

**BEFORE THE NATIONAL GREEN TRIBUNAL
(WESTERN BENCH) PUNE
Appeal No. 25/2021**

In the matter of:

Riverside Resorts and Holiday Homes ...Appellant

Versus

Goa State Pollution Control Board ... Respondent

Reply Affidavit on behalf of Respondent Goa State Pollution Control Board (GSPCB)

I, Dr. Shamila Monteiro, daughter of Shri. Augusto Monteiro aged about 50 years, Indian National, residing at House No. 5, Uttam Darshan, Opp. Sai Baba Temple, Kadamba Plateau, Chimbel, Tiswadi - Goa, do hereby solemn affirmation, state and submit as under:

1. I am presently working as the Member Secretary, Goa State Pollution Control Board, and the Respondent herein. I have been authorised to file the present Affidavit in reply on behalf of the Respondent.
2. The Respondent has received a notice issued by this Hon'ble Tribunal in the above matter returnable on 08.10.2021 along with memo of appeal and documents annexed thereto and is filing its response by way of this reply.
3. That the Respondent Board is filing the present reply affidavit to the Appeal instead of a paragraph wise reply and craves liberty of this Hon'ble Tribunal to file a detailed further affidavit if so required or as directed by this Hon'ble Tribunal.
4. That vide order dated 30.09.2021 passed in the present matter this Hon'ble Tribunal was pleased to direct the Respondent

Board to file a Reply Affidavit in the matter with supporting documents before 08.10.2021 i.e. the next date of hearing.

5. That the Respondent Board had issued the Appellants Hotel unit Consent to Operate under section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974, vide order dated 15.01.2018 that was valid upto 01.08.2020.

6. That condition no.3(vii), and 3(x) of the aforesaid Consent Order stipulates as follows:

3(vii) - The wet waste should be composted within premises.

3(x) - The hotel industry should maintain and operate machinery/equipment/facility for converting bio degradable/organic waste generated from the hotel to compost so as to meet the standard for compost prescribed in the Solid Waste Management Rules, 2016.

Annexed herewith and marked as **EXHIBIT-R1** is a copy of the Consent to Operate order dated 15.01.2018.

7. That the Consent to Operate order dated 15.01.2018 issued to the Appellant by this Respondent Board has expired on 01.08.2020 and the Appellant has submitted an application for Renewal of the said Consent to Operate to the said Respondent Board on 22.02.2021.

That presently the hotel unit of the Appellant does not possess valid Consent of the Board as required under the Water Act.

8. The issue of collection, transportation and treatment of waste generated in the State of Goa is otherwise subjudice before the Hon'ble High Court of Bombay at Goa in Suo Motu Writ Petition No.2/2007. The Hon'ble High Court from time to time has issued

directions to this Respondent and other statutory bodies in this regard.

9. The Hon'ble High Court from time to time issued orders and directions to this Respondent to take appropriate steps to ensure installation and operation of composting facilities within the units premises that generates more than 100 kg of solid waste per day.

10. That in this regard the Respondent Board through its officials had conducted site inspections of the Appellant Unit on 20.01.2021 for verification of the installation and operation of the Organic Waste Treatment/Disposal facility by the unit. During the course of the said inspection it was observed that the Appellant's organic waste composter machine was installed but was not in operation and the waste generated from the unit was being handed over to the local village Panchayat.

Annexed herewith and marked as **EXHIBIT-R2** is a copy of the Report of inspection conducted on 20.01.2021.

11. The Hon'ble High Court vide its order dated 04.03.2020, had directed this Respondent to take appropriate action against the Hotel units that are found to have not installed/operated such Organic Waste Treatment/Disposal facility. Annexed herewith and marked as **EXHIBIT-R3** is a copy of order dated 04.03.2021 passed in Suo Motu Writ Petition No.2/2007.

12. Pursuant to the said inspection, the Respondent Board issued the Appellant Unit a Show Cause Notice dated 05.02.2021 directing it to Show Cause as to why a Penalty under the Polluter Pays Principal should not be levied against it for non -operation of the Organic Waste Composter. Annexed herewith and marked

as **EXHIBIT-R 4** is the copy of Show Cause Notice dated 05.02.2021



13. Thereafter the Respondent Board was in receipt of a reply from the Appellant Unit dated 17.02.2021, wherein the Appellant unit stated that the Organic Waste Composter machine had technical issues and was under repairs. And was made operational on 23.01.2021. Annexed herewith and marked as **EXHIBIT-R 5** is the copy of reply dated 17.02.2021.

14. The Board after considering the reply filed by the Appellant re-inspected the hotel unit on 10.03.2021 to verify the exact position of composting facility. During the inspection the Organic Waste Converter was found to not in operation. The Appellant unit officials further informed the Board officials that the unit had resumed operation post covid from 17.10.2020. Pursuant to the second inspection and upon consideration of the information provided by the Appellant during the course of inspection it was established that the Appellant was not operating the composting facility from 17.10.2020 to 10.03.2021 that is for a period of 146 days. Annexed herewith and marked as **EXHIBIT-R 6** is the copy of report dated 10.03.2021.

15. The Board after considering the reply and findings recorded in the inspection report dated 10.03.2021 issued further directions under section 33(A) of the Water Act and directed the Appellant unit to pay Rs.18,25,000/- as a Penalty towards Environmental Compensation under the Polluter Pays Principle within a period of 15 days from the date of receipt of the said direction. The direction dated 12.03.2021 recorded that the Appellant unit was not operating the composting facility which is in clear violation of the conditions of Consent to Operate order dated 15.01.2018. The Board has followed the formula for assessing environmental compensation. The formula adopted by



the Board for assessing environmental compensation of Rs.18,25,000/- was also provided to the Appellant along with the direction dated 12.03.2021. Annexed herewith and marked as **EXHIBIT-R 7 collectively** is the copy of direction dated 12.03.2021 along with the enclosures.

16. Thereafter the Respondent Board afforded the unit an opportunity of personal hearing in the matter and the Appellant was heard on 26.05.2021.
17. On proper consideration of the submissions made by the unit vide its replies and the personal hearing, the Board concluded that the unit had not operated the composting facility at its premises from 17.10.2020 to 10.03.2021 and as such had violated the condition no. 3(vii) and 3(x) as contained in the Consent to Operate Order dated 15.01.2018 issued to the unit by the Board.
18. The Board vide further Directions dated 19.07.2021 reiterated the directions to the unit to pay an amount of Rs. 18,25,000/- as Environmental Compensation that was imposed upon the unit as a Penalty under the Polluter Pays Principal.
19. The Board vide its Directions dated 19.07.2021 specifically informed the Appellant unit that the Principal Bench of this Hon'ble Tribunal vide orders passed in OA 606/2018 has directed State Pollution Control Boards to initiate action against the units in the matter of violation in the management of solid waste which includes recovery of environmental compensation through the imposition of the penalties under Polluter Pays Principal. The direction further put the Appellant on notice that failure to comply with the directions of this Board would compel

the Board to initiate stringent legal action against the unit which will include issuance of closure directions.

20. In so far as the issue of imposition of Penalty under the Polluter Pays Penalty is concerned the Board has considered the following:

- A. Report of the CPCB in house committee on Methodology for Assessing Environmental Compensation and Action Plan to Utilize the Fund.
- B. Decisions taken by the GSPCB at its 144th Board Meeting Held on 06.07.2020.

Annexed herewith and marked as **EXHIBIT-R8 collectively** are the copies of the Report of the CPCB and Board Meeting Held on 06.07.2020.

21. That the Board in the present case has adopted the following formula while computing the penalty of Rs. 18,25,000/- that was imposed upon the Appellant vide the Directions:

$$EC = PI \times N \times R \times S \times LF$$

Here, EC = Environmental compensation in Rs.

PI = Pollution Index of industrial factor

(For Red, PI = 80, Orange, PI = 50, Green, PI = 30)

N = No. of days violation took place

R = 250 (Factor in Rs. For EC)

S = Factor of scale of operation,

(For Small scale, S = 0.5, for Medium, S = 1.0, Large, S = 1.5)

LF = 1.0 (Location factor)

N is an actual number of days, the hotel unit has not operated the composting facilities.

In the instant case the days are considered from the date on which the hotel unit had resumed its operation post Covid'19 lockdown /

restrictions till the date either on which the respective hotel unit has started operating its composting facilities or the date on which GSPCB inspected the respective hotel units for verification of the operation of the composting facilities.

In the instant case concerning the present appellant;

$$\begin{aligned} EC &= PI \times N \times R \times S \times LF \\ &= 50 \times 146 \times 250 \times 1.0 \times 1.0 \\ &= \text{Rs. 18,25,000/-} \end{aligned}$$

N = 146 days, is considered from 17/10/2020 (date of resumption of operation of the hotel unit post Covid'19 lock down / restriction) to 10/03/2021 (date of inspection for verification).

22. That in light of the aforesaid submissions, the Impugned Order warrants no interference from this Hon'ble Tribunal and the Appeal is liable to be dismissed outrightly with costs.

23. That the annexures are all true copies of their respective originals.


DEPONENT

Member Secretary
Goa State Pollution Control Board

Verification:

Verified in Panaji on this 07th day of October, 2021 that the contents of the above affidavit are true and correct to the best of my knowledge and as per the records duly maintained. No part of it is false and nothing material has been concealed therefrom.


DEPONENT

Member Secretary
Goa State Pollution Control Board

Filed by:

Counsel for GSPCB

Dated: 07/10/2021

SOLEMNLY AFFIRMED AND VERIFIED BEFORE ME

Dr. Shamila Monteiro

WHO IS IDENTIFIED BEFORE ME

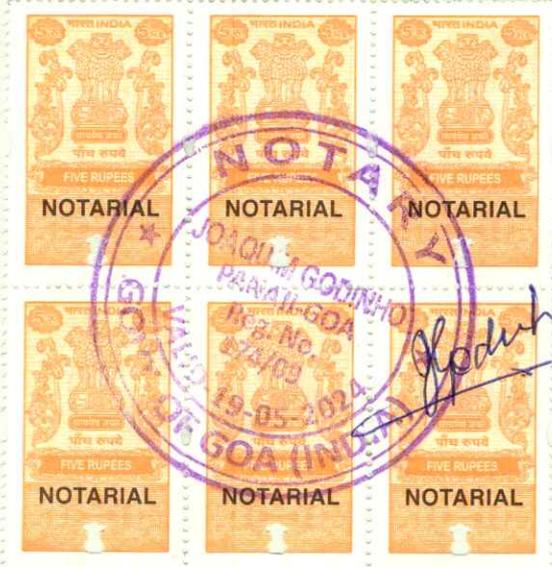
BY ADV

WHOM I KNOW Personally known

SERIAL NO. 9222 DATED 07/10/2021

VALID UPTO 19-05-2024

JOAQUIM GODINHO-NOTARY-PANAJI-GOA



Godinho
07.10.2021

JOAQUIM GODINHO

B. Com., LL.B

Advocate High Court

& Notary

Navelkar Trade Centre

C/S-3, 2nd Floor, M.G. Road,

Panjim-Goa. Ph.: 2422113

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदुशण नियंत्रण मंडळ

(An ISO 9001-2008 Certified Board)

Phone Nos : 91-832-2438567, 2438528
2438563, 2438550

Tel / Fax No. : 0832-2438528



Email Id's :

Member Secretary, GSPCB - ms-gspcb.goa@nic.in
Environment Engineer, GSPCB - ee-gspcb.goa@nic.in
Scientist, GSPCB - scientist-gspcb.goa@nic.in
Asst. Env Engineer, GSPCB - aee-gspcb.goa@nic.in
Asst. Law Officer, GSPCB - alo-gspcb.goa@nic.in

Date: 15/01/2017

No. 5/5076/16-PCB/ CI-3682

Renewal Of Consent to Operate under Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6(i) of the Hazardous Other Wastes (Management and Transboundary Movement) Rules 2016.

[To be referred as Water Act, Air Act and HW (M & T) Rules respectively]

CONSENT TO OPERATE AND AUTHORIZATION is hereby granted to:

M/s. RIVERSIDE RESORTS & HOLIDAY HOMES PVT LTD

(Unit: Resort Rio)

(Represented by: Shri. Tirthram Arondekar)

(Red Category)

Survey No. 144/1, 145/1, 8, 9 & 12 (Part),

Tambudki, Arpora,

Bardez - Goa

Located in the area declared under the provisions of the Water Act, Air Act and Authorization under the provisions of HW (M & T) Rules, subject to the provisions of the Act and the Rules and the Orders that may be made further and subject to the following terms and conditions:

1. This Renewal of Consent to operate and Authorization is issued in supersession of the earlier Consent Orders issued vide Order No.5/2197/10-PCB/13902 dated 08/01/2015 is valid up to 01/08/2020.

2. This Renewal of Consent to operate and Authorization is valid for the operation of:

Sr. No	Description	Quantity
1.	Hotel	128 rooms
2.	Restaurant	130 persons (seating capacity)
3.	Spa	01 nos

3. CONDITIONS REQUIRED TO BE COMPLIED UNDER THE WATER ACT:

(i) The daily quantity of effluent from the hotel & restaurant (sewage & sullage) shall not exceed 91.2 K.L.D.

(ii) Sewage Treatment Plant:

The hotel shall treat domestic effluent in existing Sewage Treatment Plant (120 KLD capacity) and consisting of primary/ secondary and/ or tertiary treatment as is warranted with reference to influent

quality and operate and maintain the same continuously so as to achieve the quality of the treated effluent to the following standards:

pH	Between	5.5 & 9.0
Suspended Solids	Not to exceed	100 mg/l
BOD, 3 days, 27° C	Not to exceed	30 mg/l
COD	Not to exceed	250 mg/l
Oil & Grease	Not to exceed	10mg/l

Other parameters should meet the standards specified in Schedule I Schedule VI [Rule 3(3A)] of the Environment (Protection) Act 1986 for the relevant unit

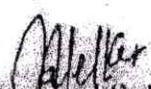
- (iii) **Sewage Disposal:**
The treated effluent shall be recycled to the maximum extent and remaining shall be used on land for gardening. There shall not be any discharge outside the hotel premises.
- (iv) The hotel unit shall at his own cost get the effluent samples collected both before and after treatment and analyse, every month the parameters indicated above from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and rules there under and results shall be submitted regularly to this Board.
- (v) The hotel shall operate and maintain Oil and Grease Trap for effluent arising from its kitchen and laundry and shall have to comply with the 'General Standards for Discharge of Environmental Pollutants Part-A: Effluents' notified under Schedule-VI.
- (vi) A good house-keeping shall be maintained within the hotel premises. All pipes, valves and drains shall be maintained in leak-proof condition. Floor washings shall be maintained to the effluent collection system only and shall not be allowed to find way in open areas.
- (vii) **Non-Hazardous Solid Waste:**
All the Solid wastes arising in the hotel premises shall be properly classified and disposed off to the satisfaction of the Board by:
 - Landfill, incase of inert materials, care should be taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
 - Controlled incineration wherever possible in case of combustible organic matter.
 - As per the Authorization issued by this Board in case of Hazardous waste.

The total quantity shall be segregated and treated as follows:

Sr. no.	Type of segregated solid waste	Quantity	Disposal
1	Dry waste	15 kgs/day	To be handed over to local authority/to be disposed through agency authorized by GSPCB.
2	Wet waste	100 kgs/day	Composted within premises

(viii) The applicant should upload monthly statement (below format) regarding the solid waste generation online.

Sr. No.	Date	Quantity of wet/dry waste	Name of agency collecting the wet/ dry waste	Authorized Signatory


 (Shivanand Salelkar)
 Superintending Engineer
 Goa State Pollution Control Board

(ix) The unit should have zero discharge policy. i.e. the treated waste water may be re-used in process/green belt development/or any other use as deemed fit by the unit with due permission from the Board.

(x) The hotel should operate and maintain machinery/equipment/facility for converting bio degradable /organic waste generated from the hotel to compost so as to meet the standard for compost prescribed in the Municipal Solid Waste (Management & Handling) Rules, 2016

4. CONDITIONS REQUIRED TO BE COMPLIED UNDER THE AIR ACT

(i) The hotel unit shall maintain and operate air pollution control system of adequate capacity for the following equipments

Sr. No.	Name of Equipments/ Installation	No of Installation	Capacity	SO ₂ Kg/Hr	NO _x	HC CO PM		
						(g/kw-hr)		
1.	D.G. set	02	600 KVA	1.62	9.2	1.3	3.5	0.3

Sr. No	Name of Equipments / Installation	No of Installation	Capacity	SO ₂ Kg/Hr	Particulate Matter mg/Nm ³
1.	Boiler	02	2 Lakh Kcal/hr	0.8	1200

(ii) The hotel unit shall erect the chimney(s) of the following specifications:

Sr. No	Chimney attached to	Height
1.	D.G. set (600 KVA)	10 mtrs (each)
2.	Boiler (2 Lakh Kcal/hr)	21 mtrs (each)

(iii) The hotel unit shall observe the following standards:-

Sr. No	Type of fuel	Quantity /hr
1.	H.S.D. (for D.G. set of 600 KVA)	45 ltrs/hr (each)
2.	L.P.G. (for Boiler)	10 Kgs/hr (each)

(iv) The Stack Port Hole and Platform is to be designed as per CPCB guidelines Method I Part I of Stack Monitoring -Material & methodology for isokinetic sampling.

(v) The hotel unit should comply with all the standards for D.G. Sets prescribed at Sr. no. 94, 95 and 96 of Schedule I of the Environment (Protection) Rules, 1986.

(vi) The hotel unit should carry out emission monitoring from the stacks connected to D.G. set once in a year and from other stacks once in three months from a laboratory recognized by Ministry of Environment and Forest under the Environment Protection Act, 1986 and the result shall be submitted to this Board by the 15th of subsequent month.


 (Shivanand Salelkar)
 Superintending Engineer
 Goa State Pollution Control Board

- (vii) The hotel unit shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise. The limits are as follows

Category of Area/ Zone	Limits in dB (A) Leq	
	Day time	Night time
Industrial Area	75	70
Commercial Area	65	55
Residential Area	55	45
Silence Zone	50	40

Day time is reckoned between 6 a.m. to 10 p.m. and night time is reckoned between 10 p.m. to 6 a.m.

5. CONDITIONS REQUIRED TO BE COMPLIED UNDER THE HAZARDOUS AND OTHER WASTES (MANAGEMENT AND TRANSBOUNDARY MOVEMENT) RULES 2016:

- (i) The hotel unit is hereby granted authorization to operate a facility for collection, storage and disposal of hazardous wastes as specified below:

Sr. No.	Category	Type of waste	Quantity	Mode of disposal
1.	5.1	Used /Spent Oil	0.01 MT/annum	To recycler registered with CPCB and having valid authorization of SPCB

- (ii) The authorization shall comply with the provisions of the Environment (Protection) Act, 1986 and the rule made there under.
- (iii) The person authorized shall not rent, lend, sell or transfer or otherwise transport the hazardous waste without obtaining prior permission of the Goa State Pollution Control Board.
- (iv) Any unauthorized change in personnel, equipment or working conditions as mentioned in the hotel unit by the person authorized shall constitute a breach of his authorization.
- (v) It is a duty of the authorized person to take permission of the Goa State Pollution Control Board to close down the facility.
- (vi) The inner bottom surfaces of the tank shall be impervious enough to prevent leakage or seepage of these wastes into the sub surface soil or ground water.
- (vii) The occupier shall maintain a manifest system as per Rule 19 for disposal of hazardous wastes to ensure that these wastes are delivered to the designated facility preventing pilferage and clandestine disposal due to unforeseen events that may occur during transit.
- (viii) The manifest shall be endorsed by the dispatcher, transporter and receiver of hazardous wastes. The endorsed copy shall be furnished to the Goa State Pollution Control Board.
- (ix) Under any circumstances the hazardous waste shall not be disposed to unauthorized facilities.
- (x) The occupier shall maintain the records for collection, storage and disposal of hazardous waste in Form 3 of as per Hazardous and Other Waste (Management & Transboundary Movement) Rules 2016.


 (Shivaji Salekar)
 Superintending Engineer
 Goa State Pollution Control Board

- (xi) The occupier shall furnish monthly returns for collection, storage and disposal of hazardous wastes through online XGN systems.
- (xii) The hotel unit shall put up an online board (minimum size 6x4 Feet) at prominent location near main gate providing details as follows in English and Konkani languages:-
- Hazardous Waste category number.
 - Hazardous Waste quantity number.
 - Treatment facility for each category.
 - Mode of disposal for each category.
 - Hazardous Waste Authorization number, date and validity period.
 - Water Consent number, date and validity period.
 - Air Consent number, date and validity period.
 - Quantity and Nature of Hazardous Chemicals being used.
- (xiii) The occupier shall ensure that the Hazardous Wastes are not allowed to be stored for more than 30 days.

6 GENERAL CONDITIONS:

- (i) The hotel unit shall not change or alter the quantity, quality of discharge, temperature or the mode of the effluent/ emission or hazardous wastes or control equipments provided for without previous permission of the Board.
- (ii) The hotel unit shall provide facility for collection of samples of effluent, air emissions and hazardous wastes to the Board staff.
- (iii) An application in prescribed form along with the prescribed fees for renewal of Consent shall be submitted at least 60 days before the expiry of validity of this Consent. An application for renewal of Consent submitted after expiry of the validity shall accompany with penalty of 50% of the Consent fees in addition to the prescribed consent fees.
- (iv) The Board shall be forthwith informed of any accident or unforeseen event involving discharge of any poisonous, noxious or polluting matter into a stream or well or on land or into the atmosphere where the result of such discharge water/ air is being polluted.
- (v) This Consent to Operate is granted without any prejudice to any of the permission(s) required under any law, by laws and regulations in force. The Consent to Operate is confined to matters arising out of the Air Act and Water Act only.
- (vi) The Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the applicant.
- (vii) The hotel unit shall submit to this office, the Environmental Statement Report in Form V for Financial Year ending April to March by 30th September of the succeeding year as per the provision of the rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- (viii) This Consent does not entitle the party to commence activities until and unless all the necessary Permissions as required under the relevant statutes are obtained by the party and this Consent to Operate is confined to matters arising out of the Air Act and Water Act only.


 (Shivaji Salelkar)
 Superintending Engineer
 Goa State Pollution Control Board

- (ix) Reliable flow meter shall be installed to maintain record of water consumption/waste water generation per day. The records so maintained shall be made available to the Board officials whenever required.
- (x) The unit shall bear the cost of analysis / monitoring in case of complaints received by the Board, reinspections due to non compliances observed by the Board & monitoring carried by the Board.
- (xi) The unit shall submit the details of the Public Liability Insurance Policy under the PLI Act 1991, the Board office as applicable.
- (xii) The unit shall submit returns for disposal of batteries under the Batteries (Management & Handling) Rules 2011, if applicable.
- (xiii) The unit shall submit returns for disposal of e - waste under the E- Waste (Management) Rules 2011, if applicable.
- (xiv) The unit shall submit returns for disposal of plastic waste under the Plastic Waste (Management) Rules 2016, if applicable.

To,
M/s. RIVERSIDE RESORTS & HOLIDAY HOMES PVT LTD
 (Unit: Resort Rio)
 (Represented by: Shri. Tirthram Arondekar)
 Survey No. 144/1, 145/1, 8, 9 & 12 (Part),
 Tambudki, Arpora,
 Bardez - Goa

- Copy to:-1. The Member Secretary,
 Goa Coastal Zone Management Authority,
 C/o. Department of Science, Technology & Environment,
 Opposite Saligao Seminary, Saligao, Bardez - Goa.
2. The Director,
 Department of Tourism,
 Paryatan Bhavan, Patto, Panaji - Goa
3. Accounts Section
 4. Concerned File
 5. Guard File

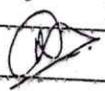
Received Consent fee of: **The capital Investment of the unit is Rs. 41.50 Crores**

Challan no.	Amount	Date
2812	Rs. 1,34,000/- (Air & Water Consent fees)	06/07/2017

Typed by	Verified by
<i>[Signature]</i>	<i>[Signature]</i>

[Signature]
 (Shivanand Salelkar)
 Superintending Engineer
 Goa State Pollution Control Board

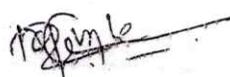
EXHIBIT-R2

Inspection of Hotels for verification of organic waste treatment/ disposal		
Ref:- Order dated 11/7/2016 passed by Hon'ble High Court of Bombay at Goa in SMWP/2/2007		
Sr.No.	Description	Details
1	Name of Hotel	M/s. Riverside Resorts & Holiday Homes Pvt. Ltd. (Unit: Resort Rio)
2	Address	Sy. No. 144/1, 145/1, 8, 9, & 12 (P) Tambudki, Arpora, Bardes - Goa.
3	Consent validity	upto 01/08/2020 (applied for renewal)
4	Daily quantity of Bio-degradable and Non-biodegradable waste generated.	Dry - 40 kg/day Wet - 80 kg/day
5	Mode of treatment/disposal of Non-biodegradable waste.	Handed over to V.P.
6.	Mode of treatment/disposal of biodegradable waste i.e Whether Organic waste is composted (Yes/No)	Handed over to V.P. (partly) Yes.
7	If not, mode of treatment/disposal of organic waste.	V.P.
8	If so, make of the composting facility	Scorptech.
9	Capacity in kg/day	120 kg/day
10	Whether operational during inspection	No.
11	Whether log book maintained, and is in confirmation with waste generated	Yes.
12	Any other observations	OWC machine installed however temporarily not in operation hence the waste handed over to V.P.
13	Name and designation of the unit representative present during inspection	Narayan C. Chodankar. Hygiene & Q.C. Manager. 8888886096.
14	Signature of unit representative	

Name of the inspecting team

: Manoj Kudalkar (JEE)

Signature

: 

Date of the inspection

: 20/01/2021

IN THE HIGH COURT OF BOMBAY AT GOA

SUO MOTU WRIT PETITION NO. 2 OF 2007

-

.... Petitioner

Versus

STATE OF GOA THROUGH CHIEF
SECRETARY AND 44 ORS.,

.... Respondents

Ms. Norma Alvares, Amicus Curiae.

