Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

(By Video Conferencing)

Original Application No. 829/2019
With
Report of CPCP dated 11.03.2020

Lt. Col. Sarvadaman Singh Oberoi — Applicant(s)

Versus

Union of India & Ors. — Respondent(s)

Date of hearing: 22.06.2020
Date of uploading of order: 29.06.2020

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

For Respondent(s) Mr. Balendu Shekhar, Advocate for CPCB

ORDER

1. The issue for consideration is the remedial action to restore sea water quality along the Indian Coastal areas.

2. According to the Applicant, certain coastal areas are critically polluted on account of dumping of sewerage and waste. Over 80% of marine pollution is from land based sources - industrial, agricultural and urban. Municipal sewage is the main source of pollution. Aquaculture Authority, Government of India has issued guidelines that Aquafarms having area of five hectares and above should have Effluent Treatment System (ETS). Discharge of untreated sewage and effluents in sea is continuing in large scale. Pollution of marine coastline is on gradual increase in the same way as 351 polluted river stretches in the country.

Directions of this Tribunal in O.A. No.673/2018 dealing with 351 polluted river stretches should be extended to the polluted coastal stretches, doing so can result in reclaiming of substantial water. National Coastal Zone Management Authority (MCZMA) has been constituted on 09.10.2017 but the problem of marine pollution remains untackled which calls for intervention by this Tribunal.

3. The Tribunal called for a report from Central Pollution Control Board ("CPCB") on the subject and considered the same vide order dated 03.12.2019 as follows :-

> **"***5. Before we issue further directions, we may note the relevant data in this regard based on study reports in public domain. India has a coastline of about 7,555 km, of which about 5,400 km belong to peninsular India and the remaining to the Andaman, Nicobar and Lakshadweep Island. With less than 0.25% of the world coastline, India houses 63 million people, approximately 11% of global population living in low lying coastal areas. The coast also includes 77 cities, including some of the largest and most dense urban agglomerations – Mumbai, Kolkata, Chennai, Kochi and Visakhapatnam. India's coastal zone is endowed with a wide range of mangroves, coral reefs, sea grasses, salt marshes, sand dunes, estuaries, lagoons, and unique marine and terrestrial wildlife. The abundant coastal and offshore marine ecosystems include 6,740 km of mangrove belts, including part of the Sundarban (West Bengal) and the Bhitarkanika (Orissa), which are among the largest mangroves in the world.[1] Andaman and Nicobar Islands have world famous and unique coral bio-diversity which is getting increasingly threatened due to tourism more than the carrying capacity.*
>
> *6. Further, there are reports that i**ndiscriminate releases of untreated or partially treated wastes without considering the assimilative capacity of the waste receiving water body have resulted in pockets of polluted environs with depleted coastal resources, public health risks and loss of biodiversity.** Coastal and marine water pollution has increased throughout the world, mainly due to direct discharges from rivers, increased surface run-off and drainage from expanding port areas, oil spills and other contaminants from shipping, and domestic and industrial effluents. Persistent Organic Pollutants (POPs) are semi volatile organic compounds of special concern because of their toxicity, persistence, long-range transport and bioaccumulation potential. They are present in the marine environment, notably in coastal areas affected by municipal sewage, agricultural and aquaculture effluents, industry and shipping traffic. Rapid urban-industrialization,*

[1] https://www.researchgate.net/publication/236852954_Persistent_Organic_Pollutant_Residues_in_the_Sediments_and_Biota_in_Coastal_Environment_of_India

maritime transport, marine fishing, tourism, coastal and sea bed mining, offshore oil and natural gas production and aquaculture cause severe environmental degradation. ***A significant ecological change is pronounced in this coastal region due to contamination of inorganic and organic pollutants originated from huge discharge of domestic and industrial effluents carried by the rivers, disposal of contaminated mud from harbor dredging, intense shipping activities, agricultural runoffs, oil spills, deforestation, ill-planned river basin developments as well as atmospheric depositions. Tamil Nadu contributed 41% of total cases of cholera in India in 2002. It is interesting to note that around 77% of total cases of cholera occurred in the coastal states on India (Gujarat, Maharashtra, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, West Bengal).***

7. The matter of degradation of environment in coastal areas has been dealt with by the Hon'ble Supreme Court inter-alia in ***Indian Council for Environment-Legal Action Vs Union of India (UOI) and Ors. (1996) 5 SCC 281.*** *While considering the issue, it was observed:*

