E

4. The Report of Analysis (ROA) of these water samples are enclosed vide Annexure – I. The ROA reveals the presence of Fecal Coliform and Total Coliform indicates the discharge of sewage into River Noyyal. The range values of parameters analysed for River Noyyal at the above locations is submitted as below.

S.No.	Parameters	Range Values
1.	Turbidity* NTU	11.4 – 32.4
2.	Colour* mL	< 5
3.	Conductivity at 25°C µmhos/cm	2040 - 3040
4.	pH at 25°C Number	8.06 – 8.13
5.	Total Suspended Solids at 103°C - 105°C mg/L	8 - 28
6.	TDS at 180°C mg/L	1344 - 2032
7.	Sulphate as SO ₄ mg/L	160 - 259
8.	Oil & Grease mg/L	< 4
9.	BOD (at 27°C for 3 days) mg/L	< 2 - 3.4
10.	COD mg/L	16 - 24
11.	Ammonical Nitrogen as NH ₃ - N mg/L	< 2
12.	Total Kjeldhal.Nitrogen mg/L	< 2 – 2.24
13.	Total Hardness as CaCO ₃ mg/L	530 - 720
14.	Iron Total as Fe mg/L	0.102 - 0.52
15.	Alkalinity as CaCO ₃ mg/L	400 - 530
16.	Ph.Compounds mg/L	< 0.05
17.	Nitrate Nitrogen as NO ₃ mg/L	0.7 - 0.979
18.	Cyanide mg/L	< 0.05

19.	Hexavalent Chromium mg/L	< 0.05
20.	Total Chromium mg/L	< 0.05
21.	Copper * mg/L	< 0.0015
22.	Zinc* mg/L	< 0.0015
23.	Lead* mg/L	< 0.015
24.	Cadmium* mg/L	< 0.0008
25.	Nickel* mg/L	< 0.006
26.	Arsenic* mg/L	< 0.01
27.	Mercury* mg/L	< 0.003
28.	Aluminium* mg/L	< 0.006
29.	Dissolved Oxygen mg/L	6 - 6.6
30.	Feacal Coliform MPN/100 ML	9.3 - 14
31.	Total Coliform MPN/100 ML	33 - 39

**** Note :** Most of the season, the River Noyyal is carrying municipal sewage & sullage water from residential area. Hence, the standards are not provided.

5. In addition to the above, O/o. Environmental Engineer (Flying Squad), Erode is regularly monitoring and analysing the water quality of River Noyyal at three locations namely, (i). Ekkatampalyam, Chennimalai (ii). Othapanai Bridge and (iii). Noyyal Village. The Consolidated Report of Analysis is also enclosed as Annexure – II.

The DEE Office, Tamilnadu Pollution Control Board at Erode and Perundurai, Environmental Engineer (Flying Squad), Erode and the District Administration, Erode are monitoring the industries operated in Erode District and is monitoring Kalingarayan Canal, River Noyyal and other major water bodies flowing in Erode District. Surprise and Night inspections are also being carried out regularly. Violating industries found discharging effluent/not operating ETP are issued with orders for closure and disconnection of power supply immediately. Environmental Compensation is collected by TNPCB and District Co-ordination Committee from the violating industries.”

10. It is seen from the report received on 06.11.2020 signed on 29.10.2020, that certain recommendations have been given to be carried out by Erode City Municipal Corporation. It is seen from the report that there are other cases pending before this Tribunal namely as O.A. No. 52 of 2020 and O.A. No. 67 of 2020 in respect of implementation of Solid Waste Management Rules, 2016 and O.A. No. 1038 of 2018 and O.A. No. 593 of 2017 which is pending before Principal Bench of National Green Tribunal, New Delhi in respect of industrial

pollution where certain directions have been issued on the basis of the reports submitted by committee appointed by that Bench. It is seen from this report that the Erode Municipal Corporation has furnished a time bound action plan which is annexed as Annexure -2 to this report which was filed by them in *O.A. No. 52 of 2020 and O.A. No. 67 of 2020* and some more directions were given in that case.

- 11.As regards the issue in this case is concerned, they have mentioned that on seeing the paper reports, they found that floating of Aluminium deposit in the Canal water, but on their enquiry shows that none of the aluminium industries situated near this water body are discharging their effluents in this water body. But on enquiry it was revealed that some vehicle had come with some materials and dumped the same in the water body and some investigation is being done on that basis for tracing out that vehicle for taking action.
- 12.They have given certain recommendations directing the Erode City Municipal Corporation to carry out the underground sewage scheme (UGSS) and also comply with the Solid Waste Management Rules, 2016 by disposing the legacy waste in Vendipalayam dump side as per the time bound action plan.
- 13.The Tamil Nadu State Pollution Control Board is directed to realise the environmental compensation from violating industries and also to make necessary continuing monitoring of this area to avoid such things being happening in future.
- 14.The report signed on 21.12.2020 and received on 23.12.2020 referred to above also reiterate these aspects and they have also mentioned that the (flying squad) of the Tamil Nadu State Pollution Control Board should regularly monitor and analyse the water quality of River Noyyal at three locations namely, (i) Ekkatampalyam, Chennimalai (ii) Othapanai Bridge and (III) Noyyal Village and the Tamil Nadu State Pollution Control Board at Erode and Perundurai and

the District Administration Erode are directed to monitor the industries operated in Erode District and also monitor Kalingarayan Canal, River Noyyal and other major water bodies flowing in Erode District.

15.They should conduct surprise and night inspections also so as to trace out miscreants and prevent such illegal activities being continued in that area.

16.Considering the fact that they were not able to trace out the persons who are responsible for discharge of this Aluminium waste in the river and they are taking steps and the water quality has not been affected on account of the presence of Aluminium waste alleged in the news paper report and also some other cases are pending in respect of industrial pollution and other implementation of the Solid Waste Management Rules, 2016, we feel that this application can be disposed of accepting the reports leaving open the continuing monitoring of the processes in the connected matter and by giving direction to the authorities to expedite the action plan and make necessary monitoring system by providing CCTV cameras in these areas , so as to find out the miscreants who are doing such mischief which will enable the authority to proceed against them effectively. So the application is disposed as follows:

(1) Reports received on 06.11.2020 and 23.12.2020 of the Joint Committee are accepted and recorded.

(2) The Erode City Municipal Corporation is directed to expedite the completion of the underground sewage system (UGSS) at the earliest and also to take temporary measures to avoid discharge of untreated sewage into the water bodies to prevent pollution being caused to the water body.

(3) The other issues regarding the industrial pollution as well as the implementation of the Solid Waste Management Rules, 2016 Erode District can be dealt with in the pending

matters namely (*O.A. No. 1038 of 2018 and O.A. No. 593 of 2017*) and (*O.A. No. 52 of 2020 and O.A. No. 67 of 2020*) pending before this Bench independently.

(4) The Erode Municipality and also the District Administration, Erode are directed to take steps to install CCTV cameras along the river stretch so as to monitor and prevent such illegal activities being committed by the miscreants and such steps will enable them to trace out the miscreants and proceed against them in accordance with law with scientific evidence effectively.

(5) The Registry is directed to communicate this order to the members of the committee and also to the implementing agencies, so as to enable them to implement the directions effectively.

17. With the above directions and observations, the application is disposed off.

.....J.M.
(Justice K. Ramakrishnan)

.....E.M.
(Shri. Saibal Dasgupta)

O.A. No.163/2020
24th December, 2020. Sr.