Mr. A. Talaulikar, Additional Government Advocate for the State in
WP No. 935 of 2017.

Mr. Pravin Faldessai, Additional Government Advocate for the State in
SMWP No.2 of 2007.

Mr. Shailesh Redkar, Additional Government Advocate for the State in
PILWP No.39 of 2018.

Mr. Sagar Dhargalkar, Additional Government Advocate for the State
in PILWP No.20 of 2017.

Mr. S.P. Munj, Additional Government Advocate for the State in CP
No. 31 of 2010.

Ms. Sulekha Kamat, Additional Government Advocate for the State in
CP No. 43 of 2017.

Mr. Geetesh Shetye, Additional Government Advocate for the State in
PIL WP No. 4/2007.

Mr. A. D. Bhohe with Ms. K. Govekar, Advocates for Respondent
Nos. 11, 15 in SMWP No. 2 of 2007, for Respondent Nos. 1 and 2 in
CP No. 43 of 2017, PILWP No. 4 of 2007, for Respondent No.2 in
PILWP No.20 of 2017, for the Petitioner in WP No.935 of 2017.

Mr. Z. D'Souza, Advocate for Respondent Nos. 35 and 36.

Mr. S.D. Padiyar with Mr. P. Shirodkar, Advocates for Respondent
Nos. 14, 19 and 47.

Mr. Amey Kakodkar, Advocate for Respondent No.49.

Mr. Somnath Karpe with Mr. Abhishek Sawant, Advocates for
Respondent No.16.

Mr. H. D. Naik, Advocate for Respondent No.10.
Mr. D. Lawande with Mr. P. Dangui, Advocates for the GSPCB.
Mr. Sudesh Usgaonkar with Ms. Maria Rosette Pereira, Advocates for Respondent No.27.
Mr. A. Palekar, Advocate for Respondent Nos. 29,30,31,34 and 35.
Ms. Susan Linhares, Advocate holding for Ms. Anita Thorat, Advocate for Respondent No. 37.
Mr. D. Naik, Advocate for Respondent No. 48.
Mr. Vinoj Daniel, Advocate for V.P., Savordem and for Respondent No. 51.
Mr. P. A. Kamat, Advocate for Respondent No. 53.
Mr. Kapil Kerkar, Advocate for Village Panchayat of Colvale.
Mr. Nikhil D. Pai with Mr. Rohit Shirodkar, Advocates for Respondent No. 26.
Mr. Byron Rodrigues, Advocate for Respondent No. 2.
Mr. V.V. Pednekar, Advocate for Respondent No. 9.
Mr. Aires Rodrigues, Petitioner in CP No. 43/2017.
Mr. Galileo Teles, Advocate for Respondent No. 32.

Coram:- M.S. SONAK &
SMT. M.S. JAWALKAR, JJ.

Date:- 4th March, 2020

P.C.

Mr. Lawande, the learned Counsel for the GSPCB states that the Village Panchayats of Calangute and Velguem had in fact made applications for establishment of Material Recovery Facilities (MRF). However, by inadvertence, a statement was made on the previous occasion that these Panchayats had failed to apply. On the basis of such statement, we had issued notices to the Sarpanch and the

Secretary of the Village Panchayat of Calangute and further, directed the Director of Panchayats to issue notices to the Sarpanch and Deputy Sarpanch of the Village Panchayat of Velguem.

2. Now that the aforesaid position is clarified, we recall the notices issued to the Sarpanch and the Secretary of the Village Panchayat of Calangute, by our order dated 12.02.2020. Similarly, we recall our direction to the Director of Panchayats to issue notices to the Sarpanch, Deputy Sarpanch or Secretary of these two Panchayats.

3. Mr. Faldessai, the learned Additional Government Advocate pointed out that before our order dated 12.02.2020 was modified, notices have been issued to the Secretaries of about 69 Panchayats by Director of Panchayats. There is no question of taking any action against the Secretaries of the Panchayats by resort to Section 50(4) of the Panchayat Raj Act. However, since, it is pointed out that notices have been issued to the Secretaries under the CCS (Conduct) Rules, such notices can be disposed off in accordance with law, depending upon the responses of the Secretaries.

4. Similarly, notices issued to the Sarpanches and Deputy Sarpanches under Section 50(4) of the Panchayat Raj Act will also have to be disposed off by the Director of Panchayats in accordance with law and on their own merits, depending upon the explanation

furnished by such Sarpanches and Deputy Sarpanches.

5. This exercise of disposal of show cause notices to be completed by the Director of Panchayats, within six months from the date of issue of the notices.

6. Mr. Bhohe, the learned Counsel for M.K. Aromatics states that necessary undertaking to furnish bank guarantee by 15.03.2020 has already been filed. He states that M.K. Aromatics consistent with their undertaking will furnish the bank guarantee by 15.03.2020.

7. Mr. Faldessai, the learned Additional Government Advocate states that the Director of Panchayats, Director of Municipal Administration has already written to the Village Panchayats and the Municipal Councils/ City Corporation of Panaji (CCP) to prevail upon the five agencies to apply for authorization from the GSPCB. Mr. Lawande, the learned Counsel for the GSPCB states that he will file the status report within a period of two weeks from today.

8. Mr. Lawande, the learned Counsel for the GSPCB states that he will also file status report in relation to composting facilities of local bodies for wet waste, within two weeks from today.

9. Mr. Lawande, the learned Counsel for the GSPCB states that inspection of units, which *prima facie* generate waste of more than 100 kgs. per day was undertaken and the details of such inspection have been set out in the status report today filed before us. In fact, such details are to be found at Annexure-E of the status report. On perusal of the same, we find that inspection has been carried out of all 44 units and some of establishments have not installed the waste composting units.

10. Mr. Lawande, the learned Counsel for the GSPCB states that notices/directions have already been issued to the establishments, which have not installed such facilities or where such facilities is not found in operation. He states that these notices/directions will be taken to its logical conclusion and further status report will be filed within four weeks from today.

11. On the next occasion, the GSPCB to also report on the issue of dry waste generated by these 44 establishments referred to in Annexure-E.

12. The learned Counsel appearing on behalf of Village Panchayat of Assagao, Calangute and Colva state that black spots within their jurisdiction have been duly cleared. Compliance report on

behalf of Village Panchayat of Calangute and Colva are being filed today. Mr. Somnath Karpe, the learned Counsel appearing for Village Panchayat of Assagao states that compliance report will be filed during the course of this week.

13. Mr. Faldessai, the learned Additional Government Advocate states that officials and the BDO have verified the position and they have reported that there are no black spots within the jurisdiction of these three Panchayats.

14. Mr. Faldessai, the learned Additional Government Advocate states that even a mechanism has been developed for surprise check so that the black spots do not recur. Mr. Faldessai, the learned Additional Government Advocate also pointed out that service of order upon these three Panchayats as well as on other Panchayats is complete.

15. The concerned Deputy Collector to file affidavit regards dumping of construction debris within the jurisdiction of St-Cruz Village Panchayat. This is in context of our earlier directions issued to the Deputy Collector. Such affidavit along with photographs to be filed within one week from today. If the Deputy Collector notices any unauthorized dumping or unauthorized construction, then, the Deputy Collector to indicate action, if any, taken in the matter.

16. Insofar as KTC bus stand at Panaji is concerned, Mr. Bhobe, the learned Counsel for the CCP states that the Directorate of Transport has entered into an agreement with the CCP. Mr. Bhobe, the learned Counsel for the CCP states that CCP will take steps to ensure that KTC bus stand is not littered with garbage/waste.

17. Mr. H.D. Naik, who appears for Mapusa Municipal Council states that necessary affidavit will be filed on the next date with regard to the issue of garbage/waste at Mapusa market.

18. Mr. Byron Rodrigues, the learned Counsel for Village Panchayat of Sancoale states that some steps will be taken for removal of waste/garbage dumped along the side of NH-17A within the jurisdiction of the Village Panchayat of Sancoale. He states that necessary affidavit will be filed in this regard including explaining the use of pits around this stretch for dumping garbage.

19. Mr. Faldessai, the learned Additional Government Advocate also states that the Goa Waste Management Corporation (GWMC) has appointed an agency to ensure that the highways are maintained litter free.

20. Leave is granted to file affidavits.

21. Stand over to 15.04.2020.

SMT. M.S. JAWALKAR, J.

M. S. SONAK, J.

EV

EX-12317 - R4

GOA STATE POLLUTION CONTROL BOARD

149

गोंय राज्य प्रदूषण नियंत्रण मंडळ

(An ISO 9001:2015, ISO 14001:2015. OHSAS 18001:2007 Certified Board)

Phone Nos. : 0832-2407700
2407701, 2407702
2407703



Tel/Fax No. : 0832-2407700

Email Ids:
Chairman, GSPCB: chairman-gspcb.goa@nic.in
Member Secretary GSPCB: ms-gspcb.goa@nic.in
Environment Engineer, GSPCB: ee-gspcb.goa.nic.in
Scientist, GSPCB: scientist-gspcb.goa@nic.in
Office: goapcb@gspcb.in

No.10/1/20-PCB/Reg/13889

By Regd. A.D.

Date: 05/02/2021

SHOW CAUSE NOTICE

WHEREAS, the Hon'ble High Court of Bombay at Goa vide order dated 11/07/2019 passed in Sou Motu Writ Petition no. 02 of 2007 has issued the Goa State Pollution Control Board (hereinafter referred to as the "Board", in short) the following directions amongst others;

"(xiii) In the meantime, the Pollution Control Board itself would formulate, based on the verification carried out by it, requisite directions to be issued to individual local bodies with a view to see that the directions of this Court and various statutory provisions bearing on the subject of solid waste disposal are complied with. This exercise shall be completed by the Pollution Control Board within a period of four weeks of the verification referred to above;"

WHEREAS, in this regard the officials of the Board carried out inspections of hotels on 19/01/2021 and 20/01/2021 for verification of organic waste treatment/ disposal in terms of the directions of the Hon'ble High Court as aforesated.

WHEREAS, during the course of the said inspection, the Board inspected the unit M/s. Riverside Resorts and Holiday Homes Pvt. Ltd.(Unit Resort Rio), Survey No.1441,145/1,8,9,12 (Part), Tambudki, Arpora, Bardez Goa and it was observed that the Organic Waste Composter machine is installed, but not in operation, hence the waste is handed over to the Village Panchayat.

4
05/02/21
ISSUED

NOW THEREFORE, in exercise of the powers vested with the undersigned under section 33(A) read with section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974, and under section 31(A) read with section 21 of the Air (Prevention and Control of Pollution) Act, 1981, notice is hereby served on M/s. Riverside Resorts and Holiday Homes Pvt. Ltd.(Unit Resort Rio), Survey No.1441,145/1,8,9,12 (Part), Tambudki, Arpora, Bardez Goa to show cause within a period of 7 days from the date of receipt of this notice as to why the Polluter Pay Principle Fine should not be levied against you for non -operation of the Organic Waste Composter.

TAKE NOTE, that failure to comply with the aforesaid show cause notice will compel the Board to initiate stringent legal action against you under the provisions of the said Act.

Issued on this 05th-day of February, 2021.

Sanjeev Joglekar

(Sanjeev Joglekar)
Environmental Engineer
For Goa State Pollution Control Board

To,
M/s. Riverside Resorts and Holiday Homes Pvt. Ltd
(Unit Resort Rio), Survey No.1441,145/1,8,9,12 (Part),
Tambudki, Arpora, Bardez

Copy to:-

- 1) The Collector (North), North Goa District, Collectorate Building, Panaji Goa.
- 2) The Secretary, Village Panchayat Arpora, Bardez Goa.
- 3) Office copy.
- 4) Guard file.

RIVERSIDE RESORTS & HOLIDAY HOMES PRIVATE LIMITED

Reg. Off: Resort Rio Tambudki Arpora Bardez Goa 403 518
(FORMERLY KNOWN AS RIVERSIDE HOME DEVELOPERS PVT LTD. TILL 11.02.2009)

20916

Ref. No: RRHHPL/20/02
Date: 17th February, 2021

To,

Mr. Sanjeev Joglekar
The Environmental Engineer,
Goa State Pollution Control Board,
Saligao, Bardez, Goa.

Sub: Reply to your letter. No.10/1/20-PCB/Leg/19889 dated 05.02.2021

Dear Sir,

With reference to your letter No.10/1/20-PCB/Leg/19889 dated 05.02.2021, received on 13.02.2021, asking for clarification on non-operational Waste Composting machine at our site during visit of your team member for inspection on 20/01/2021, however the Organic waste Composter machine had technical issue and was under repair and it was made operational on 23/01/2021.

We are committed to safeguard our environment and operate maintaining the guidelines of Pollution Control board. Therefore the Senior Management of M/s. Riverside Resorts and Holiday Homes Pvt. Ltd.(Unit Resort Rio), has taken decision to install additional Two Units of Organic Waste Composting Machine with latest technology each with the Capacity of 250kg and 100kg per day. The Purchase order is already been sent to the Manufacturer and the installation of first machine will be completed by 10/03/2021.

The additional waste Composting machine will act as substitute during breakdown or for regular service and maintenance and prevent handing over waste to the Village Panchayat.

Kindly accept the same and take on record.

Attached: Proforma Invoice of Organic waste composting Machine and Purchase order raised from our end for procurement.

Thanking You

For Riverside Resorts and Holiday Homes Pvt Ltd.

Tirthram Arondekar
Chief Financial Officer



22/2/21
Sub total
Money / Sec
Cash



PURCHASE ORDER

To,
YASH ENGINEERING SOLUTIONS
101, UTSAVI APPT. PLOT- A 25, SECTOR 14
BELAPUR, NAVI MUMBAI - 400614
400614

P.O. No : 31133
Date : 17/FEB/2021
Page No : 1

S No.	Item Name	Uom	Qty	Rate	Amount
001	AUTOMATIC COMPOSTING MACHINE eC-250KG Automatic composting machine eC-250 kg per day processing Including transportation	NUM	1.000	738000.0	738000.00
	Payment terms: 1)50% advance 2)40% against proforma invoice after inspection 3)10% same day after installation and commissioning				
	d) @ 12.00% :			88560.00	
	GRAND TOTAL:				826560.00

Signature
18/2/21

INR EIGHT LAKHS TWENTY SIX THOUSAND FIVE HUNDRED SIXTY ONLY

Indent No: 33116
Delivery : RESORT RIO
Remarks :

Payment : 50% Advance

User : DIVAKAR

* Please note that if you fail to supply above items as per our specifications the same will be procured from market at your risk and cost.

for Divakar
Purchase Manager

Signature
Chief Financial Officer

Accounts Manager

Yash Engineering Solutions

PROFORMA INVOICE

Date: 16 February 2021

GST NO: 27BCJPP4437JZ25

Bill To:

Ship To:

M/S. RIVERSIDE RESORTS & HOLIDAY HOME PVT LTD
GROUND HOUSE NO 314H, RESORTTRIO TAMBUDKHI,
ARPORA NORTH GOA 403518
GST NO: 30AADCR0685C1ZW

M/S. RIVERSIDE RESORTS & HOLIDAY HOME PVT LTD
GROUND HOUSE NO 314H, RESORTTRIO TAMBUDKHI,
ARPORA NORTH GOA 403518
GST NO: 30AADCR0685C1ZW

Item	Description	Unit	Qty	Unit Price (SS Canopy)	Amount
1	Automatic Composting Machine eC-250Kg per day processing	No.	1	7,38,000	7,38,000
2	Transportation including				
		No.		Total:	7,38,000

GST 12% Extra: 88560

Grand Total: 8,26,560

Special Notes, Terms of Sale

Taxes extra at actual As per GST applicable

Payment Terms(Low Side):-

- I) 50% Advance
- II) 40% against Performa Invoice after inspection.
- III) 10% same day after installation & commissioning.

Note: If you cancel the order 30 % will be deducted from the order valued

Bank Details

Bank Name: ICICI Bank
Bank A/C: 149005500221
Bank IFSC: ICIC0001490

I declare that the information mentioned above is true and correct to the best of my knowledge.

Signature:

Date:

*Should you have any enquiries concerning this invoice, please contact "Vinod Panda" on "+91 9892637672"

Add : 703-10, Neelkhant Park Wayle Nagar. Kalyan(West)-421 301

Telephone :+91 9892637672/9022207672, Email: vinod@engg-soln.com;info@engg-soln.com,
Web: www.engg-soln.com

Old
Signature
18/2/21

EXHIBIT - R6

INSPECTION OF VARIOUS HOTEL UNITS IN THE HON'BLE HIGH COURT MATTER, 2/2007 W. R. T. VERIFICATION OF PRESENT STATUS OF OPERATION OF THE COMPOSTING FACILITIES.

The inspection of the various hotel units were carried out by the undersigned, Mr. Manoj Kudalkar, JEE, in Hon'ble High Court matter w. r. t. verification of present status of operation of the composting facilities on 10/03/2021. The unit wise observations are as follows.

1. M/s. Colonia Santa Maria Hotel Pvt. Ltd., Calangute, Bardez, Goa.

The unit was in operation. The unit has provided vermi-composting facilities and was found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 03/11/2020 post Covid pandemic lockdown and the composting facility is made operational from 20/01/2021.

2. M/s. Nelam's Hotels Pvt. Ltd. (Neelam's The Grand), Calangute, Bardez, Goa.

The unit was in operation. The unit has provided composting machine, "Kwikcomposter" and was found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 01/11/2020 post Covid pandemic lockdown and the composting facility is made operational from 22/01/2021. The composting facility is also shared with M/s. Neelam's Hotels Pvt. Ltd. (Neelam's The Glitz).

3. M/s. Nelam's Hotels Pvt. Ltd. (Neelam's The Glitz), Calangute, Bardez, Goa.

The unit was in operation. The unit has provided composting machine, "Kwikcomposter" and was found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 01/11/2020 post Covid pandemic lockdown and the composting facility is made operational from 22/01/2021. The composting facility is also shared with M/s. Neelam's Hotels Pvt. Ltd. (Neelam's The Grand).

4. M/s. Riviera de Goa Resorts and Hotels Pvt. Ltd., Arpora, Bardez, Goa.

The unit was in operation. The unit has provided vermi-composting facilities and was found to be in operation during the inspection. Only the part of waste (approx. 50 %) is composted within the premises, remaining is handed over to the piggery. As per the information provided by the unit official the unit has commenced its operation from 01/10/2020 post Covid pandemic lockdown and the composting facility is made operational from 10/02/2021.

5. M/s. Riverside Resorts and Holiday Homes Pvt. Ltd. Arpora, Bardez, Goa.

The unit was in operation. The unit has provided composting facilities and was found to be not in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 17/10/2020 post Covid pandemic lockdown and the composting facility is not made operational.

6. M/s. Castle Royal (unit of M/s. Deltin Suites), Nerul, Bardez, Goa.

The unit was in operation. The unit has a common composting facility at Reis Magos which is also shared by the Deltin Casinos. The composting machine was inspected and found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 05/11/2020 post Covid pandemic lockdown and the composting facility is made operational from 28/02/2021.

7. M/s. Phoenix Park Inn (Unit of M/s. Phoenix Township Limited), Candolim, Bardez, Goa.

The unit was in operation. The unit has a composting machine installed within the premises and found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 01/10/2020 post Covid pandemic lockdown and the composting facility is made operational from 01/02/2021

8. M/s. Ashley Resorts Pvt. Ltd. (Adamo The Bellus), Calangute, Bardez, Goa.

The unit was in operation. The unit has a vermi-composting facility within the premises and found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 01/11/2020 post Covid pandemic lockdown and the composting facility is made operational from 28/01/2021.

9. M/s. Mabarest Hotels Pvt. Ltd. (Hotel Fidalgo), Panaji, Goa.

The unit was in operation. The unit had a organic waste convertor installed within which is now removed and the unit has now proposed to install a new composting machine as noted during the inspection. As per the information provided by the unit official the unit has commenced its operation from 16/12/2020 post Covid pandemic lockdown and the composting facility is not available now.



(Manoj Kudalkar)

Junior Environmental Engineer

EXHIBIT - K7 157

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

(An ISO 9001-2015, ISO 14001:2015. OHSAS 18001:2007 Certified Board)

Phone Nos. : 0832-2407700
2407701, 2407702
2407703

Tel/Fax No. : 0832-2407700



Email Ids:
Chairman, GSPCB: chairman-gspcb.goa@nic.in
Member Secretary GSPCB: ms-gspcb.goa@nic.in
Environment Engineer, GSPCB: ee-gspcb.goa.nic.in
Scientist, GSPCB: scientist-gspcb.goa@nic.in
Office: goapcb@gspcb.in

No.5/5076/16-PCB/Tech/695 By Regd A.D.

12/03/2021

**DIRECTIONS UNDER SECTION 33(A) OF THE WATER
(PREVENTION AND CONTROL OF POLLUTION) ACT, 1974**

*Ref: - Show Cause Notice bearing no . 10/1/20-PCB/Leg/19889 dated
05/02/2021*

WHEREAS, vide Show Cause Notice bearing no. 10/1/20-PCB/Leg/19889 dated 05/02/2021 your unit namely M/s. M/s. Riverside Resorts and Holiday Homes Pvt. Ltd.(Unit -Resort Rio), Survey No.1441,145/1,8,9,12 (Part), Tambudki, Arpora, Bardez Goa , was directed by the Goa State Pollution Control Board (herein after referred to as 'the Board' in short) to Show Cause within a period of 7 days from the date of receipt of the Notice as to why a Polluter Pays Fine/Penalty should not be levied against you for non-operation of the composting facility.

WHEREAS, in this regard the Board is in receipt of your reply to the aforesaid Show Cause Notice dated 05/02/2021, wherein you have stated the composting facility is made operational and 2 more composting facility are proposed to be installed. It was not in operational as it was under repairs.

WHEREAS, upon perusal of your reply as aforesaid officials of the Board have conducted a site inspection at your unit on 10/03/2021. During the course of the said site inspection it was observed as follows:-

1. The unit started on 17/10/2020 (post covid 19 lockdown).
2. The composting facility is not in operation.

Copy of the Report of inspection conducted on 10/03/2021 is enclosed.

WHEREAS, the observations as above indicate that you have not commenced operation of the composting machine at your unit till date. You have failed to commence operation of the composting facility or make any arrangements for treatment of wet waste generated at your unit in terms of the Consent to Operate order issued to you by this Board under the Water Act till date.

WHEREAS, the aforesaid observations further indicate that your reply to the Show Cause Notice dated 5/2/2021 issued to you by the Board is unsatisfactory and that your delayed operation of the composting facility at your unit / failure to operate the composting facility at your unit till date amounts to a violation of the Consent to Operate order dated 15/1/2018 issued to your unit under the Water Act.

WHEREAS, such delayed operation of the composting facility at your unit/ failure to operate the composting facility at your unit till date amounts to a violation of the conditions as contained in the Consent to Operate Order dated 15/1/2018 issued to your unit by the Board and also amounts to violation by you in the management of Solid waste generated by your unit.

WHEREAS, the Principal Bench of the National Green Tribunal vide orders passed in OA/606/2018 has directed the State Pollution Control Boards to initiate action in the matter of violations by various units/establishments etc. in the management of Solid Waste that include recovery of Environmental Compensation through the imposition of Penalties under the Polluter Pays Principal upon such violators.

WHEREAS, in this regard the Board at its 144th meeting held on 06/07/2020 has established the procedure to be followed by it for the imposition of Penalties under the Polluter Pays Principal, to violators.

Copy of the decision taken by the Board in this regard is enclosed.

WHEREAS, in this regard and on account of the aforesaid violation by you, the Board has calculated the amount of environmental compensation to be paid by your unit to the Board as a penalty under the Polluter Pays Principal, that amounts to Rs.18,25,000/-(Eighteen Lakhs Twenty Five Thousand) for delayed operation of the composting facility at your unit/ failure to operate the composting facility at your unit till date.

A copy of the document indicating the aforesaid computation is enclosed.

NOW THEREFORE in light of the above and in exercise of the powers vested with the Board under section 33(A) of the Water (Prevention and Control of Pollution) Act, 1974 and as delegated to the undersigned by the Board vide resolution dated 8/5/2019 passed by Board at its 139th meeting held on 8/5/2019 ; the management of M/s. Riverside Resorts and Holiday Homes Pvt. Ltd.(Unit Resort Rio), Survey No.1441,145/1,8,9,12 (Part), Tambudki, Arpora, Bardez Goa, is hereby directed to pay an amount of Rs.18,25,000/-(Eighteen Lakhs Twenty Five Thousand) to the Board as Environmental Compensation, that is imposed upon you as a Penalty under the Polluter Pays Principal, within a period of 15 days from the date of receipt of this Direction.

TAKE NOTE that failure to comply with the aforesaid directions within the stipulated time period will compel the Board to initiate stringent legal action against you that will include issue of closure directions to your unit without any further notice.

Issued on this 12 day of March 2021.


