

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

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**ORIGINAL APPLICATION NO. 189/2020**

**IN THE MATTER OF:**

**1. Kapil**

R/o 849/B, Nyay Khand  
Indirapuram, Ghaziabad  
Uttar Pradesh - 201010

Applicant(s)

Verses

**1. Central Pollution Control Board**

Through its Member Secretary,  
East Arjun Nagar, Parivesh Bhawan  
Delhi-110032

**2. Central Ground Water Authority**

Through its Regional Director  
Bhujal Bhawan, Sector-B  
Sitapur Road Yojna, Lucknow  
Uttar Pradesh- 226021

**3. Uttar Pradesh Pollution Control Board**

Through its Member Secretary,  
T.C. 12 V, Vibhuti Khand, Gomti Nagar,  
Lucknow-226010

**4. State of Uttar Pradesh**

Through District Magistrate  
District Amroha  
Uttar Pradesh-244221

**5. Umang Dairies Limited**

3 KM Stone, Hasanpur Road,  
Gajruala, District Amroha,  
Uttar Pradesh-244235

Respondent(s)

**Counsel for Applicant(s):**

Ms. Mansi Chahal, Advocate

**Counsel for Respondent(s):**

Mr. Pradeep Misra, Advocate for UPPCB

Ms. Shreya Shrivastava, Advocate for CGWA

Mr. Pinaki Misra, Senior Advocate with Mr. Ashish Prasad Advocate  
for M/s. Umang Dairies Ltd (R-5)

**PRESENT:**

**HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

**JUDGMENT**

**BY HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER**

**SYNOPSIS**

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1. This application under Section 14,15,16,17 and 18(1) of National Green Tribunal Act 2010 (hereinafter referred to as '**NGT Act 2010**') has been filed by one Kapil, complaining that M/s. Umang Dairies Limited, 3 KM Stone, Hasanpur Road, Gajraula, District Amroha, Uttar Pradesh, impleaded as **respondent 5** (hereinafter referred to as '**Project Proponent or PP**') in this Original Application (hereinafter referred to as '**OA**'), is causing immense pollution by drawing/extracting ground water and operating dairy plant without obtaining any consent/permission/No Objection Certificate (hereinafter referred to as '**NOC**') from concerned department/authority and functioning in continuous violation of environmental norms; PP is contributing to immense air and water pollution, becoming a menace for residents residing in the city of Gajraula; people residing thereat are suffering from various harmful diseases; dairy

industry is most polluting food industry due to large water consumption and is one of the major industries causing water pollution.

2. Applicant states that PP is operating in violation of environmental norms and without obtaining any permission from any concerned department/authority; has not obtained any consent to operate from Uttar Pradesh Pollution Control Board (hereinafter referred to as '**UPPCB**') i.e., respondent 3 and also lacks permission from Central Ground Water Authority (hereinafter referred to as '**CGWA**') for extraction of ground water. Complainant has further said that PP is extracting gallons of water every day, without any lawful authority from Competent Authority i.e., CGWA; ground water is being drawn through illegally established bore wells in its unit; unsustainable groundwater extraction affects severely availability of water for surface water irrigation with potential decline in food production in the city of Gajraula; PP has not installed any anti-pollution device in its unit; has also not installed any Effluent Treatment Plant (hereinafter referred to as '**ETP**') in the unit for treatment of waste water which is generated from the plant; unit is operating in violation of the environmental norms, contributing to huge water pollution in the area by making life of residents miserable; PP is also bye-passing waste effluent/water directly on the land and farmer's fields situated near to it.

3. In support of allegations, some photographs are filed by applicant as annexure A/1 to OA. He has further alleged that non treatment of waste water with high level of pollutants is the reason creating major environmental problems and particularly, when it is discharged into the fields of farmers situated near to the unit; activities at dairy plant are potentially contaminating both surface waters and ground water; PP has poor housekeeping, improper disposal facility and prolonged storage of various solid and liquid wastes which also result in odour and smell; all

the steps in dairy plant including processing, packaging, transporting are causing impact on environment; similar steps in regard to various products also lead to increased disposal and severe pollution problems in the city; PP is directly and indirectly discharging contaminated water, without any treatment, into the drain which finally merges into the Holy River Ganga; it is transporting trucks carrying milk and other dairy materials in the area in a vary unscientific manner; roads are being damaged due to overloading and health of the residents of Gajraula city is in jeopardy; there is a steep rise in prevalence of asthma, respiratory problems and lung diseases; and 67% of city residents complain of respiratory problems and cases of chronic lung problems are steadily increasing.