> *"5. With a view to protect the ecological balance in the coastal areas, the then Prime Minister is stated to have written a letter in November, 1981 to the Chief Ministers of coastal States in which she stated as under:*
>
> ***The degradation and misutilization of beaches in the coastal States is worrying as the beaches have aesthetic and environmental value as well as other values. They have to be kept clear of all activities at least upto 500 metres from the water at the maximum high tide****. If the area is vulnerable to erosion, suitable trees and plants have to be planted on the beaches without marring their beauty.* ***Beaches must be kept free from all kinds of artificial development. Pollution from industrial and town wastes must also be avoided totally****."*

7.1 Reference was to environmental guidelines for beaches as follows:

> ***"****The traditional use of sea water as a dump site from our land-derived wastes have increased the pollution loads of sea and reduced its development potentials including the economic support it provides to people living nearby.* ***Degradation and misutilization of beaches are affecting the aesthetic and environmental loss.*** *These could be avoided through prudent coastal development and management based on assessment of ecological values and potential damages from coastal developments.****"***

7.2 The Hon'ble Supreme Court referred to the status of compliance of Environmental Management Plans in coastal areas and found large scale non –compliance. It was observed:

> ***"****26….Violation of anti-pollution laws not only adversely affects the existing quality of life but the non enforcement of*

*the legal provisions often results in ecological imbalance and degradation of environment, the adverse effect of which will have to be borne by the future generations.***"**

7.3 Accordingly, it was suggested that "the Central Government should consider setting up under Section 3 of the Act. State Coastal Management Authorities in each State or zone and also a National Coastal Management Authority."

8. ***It is necessary to ensure that coastal water at beach remains fit for bathing and survival of aquatic life, fishing and contact sports in accordance with Sea Water Criteria in terms of directions of CPCB dated 15.12.2016 under Section 18(1)(b) of the Water (Prevention and Control of Pollution) Act, 1974.***

9. The report of CPCB is incomplete about the status of compliance with regard to norms of pollution laws in all the coastal areas in the country, particularly with regard to discharge of untreated and industrial and municipal effluents and solid waste. Accordingly, we direct CPCB to submit a comprehensive status report which regard to coastal pollution by way of classification of coastal areas in priority-I to V as has been done for 351 polluted stretches within three months positively.

10. As already directed in Paryavaran Suraksha Samiti (supra), in pursuance of order of Hon'ble Supreme Court dated 22.02.2017 in Paryavaran Suraksha Samiti Vs. Union of India[2], the local bodies and States are liable to pay compensation for discharge of any untreated sewage into the water bodies after 01.04.2020.[3] We may also note that local bodies have been held to be liable to be prosecuted for violation of provisions of the Water Act by a recent judgment of the Hon'ble Supreme Court dated 26.11.2019 in Criminal Appeal No. 1734 of 2019 in Karnataka State Pollution Control Board Vs B. Heera Naik.

11. Accordingly, we direct that all the State PCBs/PCCs of coastal States/ UTs may give the relevant information to CPCB within one month from today failing which defaulting Status/UTs will be liable to pay Rs. 10 lakhs per month till compliance."

4. Accordingly, report dated 11.03.2020 has been filed by the CPCB on the subject of coastal pollution in pursuance of order dated 03.12.2019.

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[2](2017) 5 SCC 326

[3] Vide order dated 28.08.2019 in O.A. No. 593/2017, Paryavaran Suraksha Samiti &Anr. v. UOI, ¶21(iii).

5. Summary status of compliance is as follows:-

"Table -2: Summary-status of compliance for criteria parameters of SW—II (Bathing, Contact Water Sports and Commercial Fishing) notified under E (P) Rules, 1986 for the year 2018

S No.	***State***	***No. of locations monitored under NWMP***	***No. of Monitored Locations not complying to the marine primary water quality criteria parameters notified under E(P) Rules, 1986.***					***Compliance Status w.r.t the marine primary water quality criteria parameters***
			pH	***BOD***	***DO***	***FC***	***Turbidity***	
1.	*Goa*	*11*	*-*	*7*	*-*	*11*	*7*	***All the locations not complying***
2.	*Gujarat*	*03*	*1*	*3*	*2*	*3*	*2*	***All the locations not complying***
3.	*Maharashtra*	*34*	*3*	*33*	*30*	*30*	*-*	***One location viz Karam bavane creek at Chiplun, Village-Karambavane, District-Ratnagiriis is complying for all the parameters***
4.	*Odisha*	*04*	*-*	*1*	*1*	*4*	*1*	***All the locations not complying***
	Total	***52***	***4***	***44***	***33***	***48***	***10***	