(Dr. Shamila Monteiro)
Member Secretary

Goa State Pollution Control Board

To,
M/s. Riverside Resorts and Holiday Homes Pvt. Ltd.(Unit Resort Rio),
Survey No.1441,145/1,8,9,12 (Part), Tambudki,
Arpora, Bardez Goa

Copy to:

1. *The Director, Department of Tourism, 1st Floor, Paryatan Bhavan, Patto, Panaji, Goa, 403001*
2. *The Secretary, Village Panchayat of Arpora, Bardez Goa.*
3. *The Director, Directorate of Panchayat, Junta House, Panaji Goa.*
4. *The Director, Department of Environment, 1st Floor, Pandit Deendayal Upadhyay Bhavan, Behind Pundalik Devasthan, Near Sanjay School, Porvorim, Bardez Goa.*
5. *Office copy.*
6. *Guard file.*

CALCULATION OF FINES UNDER POLLUTER PAYS PRINCIPLE
FOR M/S. RIVERSIDE RESORTS AND HOLIDAY HOMES PVT. LTD.

$$EC = PI \times N \times R \times S \times LF$$

EC = Environmental compensation

PI = Pollution Index, Red = 80, Orange = 50, Green = 30

N = No. of days

$$R = 250$$

S = Scale, Small = 0.5, Green = 1.0, Large = 1.5

$$LF = 1.0$$

Therefore,

$$EC = PI \times N \times R \times S \times LF$$

$$= 50 \times 146 \times 250 \times 1.0 \times 1.0$$

$$= \text{Rs. } 18,25,000/-$$



INSPECTION OF VARIOUS HOTEL UNITS IN THE HON'BLE HIGH COURT MATTER, 2/2007 W. R. T. VERIFICATION OF PRESENT STATUS OF OPERATION OF THE COMPOSTING FACILITIES.

The inspection of the various hotel units were carried out by the undersigned, Mr. Manoj Kudalkar, JEE, in Hon'ble High Court matter w. r. t. verification of present status of operation of the composting facilities on 10/03/2021. The unit wise observations are as follows.

1. M/s. Colonia Santa Maria Hotel Pvt. Ltd., Calangute, Bardez, Goa.

The unit was in operation. The unit has provided vermi-composting facilities and was found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 03/11/2020 post Covid pandemic lockdown and the composting facility is made operational from 20/01/2021.

2. M/s. Nelam's Hotels Pvt. Ltd. (Neelam's The Grand), Calangute, Bardez, Goa.

The unit was in operation. The unit has provided composting machine, "Kwikcomposter" and was found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 01/11/2020 post Covid pandemic lockdown and the composting facility is made operational from 22/01/2021. The composting facility is also shared with M/s. Neelam's Hotels Pvt. Ltd. (Neelam's The Glitz).

3. M/s. Nelam's Hotels Pvt. Ltd. (Neelam's The Glitz), Calangute, Bardez, Goa.

The unit was in operation. The unit has provided composting machine, "Kwikcomposter" and was found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 01/11/2020 post Covid pandemic lockdown and the composting facility is made operational from 22/01/2021. The composting facility is also shared with M/s. Neelam's Hotels Pvt. Ltd. (Neelam's The Grand).

4. M/s. Riviera de Goa Resorts and Hotels Pvt. Ltd., Arpora, Bardez, Goa.

The unit was in operation. The unit has provided vermi-composting facilities and was found to be in operation during the inspection. Only the part of waste (approx. 50 %) is composted within the premises, remaining is handed over to the piggery. As per the information provided by the unit official the unit has commenced its operation from 01/10/2020 post Covid pandemic lockdown and the composting facility is made operational from 10/02/2021.

5. M/s. Riverside Resorts and Holiday Homes Pvt. Ltd. Arpora, Bardez, Goa.

The unit was in operation. The unit has provided composting facilities and was found to be not in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 17/10/2020 post Covid pandemic lockdown and the composting facility is not made operational.

6. M/s. Castle Royal (unit of M/s. Deltin Suites), Nerul, Bardez, Goa.

The unit was in operation. The unit has a common composting facility at Reis Magos which is also shared by the Deltin Casinos. The composting machine was inspected and found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 05/11/2020 post Covid pandemic lockdown and the composting facility is made operational from 28/02/2021.

7. M/s. Phoenix Park Inn (Unit of M/s. Phoenix Township Limited), Candolim, Bardez, Goa.

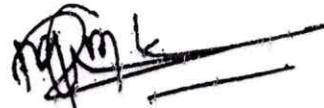
The unit was in operation. The unit has a composting machine installed within the premises and found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 01/10/2020 post Covid pandemic lockdown and the composting facility is made operational from 01/02/2021.

8. M/s. Ashley Resorts Pvt. Ltd. (Adamo The Bellus), Calangute, Bardez, Goa.

The unit was in operation. The unit has a vermi-composting facility within the premises and found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 01/11/2020 post Covid pandemic lockdown and the composting facility is made operational from 28/01/2021.

9. M/s. Mabarest Hotels Pvt. Ltd. (Hotel Fidalgo), Panaji, Goa.

The unit was in operation. The unit had a organic waste convertor installed within which is now removed and the unit has now proposed to install a new composting machine as noted during the inspection. As per the information provided by the unit official the unit has commenced its operation from 16/12/2020 post Covid pandemic lockdown and the composting facility is not available now.



(Manoj Kudalkar)
Junior Environmental Engineer

INSPECTION OF VARIOUS HOTEL UNITS IN THE HON'BLE HIGH COURT MATTER, 2/2007 W. R. T. VERIFICATION OF PRESENT STATUS OF OPERATION OF THE COMPOSTING FACILITIES.

The inspection of the various hotel units were carried out by the undersigned, Mr. Sebastiao Barreto, EA, in Hon'ble High Court matter w. r. t. verification of present status of operation of the composting facilities on 11/03/2021. The unit wise observations are as follows.

1. M/s. The Golden Crown Hotel and Spa., Colva, Goa.

The unit was in operation. The unit has started the operation (only with 10 rooms) from 1st Janaury, 2021 Kitchen and Restaurant not in operation. Since no wet waste generated, OWC is not operated. Occupancy was nil on the day of inspection. As per the information provided by the unit official the dry waste generated is handed over to private vendor. As per the information provided by the unit official the unit has commenced its operation from 01/01/2021

2. M/s. Triumph Reality Pvt. Ltd(Azaya Beach Rresort), Benaulim, Goa.

The unit was in operation. The unit has not installed OWC. The earlier composting facility has been removed. Wet and dry waste generated is disposed through private vendor. As per the information provided by the unit official the unit has commenced its operation from 01/10/2020

3. M/s. Prestige Holiday Resorts Pvt. Ltd.(Haathi Mahal), Cavelossim

The unit was in operation. The unit has provided OWC and was found to be in operation during the inspection. As per the information provided by the unit official the unit has commenced its operation from 01/11/2020 . The composting facility is started from 10/02/2021



(Sebastiao Barreto)
Engineering Asistant

**Report of the CPCB In-house Committee on
Methodology for Assessing Environmental
Compensation and Action Plan to Utilize the Fund**



CENTRAL POLLUTION CONTROL BOARD
"Parivesh Bhawan", East Arjun Nagar,
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Abstract

Environmental compensation is a policy instrument for the protection of the environment which works on the Polluter Pay Principal. Environmental compensation has already been implemented in various countries, although limited in scope. Experiences from these implementations are mixed and tend to stress the importance of certain principles in order to achieve the overall objective of protection of the environment.

The Hon'ble National Green Tribunal through its various judgments has empowered the Central Pollution Control Board to lay down the methodology to assess and recover compensation for damage to the environment and utilize such amount in terms of an action plan for protection of the environment.

An attempt has been made by the CPCB in-house Committee to develop a methodology for assessing environmental compensation to be levied on concerned industry, authority, individual etc. for the protection of environment. Expert institutions/ NGOs like The Energy and Resources Institute, Centre for Science and Environment-India, Institute of Economic Growth etc. were also consulted to finalize the report. Overall objective is to develop self-sense of responsibility towards the environment and to make defaulters realize their mistake by imposing compensation, which will be utilized for the protection/restoration of the environment.

Although, this is the first attempt in India towards development of methodology for assessing environmental compensation, however, efforts have been made to simplifying the process so that regulatory institutions can easily adopt the methodology for implementation.

Chapter-I: Environment Compensation to be levied on Industrial Units

1.1 Background

The Hon'ble National Green Tribunal (NGT), Principal Bench in the matter of OA No. 593/2017 (WP (CIVIL) No. 375/2012, Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors. directed Central Pollution Control Board (CPCB) that:

"The CPCB may take penal action for failure, if any, against those accountable for setting up and maintaining STPs, CETPs and ETPs. CPCB may also assess and recover compensation for damage to the environment and said fund may be kept in a separate account and utilized in terms of an action plan for protection of the environment. Such action plan may be prepared by the CPCB within three months" (Annexure-I).

1.2 Constitution of the Committee

In this context, Chairman, CPCB constituted a Committee under the Chairmanship of Shri A. Sudhakar, I/c WQM-I with Shri A. K. Vidyarthi, I/c WQM-II, Shri P. K. Gupta, I/c IPC-VI, Shri Nazimuddin I/c IPC-II and Dr. S. K. Paliwal, Scientist 'D' as members. The Committee was asked to deliberate on this issue and come up with a draft formulation before 15.9.2018.

1.3 Methodology for Assessing Environmental Compensation

The Committee discussed the issue on 4.9.2018, 13.9.2018, 17.9.2018 and 09.10.2018. A meeting was also held with Senior Officers of CPCB Head Office and Regional Directorates through video conferencing on 28.09.2018 to discuss the draft report and to seek comments/feedbacks. The comments/feedbacks received and deliberations of the Committee on the same are given in **Annexure-II**.

As per the Hon'ble NGT suggestion, CPCB has invited comments of 3 expert institution, namely, Centre for Science and Environment (CSE), Institute of Economic Growth (IEG) and The Energy Research Institute (TERI). A meeting to incorporate the comments of the expert institutions and to finalize the report, was held on 27/03/2019. The CPCB in-house committee on Environmental Compensation has deliberated on the comments and finalized the report accordingly. The Committee's deliberations are attached as **Annexure-III**.

It was deliberated for developing a formula for imposing environmental compensation on industrial units for violation of directions issued by regulatory bodies and this is the first attempt made. The committee discussed that environmental compensation should be based on "Polluter Pay Principle". The Committee decided to list the instances for taking cognizance of cases fit for violation and levy environmental compensation.

Cases considered for levying Environmental Compensation (EC):

- a) Discharges in violation of consent conditions, mainly prescribed standards / consent limits.
- b) Not complying with the directions issued, such as direction for closure due to non-installation of OCEMS, non-adherence to the action plans submitted etc.
- c) Intentional avoidance of data submission or data manipulation by tampering the Online Continuous Emission / Effluent Monitoring systems.
- d) Accidental discharges lasting for short durations resulting into damage to the environment.
- e) Intentional discharges to the environment -- land, water and air resulting into acute injury or damage to the environment.
- f) Injection of treated/partially treated/ untreated effluents to ground water.

1.3.1 In the instances as mentioned at *a, b and c* above, Pollution Index may be used as a basis to levy the Environmental Compensation. CPCB has published guidelines for categorization of industries into Red, Orange, Green and White based on concept of Pollution Index (PI). The Pollution Index is arrived after considering quantity & quality of emissions/ effluents generated, types of hazardous wastes generated and consumption of resources. Pollution Index of an industrial sector is a numerical number in the range of 0 to 100 and can be represented as follows:

$$PI = f(\text{Water Pollution Score, Air Pollution Score \& HW Generation Score})$$

Pollution Index is a number from 0 to 100 and increasing value of PI denotes the increasing degree of pollution *hazard from the industrial sector*.

CPCB has issued directions to all SPCBs/PCCs on 07.03.2016 to adopt the methodology and follow guidelines prepared by CPCB for categorization of industrial sectors into Red, Orange, Green and White.

The concept of Pollution Index, which was deliberated widely with all stakeholders and agreed, shall be used for calculating Environmental Compensation. This may help in implementation of such provision throughout the country, a successful initiative in vital field of industrial pollution control.

After considering various factors including the policy implementation issues, Committee has come up with following formula for levying the Environmental Compensation in instances as mentioned at *a, b and c* including non-compliance of the environmental standards / violation of directions.

The Environmental Compensation shall be based on the following formula:

$$EC = PI \times N \times R \times S \times LF$$

Where,

- EC is Environmental Compensation in ₹
 PI = Pollution Index of industrial sector
 N = Number of days of violation took place
 R = A factor in Rupees (₹) for EC
 S = Factor for scale of operation
 LF = Location factor

The formula incorporates the anticipated severity of environmental pollution in terms of Pollution Index, duration of violation in terms of number of days, scale of operation in terms of micro & small/medium/large industry and location in terms of proximity to the large habitations.

Note:

- The industrial sectors have been categorized into Red, Orange and Green, based on their Pollution Index in the range of 60 to 100, 41 to 59 and 21 to 40, respectively. It was suggested that the average pollution index of 80, 50 and 30 may be taken for calculating the Environmental Compensation for Red, Orange and Green categories of industries, respectively.
- N, number of days for which violation took place is the period between the day of violation observed/due date of direction's compliance and the day of compliance verified by CPCB/SPCB/PCC.
- R is a factor in Rupees, which may be a minimum of 100 and maximum of 500. It is suggested to consider R as 250, as the Environmental Compensation in cases of violation.
- S could be based on small/medium/large industry categorization, which may be 0.5 for micro or small, 1.0 for medium and 1.5 for large units.
- LF, could be based on population of the city/town and location of the industrial unit. For the industrial unit located within municipal boundary or up to 10 km distance from the municipal boundary of the city/town, following factors (LF) may be used:

Table No. 1.1: Location Factor Values

S. No.	Population* (million)	Location Factor# (LF)
1	1 to <5	1.25
2	5 to <10	1.5
3	10 and above	2.0

*Population of the city/town as per the latest Census of India

#LF will be 1.0 in case unit is located >10km from municipal boundary

LF is presumed as 1 for city/town having population less than one million.

For notified Ecologically Sensitive areas, for beginning, LF may be assumed as 2.0. However, for critically Polluted Areas, LF may be explored in future.

- f. In any case, minimum Environmental Compensation shall be ₹ 5000/day.
- g. In order to include deterrent effect for repeated violations, EC may be increased on exponential basis, i.e. by 2 times on 1st repetition, 4 times on 2nd repetition and 8 times on further repetitions.
- h. If the operations of the industry are inevitable and violator continues its operations beyond 3 months then for deterrent compensation, EC may be increased by 2, 4 and 8 times for 2nd, 3rd and 4th quarter, respectively. Even if the operations are inevitable beyond 12 months, violator will not be allowed to operate.
- i. Besides EC, industry may be prosecuted or closure directions may be issued, whenever required.

A sample calculation for Environmental Compensation (without deterrent factor) is given at Table No. 1.2. It can be noticed that for all instances, EC for Red, Orange and Green category of industries varies from 3,750 to 60,000 ₹/day.

Table No. 1.2: A sample calculation for Environmental Compensation

Industrial Category	Red	Orange	Green
Pollution Index (PI)	60-100	41-59	21-40
Average PI	80	50	30
R-Factor	250		
S-Factor	0.5-1.5		
L-Factor	1.00-2.00		
Environmental Compensation (₹/day)	10,000-60,000	6,250-37,500	5,000-22,500

1.3.2 In other instances i.e. *d, e and f*, the environmental compensation may contain two parts – one requires providing immediate relief and other long-term measures such as remediation. In all these cases, detailed investigations are required from expert institutions/organizations based on which environmental compensation will be decided. CPCB shall list the expert institutions for this purpose.

In such cases, comprehensive plan for remediation of environmental pollution may be prepared and executed under the supervision of a committee with representatives of SPCB, CPCB and expert institutions/organizations.

1.4 Action Plan for Utilization of Environmental Compensation Fund

The Committee discussed about the utilization of funds, which will be received by imposing Environmental Compensation. The following Action Plan is proposed to utilize the fund for protection of the environment.

1.4.1. When Environmental Compensation is calculated through the Pollution Index:

The amount received by imposing the Environmental Compensation to the industries / organization non-complying with the environmental standards / violating any CPCB's directions shall be deposited in a separate bank account. The amount accumulated will be utilized for Protection of Environment. The following schemes were identified, which may be considered for utilization of Environmental Compensation Fund:

- a. Industrial Inspections for compliance verification
- b. Installation of Continuous water quality monitoring stations / Continuous ambient air quality monitoring stations for strengthening of existing monitoring network
- c. Preparation of Comprehensive Industry Documents on Industrial Sectors / clean technology
- d. Investigations of environmental damages, preparation of DPRs
- e. Remediation of contaminated sites
- f. Infrastructure augmentation of Urban Local Bodies (ULBs) /capacity building of SPCBs/PCCs

The above proposed list may include other schemes also, depending upon the requirement.

Considering the availability of accumulated funds, CPCB will finalize the scheme, keeping in mind the priority, to utilize the funds of Environmental Compensation.

1.4.2. When Environmental Compensation is assessed based on actual damage to the environment by Expert Organization/ Agency:

The amount of Environmental Compensation under this case will be remediation costs, measures requiring immediate and short-term actions, compensation towards loss of ecology, etc., and will be utilized exclusively for the purpose at specific site, based on the detailed investigations by the Expert Organizations/ agencies.

1.5 Recommendations

The Committee made following recommendations:

- 1.5.1 To begin with, Environmental Compensation may be levied by CPCB only when CPCB has issued the directions under the Environment (Protection) Act, 1986. In case of a, b and c, Environmental Compensation may be calculated based on the formula " $EC = PI \times N \times R \times S \times LF$ ", wherein, PI may be taken as 80, 50 and 30 for red, orange and green category of industries, respectively, and R may be taken as 250. S and LF may be taken as prescribed in the preceding paragraphs.

- 1.5.2 In case of d, e and f, the Environmental Compensation may be levied based on the detailed investigations by Expert Institutions/Organizations.
- 1.5.3 The Hon'ble Supreme Court in its order dated 22.02.2017 in the matter of Paryavaran Suraksha Samiti and another v/s Union of India and others (Writ Petition (Civil) No. 375 of 2012), directed that all running industrial units which require "consent to operate" from concerned State Pollution Control Board, have a primary effluent treatment plant in place. Therefore, no industry requiring ETP, shall be allowed to operate without ETP.
- 1.5.4 EC is not a substitute for taking actions under EP Act, Water Act or Air Act. In fact, units found polluting should be closed/prosecuted as per the Acts and Rules.

Chapter-II: Environmental Compensation to be levied on all violations of Graded Response Action Plan (GRAP) in NCR.

2.1 Background

The CPCB In-house Committee also discussed that the EC shall also be levied on all violations of Graded Response Action Plan (GRAP) in NCR. The implementing agencies for each activity have been identified and the EC will be levied on these agencies. These violations attract graded amounts of EC depending on the state of ambient air quality, which is given in table below:

Table No. 2.1: Environmental Compensation to be levied on all violations of Graded Response Action Plan (GRAP) in Delhi-NCR.

Activity	State Of Air Quality	Environmental Compensation (₹)
Industrial Emissions	Severe +/-Emergency	Rs 1.0 Crore
	Severe	Rs 50 Lakh
	Very Poor	Rs 25 Lakh
	Moderate to Poor	Rs 10 Lakh
Vapour Recovery System (VRS) at Outlets of Oil Companies		
i. Not installed	Target Date	Rs 1.0 Crore
ii. Non-functional	Very poor to Severe +	Rs 50.0 Lakh
	Moderate to Poor	Rs 25.0 Lakh
Construction sites (Offending plot more than 20,000 Sq.m.)	Severe +/-Emergency	Rs 1.0 Crore
	Severe	Rs 50 Lakh
	Very Poor	Rs 25 Lakh
	Moderate to Poor	Rs 10 Lakh
Solid waste/ garbage dumping in Industrial Estates	Very poor to Severe +	Rs 25.0 Lakh
	Moderate to Poor	Rs 10.0 Lakh
Failure to water sprinkling on unpaved roads		
a) Hot-spots	Very poor to Severe +	Rs 25.0 Lakh
b) Other than Hot-spots	Very poor to Severe +	Rs 10.0 Lakh

2.2 Action Plan for Utilization of Environmental Compensation Fund

EC levied on all violations of Graded Response Action Plan (GRAP) in Delhi NCR will be deposited in the same fund and will be utilized in the same manner as mentioned in para 1.4.1 of Chapter-I of this report.

Chapter-III: Environmental Compensation to be levied in case of failure of preventing the pollutants being discharged in water bodies and failure to implement waste management rules

3.1 Background

The Hon'ble Supreme Court in its order dated 22.02.2017 in the matter of Paryavaran Suraksha Samiti and another v/s Union of India and others (Writ Petition (Civil) No. 375 of 2012), directed State Governments (including the concerned Union Territories) to set-up Sewage Treatment Plants (STPs), which are already under implementation, within the time lines already postulated. Further, the STPs, which are yet to set-up, to be completed within a period of three years, from today, i.e. by 22.02.2020.

The Hon'ble NGT in its order dated 06.12.2018 (**Annexure-III**) in the matter of Court of its own motion v/s State of Karnataka (Original Application No. 125/2017 and M.A. No. 1337/2018) has given following directions:

“Since failure of preventing the pollutants being discharged in water bodies (including lakes) and failure to implement solid and other waste management rules are too frequent and widespread, the CPCB must lay down specific guidelines to deal with the same, throughout India, including the scale of compensation to be recovered from different individuals/authorities, in addition to or as alternative to prosecution. The scale may have slabs, depending on extent of pollution caused, economic viability, etc. Deterrent effect for repeated wrongs may also be provided.”

3.2 Ideology of Environmental Compensation Formula

In compliance of the directions of the Hon'ble Tribunal, the Committee deliberated on the issue of environmental compensation to be recovered from individuals/authorities in case of failure of preventing the pollutants being discharged in water bodies and failure to implement solid and other waste management rules. The Committee has suggested that environmental compensation in these cases should be comprised of two components i.e.

1. Cost saved/benefits achieved by the concerned individual/authority by not having proper waste/sewage management system; and
2. Cost to the environment (environmental externality) due to untreated/partially treated waste/sewage because of insufficient capacity of waste/sewage management/treatment facility.

Cost saved/benefits achieved by not having proper waste/sewage management system includes the interest on capital cost of the waste/sewage management facility and daily operation and maintenance (O&M) cost associated with the facility.

The Committee suggested that annual interest rate as 10% on loan amount, borrowed by concerned individual/authority for setting-up waste/sewage management facility, may be assumed as Capital Cost Factor for calculation of environment compensation. Further, as whole O&M cost is saved by concerned individual/authority for not managing required waste/sewage management system, 100% of the O&M cost saved may be considered as O&M cost factor.

Therefore, generalized formula for Environmental Compensation may be described as:

$$EC = \text{Capital Cost Factor} \times \text{Marginal Average Capital Cost for Establishment of Waste or Sewage Management or Treatment Facility} \times (\text{Waste or Sewage Management or Treatment Capacity Gap}) + \text{O\&M Cost Factor} \times \text{Marginal Average O\&M Cost} \times (\text{Waste or Sewage Management or Treatment Capacity Gap}) \times \text{No. of Days for which facility was not available} + \text{Environmental Externality}$$

Cost to the environment due to untreated/partially treated waste/sewage discharge by concerned individual/authority may be assumed as recommended by the committee, which is mentioned below:

Table No. 3.1: Environmental externality for untreated/partially treated sewage discharge

Sewage Treatment Capacity Gap (MLD)	Marginal Cost of Environmental Externality (Rs. per MLD/day)	Minimum and Maximum value of Environmental Externality recommended by the Committee (Lacs Rs. Per Day)
Up to 200	75	Min. 0.05, Max. 0.10
201-500	85	Min. 0.25, Max. 0.35
501 and above	90	Min. 0.60, Max. 0.80

Table No. 3.2: Environmental externality for improper municipal solid waste management

Municipal Solid Waste Management Capacity Gap (TPD)	Marginal Cost of Environmental Externality (Rs. per ton per day)	Minimum and Maximum value of Environmental Externality recommended by the Committee (Lacs Rs. Per Day)
Up to 200	15	Min. 0.01, Max. 0.05
201-500	30	Min. 0.10, Max. 0.15
501-1000	35	Min. 0.25, Max. 0.35
1001-2000	40	Min. 0.50, Max. 0.60
Above 2000		Max. 0.80

The Committee further decided to fix a cap for minimum and maximum cost for capital and O&M component for Environmental Compensation, which are given in below tables:

Table No. 3.3: Minimum and Maximum EC to be levied for untreated/partially treated sewage discharge

Class of the City/Town	Mega-City	Million-plus City	Class-I City/Town and others
Minimum and Maximum values of EC (Total Capital Cost Component) recommended by the Committee (Lacs Rs.)	Min. 2000 Max. 20000	Min. 1000 Max. 10000	Min. 100 Max. 1000
Minimum and Maximum values of EC (O&M Cost Component) recommended by the Committee (Lacs Rs./day)	Min. 2 Max. 20	Min. 1 Max. 10	Min. 0.5 Max. 5

Table No. 3.4: Minimum and Maximum EC to be levied for improper municipal solid waste management

Class of the City/Town	Mega-City	Million-plus City	Class-I City/Town and others
Minimum and Maximum values of EC (Capital Cost Component) recommended by the Committee (Lacs Rs.)	Min. 1000 Max. 10000	Min. 500 Max. 5000	Min. 100 Max. 1000
Minimum and Maximum values of EC (O&M Cost Component) recommended by the Committee (Lacs Rs./day)	Min. 1.0 Max. 10.0	Min. 0.5 Max. 5.0	Min. 0.1 Max. 1.0

The application of formula for calculation of EC may be further understood with the example of two typical cases.

