



By Speed Post

F. No A-19014/43/2018-WQM-I

06.07.2018

To

The Chairman,
Tamil Nadu Pollution Control Board
76, Mount Salai,
Guindy, Chennai - 600 032

DIRECTIONS UNDER SECTION 18 (1) (b) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974 IN THE MATTER OF TREATMENT OF SEWAGE AND INDUSTRIAL EFFLUENT AND DISPOSAL IN RIVER CAUVERY AND KALINGARAYAN CANAL IN ERODE AND NAMMAKKAL DISTRICTS OF TAMILNADU

WHEREAS, amongst others, under Section 16 of the Water (Prevention and Control of Pollution) Act, 1974, one of the functions of the Central Pollution Control Board (CPCB) constituted under the Water (Prevention and Control of Pollution) Act, 1974 is to coordinate activities of the State Pollution Control Boards (SPCBs)/ Pollution Control Committees (PCCs) and to provide technical assistance and guidance to SPCBs/PCCs; and

WHEREAS, amongst others, under Section 17 of the Water (Prevention and Control of Pollution) Act, 1974, one of the functions of the State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) is to plan a comprehensive programme for prevention, control or abatement of pollution of streams and wells in the State and to secure the execution thereof; and

WHEREAS, the State Pollution Control Board including TNPCB under Section 17 of the Water (Prevention and Control of Pollution) Act, 1974 has been mandated with the following functions which inter-alia including;

- A) to inspect sewage or trade effluents, works and plants for the treatment of sewage and trade effluents and to review plans, specifications or other data relating to plants set up for the treatment of water, works for the purification thereof and the system for the disposal of sewage or trade effluents or in connection with the grant of any consent as required by the Water Act;
- B) lay down, modify or annul effluent standards for the sewage and trade effluents and for the quality of receiving waters (not being water in an inter-State stream) resulting from the discharge of effluents and to classify waters of the State;
- C) to evolve economical and reliable methods of treatment of sewage and trade effluents, having regard to the peculiar conditions of soils, climate and water resources of different regions and more especially the prevailing flow characteristics of water in streams and wells which render it impossible to attain even the minimum degree of dilution;

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- D) to evolve methods of utilization of sewage and suitable trade effluents in agriculture;
- E) to evolve efficient methods of disposal of sewage and trade effluents on land, as are necessary on account of the predominant conditions of scant stream flows that do not provide for major part of the year the minimum degree of dilution;
- F) to lay down standards of treatment of sewage and trade effluents to be discharged into any particular stream taking into account the minimum fair weather dilution available in that stream and the tolerance limits of pollution permissible in the water of the stream, after the discharge of such effluents;
- G) to lay down effluent standards to be complied with by persons while causing discharge of sewage or sullage or both and to lay down, modify or annul effluent standards for the sewage and trade effluents;

WHEREAS, the domestic sewage, plastic waste and municipal solid waste generated from the villages/towns should be disposed off in an environmentally sound manner by the local authorities / Zilla Parishads in compliance to the sewage discharge norms, Plastic Waste Management Rules 2016 as amended and Municipal Solid Waste Management Rules, 2016 respectively notified under the Environment (Protection) Act, 1986; and

WHEREAS, Central Pollution Control Board (CPCB) has issued direction under Section 18 (1) (b) of the Water (Prevention and Control of Pollution) Act, 1974 regarding treatment and utilization of sewage vide letter No. A-19014/43/06-Mon dated 21/04/2015; and

WHEREAS, Central Pollution Control Board (CPCB), during May 23-25, 2018, has carried out assessment of river Cauvery and Kalingarayan Canal in Erode & Nammakkal Districts of Tamilnadu and drains arising from Erode city namely Nochipallam Odai, Sunnambu Odai, Pichhaikkaran Odai, Perumpallam Odai and Konna Vaikal Odai which are carrying sewage and industrial effluent discharges and are joining the right bank of river Cauvery as well as five drains namely Perumpallam Odai (Ayyan Thota), Anangur Odai, Samaya Sangali Odai (Avathi Palyam), Odai near Cauvery bridge and Vasanth nagar odai arising from Kumarpalayam and Pallipallyam and carrying domestic sewage as well as dying industrial effluents which are finally joining river Cauvery, and the assessment reveals the following:-

- (i) That the analysis results of the samples collected from River Cauvery at (a) Kumara palyam bridge (U/s to Erode and Kumarapallyam); (b) Perundurai SIPCOT Water Intake; (c) Vendipalyam Barrage; (d) Kokkaraipet bridge; and

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(e) Kudumudi at Magudeshwara Temple indicates that the sample at Vendipalyam Barrage is exceeding the water quality criteria w.r.to Fecal Coliform (i.e., > 500 MPN/100 ml) and DO is less than the criteria limit of 5 mg/l at Perundurai SIPCOT Water Intake and whereas the heavy metals w.r.to Copper, Cadmium, Total Chromium, Nickel, Lead, Zinc and Cobalt are observed as 'BDL' except traces of Iron and Manganese in the order of 'BDL to 0.43 mg/l and BDL to 0.115 mg/l respectively.