Table -3: Summary-status of compliance for criteria parameters of SW-II (Bathing, Contact Water Sports and Commercial Fishing) notified under E (P) Rules, 1986 for the year 2019

S No.	***State***	***No. of locations monitored under NWMP***	***No. of Monitored Locations not complying to the marine primary water quality criteria parameters notified under E(P) Rules, 1986.***					***Compliance Status w.r.t the marine primary water quality criteria parameters***
			pH	***BOD***	***DO***	***FC***	***Turbidity***	
1.	*Andhra Pradesh*	*11*	*01*	*07*	*04*	*-*	*-*	*Sea Water Bay Bengal, Uppada Beach Road, Kakinada; Sea Water, Bay of Bengal, Kothapatnam Beach and Sea Water, Bay Of Bengal, Manginapudi Beach,*

								Machilipatnam are complying with the criteria parameters
2.	*Goa*	*11*	*05*	*03*	*-*	*11*	*04*	***All the locations not complying***
3.	*Gujarat*	*03*	*-*	*02*	*02*	*01*	*02*	***All the locations not complying***
4.	*Maharashtra*	*34*	*06*	*34*	*30*	*25*	*06*	***All the locations not complying***
5.	*Odisha*	*04*	*-*	*01*	*-*	*03*	*02*	*Paradeep location is complying*
	Total	***63***	***12***	***47***	***36***	***40***	***14***	

6. The views of CPCB have been given as under:

"Views of CPCB on control of marine pollution
Based on the information received from the 13 States/UTs, following observations are made: -

- *The coastal areas of different States/UTs except Andaman & Nicobar and Odisha are categorized into different zones such as SW-I. SW-II, SW-Ill, SW-IV and SW-V.*

- *Total of 121 numbers of major cities/towns present in the Coastal States/ UTs except Lakshadweep. There are 214 major drains present in the coastal States/UTs except Lakshadweep which outfall into creeks/estuaries/ sea water.* ***Most of the generated sewage both treated or untreated sewage and industrial effluents are disposed of through 171 major drain outfalls in the coastal areas.***

- *As per the received information, total sewage generation in the coastal areas (13 States/UTs) is about 6065 MLD from 121 major towns or cities. There are 298 STPs (total Installed Capacity of about 5304 MLD) at present in operation in the coastal areas, among them 203 STPs have obtained Consent under the Water (Prevention and Control of Pollution) Act, 1974,* ***while 95 STPs have not obtained Consent. Actual sewage treatment in 203 STPs is about 40999 MLD, leaving a gap of 685.37 MLD in sewage treatment plants installed capacity. Only 100 out of 298 STPs located in coastal areas are complying with the discharge norms. At present, 60 STPs presently under construction in 08 States and 2 UTs to meet the gap in generated sewage treatment in coastal areas of the States/UTs. Most of the States/UTs are involved in discharge of both***

treated and untreated sewage leading to marine water pollution and thereby making marine water unfit for bathing and other designated best uses.

- *As regards industrial effluent management, 48188 industries (in 10 coastal States/UTs) are present generating total industrial effluent at about 5279 MLD. Only 5891 out of 48188 industries are having captive ETPs, out of which 5550 captive ETPs are operated by the industries are complying with effluent discharge norms. There are 21 CETPs (having total installed capacity of 210.62 MLD) at present and 7127 industries are having membership of 21 CETPs. Details of remaining 35170 industries are not provided by the respective SPCBs/PCCs. Total quantity of treated industrial effluent discharged in coastal areas is about 5133 MLD. 717 industries have installed OCEMS, while 45 industries yet to install OCEMS.* ***As the treated industrial effluent is also discharged into the marine waters through river system, there is a possibility of accumulation of heavy metals in fish tissues and may likely affect human health through food chain system****. All the concerned States/UTs have to take action against the industries which are in operation without captive effluent treatment plant facilities. This matter is also being taken separately with the respective coastal SPCBs/PCCs by CPCB.*