3.3 Environment Compensation for Discharge of Untreated/Partially Treated Sewage by Concerned Individual/Authority:

BIS IS-1172:1993 suggests that for communities with population above 100,000, minimum of 150 to 200 lpcd of water demand is to be supplied. Further, 85% of return rate (CPHEEO Manual on Sewerage and Sewage Treatment Systems, 2013), may be considered for calculation of total sewage generation in a city. CPCB Report on "Performance evaluation of sewage treatment plants under NRCD, 2013", describes that the capital cost for 1 MLD STP ranges from 0.63 Cr. to 3 Cr. and O&M cost is around Rs. 30,000 per month. After detail deliberations, the Committee suggested to assume capital cost for STPs as Rs. 1.75 Cr/MLD (marginal average cost). Further, expected cost for conveyance system is assumed as Rs. 5.55 Cr./MLD (marginal average cost) and annual O&M cost as 10% of the combined capital cost. Population of the city may be taken as per the latest Census of India. Based on these assumptions, Environmental Compensation to be levied on concerned ULB may be calculated with the following formula:

EC = Capital Cost Factor x [Marginal Average Capital Cost for Treatment Facility x (Total Generation-Installed Capacity) + Marginal Average Capital Cost for Conveyance Facility x (Total Generation -Operational Capacity)] + O&M Cost Factor x Marginal Average O&M Cost x (Total Generation- Operational Capacity) x No. of Days for which facility was not available + Environmental Externality x No. of Days for which facility was not available

Alternatively;

EC (Lacs Rs.) = [17.5(Total Sewage Generation – Installed Treatment Capacity) + 55.5(Total Sewage Generation-Operational Capacity)] + 0.2(Sewage Generation-Operational Capacity) x N + Marginal Cost of Environmental Externality x (Total Sewage Generation-Operational Capacity) x N

Where; N= Number of days from the date of direction of CPCB/SPCB/PCC till the required capacity systems are provided by the concerned authority

Quantity of Sewage is in MLD

Table No. 3.5: Sample calculation for EC to be levied for discharge of untreated/partial treated Sewage

City	Delhi	Agra	Gurugram	Ambala
Population (2011)	1,63,49,831	17,60,285	8,76,969	5,00,774
Class	Mega-City	Million-plus City	Class-I Town	Class-I Town
Sewage Generation (MLD) (as per the latest data available with CPCB)	4195	381	486	37
Installed Treatment Capacity (MLD) (as per the latest data available with CPCB)	2500	220	404	45.5
Operational Capacity (MLD) (as per the latest data available with CPCB)	1900	140	300	24.5
Treatment Capacity Gap (MLD)	2295	241	186	12.5
Calculated EC (capital cost component for STPs) in Lacs Rs.	29662.50	2817.50	1435.00	0.00
Calculated EC (capital cost component for Conveyance System) in Lacs. Rs.	127372.50	13375.50	10323.00	693.75
Calculated EC (Total capital cost component) in Lacs Rs.	157035.00	16193.00	11758.00	693.75
Minimum and Maximum values of EC (Total Capital Cost Component) recommended by the Committee (Lacs Rs.)	Min. 2000 Max. 20000	Min. 1000 Max. 10000	Min. 100 Max. 1000	Min. 100 Max. 1000
Final EC (Total Capital Cost Component) in Lacs Rs.	20000.00	10000.00	1000.00	693.75
Calculated EC (O&M Component in Lacs Rs./day)	459.00	48.20	37.20	2.50
Minimum and Maximum values of EC (O&M Cost Component) recommended by the Committee (Lacs Rs./day)	Min. 2 Max. 20	Min. 1 Max. 10	Min. 0.5 Max. 5	Min. 0.5 Max. 5
Final EC (O&M Component) in Lacs Rs./Day	20.00	10.00	5.00	2.50
Calculated Environmental Externality (Lacs Rs. Per Day)	2.0655	0.2049	0.1395	0.0094
Minimum and Maximum value of Environmental Externality recommended by the Committee (Lacs Rs. Per Day)	Min. 0.60 Max. 0.80	Min. 0.25 Max. 0.35	Min. 0.05 Max. 0.10	Min. 0.05 Max. 0.10
Final Environmental Externality (Lacs Rs. Per day)	0.80	0.25	0.10	0.05

3.4 Environment Compensation to be Levied on Concerned Individual/Authority for Improper Solid Waste Management:

It is known that estimated MSW generation is approximately 1.5 lakh MT/Day in India (MoHUA Report-2016). As per the principles of SWM Rules, 2016 and PWM Rules 2016, as amended in 2018, the total cost of Municipal Solid Waste management in a city/town includes cost for door to door collection, cost of segregation at source, cost for transportation in segregated manner, cost for processing of MSW and disposal through facility like composting, biomethanation, recycling, co-processing in cement kilns etc.

In view of above, it is estimated that the total cost of processing and treatment of MSW for a city having population size of 1 lakh and generating approximately 50 tons/day of MSW is Rs.15.5 Crores, including capital cost (one time) and O & M cost for one year. The expenditure for subsequent years would be only Rs. 3.5 crores/annum.

CPCB sponsored a survey to ascertain the status of municipal solid waste disposal in 59 cities/towns of India. The survey was conducted by the Environment Protection Training Research Institute (EPTRI), Hyderabad. As per the survey, it is estimated that solid waste generated in small, medium and large cities and towns is about 0.1 kg (Class-III), 0.3-0.4 kg (Class-II) and 0.5 kg (Class-I) per capita per day respectively. The committee opined that 0.6 kg/day, 0.5 kg/day and 0.4 kg/day per capita waste generation may be assumed for mega-cities, million-plus UAs/towns and Class-I UA/Towns respectively for calculation of environmental compensation purposes. Based on these assumptions, Environmental Compensation to be levied on concerned ULB may be calculated with the following formula:

EC = Capital Cost Factor x Marginal Average Cost for Waste Management x (Per day waste generation-Per day waste disposed as per the Rules) + O&M Cost Factor x Marginal Average O&M Cost x (Per day waste generation-Per day waste disposed as per the Rules) x Number of days violation took place + Environmental Externality x N

Where;

Waste Quantity in tons per day (TPD)

N= Number of days from the date of direction of CPCB/SPCB/PCC till the required capacity systems are provided by the concerned authority

Simplifying;

EC (Lacs Rs.) = 2.4(Waste Generation - Waste Disposed as per the Rules) +0.02 (Waste Generation - Waste Disposed as per the Rules) x N + Marginal Cost of Environmental Externality x (Waste Generation - Waste Disposed as per the Rules) x N

Table No. 3.6: Sample calculation for EC to be levied for improper management of Municipal Solid Waste

City	Delhi	Agra	Gurugram	Ambala
Population (2011)	1,63,49,831	17,60,285	8,76,969	5,00,774
Class	Mega-City	Million-plus City	Class-I Town	Class-I Town
Waste Generation (kg. per person per day)	0.6	0.5	0.4	0.4
Waste Generation (TPD)	9809.90	880.14	350.79	200.31
Waste Disposal as per Rules (TPD) (<i>assumed as 25% of waste generation for sample calculation</i>)	2452.47	220.04	87.70	50.08
Waste Management Capacity Gap (TPD)	7357.42	660.11	263.09	150.23
Calculated EC (capital cost component) in Lacs. Rs.	17657.82	1584.26	631.42	360.56
Minimum and Maximum values of EC (Capital Cost Component) recommended by the Committee (Lacs Rs.)	Min. 1000 Max. 10000	Min. 500 Max. 5000	Min. 100 Max. 1000	Min. 100 Max. 1000
Final EC (capital cost component) in Lacs. Rs.	10000.00	1584.26	631.42	360.56
Calculated EC (O&M Component) in Lacs. Rs./Day	147.15	13.20	5.26	3.00
Minimum and Maximum values of EC (O&M Cost Component) recommended by the Committee (Lacs Rs./Day)	Min. 1.0 Max. 10.0	Min. 0.5 Max. 5.0	Min. 0.1 Max. 1.0	Min. 0.1 Max. 1.0
Final EC (O&M Component) in Lacs. Rs./Day	10.00	5.00	1.00	1.00
Calculated Environmental Externality (Lacs Rs. Per Day)	2.58	0.18	0.03	0.02
Minimum and Maximum value of Environmental Externality recommended by the Committee (Lacs Rs. per day)	Max. 0.80	Min. 0.25 Max. 0.35	Min. 0.01 Max. 0.05	Min. 0.01 Max. 0.05
Final Environmental Externality (Lacs Rs. per day)	0.80	0.25	0.03	0.02

3.3 Action Plan for Utilization of Environmental Compensation Fund

EC levied in case of failure of preventing the pollutants being discharged in water bodies and failure to implement waste management rules will be deposited in the same fund and will be utilized in the same manner as mentioned in para 1.4.1 of Chapter-I of this report.

3.4 Recommendations

1. The Committee recommended that to begin with, Environmental Compensation to be recovered from individuals/authorities in case of failure of preventing the pollutants being discharged in water bodies and failure to implement solid waste management rules may be calculated with the methodology described in the report.
2. If mixing of Bio-medical Waste or Hazardous Waste is found in Municipal Solid Waste than capital cost component of EC may be increased by a multiplication factor of 1.5.

3. In order to include deterrent effect for continuous violations, component of O&M and Environmental Externality in EC formula may be increased on exponential basis by 2, 4, and 8 times after every six-months, beyond the time prescribed by authority for ensuring complete treatment of sewage/waste of the city/town.

Chapter-IV: Environmental Compensation in Case of Illegal Extraction of Ground Water

4.1 Background

The Hon'ble National Green Tribunal (NGT), Principal Bench in the matter of Shailesh Singh v/s Central Ground Water Board & Ors. (Original Application No. 327/2018) vide order dated 03/01/2019 (Annexure-V) directed Central Pollution Control Board (CPCB) that:

"CPCB may constitute a mechanism to deal with individual cases of violation of norms, as existed prior to Notification of 12/12/2018, to determine the environment compensation to be recovered or other coercive measures to be taken, including prosecution, for past illegal extraction of ground water, as per law."

4.2 Constitution of the Committee

In compliance to Hon'ble NGT dated 03/01/2019, CPCB constituted a committee under the Chairmanship of Shri A. Sudhakar, DH, WQM-I Division with Shri P. K. Gupta, DH, IPC-VI, Shri Vishal Gandhi, Sc. D, UPC-I Division and Smt. Suniti Parashar, Scientist B, WQM-I Division as members. The committee was asked to deliberate on this issue and come up with draft formulation of mechanism to determine the Environmental Compensation for illegal extraction of ground water.

4.3 Methodology for Assessing Environmental Compensation

The committee discussed the issue on 07/02/2019, 07/03/2019 and 20/3/2019. The committee deliberated on the issue of Environmental Compensation to be recovered from individuals/industries such as domestic, packaging drinking water units, mining & infrastructure projects and industrial units in case of illegal extraction of ground water. The Guidelines/Criteria for evaluation of proposals/requests for Ground Water Abstraction, 2015 were also discussed and based on this further formulation to levy Environmental Compensation has been evolved.

4.4 Ideology of Environmental Compensation w.r.to illegal extraction of ground water

Ground water is becoming an increasingly scarce resource because of its unabated and indiscriminate over-exploitation: Growth in ground water exploitation, however, has led to a steep fall in water table in several parts of the country. Use of ground water is becoming unsustainable day by day. The falling water table is a matter of special concern since it tends to reduce the accessibility of the resource to small and marginal farmers due to increase in costs of extractions.

Specific conditions applicable in Notified/Non-Notified areas for various users, as mentioned in Guidelines/Criteria for evaluation of proposals/requests for Ground Water Abstraction, 2015 are given below:

For Notified Areas:

1. Permission to abstract ground water through any energized means will not be accorded for any purpose other than drinking water.

2. Central Ground Water Authority (CGWA) so far has notified 162 areas, in the country for the purpose of regulation of ground water development.
3. Regulation of Ground Water development in Notified areas is through District Administrative Heads assisted by Advisory Committees under the provisions of Section 4 of the Environment (Protection) Act, 1986.
4. In Notified areas, ground water use in individual houses, infrastructure complexes like group housing societies, hospitals, schools etc. and drinking water requirements of workers in industries can be allowed.
5. NOC for ground water withdrawal will be considered only if Water Supplying Department is not providing adequate water in the area/premises. Proof for this is to be produced from the concerned authority by the applicant.
6. For individual houses, the maximum diameter of the tube-well should be restricted to 4 inch only and the capacity of the pump should not exceed 1HP. For infrastructure projects, maximum diameter of the ground water abstraction structures should be restricted to 150 mm (6 inches) only and capacity of the pump should not exceed 5 HP.
7. Any violation of the above conditions will attract legal action under Section 15 of the Environment (Protection) Act, 1986.

For Non-Notified Areas:

NOC for ground water withdrawal will be considered for industries/infrastructure/packaging as per safe, semi critical, critical and over-exploited criteria.

4.5 Formula for Environmental Compensation for illegal extraction of ground water

The committee decided that the formula should be based on water consumption (Pump Yield & Time duration) and rates for imposing Environmental Compensation for violation of illegal abstraction of ground water. The committee has proposed following formula for calculation of Environmental Compensation (EC_{GW}):

$EC_{GW} = \text{Water Consumption per Day} \times \text{No. of Days} \times \text{Environmental Compensation Rate for illegal extraction of ground water (ECR}_{GW})$
--

Where water Consumption is in m^3/day and ECR_{GW} in $Rs./m^3$

Yield of the pump varies based on the capacity/power of pump, water head etc. For reference purpose, yield of the pump may be assumed as given in **Annexure-VI**.

Time duration will be the period from which pump is operated illegally.

In case of illegal extraction of ground water, quantity of discharge as per the meter reading or as calculated with assumptions of yield and time may be used for calculation of EC_{GW} .

4.6 Environmental Compensation Rate (ECR_{GW}) for illegal use of Ground Water

The committee decided that the Environmental Compensation Rate (ECR_{GW}) for illegal extraction of ground water should increase with increase in water consumption as well as water scarcity in the area. Further, ECR_{GW} are kept relaxed for drinking and domestic use as compared to other uses, considering the basic need of human being.

As per CGWB, safe, semi-critical, critical and over-exploited areas are categorized from the ground water resources point of view (CGWB, 2017). List of safe, semi-critical, critical and over-exploited areas are available on the website of CGWB and can be accessed from- <http://cgwa-noc.gov.in/LandingPage/NotifiedAreas/CategorizationOfAssessmentUnits.pdf#ZOOM=150>.

Environmental Compensation Rates (EC_{GW}) for illegal use of ground water (EC_{GW}) for various purposes such as drinking/domestic use, packaging units, mining and industrial sectors as finalized by the committee are given in tables below:

4.6.1 EC_{GW} for Drinking and Domestic use:

Drinking and Domestic use means uses of ground water in households, institutional activity, hospitals, commercial complexes, townships etc.

Sl. No.	Area Category	Water Consumption (m^3/day)			
		<2	2 to <5	5 to <25	25 & above
Environmental Compensation Rate (EC_{GW}) In Rs./ m^3					
1	Safe	4	6	8	10
2	Semi Critical	12	14	16	20
3	Critical	22	24	26	30
4	Over-Exploited	32	34	36	40
Minimum EC_{GW} =Rs 10,000/- (for households) and Rs. 50,000 (for institutional activity, commercial complexes, townships etc.)					

4.6.2 EC_{GW} for Packaged drinking water units:

Sl. No.	Area Category	Water Consumption (m^3/day)			
		<200	200 to <1000	1000 to <5000	5000 & above
Environmental Compensation Rate (EC_{GW}) In Rs./ m^3					
1	Safe	12	18	24	30
2	Semi critical	24	36	48	60
3	Critical	36	48	66	90
4	Over-exploited	48	72	96	120
Minimum EC_{GW} =Rs 1,00,000/-					

4.6.3 EC_{GW} for Mining, Infrastructure and Dewatering Projects

Sl. No.	Area Category	Water Consumption (m^3/day)			
		<200	200 to <1000	1000 to <5000	5000 & above
Environmental Compensation Rate (EC_{GW}) In Rs./ m^3					
1	Safe	15	21	30	40
2	Semi critical	30	45	60	75
3	Critical	45	60	85	115
4	Over-exploited	60	90	120	150
Minimum EC_{GW} =Rs 1,00,000/-					

4.6.4 ECR_{GW} for Industrial Units:

Sl. No.	Area Category	Water Consumption (m ³ /day)			
		<200	200 to <1000	1000 to <5000	5000 & above
Environmental Compensation Rate (ECR _{GW}) In Rs./m ³					
1	Safe	20	30	40	50
2	Semi critical	40	60	80	100
3	Critical	60	80	110	150
4	Over-exploited	80	120	160	200
Minimum ECR_{GW}=Rs 1,00,000/-					

For better understanding of implementation of ECR_{GW} policy, some example calculations are given below:

Example No. 1 (For drinking and domestic Use):

It is observed that a household in safe zone is extracting ground water illegally from past 2 year and 3 months with the help of 1 HP pump, dia 4 inches and head as 25 meter. It is assumed that the house-owner runs the pump for 0.5 hr/day. What Environmental Compensation (EC_{GW}) will be charged to the owner?

Solution: Pump Yield (Please refer Annexure-VI) = 3 m³/hr
 Daily Consumption = 3 x 0.5 = 1.5 m³
 ECR_{GW} = 4 Rs./m³ (Please refer para 4.6.1)
 EC to be levied = 4 x 1.5 = 6 Rs./day
 Total time period = 820 days

Then, ECR_{GW} = 6 x 820

Calculated ECR_{GW} = 4,920 Rs.

EC_{GW} to be levied = 10,000 Rs. (minimum prescribed ECR_{GW}, please refer para 4.6.1)

Example 2 (For Industrial Units):

It is observed that an industry in critical zone is extracting ground water illegally from past 1 year with the help of 5 HP pump, dia 6 inches and head as 50 meter. It is assumed that the industry runs the pump for 3 hrs/day. What Environmental Compensation (EC_{GW}) will be charged to the owner?

Solution: Pump Yield (Please refer Annexure-VI) = 12 m³/hr
 Daily Consumption = 12 x 3 = 36 m³/day
 ECR_{GW} = 60 Rs./m³ (Please refer para 4.6.4)
 EC to be levied = 60 x 36 = 2,160 Rs./day
 Total time period = 365 days

Then, ECR_{GW} = 2,160 x 365

ECR_{GW} = 7,88,400 Rs.

4.7 Relaxation

Central Ground Water Authority (CGWA) reserves to right to relax or interpret these mechanisms in case of any exigency or situation of National strategic importance, as per Guidelines/Criteria for evaluation of proposals/requests for Ground Water Abstraction, 2015.

4.8 Recommendations

The committee has given following recommendations:

- The minimum Environmental Compensation for illegal extraction of ground water for domestic purpose will be Rs. 10,000, for institutional/commercial use will be 50,000 and for other uses will be 1,00,000.
- In case of fixation of liability, it always lies with current owner of the premises where illegal extraction is taking place.
- Time duration may be assumed to be one year in case where no evidence for period of installation of bore well could be established.
- For Drinking and Domestic use, where metering is not present but storage tank facility is available, minimum water consumption per day may be assumed as similar to the storage capacity of the tank.
- For industrial ground water use, where metering is not available, water consumption may be assumed as per the consent conditions. Further, where in case industry is operating without consent, water consumption may be calculated based on the plant capacity (on the recommendation of SPCB/PCC, if required). SPCB/PCC may bring the issue of illegal extraction of ground water in industries in to the notice of CGWA for appropriate action by CGWA.
- Authorities assigned for levy EC and taking penal action are listed below:

S. No.	Actions	Authority
1.	To seal the illegal bore-well/tube-well to stop extraction of water and further closure of project	District Collector
2.	To levy EC _{GW} as per prescribed method	District Collector, CGWA
3.	To levy EC on water pollution, as per the method prescribed in report of CPCB- "EC on industrial pollution"	CPCB/SPCB/PCC
4.	Prosecution of violator	CGWA under EP Act SPCB/PCC under Air and Water Act

- CGWA may maintain a separate account for collection and utilization of fund, collected through the prescribed methodology in this report.

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

**Original Application No. 593/2017
(W.P. (Civil) No. 375/2012)**

In the matter of:

**Paryavaran Suraksha Samiti & Anr.
Vs.
Union of India & Ors.**

**CORAM : HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE DR. JUSTICE JAWAD RAHIM, JUDICIAL MEMBER
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Present:

Applicant:	Mr. Rohit Prajapati, Applicant in person
Amicus Curiae:	Mr. Jai A. Dehadrai, Adv.
Respondent Nos.	Mr. Nishe Rajan Shonker, Adv. for State of Kerala
	Mr. Tarunvir Singh Khehar, Ms. Guneet Khehar
	Mr. Sandeep Mishra Advs. for GNCTD
	Mr. Anil Shrivastava Mr Rituraj Bswas and
	Ms. Sujaya Bardhan, Advs. for State of Arunachal Pradesh
	Mr. Jogy Scaria, Ms. Beena Victor, Advs. for Kerala State Pollution Control Board
	Mr. Avijit Roy, Adv. for Assam Pollution Control Board
	Mr. Leishangthem Roshmani Kh, Ms. Maibam Babina, Advs. for State of Manipur
	Mr. Nikhil Nayyar, Mr. Dhananjay Bajjal, Advs. for APPCB and TSPCB
	Mr. Mukesh Verma, Adv.
	Mr. Tarunvir Singh Khehar, Adv., Mr. Sandeep Mishra and Ms. Guneet Khehar, Adv.
	Mr. Dinesh Jindal, LO for DPCC
	Ms. Aruna Mathur, Mr. Avneesh Arputham, Ms. Simraj Jeet and Ms. Anuradha Arputham, Advs. for State of Sikkim
	Mr. Raja Chatterjee, Mr. Piyush Sachdev, Ms. Abhinandini Yadav, Advs. and Advs. for State of WB
	Mr. Edward Belho, AAG, Mr. K. Luikang Michael and Ms. Hoineithiam, Advs. for State of Nagaland
	Ms. Enatoli Sema, Adv. for State of Nagaland and Pollution Control Board
	Mr. M. Paikaray and Mr. A.K. Panda, Advs. for SPCB, Odisha
	Mr. Dhruv Pal, Adv. for State of Gujarat
	Mr. V.K. Shukla, Adv. for State of MP
	Mr. Jayesh Gaurav, Adv. for R-47
	Mr. Tayenjam Momo Singh, Adv. for Meghalaya Pollution Control Board
	Mr. Shlok Chandra and Mr. Ritesh Kumar Sharma, Advs.
	Mr. Gautam Singh and Mr. Shoeab Alam, Advs. for State of Bihar
	Ms. Aprajita Mukherjee, Adv.
	Ms. G. Indira, Adv. for UT of Andaman & Nicobar
	Mr. Balendu Shekhar, Mr. Sriansh Prakash and Mr. Rajkumar Maurya, Advs. for Ministry of Environment, Forest and Climate Change
	Ms. Puja Kalra, Adv. for SDMC & NDMC
	Mr. Anil Grover, AAG, Mr. Rahul Khurana and Mr. Mishal Vij, Advs. for State of Haryana and HSPCB

Ms. Yogmaya Agnihotri, Adv. and Ms. Prity, Adv. for CECB
 Ms. Sakshi Popli, Adv. for Ministry of Environment, Forest and Climate Change
 Mr. Shuvodeep Roy, Adv. and Mr. Rituraj Biswas, Adv. for State of Tripura & Tripura Pollution Control Board
 Mr. Shashank Bajpai and Mr. Shakun S. Shukla, Adv. for State of Odisha
 Ms. Asha Nayar Basu and Ms. Aradhita Ghosh Mandal, Adv.
 Ms. Priyanka Sinha, Adv. for State of Jharkhand
 Mr. Rajul Shrivastav, Adv. for MPPCB
 Mr. Pradeep Misra and Mr. Daleep Dhyani Adv. for UPPCB
 Mr. R. Rakesh Sharma and Mr. V. Mowli, Adv. for State of TN & TNPCB
 Mr. Shubham Bhalla, Adv.
 Mr. Shiv Mangal Sharma, AAG, Mr. Saurabh Rajpal, Mr. Adhiraj Singh, Ms. Shikha Sandhu and Mr. Vikrmjeet singh, Adv. for State of Rajasthan and Pollution Control Board
 Mr. G. M. Kawoosa, Adv. for State of J & K
 Mr. Divya Prakash Pande, Adv. For HPSPCB
 Mr. Manish Kumar, Adv.