Also, The concentration of TDS was found increasing from 296 mg/L (at Kumarapallyam bridge) to 436 mg/L (at Kokkaraipet) which confirms inception of industrial effluent into river Cauvery except Iron & Manganese, no traces of other heavy metals found.

- (ii) That the analysis results of the samples collected from Kalingrayan Canal at (a) U/s of canal at Perundurai water intake, and (b) D/s of canal at Vendipalyam bridge indicates that the wastewater sample for the parameter BOD and Faecal coliform at D/s of canal at Vendipalyam bridge are observed as 22.9 mg/l & 1280 MPN/100 ml which are exceeding the water quality criteria whereas DO content of Kalingrayan Canal at Perundurai water intake is observed as 3.3 mg/l which is not meeting the water quality criteria. No traces of other heavy metals observed except Iron & Manganese.
- (iii) That the analysis results of the samples collected from five drains in Erode City at (a) Nochipalyam Odai; (b) Sunnambu Odai; (c) Pichaikkaran Odai; (d) Perumpallam Odai; and (e) Konnavakkal Odai reveals that the wastewater samples for the parameter BOD is exceeding the limit of water quality criteria whereas FC is exceeding the limit of water quality criteria at three sampling points namely Pichaikkaran Odai; Perumpallam Odai; and Konnavakkal Odai.

In spite of continuous rain during monitoring, the TDS concentration in three drains namely Nochipalyam odai, Sunambu Odai and Pichhaikkaran Odai was found in the order of 2354-4108 mg/l which confirms discharge of industrial effluent into these drains. The concentration of chloride (784 – 1804 mg/L) in these drains also confirms discharge of effluents either from tannery units or from dying units.

in Erode, two drains namely Sunnambu Odai and Pichhaikkaran odai are surrounded by the tannery units as well as dyeing units, other two drains namely Nochipalyam Odai and Perupallam odai surrounded by the dyeing units, and the analysis results of samples taken from these drains also confirms all these drains carries sewage as well as discharges of industrial effluent and finally confluence with river Cauvery.

- (iv) That the analysis results of samples taken from four drains (passes through cluster of dyeing units) in Kumarapallyam and Pallipallyam at four locations viz., ai) Perumpalam drain at Ayyan thota; (b) Odai at Anengur road;

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(c) Confluence of Avanthi pallyam and Samaya Sangali Odai; and (d) Pallipallyam Odai at Cauvery Bridge reveal that the parameter BOD and Fecal Coliform is exceeding the water quality criteria except at Odai at Anengur road.

Also, TDS concentration in three drains namely Perumpallam drain, Odai at Anengur road and Samya Sangali Odai found in the order of 1374 to 5320 mg/l as well as presence of Chloride (424 – 2306 mg/L), Sulphate (105 – 176 mg/l) and Sulphide (2.7 -20.5 mg/L) also confirms discharge of industrial effluent from dyeing units.

All four drains namely Perumppallam drain, Odai at Anengur road, Samaya Sangali Odai & Pallypallyam Odai are surrounded by dying units, and carries sewage as well as discharges from dying units which finally confluence with river Cauvery.

- (v) That at Palli Pallyam, there are 154 un-authorized industrial units that does not have Consent to Operate from TNPCB.
- (vi) That all drains were found choked with plastic and other municipal solid waste that contribute pollution load on river Cauvery.
- (vii) That the municipal solid waste from Erode city is being dumped on the bank of river Cauvery at Vyrappallyam, which is also one of the continuous sources of pollution to river Cauvery.
- (viii) That the presence of Fecal Coliform in the collected water samples also confirms the inception of domestic waste into river Cauvery

NOW THEREFORE, in view of the above stated facts and realizing that the Cauvery river water have been polluted and to prevent further deterioration of river Cauvery, following directions under Section 18(1)(b) of the Water (Prevention and Control of Pollution) Act, 1974 are hereby issued to TNPCB for ensuring compliance:-