- ***Hazardous waste generation in the coastal States/UTs is about 20633 MTA****. At present, Hazardous Waste Treatment Storage and Disposal Facilities in the States/UTs viz., A.P (1 Integrated TSDF), Gujarat (4 Integrated TSDFs with both common incinerator and common SLF, 2 TSDFs only with common Incinerators and 3 TSDFs only with common secured landfills (SLFs)), Karnataka (6 TSDFs only with common Incinerators and 2 TSDFs with common SLFs), Kerala (1 TSDF with common SLF), Maharashtra (3 Integrated TSDFs with both common incinerator and common SLF and 1 TSDF only with common SLF), Odisha (1 TSDF only with common SLF), Tamil Nadu (1 Integrated TSDF with both common incinerator and common SLF and 1 TSDF only with common SLF) and West Bengal (1 Integrated TSDF with both common incinerator and common SLF) and Daman, Diu, Dadra and Nagar Haveli (1 Integrated TSDF with both common incinerator and common SLF).*

- *Bio medical waste generation in the coastal areas of the States/UTs is about 16105 TPA.* ***Daman & Diu UT, Goa State, and Lakshadweep UT are not having Common Bio-medical waste Treatment Facilities****, However, generated biomedical waste is disposed of in deep burial after chemical disinfection. In Daman & Diu, all the generated biomedical waste disposed through M/s Enclear Biomedical Waste Pvt. LTD., Surat. The biomedical waste generated in Goa is partly disposed in the incinerator facility of Goa Medical College and by*

individual HCFs by encapsulation/deep burial after autoclaving and disinfection as applicable.

- *Municipal Solid Waste, Plastic waste, E-Waste as well as C & D waste generated in the coastal States /UTs is about 13,59,155 MTA, 2,60,812 MTA, 195840 MTA and 14,93,690 MTA, respectively.* ***There are no adequate facilities for treatment and disposal of these wastes in most of the coastal States/UTs.***

- *Presently, marine or sea water quality is monitored by CPCB in association with the States/UTs only at 63 locations in 5 States including creeks (as on 31.01.2020).* ***Most of the States/UTs are not having adequate infrastructure for sampling of sea water specially 5 KM from shore. CPCB/SPCBs/PCCs are not having adequate infrastructure for sea water monitoring and coastal water quality data available with CPCB is limited.***

National Centre for Coastal Research (NCCR), Chennai under Ministry of Earth Sciences is having adequate infrastructure for sampling of sea water including deep sea waters and also working on indices for sea waters in association with Ministry of Jal Shakti and Ministry of Statistics and Programme Implementation, Government of India. NCCR, Chennai has expertise and adequate infrastructure, may be assigned the task of classification of coastal areas in Priority-I to V considering the toxic nature
of the effluent being discharged into the sea waters by the States/UTs.

Also, Clause 4 of the CRZ Notification, 1991, under the sub heading "Procedure for monitoring and enforcement", stated: "The Ministry of Environment & Forests and the Government of State or Union Territory and such other authorities at the State or Union Territory levels, as maybe designated for this purpose, shall be responsible for monitoring and enforcement of the provisions of this notification within their respective Jurisdictions.". National and State Coastal Zone Management Authority shall have the power to take measures for protection and improving the quality of the coastal environment and preventing, abating and controlling environment pollution in coastal areas.

Further, The National Centre for Sustainable Coastal Management (NCSCM), under Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India is set up for better protection, conservation, rehabilitation, management and policy design for the coast. It would promote integrated and sustainable management of coastal and marine areas in India and advise the Union and States/Union Territory Government and other associated stakeholders on policy and scientific matters relating to Integrated Coastal Zone Management (ICZM).

Considering coastal length of country about 7,516.6 km and the present scenario with regard to the coastal or

marine pollution and with a view to have an implementable approach for Integrated Coastal Management plans in the country, expert organization such as NCSCM under MoEF&CC, Central and State Coastal Zone Management Authorities may be assigned the task of integrated coastal management including preservation and maintenance of sea water quality designed in each coastal Zone."

7. From the above, it is clear that there is huge pollution being discharged into the sea in all the coastal regions. The pollution includes untreated sewage and industrial effluents. Remedial action needs to be taken by the statutory regulators under the Water (Prevention and Control of Pollution) Act, 1974 ("Water Act, 1974") as well as by the local bodies, concerned Departments of the State Governments and overseen by the Chief Secretaries of the States and other concerned authorities in the State/Central Government. There is need for compliance of law and the judgment of the Hon'ble Supreme Court in *Paryavaran Suraksha case, (2017) 5 SCC 326* and orders of this Tribunal, including the order dated 01.05.2020 in *O.A. No. 593/2017, Paryavaran Suraksha Samiti & Anr.v. UOI & Ors.* as follows:-

"23. The above shows serious deficiencies on the part of several States/UTs in performing their constitutional obligation of properly and rationally managing the treated water so as to make more potable water available for drinking purposes. Some States have shown apathy and indifference in giving appropriate response.