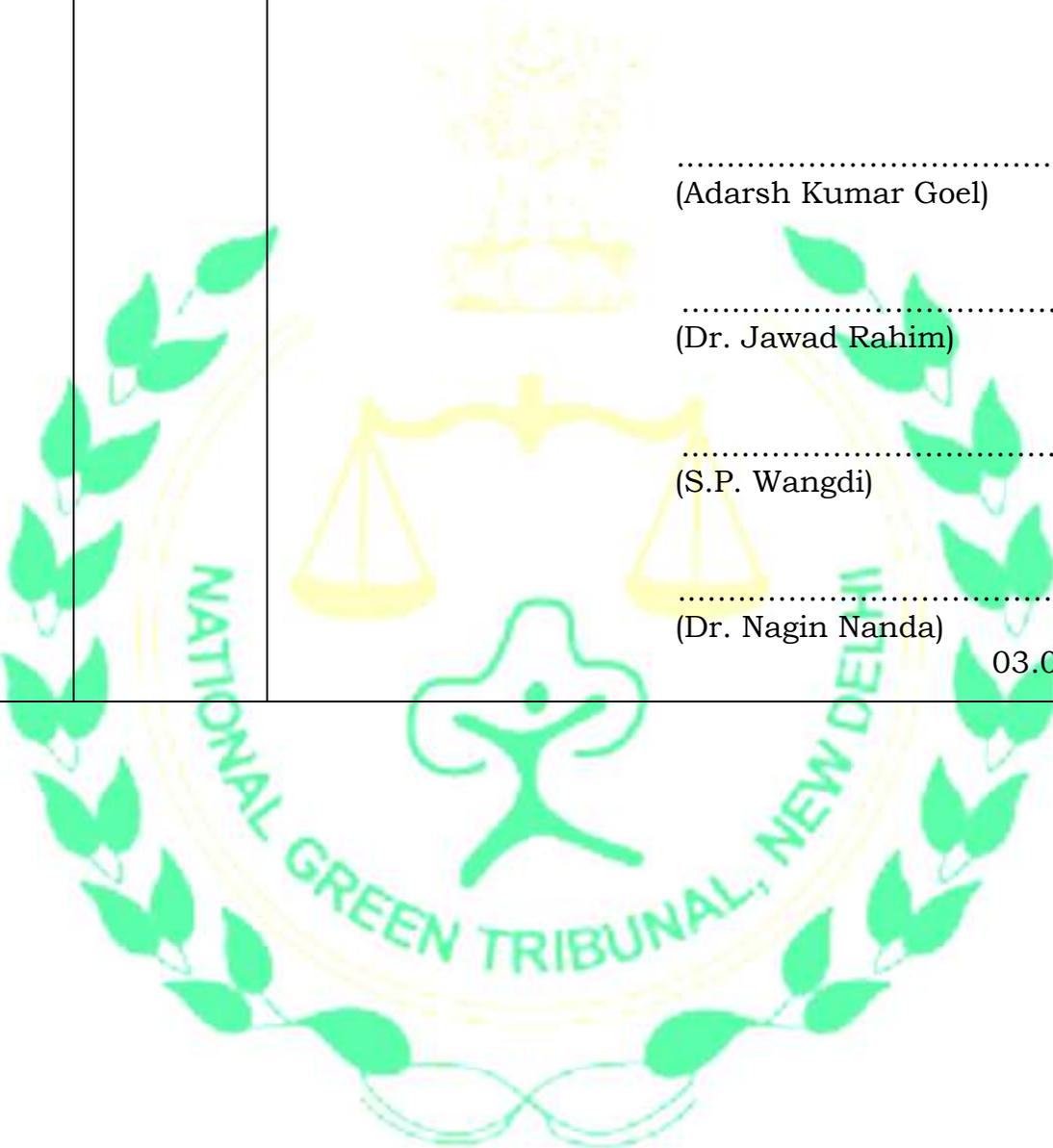
Date and Remarks	Orders of the Tribunal
<p>Item No. 12 August 03, 2018 A</p>	<p>1. This matter was taken by this Tribunal in furtherance to the orders of the Hon'ble Supreme Court dated 22.02.2017 <i>Paryavaran Suraksha Samiti Vs. Union of India</i> (2017) 5 SCC 326, establishment and functioning of ETPs/CETP/STPs.</p> <p>2. Vide order dated 25.05.2017, Notice was issued to Central Pollution Control Board and all the States Pollution Control Boards/Committees and the Ministry of Environment, Forest and Climate Change. They were directed to file status-cum-compliance report in terms of the orders of the Hon'ble Supreme Court. Accordingly, various status reports have been filed. An affidavit has been filed by the Ministry of Environment, Forest and Climate Change dated 04th July, 2017 stating as follows:</p> <p style="padding-left: 40px;">“4. That the answering Respondent is engaged in policy formulation, prescribing standards and its implementation through the Central Pollution Control Board (CPCB), State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) for UTs. This Ministry has written to all SPCBs and PCCs as well as to CPCB to ensure compliance of the judgment of the Hon'ble Supreme Court and to submit detailed compliance report.</p>

	<p>Item No. 12</p> <p>August 03, 2018</p> <p>A</p>	<p>5. That the CPCB has also followed up with all SPCBs and PCCs through letters and review meetings to ensure compliance of the aforementioned judgment and that the matter was also discussed in the 62nd Conference of the Chairmen and Member Secretaries of SPCBs and PCCs held on 27.06.2017. That 26 SPCBs/PCCs have submitted the compliance report, which has been summarized at Annexure-I.</p> <p>6. That the CPCB has also carried out inspections of 17 categories of industries to verify compliance with its directions issued on online effluent/emission monitoring system and to cross-verify online results with manual sampling. During February-June, 2017, 64 industries were inspected and directions under section 5 of the Environment (Protection) Act, 1986 have been issued to 24 non-complying industries; 18 industries were complying; 8 were found closed and inspection reports of 14 industries are under process.</p> <p>7. That the CPCB and NMCG through 11 technical institutions, inspected 751 industries located in the River Ganga main stem during March-April, 2017 to verify the status of installation and connectivity of industries discharging effluents as well as their compliance with the standards. Closure directions have been issued to 154 industries; show cause notices issue to 36 industries; 149 industries were found complying and direction issued to 91 self-closed Grossly Polluting Industries (GPI) to remain closed; 93 GPI units were found closed as per directions; 38 GPI units found operational in violation of closure directions and inspection reports of 190 industries are under process”.</p> <p>3. We have heard learned Amicus Curiae Sh. Jai A. Dehadrai and the learned counsel for Ministry of Environment, Forest and Climate Change, Central Pollution Control Board, various State Pollution Control Boards and the Pollution Control Committees.</p> <p>4. Learned Amicus Curiae has drawn our attention to orders dated 04.07.2017, 18.09.2017 and 11.10.2017 of the Tribunal directing the State Pollution Control Boards to file a statement as to how many Industrial Units discharging trade effluents or causing emissions exist in the State, how many are having their own STPs, ETPs and/or connected to Common Effluent Treatment Plant</p>
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	<p>Item No. 12</p> <p>August 03, 2018</p> <p>A</p>	<p>(CETP), whether any such CETP or ETP or STP is properly functioning and treating the effluents as per prescribed limits or not.</p> <p>5. Learned Amicus Curiae submitted that contamination of water due to industrial effluents can lead to various diseases and adverse consequences on the aquatic organism due to decreased level of oxygen. The use of technology can help reduction of adverse consequences. However, the best solution is to prevent pollution by soil conservation and proper disposal of toxics and chemicals which may include chemical recycling.</p> <p>6. Having monitored the matter for the last more than one year on several dates, we are of the view that the matter requires continuous monitoring by statutory authorities as per directions which we proceed to issue today.</p> <p>(i) We direct the Central Pollution Control Board (CPCB) to forthwith prepare an action plan after looking into all the status reports. The action plans must have mechanism to ensure compliance or all the directions in the order of the Hon'ble Supreme Court. To enable this to be done, a Nodal officer must be identified to deal with the issue of CETPs/ETPs/STPs.</p> <p>(ii) A representative of the Ministry of Environment, Forest and Climate Change may be associated with the Nodal Officer of the CETP for monitoring. The Monitoring by the said two officers- the representative of the MoEF and the Nodal Officer of the CPCB must be held atleast once in a month and on the basis of such meeting and the feedback taken further follow up action must be taken and</p>
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	<p>Item No. 12</p> <p>August 03, 2018</p> <p>A</p>	<p>appropriate directions issued. This process may be a continuous process.</p> <p>(iii) It must be ensured that STPs, CETPs and ETPs are functional and meet the requisite standards.</p> <p>(iv) There is already a direction in the above judgment under which 50% of the funds for the purpose are to be provided by the Central Government, 25% by the States and remaining 25% to be arranged by way of loans which is to be re-paid by the user industries. Local bodies and the States have duties as clearly stipulated in the judgment. There has to be online monitoring system by each State to display emission levels in public domain in terms of paragraph 17 of the order of the Hon'ble Supreme Court.</p> <p>(v) A report of the steps taken may be placed on the website of the Central Pollution Control Board atleast once in three months. Deficiencies if any may also be so displayed.</p> <p>(vi) The Central Pollution Control Board may take penal action for failure, if any, against those accountable for setting up and maintaining STPs, CETPs and ETPs. Central Pollution Control Board may also assess and recover compensation for damage to the environment and the said fund be kept in a separate account and utilized in terms of an action plan for protection of the environment. Such action plan may be prepared by the Central Pollution Control Board within three months from today.</p> <p>(vii) A compliance report in terms of the above order may be furnished to this Tribunal within four months from today by e-mail at filing.ngt@gmail.com.</p>
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	<p>Item No. 12</p> <p>August 03, 2018</p> <p>A</p>	<p>(7) Proceedings are disposed of.</p> <p>However, the report received from the Central Pollution Control Board may be placed for consideration before this Tribunal on 04.09.2018.</p> <p>We place on record our appreciation for the services rendered by the learned Amicus Curiae.</p> <p>....., CP (Adarsh Kumar Goel)</p> <p>....., JM (Dr. Jawad Rahim)</p> <p>.....,JM (S.P. Wangdi)</p> <p>.....,EM (Dr. Nagin Nanda)</p> <p>03.08.2018</p>
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Annexure-II

Annexure-II		Comments Received from Various RDs on Draft Report for Environmental Compensation				
S. No.	Item	RD Kolkata	RD Vadodara	RD Bengaluru	RD Lucknow	Committee Deliberations
1	Case a, b & c	<p>Bypassing of effluent/emission should be given special consideration.</p> <p>EC levied on ROG categories of industries should be on the basis of inspection by CPCB, complaint verification and routine inspection.</p>	<p>Instead of "Compensation" "Penalty" word should be used.</p> <p>In case common facilities like CETPs, factor may be introduced based on member industries.</p> <p>Clarify the applicability of penalty in addition to closure directions for pro-longed and gross non-compliance.</p>			<p>The Committee discussed that the points highlighted by RD Kolkata are already the part of cases fit for violation and levy environmental compensation. However, as mentioned by RD Vadodara, word "Penalty" may be used for case a, b and c. For CETPs, a factor may be considered in future based on the capacity of the plant.</p>
2	Case d, e & f	<p>Higher rates for irreparable damages crop, soil, health etc.</p> <p>Leakages/spillage should have different compensation value.</p>	<p>It should be mentioned that instances d, e & f shall be dealt for environmental compensation in line with the polluter pays principle, besides of environmental penalty for cases a, b and c.</p>	<p>Similar to Guidelines on Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Waste and Penalty Guidelines may be prepared.</p>		<p>Suggestions made by RD Kolkata and Vadodara has already been taken care. Concept of environmental compensation is based on the philosophy of "polluters pay" and for grievance injury to environment, compensation will be charged as per the assessment of remediation cost, on case to case basis.</p>
3	Pollution Index (PI)			<p>Instead of average PI, Actual PI may be used.</p>		<p>Committee suggested that to make the implementation of EC simple and easy, use of average PI may be considered for calculation of EC.</p>
4	R-factor	<p>Should be based on pollution load. For ex. Amount of BOD/NOx etc. discharged.</p>		<p>May be classified based on the contribution of pollution load based on quantity of effluent, concentration, Permittions</p> <p>May be redefined based on the features, activities involved and habitation.</p>	<p>May be as per the category of industry for ex. Red-500, Orange-300, Green-100.</p>	<p>As PI is based on the pollution load, suggestion of RDs are already taken care in the formula.</p>
5	L-factor					<p>L-factor may be covered in future as already indicated in the report.</p>

S. No.	Item	RD Kolkata	RD Vadodara	RD Bengaluru	RD Lucknow	Committee Deliberations
6	Defining period of violations for which EC will be levied		Duration of violations needs more clarity	For industry having OCEMS no. of days may be counted based on the recorded data. Industry without OCEMS based on break down of FTP/APCD, disturbance of power supply or any failure of auxiliary machineries w.r.t. control system.	May be clearly defined as the period between the day of violation observed and the day of compliance verified by CPCB/SPCB/PCC.	The committee agreed that period of violation for which EC may be levied will be the period between the day of violation observed and the day of compliance verified by CPCB/SPCB/PCC.
7	Repeated Violations		Some number of days may be specified after which the penalty amount may get a factor of 1.5 or 2.		Multiplying factor for repeated violations may be included. For 1 st Repetition- 25% 2 nd Repetition- 50% 3 rd Repetition- 100%	For habitual offenders, higher amount of penalty/compensation may be charged in future.
8	Utilization of fund	An environmental damage assessment cell may be created. Expertise in the field may be achieved by involving scientists/engineers and providing them training in country/abroad.	Amount should not be utilized for: a) Industrial inspections for compliance verification. b) Installation of Continuous water quality monitoring stations / Continuous ambient air quality monitoring stations for strengthening of existing monitoring networks. c) Preparation of Comprehensive Industry Documents on Industrial Sectors / clean technology. f) Funding to financially weaker municipalities for installation of STPs. The amount should be utilized solely for damage assessment, remediation of affected sites and orphan contaminated sites and creating awareness. The purpose should not get inclined towards revenue generation.			RD Vadodara suggested that amount should be utilized only for remediation purpose. However committee discussed that the proposal for utilization of fund is prepared considering the other aspects i.e. direct and indirect for protection of environment which include research, monitoring etc. Suggestion of RD Kolkata may be considered in future.

	<p>The committee discussed that CPCB is already taking appropriate action including closure direction against the industries found operating without pollution control measures.</p>
<p>Thus, the functional fabric of CPCB shall remain intact.</p>	
<p>Higher EC for non-installation of pollution control measures. Expected sources should have different scoring methodology based on their weightage.</p>	
<p>Others</p>	
<p>9</p>	

Annexure-III

Comments Received from Various Expert Institutions on the Report on Environmental Compensation

As per the Hon'ble NGT suggestion, CPCB has invited comments of 3 expert institution, namely, Centre for Science and Environment (CSE), Institute of Economic Growth (IEG) and The Energy Research Institute (ERI). The CPCB in-house committee on Environmental Compensation has deliberated on the comments and finalized the report accordingly. The Committee's deliberations are summarized in table below:

S. No.	Item	Comments from IERI	Comments of CSE	Comments of IEG	Committee's Deliberations
1.	Cases d, e and f	Distinction between categories 'a, b, c' and 'd, e, f' is not clear. Case specific investigations should be minimized. Proposed cases with intentional and accidental cases but sometimes they are not easy to establish.		Why cases 'e' and 'f' are kept for later remediation and study?	There may be a varied damage to the environment as considered in cases 'e' and 'f'. Such damage assessment requires detailed case specific study and remediation measures. Therefore, whenever such case comes into the notice, Environmental Compensation may be levied based on the detailed investigation made by Expert Institutions/Organizations.
2.	R factor		R-factor should be Rs. 1,000/day.	Why R-factor is kept as 250, although the value ranges between 100 to 500?	In the Environmental Compensation policy, average value of the R-factor as 250 is recommended, keeping in view both its practicability as well as to make it significantly deterrent, which may be further revised in future.
3.	L-factor		L-factor should be based on the population density of surroundings instead of population of the nearby city/town. For critically polluted areas/ ecologically fragile areas LF should be considered as 2.	For nearby city, having population less than 1 million, the LF is 1. This implies that we care only for populated regions only. Industries located in critically polluted and ecologically fragile area should be closed down.	Population density for surrounding of industrial units will be complex because it will vary depending on area used in calculation of population density as industrial units are generally away from population. More weightage is given to the higher population exposure to the risk. In case the industry is located in the city of population less than one million than the LF Factor will be 2. Depending on the local environmental conditions, the restrictions on expansion and modernization of industries in critically polluted areas are imposed as per the prevailing policy of the Government of India. Similarly, industries in ecologically fragile areas are permitted after careful examination as per prevailing policy of MoEFCC/SOPB. The Committee agreed that for notified ecologically fragile areas, LF may be considered as 2. However, LF for critically polluted areas may be explored in future.

S. No.	Item	Classification of industries should be based on profit/turnover basis	Comments of CSE	Comments of IEG	Committee's Deliberations
4	S-factor		S-factor should be based on the turnover of the industrial unit.		Presently industrial units are classified into small, medium and large category (MSME Act, 2006) based on the data of assets/infrastructure available with them. The data for profit/turnover of industrial units are not available with SPCBs/PCCs and S-factor based on profit/turnover will complicate the procedure for calculation of EC. This may be considered in future when SPCBs/PCCs will have such type of data.
5	Level of non-compliance	Pollution index does not measure the level of pollution further, averaging PI eliminates the variation in the nature/impact of pollution that PI tries to capture. Further, the Red Category itself is too wide and some sort of sub-classification should be undertaken.	For different level of non-compliance such as gross, moderate and low IV factor for intensity of violations IV-factor should be incorporated in the formula.		<p>Pollution Index (PI) itself covers the potential of environmental pollution as its calculation considers variation in pollution load.</p> <p>The industrial sectors have been categorized into Red, Orange and Green based on their Pollution Index in the range of 60 to 100, 41 to 59 and 21 to 40, respectively. As PI is not available for all the industrial sectors calculating PI for rest of the sectors will delay the processing. Therefore, for calculating the Environmental Compensation average PI as 80, 50 and 30 may be used for Red, Orange and Green category of industries respectively.</p> <p>To keep the formula simple for better implementation, the IV factor may not be considered as there are different environmental parameters such as environmental standards and for each standard calculation of level of violation and its weightage will be a tedious task which may be done after implementation of EC concept.</p> <p>The Committee has agreed that in order to include deterrent effect for repeated violations, EC may be increased on regular basis i.e. by 2, 4 and 8 times on each similar operations beyond 3 quarters then EC may be increased by 2, 4 and 8 times for 4th and 5th quarter respectively.</p> <p>Besides EC, penalty may be prosecuted or closure directions may be issued, where required.</p> <p>EC is not a substitute for taking actions under EP Act, Water Act or Air Act. For best environmental performance, units should be closed/processed under the Act.</p> <p>Scheme of infrastructure augmentation for SPCBs/PCCs is already covered in the report.</p> <p>Further, as incentives to regulators where no violations observed, incentives to public for reporting violations may be considered separately.</p>
6	Utilization of fund	Funds may be utilized for building monitoring and enforcement capacity of SPCBs and strengthening the pollution compliance especially in the MSME sector.		For subjects to regulators where no violations are observed and incentives to public for reporting violations may be provided.	

S. No.	Item	Comments of CSE	Comments of IEG	Committee's Deliberations
7	GRAP			
8	Others (a)	Severity of violations should be measured in terms of hours of violation because some pollutants have serious environmental and health consequences. This would require continuous monitoring for pollutants. Therefore, continuous monitoring should be implemented urgently to begin with for all red and orange categories.	Area of the construction sites more than 25,000 sq. meters are considered for EC. Although small sites cumulatively impact significantly. Legal dumping of municipal solid waste regardless of the place should be penalized.	As per the EIA Notification, 2006, building construction projects more than 20,000 sqm area are required to have environmental clearance, therefore, the same cut-off is maintained here. Issue of legal dumping of municipal solid waste is being covered in separate report of EC. Currently, online continuous emission monitoring system (CEMS) is installed in only in 17 categories of highly polluting industries and some other industries sectors only. In current practice, the compliance of industries is only verified by physical monitoring and compensation may be imposed based on the manual testing. The idea of measurement of violation on hourly basis may be considered in future, when OCEMS is widely installed and included in policy.
9				CEEPs are already categorized under Red Category of Industries.
10				The power of imposing "Penalty" lies in the jurisdiction of the Hon'ble Courts and NGT only. The CPCB is empowered to levy environmental compensation by the Hon'ble NGT in its order dated: D3 08/2018 (OA No.593/2017). Therefore, term "Environmental Penalty" is avoidable.

Item Nos. 01 & 02

Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 125/2017
(M.A. No. 1337/2018)

With

Original Application No. 217/2017
(M.A. Nos. 761/2017, 1073/2017,
1098/2017 & 1471/2017)

Court on its own Motion

Applicant(s)

Versus

State of Karnataka

Respondent(s)

With

D. Kupendra Reddy

Applicant(s)

Versus

State of Karnataka

Respondent(s)

Date of hearing: 06.12.2018

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

Original Application No. 125/2017
(M.A. No. 1337/2018)

For Applicant(s):

Mr. Sajan Poovayya, Sr. Advocate and Mr. Saransh Jain,
Advocate for impleaded applicant - Namma Bengaluru
Foundation
Mr. Vikram Hegde, Advocate for impleaded applicant

For Respondents (s):

Mr. Devraj Ashok, Advocate
Mr. Rajkumar, Advocate and Ms. Sonia, LA
Ms. Nidhi Mehrotra, Advocate

Original Application No. 217/2017
(M.A. Nos. 761/2017, 1073/2017,
1098/2017 & 1471/2017)

For Applicant(s):

Ms. Guneet Khehar, Mr. Tarunvir Singh Khehar, Mr.
P. Ramaprakash and Mr. Sandeep Mishra, Advocates

For Respondents (s):

Dr. Abhishek Atrey, Advocate
Mr. Rajkumar, Advocate and Ms. Sonia, LA

ORDER

1. The issue for consideration in the two matters, one initiated by the Tribunal on its own motion and the other filed by an individual relates to contamination of water bodies at Bengaluru - Bellandur lake, Agara lake and Varthur lake *inter-alia*, on account of discharge of untreated sewage and other effluents from

residential/commercial/industrial buildings in violation of statutory provisions of the Water (Prevention And Control of Pollution) Act, 1974, particularly Section 25 thereof. It is said that the said water bodies have also been subjected to severe pollution on account of inefficient management of solid waste management as well as discharge of untreated sewage waste, apart from industrial effluents. Toxic snowy froth was widely reported in the media having potential health hazard. The Bellandur lake is said to be 130 years old across 9,000 acres of land. The lake was habitat for several species of birds, reptiles and aquatic life which is now severely affected by pollution. It has also affected ground water recharge. Waste dumping has resulted in foul stench around the lake. The major cause for foam formation is considered to be the discharge of untreated sewage through open drains. Requisite de-silting of the lake has not been done from time to time nor have steps been taken to stop the flow of untreated sewage into the water bodies. There is also failure to prevent dumping of municipal solid waste and undertaking other requisite measures on 'Precautionary Principle', basis such as plantation around the Tank of the lake, fencing of the lake, providing screens in major storm drains to prevent carry over waste, construction of adequate STPs and other equipment.

2. The matter was first taken up by this Tribunal in the year 2014 and considered in the light of reports prepared by the Lake Development Authority, Bangalore (LDA) and the Regional Office of the Ministry of Environment, Forest and Climate Change (MoEF&CC) dated 12.06.2013 and 14.08.2013.
3. Vide order dated 07.05.2015 in *Original Application No. 222/2014, The Forward Foundation Vs. State of Karnataka & Ors.*¹, the Tribunal dealt with the issue of encroachments around drains called *Rajakaluves* resulting in pollution of the water bodies and affecting

¹ 2015 ALL (1) NGT REPORTER (2) (DELHI) 81

the ecologically sensitive area of the above lakes. The Tribunal noted the order of the Karnataka High Court in *Environment Support Group and Another V. State of Karnataka*² appointing a Committee headed by Hon'ble Mr. Justice N.K. Patil to suggest remedial action to remove encroachments. The Central Government issued an advisory on the subject. Certain Project were still allowed to be developed within the prohibited range from the water bodies. The projects included Information Technology Park, residential apartments, malls, hotels and office buildings with or without Environmental Clearance.

4. After consideration of the matter and after noticing encroachment on land by the land-mafia or otherwise and violation of environment norms, the Tribunal constituted a Committee to inspect the projects where encroachment was alleged on wetland and *Rajakaluves* and submit a report about the adverse impact on the environment. The project proponents *Mantri Techzone Private Limited, formerly called Manipal ETA P Ltd. and Core mind Software and Services Private Limited* were required to pay compensation for damage to the environment. The said issue is said to be pending before the Hon'ble Supreme Court in *Civil Appeal No. 4829 of 2014 and 4832 of 2015*.
5. Expert Members of the National Green Tribunal inspected the site. The report in pursuance of the above order was considered and the matter was then dealt with by judgment dated 04.05.2016 in *Forward Foundation & Ors v. State of Karnataka & Ors*³. The Tribunal directed that distance specified in the said order be maintained for any construction near the *Rajakaluves*, maintaining buffer/clean zone as no construction zone. STPs be upgraded to ensure that no untreated sewage is discharged in the water bodies. Water requirement in construction and operation phase should be

² Writ Petition No. 817/2008

³ 2016 NGTR (2) PB 1

assessed in advance. With regard to the project proponents required to pay compensation for the damage to the environment, further directions were issued for restoration of the damage to the environment and further conditions being incorporated for the Environmental Clearance already granted.