1. TNPCB shall make mandatory for all local/urban bodies to set up sewage treatment plants (STPs) of adequate capacity with requisite treatment facilities and also to provide underground sewerage system to cover the entire local/urban areas and to bridge the treatment gap along with enforcement of consent management in line with standards for sewage treatment notified under the Environment (Protection) Act, 1986 (**Annexure-I**).
2. TNPCB shall direct all the industrial units to ensure treatment of effluents to comply with the prescribed limits before discharge into river Cauvery and Kalingarayan Canal in Erode & Nammakkal. Also, TNPCB shall take action for closure of all the unauthorized 154 industrial units located at Palli Pallyam in Tamil Nadu with immediate effect.

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3. TNPCB shall carryout inventory of all commercial / industrial activities and to quantify the effluent discharged into river Cauvery and Kalingrayan Canal in Erode & Nammakkal within three months time period.
4. TNPCB shall issue directions to all the concerned local authorities / Zilla Parishads for ensuring proper channelization and for ensuring proper treatment of domestic sewage generated from the villages/towns along the bank of river Cauvery and Kalingrayan Canal through sewage treatment plants for ensuring compliance to the sewage discharge norms notified under the Environment (Protection) Act, 1986.
5. TNPCB shall issue directions to the PWD and Irrigation Department and other concerned authorities in the TN State to provide proper lining of Kalingrayan Canal in Erode & Nammakkal where ever not provided earlier as well as at damaged places at present so as to prevent the confluence of drains into Kalingrayan Canal.
6. All the upcoming sewage treatment plants (STPs) after issuance of these directions, TNPCB shall ensure to design properly to treat and achieve effluent discharge standards notified vide G.S.R.1265 (E) Environment (Protection) Amendment Rules, 2017 dated 13/10/2017.
7. The industrial establishments in the Erode having diverse industrial units and are generating substantial volume of industrial effluent and thus there is a need to establish CETP of adequate capacity with requisite infrastructure to ensure compliance to the effluent discharge norms prescribed by TNPCB in accordance to the Environment (Protection) Act, 1986.
8. TNPCB shall issue directions to all the concerned local authorities / Zilla Parishads for collection and for ensuring disposal of municipal solid waste and plastic waste generated from the villages/towns along the bank of river Cauvery and Kalingrayan Canal, in a properly designed secured landfill in accordance with the Municipal Solid Waste Management Rules, 2016 and Plastic Waste Management Rules, 2016 as amended respectively, notified under the Environment (Protection) Act, 1986.
9. TNPCB shall issue directions to *Erode and Nammakkal Municipality authority* to evacuate existing municipal solid waste dumped on the bank of river Cauvery at Vyrappallyam, with immediate effect.
10. TNPCB may constitute an 'Environmental Surveillance Squad (ESS)' for periodic surprise inspection of industries located along river Cauvery and Kalingrayan Canal in Erode & Nammakkal.

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That the TNPCB shall acknowledge receipt of this direction within 10 days and shall communicate the status of actions taken along with the action plan for ensuring proper treatment and disposal of sewage, industrial effluents, plastic waste, municipal solid waste generated from the villages/towns along the bank of river Cauvery and Kalingrayan Canal, by 20th July 2018.

(S.P.Singh Parihar)
Chairman

Copy to :

1. PPS to Secretary,
Ministry of Environment, Forests & Climate Change
Indira Bhawan, Aliganj, Jorbagh Road,
New Delhi-110 003
2. PPS to Secretary
Ministry of Water Resource, River Development & Ganga Rejuvenation
626, Shram Shakti Bhawan, Rafi Marg,
New Delhi 110 001.
3. PPS to Secretary
Ministry of Housing and Urban Affairs
Maulana Azad Road, Nirman Bhawan,
New Delhi - 110 011
4. Joint Secretary (CP Division),
Ministry of Environment, Forests, & Climate Change
Indira Bhawan, Aliganj, Jorbagh Road,
New Delhi 110 013
- ✓ 5. Regional Directorate
Central Pollution Control Board
1st Floors, Nisarga Bhawan, A-Block, Thimmaiah
Road, 7th D cross, Shivanagar, Opp
Pushpanjali Theatre,
Bangalore-560086
6. Div. Head, IT Division, CPCB
7. Div Head, WQM-II, CPCB
8. Div. Head, IPC-I, CPCB
9. Div. Head, UPC-I, CPCB
10. Div. Head, IPC-VII, CPCB

(A.Sudhakar)
Member Secretary