24. Accordingly, we direct that States which have not addressed all the action points may do so promptly latest before 30.06.2020, reducing the time lines in the action plans. The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected. All the States may take steps accordingly. The CPCB may compile further information on the subject. The compliance for action plans will be the responsibility of the Secretaries of Urban Development/other concerned, including Irrigation & Public Health, Local Bodies, Rural Development Departments of all the States/UTs and to be overseen by the Chief Secretaries. The Ministry of Jal Shakti and Ministry of Housing and Urban Affairs, Government of India may also monitor and coordinate the situation appropriately in the interest of water qualities of rivers, lakes, water bodies and protection of groundwater.

25. Needless to say that since the issue of sources of funding has already been dealt with in the orders of the Hon'ble Supreme Court, the States may not put up any excuse on this pretext in violation of the judgment of the Hon'ble Supreme Court.

26. Summary of directions:

i. All States/UTs through their concerned departments such as Urban/Rural Development, Irrigation & Public Health, Local Bodies, Environment, etc. may ensure formulation and execution of plans for sewage treatment and utilization of treated sewage effluent with respect to each city, town and village, adhering to the timeline as directed by Hon'ble Supreme Court. STPs must meet the prescribed standards, including faecal coliform.

CPCB may further continue efforts on compilation of River Basin-wise data. Action plans be firmed up with Budgets/Financial tie up. Such plans be overseen by Chief Secretary and forwarded to CPCB before 30.6.2020. CPCB may consolidate all action plans and file a report accordingly.

Ministry of Jal Shakti and Ministry of Housing and Urban Affairs may facilitate States/UTs for ensuring that water quality of rivers, lakes, water bodies and ground water is maintained.

As observed in para 13 above, 100% treatment of sewage/effluent must be ensured and strict coercive action taken for any violation to enforce rule of law. Any party is free to move the Hon'ble Supreme Court for continued violation of its order after the deadline of 31.3.2018. This order is without prejudice to the said remedy as direction of the Hon'ble Supreme Court cannot be diluted or relaxed by this Tribunal in the course of execution. PCBs/PCCs are free to realise compensation for violations but from 1.7.2020, such compensation must be realised as per direction of this Tribunal failing which the erring State PCBs/PCCs will be accountable.

ii. The CPCB may study and analyse the extent of reduction of industrial and sewage pollution load on the environment, including industrial areas and rivers and other water bodies and submit its detailed report to the Tribunal.

iii. During the lockdown period there are reports that the water quality of river has improved, the reasons for the same may be got studied and analysed by the CPCB and report submitted to this Tribunal. If the activities reopen, the compliance to standards must be maintained by ensuring full compliance of law by authorities statutorily responsible for the same.

iv. Accordingly, we direct that States which have not addressed all the action points with regard to the utilisation of sewage treated water may do so promptly latest before 30.06.2020,

reducing the time lines in the action plans. The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected. The CPCB may compile further information on the subject accordingly.

*v. Needless to say that since the issue of sources of funding has already been dealt with in the orders of the Hon'ble Supreme Court, the States may not put up any excuse on this pretext in violation of the judgment of the Hon'ble Supreme Court.***"**

8. We have also considered the issue in the context of pollution of rivers by a separate order today in *O.A. No. 673 of 2018*, *News item published in "The Hindu" authored by Shri Jacob Koshy titled "More river stretches are now critically polluted: CPCB.* The observation relating to prevention of discharge of untreated sewage and industrial effluents or other pollution in violation of the Water Act, 1974 apply to the present case also. Remedial action by way of prosecution, recovery of compensation and stopping polluting activities needs to be taken with regard to the marine pollution in the same manner.

9. Accordingly, let the State PCBs and PCCs of the States/UTs and Chief Secretaries of the concerned coastal States/UTs take further remedial action and furnish an action taken report to the CPCB. CPCB may file a consolidated report in the matter before the next by e-mail at judicial-ngt@gov.in (preferably in the form of searchable/OCR PDF and not image PDF).

A copy of this order be sent to the Chief Secretaries, PCBs/PCCs of coastal States and the CPCB by email. CPCB may also forward a copy of this order with any other agencies dealing with the coastal pollution.

List for further consideration on 21.09.2020.

Adarsh Kumar Goel, CP

Sheo Kumar Singh, JM

Dr. Nagin Nanda, EM

June 29, 2020
O. A. No. 829/2019
A & DV