6. The present matter was again taken up afresh for the third time on 22.02.2017 in the light of the media reports projecting environmental disaster, including fire in the lake (perhaps on account of gases in polluted water), emitting highly polluting fumes and creating thick clouds of smoke. The source of fire is also said to be garbage dumps around the lake.
7. On 22.02.2017, learned counsel for the statutory authorities conceded and stated that the fire took place on account of burning of municipal solid waste, including plastics, etc.
8. On 19.04.2017, this Tribunal noticed circular dated 30.03.2017 issued by Bruhat Bangalore Mahanagara Palike (BBMP) to circumvent the orders of this Tribunal while sanctioning illegal construction. The circular was later withdrawn.
9. The Karnataka Pollution Control Board (KPCB) found chemical in the water of the lake of which the source was domestic sewage. The STP was not able to treat and remove Nitrates and Phosphates.
10. The rejuvenation plan was prepared by the State after consultation with the stake holders. It was also stated on behalf of the Lake Development Authority that the lake was in bad condition and stringent measures were required to be taken. Orders for stopping dumping of waste into the lake were not being complied with.
11. The Tribunal noticed that apathy of the State and its instrumentalities was patent. Development of projects was being sanctioned without ensuring preventive, restorative and controlling measures. Accordingly, the industries causing pollution were directed to be closed and direction was issued against dumping of

any waste into the lake or in the buffer zone. The Committee headed by the Additional Chief Secretary of Urban Development, State of Karnataka was to undertake cleaning of the lake through a specialized agency. The sewage was required to be transported to a designated site at a distance for scientific disposal. The builders and developers were to be required to pay damages on 'Polluter Pays' principle'.

12. Further directions were issued on 18.05.2017 which included direction for a joint inspection of the STPs and installation of STPs in all complexes in the catchment area.

13. On 22.08.2017, the officers of the State who were summoned to the Tribunal were required to work on day-to-day basis to remedy the situation.

14. On 29.01.2018, the matter was again reviewed in the light of the status report dated 04.09.2017 suggesting short term and long term measures. It was noted that 99 apartment projects had still not installed STPs. The State was directed to prepare a comprehensive plan for rejuvenation or remediation of all the three lakes in a holistic manner.

15. On 11.04.2018, there was further consideration. It was noted that the water body had shrunk in size on account of dumping of waste and there was failure to set up the requisite STPs. Accordingly, the Tribunal appointed a Committee headed by a Senior Advocate of the Tribunal to assess the factual situation and suggest review of the action plan. Accordingly, report has been submitted on 31.05.2018.

16. We have perused the report and also other record with the assistance of learned counsel for the parties. The report shows that the members of the Committee visited the site on 14th and 15th April, 2018 and found construction of a road within the lake itself by dumping construction and demolition (C&D) waste in the garb of laying a pipeline. The Committee also noted various fire incidents on

account of burning of garbage and the extent of discharge of untreated waste water. The lake was found covered with a thick green cover with patches of foul smelling water. There was huge mounds of the de-weeded hydrophytes along with plastic waste etc. There was no facility to do composting at the site. Wet compost had a potential for further damage. Dumping of municipal solid waste particularly the C&D waste was taking place. CCTV cameras were installed at five places with the sign board prohibiting dumping of garbage. Eight home guards were also said to have been deployed apart from 18 marshals. Four watchtowers were being constructed. The conclusion of the Committee is that the authorities have neglected their duties and have done too little too late. Foam was being formed in the lakes due to sustained inflow and agitation of sewage. Large number of illegal immigrants had encroached the buffer zone on the lake. Untreated sewage was being discharged into the lake through storm water drains. Untreated sewage was flowing into the lake through *Rajakaluves* which had also been encroached.

17. The water quality had high level of "Oil and Grease (24.74 mg/l) high BOD, (148 mg/l) COD (315 mg/l) and Sulphide (4.0 mg/l). The Dissolved Oxygen is reported nil for all locations in Bellandur and Varthur lakes and their inlets." The study by the Indian Institute of Science, Bangalore found heavy metals in the lakes, sediments and water. 873 complexes were found to have been identified which required STPs of which 496 had established STPs. 326 projects did not have STPs, out of 326, 271 projects were discharging sewage in the sewers with permission of the BWSSB. The remaining 55 complexes did not have any STP. The direction of the Tribunal to remedy the situation had not been complied with in letter and spirit and untreated effluents and sewage indiscriminately continued to pollute the lakes.

18. Varthur lake was downstream of Bellandur lake which was the second largest lake of the city with catchment area of 279 sq. km. and 96 cascading interlinked lakes. The Committee observed a horrific site. A wide road had been constructed in the lake bed which was over a kilometer long with an average width of 15 mts. and a depth of 4 mts. by using the debris.

19. Finally, following recommendations have been made:

“1. The crux of the present environmental disaster is indiscriminate discharge of untreated sewage into the lakes. Admittedly, currently approximately 183 MLD, if not more, of untreated sewage is being discharged into the lake. **This is nothing short of a state of environmental emergency.** Consequently, it is of utmost importance that the under construction and planned STPs are commissioned on a war footing. **The Commission is of the view that there is no proper justification on the part of the authorities not to expedite the completion of the STPs as indicated particularly in respect of the 150 MLD K & C Valley STP.** The authorities (BWSSB, BDA and KSPCB) must mobilize all available resources to ensure that the STPs are commissioned as expeditiously as possible preferably by March 2019 or within such time as this Hon'ble Tribunal may deem fit.

2. Less Phosphorous means less weeds in the water body. **One of the major source of Phosphate are soaps and detergents. In several countries stringent limits have been specified for Phosphate in soaps and detergents as it leads to eutrophication of water bodies. MoEF &CC in conjunction with other ministries need to prescribe limits for Phosphorus in soaps and detergents by progressively reducing it to 2.2% of permissible phosphorous content. The STPs that are being set up and those which have already been set up must provide for treating/removing Phosphorous and Nitrogen nutrients.**

3. As per the reports submitted before the Hon'ble Tribunal, the authorities have already identified all the sewage and effluent entry points into the lake. **Therefore it is imperative that the authorities must simultaneously ensure that all the sewage generated in the catchment area is channelized and linked to the Rajakaluves for appropriate treatment by the STPs.**

4. No further channelization and concretization of Rajakaluves.

5. **All existing and new industries or commercial establishments or apartments / townships or institutions within the catchment area of the lakes must be made Zero Discharge.**

6. (a) The authorities must conduct a survey in the buffer zone of the lake to identify the encroachments and appropriate exercise should be undertaken to remove them.

(b) Complete Fencing of lake area including the buffer zone to prevent any further mushrooming of illegal encroachments. As

per the reports submitted by the Authorities before this Hon'ble Tribunal, the fencing work is currently in progress at a fast pace and should be completed by 30.06.2018. The authorities must abide by the said timeline.

7. (a) The Commission recommends that CCTVs should be installed at appropriate locations for ensuring that no C&D waste is dumped in the buffer zone area of the lake.
- (b) Security Guards should be deployed at the most vulnerable locations to keep vigilance on illegal dumping of debris and to prevent encroachment activities.
- (c) In case anyone is found to be dumping C&D waste or debris into the lake or its buffer zone, a penalty of Rs. 5 Lakhs be imposed for each offence in terms of the Order passed by this Hon'ble Tribunal on 19.04.2017.
8. No new facility or expansion of existing facility, whether for commercial or non-commercial purpose, to be permitted within the territorial jurisdiction of Municipal Corporations of catchment area of the lake, which generates sewage, until the commissioning of the STPs except public toilets.
9. No new facility or expansion of existing facility within 75 meters (buffer zone) of Rajakaluves / SWDs to be permitted. No fresh permission or sanction ought to be given by the municipal authorities to any project or facility within the buffer zone.
- 10. Structures, between 30-75 meters of Rajakaluves, which have already been constructed prior to 07.05.2015 (Forward Foundation Judgment) but are uninhabited, not to be occupied without the prior permission of the Hon'ble Tribunal and in any event not until the commissioning of the STPs in order to prevent generation of more sewage.**
- 11. Structures between 30-75 meters of Rajakaluves, which are under construction, be restrained from constructing further without the prior permission of the Hon'ble Tribunal and in any event not until the commissioning of the STPs.**
12. Permission or sanction or consent or EC for structures between 30-75 meters of Rajakaluves where construction was below 25% of the total built up area as on 07.05.2015 (Forward Foundation Judgment) be withdrawn. The Hon'ble Tribunal may issue appropriate directions and orders keeping in view the interests of the buyers who would eventually suffer financial loss.
13. Strict Compliance of environmental laws for apartments/ townships or commercial establishments:

Sl. No	Violation	Environmental Damage
1.	Where STP is required as per the EC/ Consent, but the facility has not constructed the STP despite generating sewage.	Rs. 10 Lakhs per month from the date of completion certificate or date of completion
2.	Where actual capacity of STP is less than the capacity as shown in the EC/ Consent.	Rs. 20,000/- per day from the date of inspection till final upgradation.

3.	Where the number of flats/ units actually constructed is more than the number of flats / units disclosed to KSPCB while obtaining Consent.	Rs. 1 Lakh per unit per month from the date of construction until the grant of fresh requisite consent.
4.	Where STP is not functioning or parameters are not being met or untreated sewage is being bypassed from the STP or being otherwise diverted.	Rs. 5 lakhs per default.

All damages so collected to be deposited in a separate account to be maintained by CPCB and to be exclusively utilized for upgradation, control and management of sewage.

14. The estimated 480 MLD of sewage, which flows into Bellandur Lake eventually via Varthur Lake, finally discharges into South Pinakini River, a tributary of River Cauvery. **Hence, it would be advisable that the de-siltation process of Bellandur Lake commences after reasonably treated water has reduced the pollutants, which have proved to be ecologically fatal for the lake.** As per the material on record, admittedly the storage capacity of the lake has decreased by 71.45%. Once the quality of water has improved, it would be ecologically fair that the treated water flowing from Rajkaluves into Bellandur is diverted towards the waste were leading to Varthur Lake. Thereafter the task of de-silting and de-sedimentation ought to be undertaken. The process of de-silting and de-sedimentation would restore the original storage capacity and ecology of the lake.
15. **The Commission observed that the current exercise of de-weeding is not only slow but also futile as the growth rate of the weeds is much more than the rate at which is being removed due to unhampered inflow of nutrients through the sewage.** The Commission is of the view that the exercise of de-silting and de-weeding can be carried out simultaneously since the water content would be substantially reduced due to the diversion of treated water. Post completion of de-silting and de-sedimentation process, the diversion so created for treated water can be removed.
16. Post removal of waste from the Lake and from the Rajakaluves, the State ought to prepare a detailed project report with respect to disposal of the same.
17. The Commission is of the view that after achieving the above, the authorities must install adequate number of water fountains in order to sustain ecology of the lake water.
18. **The Commission recommends constitution of a Task Force of experienced senior officers consisting of BDA, KSPCB, Minor Irrigation Department, Lake Development Authority, CPCB and a Professor from IIS for strict and timely implementation of the present recommendations.** The Task Force can be headed by an independent individual preferably a former Expert Member of the Hon'ble Tribunal who may, after taking assistance of the other members, submit monthly action taken reports to this Hon'ble Tribunal.

19. *The approximately over 1.5 km road laid upon the lake bed and within the boundary of Varthur lake by dumping of C & D debris should be removed forthwith. The entire project including laying of pipeline as per work order was to be completed within 24 months from June 2016.*

20. Hon'ble Tribunal may order an independent enquiry to examine the guilt of the officers involved in the dumping of thousands of Cubic meter of C & D debris on the Varthurlake bed for an ostensible object of laying of pipeline.

21. Apparently there is absolute non-compliance of Construction and Demolition Waste Management Rules, 2016. The concerned authorities in compliance with the said rules should identify appropriate suitable sites for deposit of C & D debris. All environment clearances granted prior to or after the notification of the C & D Rules 2016 must comply with the same."

(Emphasis added)

20. Since no objection has been filed to the report, the same is accepted.

We note that even after reports which was filed more than 6 months back, to which no objection was filed, steps suggested in the report are not shown to have been taken.

21. It is obvious from the resume of the facts and reports noted above that there is a failure of very high magnitude on the part of the State of Karnataka and its authorities, including the BBMP, in protecting the three lakes and also in keeping the Rajakaluves joining the lake clean and free from encroachments.

22. The Water (Prevention and Control of Pollution) Act, 1974 has been enacted to prevent and control water pollution and to maintain wholesomeness of water. The Act provides for standards of water to be laid down, to be maintained and prohibits discharge of pollutants in the water which is made criminal offence apart from provision for closing such process which results in pollution. The State Governments are authorized to frame rules and to set up and control the Pollution Control Boards. The Pollution Control Boards have statutory powers to carry out inspection and take coercive measures to protect the water. Statutory functions of the Pollution Control Boards include comprehensive plan for prevention, control and abatement of pollution of water bodies. The Pollution Control Board is bound by

every direction of the State Government. The local bodies have been entrusted the duties specified in 12th Schedule to the Constitution, read with Article 243 W. The 12th Schedule includes the issues of public health, sanitation, solid waste management, etc. Environment (Protection) Act, 1986 empowers measures for environment protection. Under the said Act, solid waste, plastic waste, e-waste, hazardous waste, bio-medical and other rules have been framed. Air (Protection) Act, 1981 provides for measures to control air pollution. In spite of comprehensive statutory framework, the State of Karnataka as well as the BBMP, even after repeated orders of this Tribunal, have failed to perform their duties.

23. Orders of this Tribunal are statutorily treated to be decree of civil court and can be executed in such manner as may be found necessary, having regard to the nature of the order to be executed. This Tribunal also has jurisdiction to require damages to be paid for the damage to the environment on “Polluter Pays” principle⁴. Public Trust Doctrine is a part of our jurisprudence. The State as a trustee of all natural resources which are by nature meant for public use enjoyment. Public at large is the beneficiary of the sea-shore running waters, air, forest & ecologically fragile lands. The State as a trustee is under a legal duty to protect the natural resources.⁵The authorities responsible have equal liability to pay compensation for restoring the damage to the environment and to prevent further damage.⁶The officers charged with the responsibility of public duties are accountable for their failure. It may be worthwhile to recall several earlier executable orders on the subject of water pollution, air pollution, requirement of setting up STPs/ETPs, checking encroachments in catchment of water bodies⁷.

⁴ Section 20, NGT Act, 2010

⁵ M.C Mehta v. Kamal Nath (1997) 1 SCC 388

⁶ M.C Mehta v. UOI & Ors, W.P © No. 13029/1985 order dated 24.10.2017

⁷ All India Lokadhikar Sangathan v. Govt. of NCT of Delhi & Ors. E. A No. 11/2017 dtd. 16.10.2018, Venkatesh O.A No. 711 of 2018 dtd. 22.10.2018, Subhas Datta v. State of West Bengal & Ors. O.A No. 171/2016 dated 01.10.2018, Shobha Singh & Ors v. State of Punjab & Ors. dated 14.11.2018, Saloni Ailwadi v. Union of India & Or, O.A no. 509/2015 dated 16.11.2018.

24. Pan- India, environment degradation is severely affecting public health on a large scale⁸. References may be made to orders of the Tribunal on the subject of non-compliance of Solid Waste Management Rules, 2016,⁹ 351 river stretches being polluted,¹⁰ 102 non-attainment cities in terms of ambient air quality¹¹. Remedial measures are required which include awareness creation as well as coercive measures in the interest of public health.

25. There is thus, clear need to require the State and the BBMP to forthwith perform their duties to remedy the situation by preparing the requisite action plan, providing funds. In spite of admitted grave situation, the State/BBMP have not taken any coercive measures against polluters or the concerned officers for their failure. No prosecution is shown to have been launched. No serious steps are shown to have been taken to remedy the situation. Thus, the State and BBMP are also liable to pay compensation for the past failure. We have heard detailed submissions on the subject as well as quantum of the amount to be paid/set apart and the mechanism to be followed.

26. Accordingly, having regard to the facts and circumstances, we find it appropriate and necessary to issue following directions:

- i. Recommendations of the Committee dated 31.05.2018 may be carried out with a view to ensure that no polluted waste water is discharged into the water bodies and no solid waste is dumped therein. The encroachments from catchment areas must be removed. Karnataka SPCB in consultation with the CPCB may set up Real Time Water Quality Monitoring Systems in three

India ranked no.1 in pollution related deaths ⁸ <https://www.thehindu.com/sci-tech/energy-and-environment/india-ranked-no-1-in-pollution-related-deaths-report/article19887858.ece>

1.2 million people died from effects of air pollution in 2015

<https://www.livemint.com/Opinion/V2CgeiUq89k1k2fDwJXML/Swachh-Bharats-waste-management-problem.html>

<https://timesofindia.indiatimes.com/home/environment/pollution/80-of-Indias-surface-water-may-be-polluted-80%of-India-s-surface-water-is-polluted-report-by-international-body-says/articleshow/47848532.cms>

<https://www.mapsofindia.com/my-india/society/river-pollution-in-india-who-will-bell-the-cat>

⁹ In the matter of non-compliance of MSW Rules, 2016 O.A No. 606/2018 order dated 20.08.2018

¹⁰NEWS ITEM PUBLISHED IN 'THE HINDU' AUTHORED BY SHRI. JACOB KOSHY Titled "More river stretches are now critically polluted: CPCB" O.A No. 673 of 2018 dated 20.09.2018

¹¹ News Item Published In 'The Times of India' Authored by Shri. Vishwa Mohan Titled "NCAP with Multiple Timelines to Clear Air in 102 Cities to be released around August 15" O.A No. 681/2018 dated 08.10.2018

lakes at appropriate locations to monitor parameters which are critical like Dissolved Oxygen, Ammonia and others. The online data may be displayed for information. The activities around the three lakes may also be monitored by using drones and satellite imageries.

- ii. Overall responsibility to carry out these directions will be of the Additional Chief Secretary, Urban Development (UD), Karnataka and the BBMP. An action plan be prepared by the State/BBMP forthwith, within one month from today, indicating the timelines for the actions including the budgetary provisions and same should be placed on the website of State UD and BBMP. Execution of such plan may be completed by 30.06.2019.

- iii. The compliance of the above directions will be overseen by a Committee as follows:

- A. Justice Santosh Hegde, former Judge, Supreme Court of India – Chairman
- B. Professor T.V. Ramachandra, Indian Institute of Science, Bangalore- Member
- C. Nominee of Central Pollution Control Board who should be a senior level officer- Member
- D. Nominee of the Karnataka Pollution Control Board- Member.

- iv. KSPCB may provide logistics support to the Committee and coordinate as per directions of the Chairman of the Committee.

- v. The Committee will have such powers as are necessary to ensure execution of this order within reasonable time. The State and all concerned Authorities will cooperate and provide all assistance as may be necessary. The Committee may issue necessary instructions to the authorities from time to time for the purpose. The Committee will be at liberty to co-opt any

other expert or take assistance from such person or persons as may be deemed necessary.

- vi. The Committee may set up its own website for receiving and disseminating information and suggestions, including inviting volunteers, as may be deemed proper. Achievements may be put on website so that the same can be replicated wherever relevant.
- vii. The Committee may oversee the timelines in the action plan to be prepared by the State UD of Karnataka/ BBMP.
- viii. The State of Karnataka will transfer an amount of Rs. 500 crores in an Escrow Account for execution of the action plan within one month from today.
- ix. The State of Karnataka will deposit a sum of Rs. 50 crores by way of interim compensation for restoration of the environment with the CPCB. For delay, an interest @ 12% will be payable.
- x. The BBMP will be required to deposit a sum of Rs. 25 crores in this regard to CPCB separately in the same manner as (ix).
- xi. Out of the amount so deposited, a sum of Rs. 10 crores will be transferred by CPCB to the Karnataka PCB. The SPCB will defray all expenses of the Committee to provide logistics or otherwise.
- xii. The amount can be recovered by the State/BBMP from polluters and the erring officers.
- xiii. The State of Karnataka will furnish a Performance Guarantee to the CPCB to execute the action plan in a time bound manner, subject to the timelines being approved by the above Committee. The Performance Guarantee will undertake to pay amount of Rs. 100 crores for the failure in the execution of the action plan before 30.06.2019.
- xiv. The State of Karnataka must identify and declare the persons responsible for executing the action plan and any failure in

their performance should be recorded and considered favourably or otherwise for their career progression.

xv. Similar exercise as (xiv) may be undertaken to identify officers responsible for failure in the past. Such exercise may be completed within three months from today.

xvi. Since failure of preventing the pollutants being discharged in water bodies (including lakes) and failure to implement solid and other waste management rules are too frequent and widespread, the CPCB must lay down specific guidelines to deal with the same, throughout India, including the scale of compensation to be recovered from different individuals/authorities, in addition to or as alternative to prosecution. The scale may have slabs, depending on extent of pollution caused, economic viability, etc. Deterrent effect for repeated wrongs may also be provided.

xvii. MoEF&CC may specify limit for phosphorus in soaps and detergents to prevent damage to the environment and public health.

27. The above amount in the present case has been determined having regard to the estimated cost of setting up of STPs, based on the data available, which has been assessed with the assistance of the learned Counsel for the parties.

28. We have nominated Justice Santosh Hegde on information being provided during the hearing that he is agreeable to undertake the above job.

29. Justice Hegde will be entitled to a token honorarium of Rs. 2.5 Lakh per month from the date he assumes the charge. Justice Hegde will be entitled to assistance of persons of his choice for which remuneration will be paid by the SPCB, Karnataka as may be determined by Justice Hegde.

30. The Committee will also be at liberty to furnish interim or final report from time to time to this Tribunal by e-mail at ngt.filing@gmail.com.
31. A copy of this order be forwarded to the State PCB by e-mail. For coordination. The Applications stand disposed of.
32. If any report is received, the same may be put up for consideration.

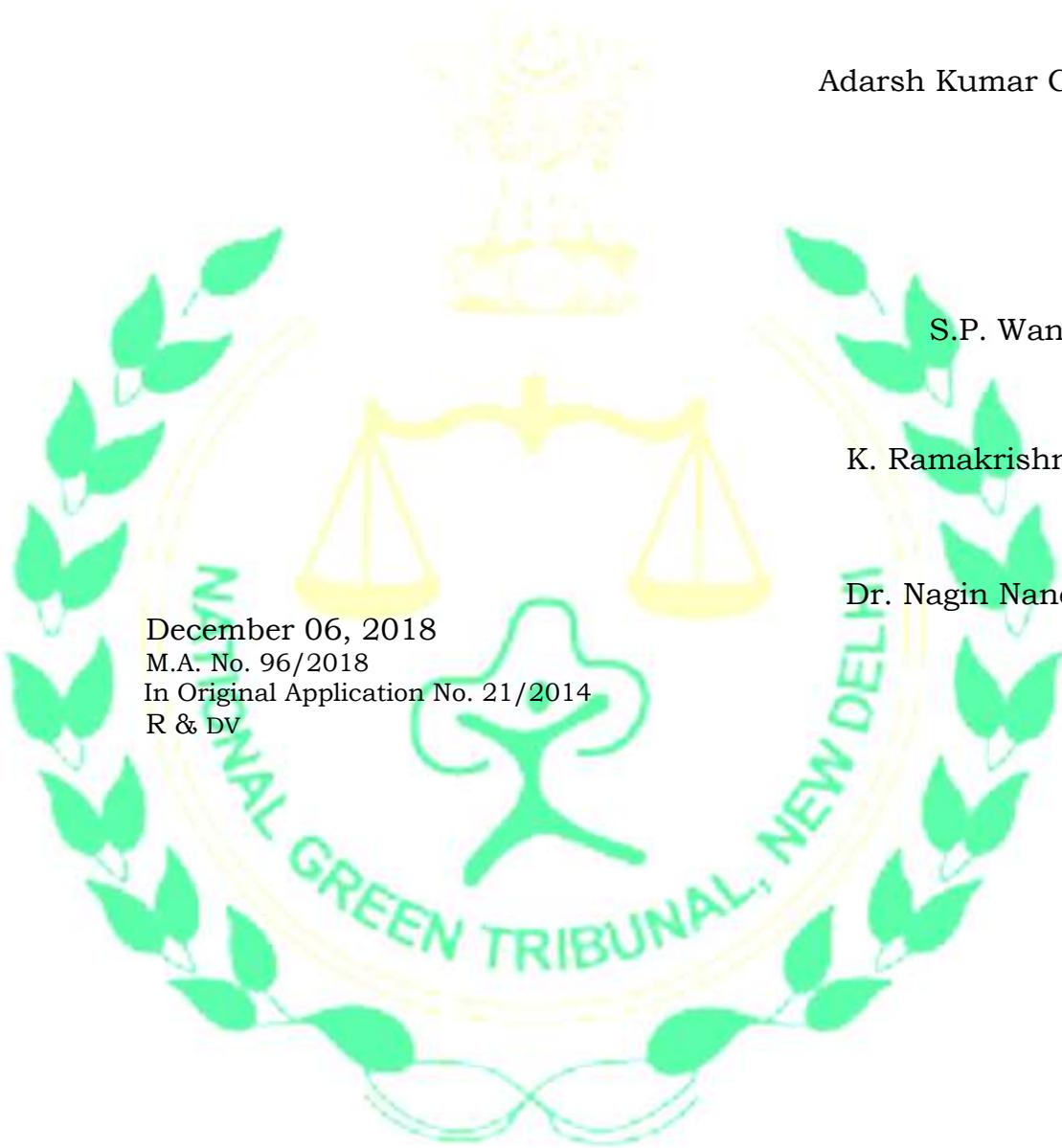
Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

December 06, 2018
M.A. No. 96/2018
In Original Application No. 21/2014
R & DV



BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 176/2015
(M.A. No. 1332/2015)

&

Original Application No. 59/2012
(M.A. No. 34/2016 & M.A. No. 190/2016)

&

Original Application No. 108/2013
(M.A. No. 489/2015)

&

Original Application No. 179/2013
(M.A. No. 866/2014 & M.A. NO. 644/2015)

&

Appeal No. 67/2015
(M.A. No. 652/2015)

And

Original Application No. 484/2015
(M.A. No. 155/2017, M.A. No. 567/2017
& M.A. No. 927/2017)

And

Original Application No. 327/2018
(M. A. No. 1282/2018)

And

Original Application No. 115/2017
(M.A. No. 442/2017)

And

Original Application No. 411 of 2018

And

Original Application No. 613/2017

And

Original Application No. 614/2017

Shailesh Singh

Respondent(s)

Versus

Hotel Holiday Regency, Moradabad & Ors.
With

Applicant(s)

Legal Aid, National Green Tribunal Bar Association

Applicant(s)

Versus

NCT of Delhi & Ors.

Respondent(s)

With

Raj Hans Bansal

Applicant(s)

Versus

Ministry of Water Resources & Ors.

Respondent(s)

With

Apex Chambers of Commerce and
Industries of N.C.T. of Delhi & Ors.

Applicant(s)

Versus

Govt. of NCT Delhi & Ors.

Respondent(s)

With

Vikrant Tongad

Applicant(s)

Versus

Union of India & Ors. Respondent(s)

With
Shailesh Singh Applicant(s)

Versus

Hotel The Oberoi Amarvilas & Ors. Respondent(s)

With
Shailesh Singh Applicant(s)

Versus

Panchsheel Buildtech Pvt. Ltd. & Ors. Respondent(s)

With
Shailesh Singh Applicant(s)

Versus

Central Ground Water Board & Ors. Respondent(s)

With
M/s A-One Mineral Water Industry Applicant(s)

Versus

Central Ground Water Authority & Ors. Respondent(s)

With
Mohd. Javed Asghar Applicant(s)

Versus

M/s Upper Ganges Sugar and Industries Ltd.
(Distillery Unit) & Ors. Respondent(s)With
Mohd. Javed Asghar Applicant(s)

Versus

State of U.P. & Ors. Respondent(s)

Hearing concluded on: 18.12.2018

Order uploaded on: 03.01.2019

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
 HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
 HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
 HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

For Applicant(s): Mr. Raj Pajwani, Senior Advocate and Mr. Rahul Choudhary, Advocate (In O.A. Nos. 59/2012 & 108/2013)
 Ms. Preeti Singh, Mr. S. Porwal, Mr. Shivam Jaiswal, Advocates (In O.A. Nos. 176/2015, 484/2015, 327/2018 & 115/2017)
 Mr. Amrendra Kumar Dubey, Advocate (O.A. No. 411/2018)

For Respondent (s): Ms. Sakshi Popli, Advocate for DJB (O.A. No. 59/2012)
 Mr. Sumeet Pushkarna, Mr. Devanshu, Advocates with Mr. Sudhir Chauhan, E.E., Delhi Jal Board (O.A. No. 108/2013)
 Mr. Ajay Jain, Advocate for GNCTD
 Mr. Ardhendumauli Kumar Prasad, Mr. Shashank Saxena, Ms. Diksha Gera, Mr. Amritesh Raj, Advocates for CGWA
 Mr. Pradeep Mishra, Mr. Daleep Dhyani, Advocates for UPPCB
 Ms. Sakshi Popli, Advocate for NDMC
 Mr. Amit Tiwari, Mr. Rohit Pratap Singh, Advocates for State of UP

Dr. Sandeep Singh, Mr. Vinay Pal, Advocates for State of UP (O.A. No. 327/2017)

Mr. Sumeer Sodhi, Advocate

Mr. Rahul Khurana Advocate for Mr. Anil Grover, Advocate

Mr. Arvind Kr. Pandey, Proxy Counsel for Ms. Anushuya Salwan, Advocate for DSIIDC (O.A. No. 179/2013)

Mr. Arvind Kr. Pandey, Proxy Counsel for Mr. Moni Cinmoy, Advocate for DSIIDC (O.A. No. 65/2015)

Mr. Narender Pal Singh, Advocate with Mr. Dinesh Jinda, Law Officer, DPCC

Ms. Ranjana Roy Gawai, Advocate for TPDDL

Ms. Deep Shikha Bharati, Advocate for State of UP (O.A. No. 613/2017 & 614/2017)

Mr. Pawan Upadhyay, Mr. Ankit Vij, Advocates

Mr. Anil Kaur, Ms. Kapil Kaur, Ms. Diksha, Advocates for Raddisson Blue

Mr. L.K. Bhushan, Ms. Adity, Advocates

Mrs. Sharmila Upadhyay, Mr. Krishna, Advocates for CPCB (O.A. No. 327/2018)

Mr. Rohit Singh with Jasvinder Kaur, Mr. Vishal Mittal, Advocates

Mr. Rajkumar, Advocate for CPCB

Mr. Satish Kumar, Mr. V. Senthil Kumar, Mr. Theerthe Gowda N.M., V. Elangovan, Advocates for CPCB (O.A. No. 613/2017)

Priyadarsni Gopal, Advocate

Ms. Antima Bazaz, Dr. Yashpal Singh, Advocates

Ms. Shalini Sati Prasad, Advocate

Ms. Priyanka Swami, Ch. Nounihal Singh, Advocates for GNN

Mr. Bipin Kumar, Advocate

Mr. Rachit Mittal, Ms. Tanvi Aggarwal, Advocates for GDA

Mr. Ravinder Kumar, Advocate

Mr. R. Chandrachud, Mr. Nitin Thukra, Mr. Karan Sharma, Advocates for Noticee No. 1

Mr. Manish Sharma, Ms. Jigyasa, Deepti Rajpal, Mr. Ninad Dogra, Advocates for Noticee No. 2

Mr. Ranvir Singh, Advocate for Noticee No. 3

Mr. Alok Sangwan, Mr. Ram Bhardwaj, Mr. Sunny Kadiyan, Advocates for Noticee No. 4

Mr. Pinaki Mishra, Senior Advocate with Mr. Sanjeet, Mr. Utkarsh, Advocates for DLF

Mr. Arjun Nanda, Adv. for Noticee No. 6

Mr. Himanshu Tyagi, Mr. Gautam Sharma, Advocates for Noticee No. 9

Mr. Dabesh Panda, Mr. Anshuman Ray, Advocates for Noticee No. 10

M. Salim, Advocate for Noticee No. 11

Mr. Ameya Vikram Mishra, Advocate for Noticee No. 12

Mr. Raghav Pandey, Advocate for Noticee No. 21

Mr. Karan Chandhiok, Ms. Swati Seth, Advocates and Mr. Debojyoti Sengupta, for Noticee No. 23

Mr. Ashish S. Kulshrestha, Advocate for UPSIDC

ORDER

1. Ground water conservation which is the issue for consideration in this case, has attained significance on account of fast depletion of ground water in recent years. Fast depletion of ground water is acknowledged in studies.¹ Ground water depletion is serious cause of concern for human well being.

2. As per publication of NITI Ayog, India is placed at 120th amongst 122 countries in water quality index. Most states have achieved less than 50% of the total score in augmentation of groundwater resources, highlighting a growing national crisis. 54% of India's ground water wells are decreasing in levels and 21 major cities across the country are expected to run out of ground water by 2020. Almost none of the States have built the infrastructure required to recharge groundwater in over exploited and critical areas. Several States such as U.P., Bihar, Rajasthan etc. have not put in place any regulatory framework for managing the groundwater. These states produce 20-30% of India's agricultural output and groundwater accounts for 63% of all irrigation water. Therefore, unsustainable extraction in these states also poses a significant food security risk for the country.²

3. About 60% of the irrigation needs, 85% of rural drinking water needs and 50% of urban water needs are met through ground water. The CGWB has categorised the areas into the following on the basis of availability of ground water resources:

Safe	(<=90%, No decline in water levels)
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¹https://www.researchgate.net/publication/26736936_Satellite_Based_Estimates_of_Groundwater_Depletion_in_India

² Composite Water Management Index: A Tool for Water Management, June 2018, Niti Aayog in association with Ministry of Water Resources, Ministry of Drinking Water and Sanitation and Ministry of Rural Development

Critical	(>70% and <=100%, decline in water levels)
Semi-critical	(<100%, decline in water levels)
Over-exploited	(>100%, decline in water levels)

4. As per another survey, India extracts most ground water. Globally, 25% of total annual global annual water is extracted in India. The extraction level is going up continuously³.
5. Depletion of ground water not only creates crisis for drinking water in absence of inadequate surface water being available in certain areas where there may be drought conditions, but also affects e-flow in rivers and can also increase salinity in soil.
6. The grievance of the applicants in the present applications is that there is fast depletion of ground water in NOIDA and Greater NOIDA, District Gautam Budh Nagar, U.P. There is large scale extraction of groundwater by various construction companies. Directions relating to the water harvesting are not complied with. No measures are properly adopted to stop the fast depleting ground water levels.
7. The Hon'ble Supreme Court considered the issue of ground water conservation and regulation vide the judgement in *M.C Mehta v. Union of India and Ors (1997) 11 SCC 312*. Direction was issued for constitution of Central Ground Water Authority (CGWA) to regulate the subject of conservation of underground water. The said regulatory body was to exercise powers under Section 5 of the Environment (Protection) Act, 1986 to regulate, control and manage drawal of ground water in the country. The main object for the constitution of the Board as an authority was to regulate the indiscriminate boring and withdrawal of

³<https://www.thehindu.com/news/cities/mumbai/the-alarming-levels-of-indias-groundwater/article19253949.ece>

underground water in the country which was needed urgently. The mandate of the authority was to issue necessary regulatory directions with a view to preserve and protect the underground water resources.

8. Based on survey by CGWA, certain areas have been declared as over exploited, critical and semi-critical areas (OCS). According to the applicants, the Central Ground Water Authority constituted in pursuance of the order of the Hon'ble Supreme Court failed to check the unregulated extraction of ground water for commercial purposes including packaging water, use of ground water by builders and hotels for swimming pool etc.

9. The fact that recharge is not taking place is acknowledged by categorization of OCS areas. In OCS areas, unregulated extraction of ground water further adds to the problem. There is nothing to show improvement in water tables in OCS areas on account of efforts or policies of the CGWA calling for review to achieve the goal of ground water conservation. There is a dire need for strict regulatory regime in OCS areas and not to permit use of ground water except for drinking water purposes where supply of drinking water is not otherwise available. Mere making of provision for recharge, without recharge actually happening will not justify grant of any permission for extraction of ground water on such impractical conditions.

10. This Tribunal considered the matter in the last six years on various occasions. It was noted in the order dated 23.04.2015 that ground water level has gone down in NOIDA by 15 mtrs. between 2007-2014. On 26.07.2018, it was noted that even apart from NOIDA, Greater NOIDA, Delhi and NCR, the

situation in OCS region calls for stringent regulation for ground water extraction.

11. Reference was made to order dated 28.08.2018 in O.A No. 176/2015, *Shailesh Singh v. Hotel Holiday, Regency Moradabad & Ors.*, directing the Ministry of Water Resource (MoWR), Government of India, in consultation with the Ministry of Environment, Forest and Climate Change (MoEF&CC) and Ministry of Agriculture (MoA), to review the existing mechanism for effective conservation of ground water resources in OCS. It was directed that the policy framework must include monitoring mechanism by way of provision for coercive measures, consistent with the mandate in the judgement of the Hon'ble Supreme Court of India in *M.C Mehta (supra)*.

12. In the said order the Tribunal noted that:

"11. Availability of groundwater resources as on 31.03.2009 is on CGWA website. 802 over-exploited units, 169 critical units, 523 semi-critical units have been notified for regulation. Authorized officers have been nominated. The guidelines provide that permission to extract groundwater is not given in such areas for any purpose other than the drinking water. The permission is given only if Water Supply Department is not able to supply such water. The NOC is granted subject to conditions laid down in the guidelines. In non-notified areas, NOC is granted for new industries or for expansion, subject to the conditions relating to recycle/re-use.

12. It is further pointed out that as per order of this Tribunal dated 15.04.2015 in the case of 'Krishan Kant Singh Vs. Union of India', this Tribunal issued directions for fresh guidelines and draft of such guidelines is issued w.e.f. 16.11.2015. As per para 8 of the guidelines, all existing industries who have not obtained NOC would apply to CGWA. In the said guidelines, it is mentioned that 162 areas have been notified for regulation but more areas can be

notified periodically. There are 1071 over-exploited units, 217 critical units and 697 semi-critical units. NOC is to be granted for drinking and domestic purposes only in the notified area. In non-notified areas, it is granted for industries, for infrastructure and mining.”

13. It was noted that the Environment (Protection) Act, 1986 had an overriding effect as held in *M.C Mehta (supra)* and no State Legislation could override the Environment (Protection) Act, 1986. Thus, the mandate of CGWA was to override any State regulatory framework. Doing so was the right of CGWA coupled with the duty for achieving the object of the Environment (Protection) Act, 1986.

14. On 12.11.2018, the matter was further considered. After making reference to the 2012 Guidelines issued by the CGWA and draft guidelines dated 16.11.2015, the Tribunal noted following points:

- i. CGWA was repeatedly disowning its responsibility on the plea that regulation of ground water was a State subject, contrary to the mandate in the judgement of the Hon'ble Supreme Court in *M.C Mehta (Supra)*.
- ii. CGWA was failing to regulate drawal of ground water in OCS on the ground that it had not issued a notification except for some areas, and without such notification, there was no need for regulating extraction of ground water even in OCS.
- iii. Extraction of ground water for commercial purposes was being allowed in OCS just by a mechanical condition that the ground water will be recharged, without ensuring compliance of such condition.
- iv. Underground water was being allowed to be extracted for illegal constructions, bottling plants, swimming pools etc. without any

impact study or effective steps for rain water harvesting for recharge of the ground water.

- v. CGWA was repeatedly taking the plea that charges were being collected for permitting drawal of underground water for commercial purposes in OCS against the Precautionary Principle, Sustainable Development as well as Inter-generational Equity Principles.
- vi. Difficulties of agriculturists needed to be addressed in a phased manner by persuading the agriculturists to switch over to less water consuming crops and to consider use of treated sewage water instead of extraction of fresh underground water, wherever viable.
- vii. Untreated effluents are not to be discharged in the water.

15. Affidavit of Member CGWA, Ministry of Water Resources, has been filed before this Tribunal on 14.12.2018 in compliance of the earlier orders. The affidavit refers to orders dated 22.10.2018, 29.08.2018, 12.11.2018 in O.A.No. 59 of 2012 in *Vikrant Kumar Tongad vs. Union of India & Ors.*, order dated 28.8.2018 and 28.08.2018 in O.A No. 176/2015, *Shailesh Singh v. Hotel Holiday, Regency Moradabad & Ors.* It further states that utilizable water in India is 1137 BCM which comprises of 690 BCM of surface water and 447 BCM of replenishable ground water resources. In the year 2009, about 2700 BCM of ground water was available in deeper aquifers, below the zone of water level fluctuations. Thus, ground water over exploitation is recommended to be restricted to sustainability of ground water by annual replenishment in order to facilitate long term sustainability of ground water. It is further stated that per year extraction is 253 BCM which is 25% of the global ground water extraction. Out of total 6,584

assessment units, 1,034 fall in over-exploited category (where extraction is more than 100% of recharge), 253 fall in critical category (where extraction is 90-100% of the recharge), 681 fall under semi-critical category (where extraction is 70-100% of the recharge) and 4,520 are under safe category (where extraction is 90% of the recharge). About 90% extraction is for agricultural purposes, 10% for drinking, domestic and industrial purposes. Industrial use is 5%. Model building bye-laws 2016 include the provision of rain water harvesting in all new buildings on plots of 100 sq. mtrs. and above. Entire storm water is to be captured for water harvesting through suitable structures in all public and open spaces of more than 500 sq. mtrs. Buildings having minimum discharge of 10,000 liters and above are required to have waste water recycling system for horticulture purposes. 'Mission Water Conservation' has been introduced by the Ministry of Agriculture, Government of India. Inter-Ministerial Committee has been constituted under the chairmanship of the Secretary, Ministry of Water Resources, Government of India. The Ministry is also carrying out training programme and Information, Education & Communication (IEC) activities for awareness. The Department of Land Resources is implementing water-shed development projects. Certain States have taken initiatives including Punjab Preservation of Subsoil Water Act, 2009 which ban early sowing of paddy nursery and transplantation of saplings. Maharashtra Groundwater (Development and Management) Act, 2009 prohibits drilling of deep wells within for agriculture or industrial usage, pumping of ground water for deep well of depth of 60 mtrs. or more. The CGWA has issued advisories and it requires taking of NOC for ground water withdrawal but the agriculture section is not subjected to ground water regulation on account of socio-

economic implications. The steps taken by the CGWA include directions for rooftop rain water harvesting systems, ground water recharge measures along the National highways, State national highways, railway tracks, etc., artificial recharge in over-exploited areas, large and medium industries using ground water to take up the ground water conservation measures. CGWA imposes condition while granting NOC for withdrawal of ground water in States/UTs which do not have functional ground water authorities. NOCs are granted online in a user-friendly manner. Industries in safe category are exempted from NOC but in OCS areas, condition for grant of NOC is rain water harvesting/ground water recharge measures and NOCs are denied in over-exploited areas. Non-water intensive industries drawing ground water up to 100 m³/day are exempted from NOC in critical areas, non-water intensive industries drawing up to 50 m³/day are exempted from NOC. (In over-exploited areas, non-water intensive industries are exempted which are drawing ground water up to 25 m³/day. Permitted water extraction is restricted to 60% of the proposed recharge. Ground water extraction should not exceed 1,500m³/day for each unit. In semi-critical areas, ground water extraction is restricted to 200% and 100% of proposed recharge for non-water intensive and water intensive industries respectively. In critical areas, ground water extraction is permitted up to 100% and 50% of proposed recharge for non-water intensive and water intensive industries respectively. In over-exploited areas, ground water extraction is permitted up to 50% of the proposed recharge). Till 2015, existing industries were not required to seek any NOC. In compliance of order of the Tribunal dated 15.04.2015, existing industries were brought within the purview of NOC with effect from 16.11.2015.

16. We may now refer to the Notification dated 12.12.2018, issued by the Ministry of Water Resources, River Development and Ganga Rejuvenation under Section 3(3) of the Environment (Protection) Act, 1986. Some of the striking salient features of the notification are as follows:

- i. Exemption of individual households to draw ground water from single dug well/bore well/tube well through delivery pipe of upto 1" diameter and certain other categories, even if there is an existing supply of drinking water.
- i. Beyond the said exemption, ground water withdrawal can be permitted on the basis of NOC where water supply is not adequate subject to certain conditions.
- ii. Infrastructural projects including water supply agencies can be allowed to get NOC and the said industries are in Annexure-VI i.e.:

Indicative List of Infrastructure projects

<i>Residential apartment</i>
<i>Residential township</i>
<i>Office building</i>
<i>School</i>
<i>College</i>
<i>University</i>
<i>Industrial Area (Drinking use)</i>
<i>SEZ (Drinking use)</i>
<i>Metro Station</i>
<i>Railway Station</i>
<i>Bus Depot</i>
<i>Airport</i>
<i>Seaport</i>
<i>Highway infrastructure</i>
<i>Fire station</i>
<i>Warehouse</i>
<i>Business Plaza</i>
<i>Malls & Multiplex</i>
<i>Hospitals</i>
<i>Nursing Homes</i>
<i>Water Park/ Theme Park/ Amusement Park</i>
<i>Resort</i>
<i>Hotel/ Restaurant/ Food Plaza</i>
<i>Holiday home/ Guest house</i>
<i>Banquet Hall/ Marriage Gardens</i>
<i>IT Complex</i>
<i>Logistics & Cargo</i>
<i>Clubs</i>
<i>Trade Centre</i>

- iii. Other industries can be granted NOC through energized means including industrial mining/infrastructure projects, industries mining projects and infrastructure projects requiring dewatering or use of ground water for construction.

17. Relevant provisions in the impugned notification are quoted for ready reference:-

“2.1 Exemption

1. *The following categories of users shall be exempted from obtaining NOC for ground water abstraction:*

- (i) *All users drawing/proposing to draw ground water through non-energized means (bucket & rope, hand pump, mhote etc.)*
- (ii) *Individual households drawing/proposing to draw ground water from a single dug well/ bore well/ tube well through delivery pipe of upto 1” diameter.*

xx.....xx.....xx

2.2.1 Individual households:

Individual houses drawing/proposing to draw ground water through more than one functional bore well/ tube well / dug well or drawing ground water through delivery pipe of more than 1” diameter from a single ground water abstraction structure shall be required to seek NOC for ground water withdrawal under this category.

xx.....xx.....xx

2.2.2 Infrastructure projects /industries/ mining projects / public water supply agencies / others requiring water only for drinking & domestic use

An indicative list of infrastructure projects to be considered under this category is given in Annexure VI. NOC for ground water withdrawal for drinking and domestic purpose only for infrastructure projects/ industry/ mining projects/ water supply agencies / others.

xx.....xx.....xx

2.3 Industrial /Mining/ Infrastructure projects

All industries / mining / infrastructure projects, whether existing / new/ under expansion and drawing/ proposing to draw ground water through energized means shall need to obtain NOC for ground water withdrawal from Central Ground Water Authority.

xx.....xx.....xx

2.3.1 Industries

NOC to industries shall be granted only for such cases where government agencies are not able to supply the desired quantity of water.

XX.....XX.....XX

2.3.2 Mining Projects

All existing as well as new mining projects need to obtain NOC for mine dewatering and / or ground water withdrawal through wells, if any, from Central Ground Water Authority.

XX.....XX.....XX

2.3.3 Infrastructure projects requiring dewatering or use of ground water for construction

New infrastructure projects/ residential buildings may require dewatering during construction activity and/or use ground water for construction. In both cases, applicants shall seek NOC from CGWA before commencement of work.

XX.....XX.....XX

2.4 Agricultural Sector

Agriculture sector is the backbone of the Indian economy. Since livelihood of farmers is dependent on agriculture, they shall be exempted from obtaining NOC for ground water withdrawal from the CGWA. Concerned State Departments (Agriculture / Irrigation / Water Resources) shall be required to undertake suitable demand and supply side measures to ensure sustainability of ground water sources.

XX.....XX.....XX

2.5 Abstraction of Saline/ contaminated ground water

Abstraction of saline/ contaminated ground water for use by industries dewatering by infrastructure / mining projects including those located in over-exploited areas would be encouraged.

XX.....XX.....XX

2.6 Water Conservation Fee (WCF)

.....all ground users would have to pay WCF based on quantum of ground water extraction as per details given below.

XX.....XX.....XX

- I. Drinking & Domestic use
- II. Packaged drinking water units drawing more than 50 m³ per day/ soft drinks/ breweries/ distilleries
- III. Packaged Drinking Water units (drawing less than 50 m³ per day) and other industries
- IV. Mining / infrastructure dewatering projects

XX.....XX.....XX

5. Delegation of powers to monitor compliance of NOC Conditions

Central Ground Water Authority has appointed the District Magistrate/ District Collector / Sub Divisional Magistrates of each Revenue District and Regional Directors of CGWB through Public Notice as Authorized officers, who have been delegated the power to monitor compliance, check violations and seal illegal wells, launch prosecution against offenders etc. including grievance redressal related to ground water. In cases of violation such as illegal ground water withdrawal, the District Magistrate/ District Collector/ Sub Divisional Magistrate, subject to his/her satisfaction, shall ensure discontinuation of the same by the seizure of drilling rig, sealing of tube well/ bore well if so constructed and also disconnection of electricity supply to the energised well.”

18. We have heard the learned Counsel for the parties.

19. Mr. Panjwani, learned Senior Counsel, appearing for some of the applicants, submitted that the MoWR has clearly acted contrary to the mandate of the judgement of the Hon'ble Supreme Court in *M.C Mehta (Supra)* as well as orders of this Tribunal requiring regulation of ground water, particularly for the OCS areas. The CGWA cannot surrender its responsibility on the ground that the States which had their own regulation need not be regulated by CGWA. In, the revised guidelines, the situation has been made worst by liberalizing the regime of control against extraction of ground water in OCS areas even for commercial/industrial purposes. There is no study undertaken of the likely impact for such liberalization on the ground water resources and there is no projected estimation as to how the revised policy will result in better conservation of ground water which is necessary for compliance of the Precautionary Principle, Sustainable Development Principle as well as Inter-generational Equity Principles. It seems that the revised policy is a sort of knee jerk reaction in response to observations of this Tribunal. It appears that MoWR has not undertaken any strength, weakness, opportunities and threats (SWOT) analysis to ascertain the weaknesses of old policy and

the threat scenarios it offers. It is silent on robust institutional mechanism on surveillance and monitoring of its ground implementation. It rather abdicates its authority in form of delegation to field units without any checks and balances to regulate ground water extraction, on scientific lines and environmentally sustainable manner. Despite stating that the guidelines shall be applicable Pan-India, the notification does not cover the States of Kerala, Karnataka, Andhra Pradesh, Telangana, West Bengal, Arunachal Pradesh, Himachal Pradesh, Jammu & Kashmir and the UT of Delhi. The serious flaws pointed out are:

- i. Liberally permitting extraction of ground water and justifying the same on the plea that charges have been prescribed even in OCS areas for commercial/industrial purposes.
- ii. Liberally permitting extraction of ground water on the ground that condition was imposed for rain water harvesting without any data of effective compliance of such conditions or even possibility of this being done.
- iii. Having exempted categories in OCS areas for purposes other than drinking water, including swimming pools, commercial and industrial uses. Reference has been made to the statistics to show deteriorating status of conservation of water and crises of access to water being available to the common man, as well as its requirement for ensuring e-flow in the rivers.

20. It is clear from the above that, rather than laying down stricter norms for extraction of ground water for commercial purposes and putting in place a robust institutional mechanism for surveillance and monitoring, extraction of ground water has been liberalized adding to the crisis unmindful of the ground situation and likely impact it will have on environment. No data

has been furnished to justify the policy reversal by way of uncontrolled liberalized drawal of groundwater in OCS areas.

21. The provisions of the impugned notification show that drawal of ground water has been, for all practical purposes, made unregulated in all areas, including the OCS areas.

22. The so called regulation is illusory. The so called conditions are incapable of meaningful monitoring, as shown by past experience also.

23. The water conservation fee virtually gives licence to harness ground water to any extent even in OCS areas.

24. There is no institutional mechanism to monitor removal and replenishment of ground water.

25. Delegation provision is virtual abdication of authority.

26. There is no check on injection of pollutants in the ground water in the impugned notification. There is no provision with regard to check on water quality and its remediation, if there is contamination.

27. We are satisfied that the Notification dated 12.12.2018 tested on the Precautionary Principle, Sustainable Development as well as Inter-generational Equity Principles is unsustainable in law and instead of conservation of ground water which is necessary for providing access to drinking water in OCS areas, as well also other needs of environment, including sustenance of rivers and other water bodies, it will result in fast depletion of ground water and damage to water bodies and will be destructive of the fundamental right to life under Article 21 of the Constitution of India.

28. Accordingly, the impugned Notification may not be given effect to in view of serious shortcomings as pointed above so that an

appropriate mechanism can be introduced consistent with the needs of environment.

29. The MoEF&CC is directed to constitute an Expert Committee by including representatives from IIT Delhi, IIT Roorkee, IIM Ahmedabad, CPCB, NITI Ayog and any other concerned agency or department to examine the issue of appropriate policy for conservation of ground water with a robust institutional mechanism for surveillance and monitoring with a view to enhance access to ground water for drinking purposes in OCS areas by way of appropriate replenishment practices which can be properly accounted and measured for as well as to sustain the floodplains of rivers in terms of e-flows and other water bodies. The MoEF & CC and MoWR may finalize the issue of subject remain *inter-se* with regard to ground water reserve and its quality.

30. The Committee may be constituted in two weeks and report of the Committee may be furnished to the MoEF &CC and this Tribunal in two months by e-mail at ngt.filing@gmail.com.

31. The Committee may also indicate the projection of its impact study in light of projected data for the next 50 years (in phased manner with action plan for each decade). Thereafter, fresh guidelines be issued by the concerned Ministry and the report furnished to the Tribunal on or before 30.04.2019.

32. The CPCB may constitute a mechanism to deal with individual cases of violations of norms, as existed prior to Notification of 12.12.2018, to determine the environment compensation to be recovered or other coercive measures to be taken, including prosecution, for past illegal extraction of ground water, as per

law. All the matters relating to illegal extraction of ground water by individuals are disposed of with these directions.

33. The Expert Committee report, the new policy and challenge to orders of authorities, if any, will be considered on the next date.

The matter be put up for above consideration in the first week of May, 2019.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

January 03, 2019
Original Application No. 176/2015
(M.A. No. 1332/2015) and other connected matters
AK



Annexure-VICRITERIA TO CALCULATE WATER CONSUMPTION**Table 1: Discharge of 4" Dia and 1 HP Pump**

Sl. No.	Depth (Meter)	Discharge	
		LPM	m ³ /hr
1	25	50	3
2	43	40	2.4
3	59	30	1.8
4	69	20	1.2
5	77	10	0.6

Table 2: Discharge of 4" Dia and 2 HP Pump

Sl. No.	Depth (Meter)	Discharge	
		LPM	m ³ /hr
1	60	50	3
2	98	40	2.4
3	124	30	1.8
4	141	20	1.2
5	165	10	0.6

Table 3: Discharge of 6" Dia and 3 HP Pump

Sl. No.	Depth (Meter)	Discharge	
		LPM	m ³ /hr
1	17	200	12
2	29	175	10.5
3	41	150	9
4	50	130	7.8
5	62	100	6

Table 4: Discharge of 6" Dia and 5 HP Pump

Sl. No.	Depth (Meter)	Discharge	
		LPM	m ³ /hr
1	26	225	13.5
2	50	200	12
3	70	175	10.5
4	86	150	9
5	92	140	8.4

References

1. Bureau of Indian Standards. 1993. IS1172:1993 (Reaffirmed 2002). *Code of Basic Requirements for Water Supply, Drainage and Sanitation (Fourth Revision)*. New Delhi: BIS.
2. Census of India. 2011. Census of India's website. [Online]. [Accessed 15 February 2019]. Available from: http://censusindia.gov.in/2011-prov-results/paper2/data_files/India2/1.%20Data%20Highlight.pdf.
3. Central Pollution Control Board. 2013. *Performance Evaluation of Sewage Treatment Plants under NRCDC*. Delhi: CPCB.
4. Central Pollution Control Board. 2016. *Graded Response Action Plan for Delhi & NCR*. Delhi: CPCB.
5. Central Pollution Control Board. 2016. *Final Document on Revised Classification of Industrial Sectors Under Red, Orange, Green and White Categories*. Delhi: CPCB.
6. CGWA. 2015. *Guidelines/Criteria for evaluation of proposals/requests for ground water abstraction*. New Delhi-Central Ground Water Authority, Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India.
7. CGWB. 2017. *Categorisation of Assessment Units* [Online]. [Accessed 20 February 2019]. Available from: <http://cgwa-noc.gov.in/LandingPage/NotifiedAreas/CategorizationOfAssessmentUnits.pdf#ZOOM=150>.
8. CGWB. 2017. *Dynamic Ground Water Resources of India*. Faridabad-Central Ground Water Board, Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India.
9. CPHEEO. 2013. *Manual on Sewerage and Sewage Treatment Systems – 2013*, New Delhi: Ministry of Urban Development, Government of India.
10. CPHEEO. 2016. *Manual on Municipal Solid Waste Management – 2016*. New Delhi: Ministry of Urban Development, Government of India.
11. Ministry of Micro, Small and Medium Enterprises. 2006. *The Micro, Small and Medium Enterprises Development Act, 2006*. 2nd October, 2006, vide notification No. S.O. 1154(E) dated 18th July, 2006, see *Gazette of India, Extraordinary Part II sec.3(ii)*, Government of India.
12. *Plastic Waste Management Rules, 2016*. (G.S.R. 320 (E) [18-03-2016]). New Delhi: Ministry of Environment Forest and Climate Change, Government of India.
13. *Solid Waste Management Rules, 2016*. (S.O. 1357(E) [08-04-2016]). New Delhi: Ministry of Environment Forest and Climate Change, Government of India.
14. WILO. 2017. *Building Service Residential Selection Booklet*. Pune- WILO Mather and Platt Pumps Pvt. Ltd.

STATUS OF DIRECTIONS ISSUED TO MUNICIPAL COUNCILS

Sl.No.	Municipal Council	MRF Status	Composting status	Action taken	Status as on date
1	Sanguem Municipal Council	The Municipal Council has established. MRF valid upto 22/2/2025	1. The composting facility installed by the council was found to be not operational.	<p>Directions proposed to;</p> <ol style="list-style-type: none"> 1. The Composting facilities should be made operational immediately. 2. The non-biodegradable waste collection system of the Council has to be improved. 3. Immediate steps should be taken to stop littering and to clear the black spots within the jurisdiction of the Council. 4. The garbage disposal site at Gunjmol should be utilised for environmentally sound treatment of solid waste. 5. Submit a detailed compliance/ status report on the compliance by the Municipal Council with Rule 15 of the SWMR 2016 within a period of 7 days from the date of receipt of this directions. 6. Submit a Bank Guarantee of Rs.2 lakhs with a validity period of 6 months to the Board within a period of 7 days from the date of receipt of this direction towards ensuring compliance of the above measures within the stipulated time period. 	<p>Replied, but unsatisfactory. Personal Hearing conducted on 2nd September 2021. The Online application for Authorization under Rules and Consent under the Water Act and Air Act will be submitted by the 17th September 2021. and the Compliance to Rule 15 of the Waste Management will be submitted by the 17th September 2021. The Board will impose fine as PPP in the event if the Council does not compliance by 3rd September 2021. The Council replied to the Personal hearing. The Board officials conducted inspection. The Council submitted Bank Guarantee.</p>

2	Mortnugao Municipal Council	Council has set up MRF facility at waste treatment plant at Headland Sada	The composting facility provided by the Council was found to be not adequate to treat the biodegradable waste being generated by the Council.	<p>Directions proposed to:</p> <ol style="list-style-type: none"> 1. Ensure that the unsegregated/ mixed waste dumped within the premises of the Solid Waste Treatment Plant at Headland Sada is cleared and disposed off in an environmentally sound manner within a period of 3 months. 2. Take immediate steps to stop littering within the jurisdiction of the Municipal Council. 3. Take immediate steps to clear the black spots located within the jurisdiction of the Municipal Council. 4. Take immediate steps to improve and enhance waste collection mechanism within the jurisdiction of the Council. 5. Take immediate steps to upgrade and effectively operate the composting facility installed by the Council. 6. Submit a detailed compliance/ status report on the compliance by the Municipal Council with Rule 15 of the SWMR 2016 within a period of 7 days from the date of receipt of these directions. 7. Submit a Bank Guarantee of Rs.2 lakhs with a validity period of 6 months to the Board within a period of 7 days from the 	No reply received. Personal Hearing conducted on 23/08/2021. The Online application for Consent under the Water Act and Air Act will be submitted by the 3rd September 2021. and the Compliance to Rule 15 of the Waste Management will be submitted by the 3rd September 2021. The Board will impose fine as PPP in the event if the Council does not compliance by 3rd September 2021. The Council replied to the Personal hearing. The Board official conducted inspection. The Council has paid amount to release the Bank Guarantee, The Bank Guarantee is awaited.
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3	<p>Canacona Municipal Council</p>	<p>The Council has MRF facility at Dhumane Solid Waste Treatment Plant</p>	<p>1. Composting unit located behind the Municipal building was found to be not operational.</p>	<p>1. Take immediate steps to clear and dispose off the wet waste dumped outside the shed at the waste treatment plant at Dhumane in an environmentally sound manner within a period of 3 months. 2. Take immediate steps to stop the flow of leachate from an un segregated waste into the open at the waste treatment plant at Dhumane. 3. Provide and operate adequate composting facility to treat the biodegradable waste generated by the Council. 4. Take immediate steps to clear the black spots observed during the site inspection. 5. Take immediate steps to enhance collection of non biodegradable waste. 6. Submit a detailed compliance/ status report on the compliance by the Municipal Council with Rule 15 of the SWMR 2016 within a period of 7 days from the date of receipt of these directions. 7. Submit a Bank Guarantee of Rs.2 lakhs with a validity period of 6 months to the Board within a period of 7 days from the date of receipt of this direction towards ensuring compliance of the above measures</p>	<p>No reply received. Personal Hearing conducted on 23/08/2021. The Online application for Authorization under Rules and Consent under the Water Act and Air Act will be submitted by the 3rd September 2021. and the Compliance to Rule 15 of the Waste Management will be submitted by the 3rd September 2021. The Board will impose fine as PPP in the event if the Council does not comply by 3rd September 2021. The Council replied to the Personal hearing. The Board officials conducted inspection. The Council submitted B.G.</p>
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4	<p>Churchorem Cacora</p>	<p>1. A large quantity of mix waste was dumped at the waste treatment site i.e. is currently handed over to Goa Waste Management Corporation for the construction and establishment of the 100 TPD common waste treatment facility at Churchorem Cacora</p>	<p>1. Ensure that all the composting units installed by the Council are made fully operational/ functional within a period of 3 months from the date of receipt of this direction.</p> <p>3. Ensure that the dumping of unsegregated mixed waste at the waste treatment site i.e. is currently handed over to Goa Waste Management Corporation for the construction and establishment of the 100 TPD common waste treatment facility at Churchorem Cacora is stopped with immediate effect and that the existing dump waste is cleared/ remediated in an environmentally sound manner, within a period of 3 months .</p> <p>4. Submit a detailed compliance/ status report on the compliance by the Municipal Council with Rule 15 of the SWMR 2016 within a period of 7 days from the date of receipt of this directions.</p> <p>5. Submit a Bank Guarantee of Rs.2 lakhs with a validity period of 6 months to the Board within a period of 7 days from the date of receipt of this direction towards ensuring compliance of the above measures</p>	<p>Replied, but unsatisfactory. Personal Hearing conducted on 23/08/2021. The Online application for Authorization under Rules and Consent under the Water Act and Air Act will be submitted by the 3rd September 2021. and the Compliance to Rule 15 of the Waste Management will be submitted by the 3rd September 2021. The Board will impose fine as PPP in the event if the Council does not comply by 3rd September 2021. The Council replied to the Personal hearing. INSPECTION CONDUCTED BY BOARD OFFICIALS. REPORT IS ENCLOSED. THE COUNCIL PAID AN AMOUNT OF RS. 2,00,000/-</p>
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5	Cuncohim Municipal Council	The Material Recovery Facility of the Council is in the process of being upgraded and the present Material Recovery Facility is found to be not adequate.	Windrows method of composting being adopted by the Municipal Council is found to be inadequate.	<ol style="list-style-type: none"> 1. Upgrade the composting facilities installed by your Municipal Council so as to ensure effective treatment of waste within a period of 3 months. 2. Ensure operation of the leachate collection tank installed by your Council within 3 months. 3. Ensure up gradation and operation of the material Recovery Facility at your Council inorder to ensure effective operation within a period of 3 months. 4. Immediately stop the dumping of mixed waste outside the shed and the leachate collection tank installed by your Council and ensure that the existing dump waste at these location is removed and disposed off in an environmentally sound manner within a period of 3 months. 5. Submit a detailed compliance/ status report on the compliance by the Municipal Council with Rule 15 of the SWMR 2016 within a period of 7 days from the date of receipt of this directions. 6. Submit a Bank Guarantee of Rs.2 lakhs with a validity period of 6 months to the Board within a period of 7 days from 	Reply received. Personal Hearing conducted on 23/08/2021. Compliance to Rule 15 of the Waste Management will be submitted by the 3rd September 2021. The Board will impose fine as PPP in the event if the Council does not compliance by 3rd September 2021. The Council replied to the Personal hearing. INSPECTION CONDUCTED BY BOARD OFFICIALS. REPORT ATTACHED. THE COUNCIL SUBMITTED BANK GUARANTEE.
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5	Sankhalim Municipal Council	The MRF is established and applied for renewal	Windrows composting method adopted by your council was found to be inadequate.	<ol style="list-style-type: none"> 1. Take immediate steps to ensure that leachate flowing to the compost stored at the waste treatment facility of the council is stopped. 2. Take immediate steps to establish a facility for treatment of bio degradable waste generated by your Council within a period of 3 months. 3. Ensure that the RDF stored outside the shed installed by your Council is disposed off in an environmentally sound manner within 3 months. 4. Ensure that the leachate collection tank installed by your council is made operational within 3 months. 5. Submit a detailed compliance/ status report on the compliance by the Municipal Council with Rule 15 of the SWMR 2016 within a period of 7 days from the date of receipt of these directions. 6. Submit a Bank Guarantee of Rs.2 lakhs with a validity period of 6 months to the Board within a period of 7 days from the date of receipt of this direction towards ensuring compliance of the above measures within the stipulated time period. 	<p>Replied, but unsatisfactory. Personal Hearing conducted on 23/08/2021. The Online application for Authorization under Rules and Consent under the Water Act and Air Act will be submitted by the 3rd September 2021. and the Compliance to Rule 15 of the Waste Management will be submitted by the 3rd September 2021. The Board will impose fine as PPP in the event if the Council does not comply by 3rd September 2021. The Council replied to the Personal hearing. Paid an amount of 2,00,000/-</p>
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7	Bicholim Municipal Council	MRF is operated by Sampurna Earth in collaboration with GWMC	The windrows composting facility installed by the Municipality is found to be inadequate	<p>1. To take immediate steps to enhance the composting facilities in order to ensure effective treatment of biodegradable waste generated by the council within a period of 3 months</p> <p>2. Ensure that the RDF stored outside the shed installed by your Council is disposed off in an environmentally sound manner within 3 months.</p> <p>3. Submit a detailed compliance/ status report on the compliance by the Municipal Council with Rule 15 of the SWMR 2016 within a period of 7 days from the date of receipt of this directions.</p> <p>3. Submit a Bank Guarantee of Rs.2 lakhs with a validity period of 6 months to the Board within a period of 7 days from the date of receipt of this direction towards ensuring compliance of the above measures within the stipulated time period.</p>	<p>Replied, but unsatisfactory. Personal Hearing conducted on 23/08/2021. The Online application for Authorization under Rules and Consent under the Water Act and Air Act will be submitted by the 3rd September 2021. and the Compliance to Rule 15 of the Waste Management will be submitted by the 3rd September 2021. The Board will impose fine as PPP in the event if the Council does not compliance by 3rd September 2021. The Council replied to the Personal hearing. inspection conducted by Borad officials. Report attached. Council paid amount of Rs.2,00,000/-</p>
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8	Quepem Municipal Council	MRF is operated by Bavish	The existing facility for composting approx. 2.5 to 3.5 tonnes of biodegrade waste that is generated by the Council through windrows composting is found to be inadequate.	<ol style="list-style-type: none"> 1. The mixed waste and the wet waste found dumped outside the shed of the solid waste treatment plant is required to be cleared and disposed off in an environmentally sound manner within a period of 3 months. 2. The existing composting facilities installed by the Council are required to be enhanced. 3. Submit a detailed compliance/ status report on the compliance by the Municipal Council with Rule 15 of the SWMR 2016 within a period of 7 days from the date of receipt of these directions. 4. Submit a Bank Guarantee of Rs. 2 lakhs with a validity period of 6 months to the Board within a period of 7 days from the date of receipt of this direction towards ensuring compliance of the above measures within the stipulated time period. 	No reply received. Personal Hearing conducted on 23/08/2021. The Online application for Authorization under Rules and Consent under the Water Act and Air Act will be submitted by the 3rd September 2021. and the Compliance to Rule 15 of the Waste Management will be submitted by the 3rd September 2021. The Board will impose fine as PPP in the event if the Council does not compliance by 3rd September 2021. The Council replied to the Personal hearing.
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9	Margao Municipal Council			<p>1. Apply for renewal of Consent to operate under Air Act, Water Act and Hazardous Waste Authorization which was valid till 20/6/2020 and Solid Waste Authorization under Solid Waste Management Rules 2016.</p> <p>2. To stop dumping of wet waste outside the shed and to shift wet waste in proper covered area within 7 days from the date of directions.</p> <p>3. To shift un-segregated waste stored outside the segregation shed all around the landfill site, Leachate collection tank, plant side and solid waste bailing stations in open air in covered shed and disposed of in proper scientific manner within next one month from the date of directions.</p> <p>4. To repair/replace sheets of the plant where vermin-composting is carried out.</p> <p>5. To dismantle External Water pump installed at the Leachate collection tank.</p> <p>6. To dispose Bio-Medical Waste through Scientific Manner following the Covid-19 guidelines issued by Central Pollution Control Board.</p> <p>7. To cover remaining part of Legacy Dump and install GI sheets where compound wall</p>	<p>Reply received. Reply found to be unsatisfactory. Personal Hearing conducted on 23/08/2021. Compliance to Rule 15 of the Waste Management will be submitted by the 3rd September 2021. The Board will impose fine as PPP in the event if the Council does not compliance by 3rd September 2021. The Council replied to the Personal hearing. Board officials conducted inspection. report attached. the council paid an amount of Rs.2,00,000/-</p>
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The following Municipal Councils were inspected and directions are issued on 2/9/2021.

- 1) Pernem Municipal Council Did not replied to the direction Sent an email stating that CO is on leave. And requested for time.
- 2) Valpoi Municipal Council Replied to the direction
- 3) Ponda Municipal Council Replied to the direction
- 4) Mapusa Municipal Council Did not replied to the direction Conducted inspection by Board officials. Report attached. Paid Rs.2,00,000/-
- 5) Corporation of City of Panaji Replied to the direction

MINUTES OF THE 144th MEETING OF THE GOA STATE
POLLUTION CONTROL BOARD HELD ON 6th JULY, 2020 AT 3.00
pm IN THE CONFERENCE HALL OF THE BOARD.

I. The 144th meeting of the Goa State Pollution Control Board was held on 6th July at 3.00 pm in the Conference hall of the Board.

The following members attended the meeting:

1.	Mr. Ganesh B. Shetgaonkar, Chairman
2.	Director of Industries, Trade and Commerce was represented by Shri Prashant Kamat, F.M.- I
3.	Mr. Shrikant Patil, Chief Engineer, Water Resource Dept.
4.	Director of Mines was represented by Ms. Nelita D'Silva, Assistant Geologist
5.	Director of Tourism was represented by Mr. Subhash Kavlekar, Asst. Director
6.	Director of Health Services was represented by Dr. S. Parulekar Chief Medical Officer
7.	Mr. Shawn Brian Martins, Panch Member, Village Panchayat Calangute
8.	Mrs. Unnati Sahastrabhudhe, Panch Member, Village Panchayat Velguem
9.	Mr. Rajsingh Rane, Councillor Mapusa Municipal Council
10.	Mr. Sanjay Naik, Panch Member, Village Panchayat Sanvordem
11.	Mr. Blaise Costabir, Chairman, Confederation of Indian Industries
12.	Mr. Nilesh Shah, President Travel and Tourism Association of Goa
13.	Mr. Nikhil Dessai, Managing Director, Goa Tourism Dev. Corpn.
14.	Dr. (Mrs.) Shamila Monteiro, Member Secretary

II. Member Secretary welcomed the members for the meeting. The agenda items for the meeting were then taken for discussion.

Agenda Item no. 01

Confirmation of the minutes of the 143rd meeting of the Goa State Pollution Control Board held on 22nd May, 2020.

The minutes of the 143rd meeting of the Board held on 22nd May, 2020 were forwarded to all the members vide this office letter no. 4/143/20-

~~4/143/20-~~

However Members sought to know and peruse the material and evidence available with the Board that indicated that the stone crushing unit of M/s Jolly Metals initially operated without the consent of the Board. This was required as all the issues for determination before the Board primarily relate to this aspect. It was also decided that this material and evidence would have to be provided to M/s Jolly Metals prior to the next date of hearing in order to enable him to deal with the same during his submissions to the Board.

In this regard the hearing in the matters arising out of WP/501/2019, WP/504/2019 and WP/437/2019 was differed till the next meeting in order to enable the material and evidence available with the Board that indicated that the stone crushing unit of M/s Jolly Metals initially operated without the Consent of the Board; to be placed before the Board members and also to be provided to M/s Jolly Metals.

Agenda item no. 04:
Review of Polluter Pays Penalty:

A. Member Secretary informed the members that the Board had approved the Polluters Pay principle in its 138th Board meeting. However, it was noticed that the PPP levied per day violation amounts to more than the investment of the industries / establishments. Member Secretary also brought to the notice of the members that Central Pollution Control Board has prepared an in-house Report on Methodology for Assessing Environmental Compensation and Action Plan to utilize the funds. It was informed that since CPCB has come out with a detailed report, it would be advisable to follow the report prepared by CPCB, as the same would hold grounds in the Court of Law. After deliberations it was decided to adopt the report as prepared by Central Pollution Control Board

B. Member Secretary informed the members that the Board at its 139th meeting had decided to levy penalty to industrial sectors based on the category that is Red, orange and Green and Scale of industry that is Large, medium and Small. She further informed the members that the Board is now in receipt of latest Directions that certain units are categorized under Non Industrial Sectors such as cannot be classified under Large, Medium and Small based on cost of Plant and machinery. Similarly, residential complexes cannot be classified as Large, medium and Small. Members perused the Classification prepared for such sectors and approved the same and decided to penalise the below mentioned sectors as per the Polluter Principle Pay as adopted from the Central Pollution Control Board.

Sr No.	Sector	Category	Scale
1	Airports and Commercial Strips -- waste water generation more than 100 KLD	Red	Large
2	Airports and Commercial Strips - waste water generation less than 100 KLD	Orange	Large
3	Health-care Establishments - waste water generation more than 100 KLD OR incinerator	Red	Medium
4	Health - care Establishments - waste water generation less than 100 KLD but having beds above 50	Orange	Medium
5	Health - care Establishments - Having beds below 50	Orange	Small
6	Hotel - waste water generation more than 100 KLD	Red	Medium
7	Hotel - waste water generation less than 100 KLD and rooms more than 20	Orange	Medium
8	Hotel - waste water generation less than 10 KLD, having no boiler, No Hazardous waste generation and rooms less than 20	Green	Small
9	Railway locomotive workshop / Integrated road transport workshop / authorized service centre - more than 100 KLD	Red	Medium
10	Workshops - waste water generation less than 100 KLD	Orange	Medium
11	Ports and Harbours - major	Red	Large
12	Ports and Harbours - Minor	Red	Medium
13	Jetties and dredging operations	Red	Small
14	Common Treatment and Disposal Facilities (CETP; TSDF, CBWTF, effluent conveyance project, incinerator, MSW sanitary landfill site)	Red	Large
15	Residential and Commercial complexes - waste water generation more than 100 KLD and built up area more than 20000 sq.m	Red	Large
16	Residential and Commercial complexes - waste water generation less than 100 KLD and built up area more than 20000 sq.m	Orange	Medium
17	Residential and Commercial complexes - built up area less than 20000 sq.m	Green	Small

Member Secretary further informed the members that a Committee needs to be constituted to calculate the penalty so as to maintain uniformity. After deliberations, it was decided to entrust the said responsibility to the Technical Advisory Committee of the Board.