4. Relying on Tribunal's judgment dated 12.05.2017 in **OA No. 200/2014, MC Mehta vs. UOI & Others**, imposing penalty of Rs. 10 lakhs as environmental compensation on respondent 5 for causing pollution beyond the prescribed norms, it is claimed that respondent 5 is contributing to air pollution also particularly, when city of Gajraula also suffers high level of PM<sub>10</sub> in the air and one of the major polluted cities in State of UP, hence appropriate action needs be taken against PP. Reliance is also placed on Tribunal's judgment dated 20.07.2020 in **OA 176/2015, Shailesh Singh vs. Hotel Holiday Regency Moradabad** wherein Tribunal said,

***"There is no absolute right even of existing industries to continue to draw ground water without regard to depleting groundwater levels as held even in 2015. Such extraction cannot be at the cost of environment and ignoring intra and intergenerational, precautionary and sustainable development principles. Development and growth must be undertaken but not without ignoring the sustainable groundwater level."***

5. Applicant has also relied on **AP Pollution Control Board II vs. Prof. M.V. Nayudu (Retd.) & Others (2001)2SCC62**, wherein Court held:

*“There can be **no exemption to industries against sustainable development principle**”.*

6. Applicant sent several complaints to various authorities about pollution caused by respondent 5 but no response has been shown by any of the authorities including Regulators and the recent letters/ complaints dated 08.06.2020 and 10.07.2020, sent by applicant, are filed collectively as Annexure A/3 to OA. There is violation of Article 21 of the Constitution in as much as people’s Right to life including right to shelter, right to food, free from environmental pollution and other environmental hazards is being violated. In the above backdrop of factual allegations, applicant has prayed to direct respondents 1, 3 and 4 (CPCB, UPPCB, State of Uttar Pradesh) to take strict and immediate action against PP for causing immense pollution; direct CGWA to seal bore wells of PP who is extracting water without consent from CGWA and to impose environmental compensation as per Section 24(1) of NGT Act 2010.

7. Taking cognizance of the allegations made by applicant in OA, Tribunal on 04.09.2020 found it necessary to obtain a factual and action taken report by constituting a joint Committee, comprising of UPPCB, CGWB, Lucknow and District Magistrate, Amroha and passed following order:

*“Grievance in this application is against violation of environmental norms by Respondent No. 5, Umang Dairies Limited, operating a Dairy plant in the city of Gajraula, District Amroha, Uttar Pradesh. **The said unit is extracting ground water without any permission from the concerned authority and is bypassing the waste on land in violation of the Water (Prevention and Control of Pollution) Act, 1974 (Water Act).** There is no ‘Consent to Establish’ or ‘Consent to Operate’ under the Water Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1974.*

*In view of above, we consider it necessary to require the State PCB, Central Ground Water Authority (CGWA) and the District Magistrate, Amroha to furnish a joint factual and action taken report in the matter 2 within two months by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.*

*The applicant may serve a set of papers on the State PCB, CGWA and the District Magistrate, Amroha and file an affidavit of service within one week.*

*A copy of this order be sent to the State PCB, CGWA and the District Magistrate, Amroha by e-mail for compliance.*

*List for further consideration on 26.11.2020.”*

**Joint inspection report of CPCB and UPPCB dated 27.10.2020 pursuant to order dated 04.09.2020:**

8. The aforesaid Joint Committee has submitted an inspection report dated 27.10.2020, stating that Committee visited site on 21.10.2020, inspected the unit, assessed air pollution, waste water management and compliance status of environmental norms by PP. Report says that unit was earlier running in the name of **M/s. J.K. Dairy and Food Limited** and taken over by Singhania Group in December 2006 for running unit under the name and title of **M/s. Umang Dairy Ltd.** It is engaged in production of pasteurised milk, curd, ghee, chhach (butter milk), SMP butter and dairy products, having consented capacity of raw milk handling of 11.5 lakh litres/day. On the day of inspection, unit was found operational handling 7.5 lakhs litres milk which is about 65% of consented production capacity. Unit is using cow and buffalo milk as main raw material which is procured from nearby areas. Monthly milk handling data from January 2020 up to the date of inspection i.e., upto 20.10.2020 has been given in table 1 as under:

**“Table No. 1**

<b>S. No.</b>	<b>Month &amp; year</b>	<b>Total Milk Process (Lakh litre/day)</b>	<b>Remarks</b>
1	Jan-20	309.77	
2	Feb-20	301.58	
3	Mar-20	326	
4	Apr-20	244.27	
5	May-20	223.16	
6	Jun-20	195.71	
7	Jul-20	201.14	
8	Aug-20	210.22	
9	Sep-20	216.44	
10	Upto 20 Oct-20	147.09	
11	Total	<b>2375.38</b>	

9. Unit obtained Consent to Operate (hereinafter referred to as ‘**CTO**’) dated 13.06.2020 under Water (Prevention & Control of Pollution) Act, 1974 (hereinafter referred to as ‘**Water Act 1974**’) and under Air (Prevention and Control of Pollution) Act, 1981 (hereinafter referred to as ‘**Air Act 1981**’) from UPPCB which is valid upto 31.12.2021. As per conditions mentioned in CTO, production capacity of milk products, i.e., cultured products is 4800 MT/month, poly pouch milk is 18000 MT/month, Skimmed milk powder is 19100 MT/month and ghee/butter is 960 MT/month. Unit is consuming water by abstraction of ground water through three borewells. Water is used for industrial as well as domestic purposes. **NOC** for abstraction of ground water (1650 KLD) **expired on 18.05.2019**. Before expiry, unit applied for renewal of NOC for abstraction of groundwater to CGWA on 24.04.2019 but till the date of inspection i.e., 21.10.2020, NOC for withdrawal of ground water was not issued. As per Central Ground Water Board (hereinafter referred to as ‘**CGWB**’) report of 2017 “Dynamic Ground Water Recourses Assessment of India-2017” (page no. 146), level of water in Gajraula, District Amroha has gone down and category has changed from Semi Critical (2011) to **Over-Exploited** (2017). Unit has three borewells and their location, meter readings and flow rates are given in Table 2, as under:

**“Table 2**

<b>S No.</b>	<b>Borewell No. and location</b>	<b>Meter Reading (m<sup>3</sup>)</b>	<b>Flow rate (m<sup>3</sup>/hr)</b>	<b>Latitude and Longitude</b>
1.	1, Near Boiler House	477153.4	66.46	28°48’32.369” N 78°15’9.211”E
2.	2, Near Main gate	29322.53	39.45	28°48’42.314”N 78°15’12.41”E
3.	3, Near old hostel	446251.3	35.49	28°48’38.439”N 78°15’11.665”E

10. As per log book data from 1<sup>st</sup> January, 2020 to 20<sup>th</sup> October, 2020, fresh water consumption by unit is shown in Table 3, as under:

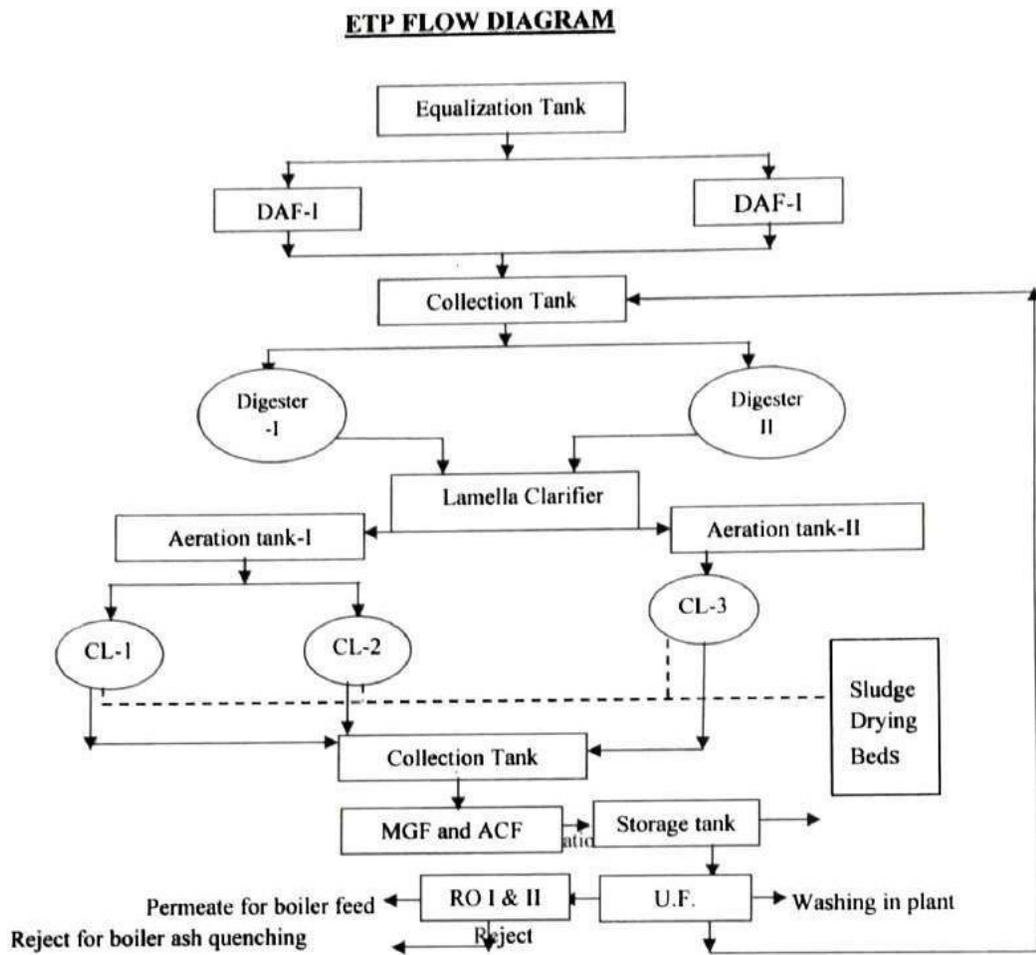
**“Table 3**

<b>S. No.</b>	<b>Month</b>	<b>Tubewell No. 1</b>	<b>Tubewell No. 2</b>	<b>Tubewell No. 3</b>	<b>Total Water abstraction</b>
<b>1</b>	Jan-20	16826	0	16889	33715
<b>2</b>	Feb-20	12266	6016	16076	34358
<b>3</b>	Mar-20	15087	0	16828	31915
<b>4</b>	Apr-20	10797	2355	13947	27099
<b>5</b>	May-20	13654	0	16188	29842
<b>6</b>	Jun-20	14416	2461	14449	28865
<b>7</b>	Jul-20	13320	0	14621	27941
<b>8</b>	Aug-20	16014	0	13905	29919
<b>9</b>	Sep-20	12828	360	12211	27860
<b>10</b>	Oct-20	9126	3275	6817	19218
	<b>Total</b>	134334	14467	141931	290732
<b>Total Days 293</b>					<b>992.259 KLD</b>

11. Average fresh water withdrawal from borewells as per the aforesaid chart, is computed at 992.259 KLD, which is below sanctioned capacity of 1650 KLD. However, NOC expired on 18.05.2019 and extraction of groundwater in January 2020 to October 2020 was without consent. Unit has installed **ETP**, based on the anaerobic and aerobic treatment on activated sludge process and flow meter installed at different section of ETP. At the time of inspection, **totalizer reading of flow meter of ETP outlet was not shown due to that only flow rate 61.43 was observed.** Unit had installed two water flow meters at inlet of USABR I & II, separately. **Water flow meter attached with USABR II was not showing totalizer reading due to electrical fault.** The flow meters readings found at the time of inspection, are as under:

<b>S No.</b>	<b>Location of Flow meter</b>	<b>Reading</b>
1.	Inlet of UASBR-I	00097775 m <sup>3</sup>
2.	<b>Inlet of UASBR-II</b>	<b>Not shown</b>
3.	Outlet of ETP	61.43 m <sup>3</sup> /hr flow rate
4.	Outlet of U.F.	386568.9 m <sup>3</sup>
5.	RO-I feed	21378.23 m <sup>3</sup>
6.	RO-I Permeate	49557.63 m <sup>3</sup>
7.	RO-II reject	0091567 m <sup>3</sup>
8.	Gardening/irrigation pipeline	11472 m <sup>3</sup>

12. ETP received effluent from different plant production sections, consist of physiochemical treatment, biological treatment, tertiary treatment followed by two stage RO system and ultra-filtration, installed, having total capacity of 1750 KLD. Flow diagram of ETP is as under:



13. RO permeates of ETP is sent for further treatment through DM plant and used in boiler feed and reject of RO-II is used for quenching of boiler ash and dust suppression in premises. Sludge received from Clarifier is sent to sludge drying beds for dewatering and used as manure. **Ash generated from boilers is disposed for filling low lands in nearby area.**

Analysis results of collected samples are given in table-4 as under:

***“Table 4  
Chart for ETP Waste Water Analysis report***

Parameter	Inlet of ETP	Outlet of UASBR	Outlet of Aeration Tank	Outlet of ETP (before MGF)	Outlet of ETP (after MGF)	RO Permeate	RO Reject
pH	7.19	7.7	7.62	7.80	8	7.44	7.72

Colour	Milky	Slight Blackish	Brownish	Colourless	Colourless	Colourless	Brownish
Odour	Foul	Unpleasant	Unpleasant	Odourless	Odourless	Odourless	Unpleasant
TDS (mg/l)	1180	1130	1060	1070	870	114	2210
TSS (mg/l)	1283	689	3856	62	48	32	66
TS (mg/l)	2463	1819	4916	1132	918	146	2276
BOD (mg/l)	620	230	16	12	10	4	6
COD (mg/l)	1600	400	80	64	40	24	84
Oil and Grease	192	18	8	4	3	ND	12

14. Inspection team also collected ground water sample from borewells within the premises and outside the premises and analysis report is given in table 5 as under:

**Table No. 5**  
**Chart for Borewell water Analysis report**

<b>Parameter s</b>	<b>Borewells within Premises</b>			<b>Outside premises/ farms house Harjeet Singh</b>	<b>BIS IS 10500:2012 (Permissible limit in absence of alternative source)</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	
<i>pH</i>	8.16	7.85	8.29	8.09	<b>6.5-8.5</b>
<i>Colour</i>	30	Colour less	Colour less	30	<b>5.0-25.0</b>
<i>TDS</i>	181	465	175	465	<b>500-2000</b>
<i>TSS</i>	41	71	56	211	<b>NS</b>
<i>Hardness</i>	96	70	94	160	<b>300-600</b>
<i>Calcium</i>	35	35	26	24	<b>75-200</b>
<i>Magnesium</i>	61	35	68	136	<b>30-100</b>
<i>Chloride</i>	25	27	18	93	<b>250-1000</b>

15. For treatment of domestic sewage, PP has installed three numbers of Septic tank and soakpit in different locations within premises. Committee has recorded its observation on water consumption of unit and analysis result of sample collected from ETP, as under:

**“8.1 Observation on the Water consumption of the Unit**

- As per logbook data, average fresh water withdrawal from borewells 992.259 KLD, which is within the permitted quantity of withdrawal (1650 KLD) as per the previous NOC issued from CGWA, which was expired on dated 18.05.2019.
- Some **discrepancy was found in borewell logbook against the tubewell nos 02 for the unit shall ask for clarification/explanation.**

- *In compliance of the condition of previous NOC issued by the CGWA unit has installed 2 Numbers roof top rain water harvesting system within a premises and 10 ponds in the villages have also adopted and developed rain water harvesting system to preserve the rain water so that water level of the area can increase. Details of compliance status report is enclosed as Annexure-8.”*

16. On Effluent emission and Solid and Hazardous Waste Management System and compliance status of Plastic Waste Management Rules 2016, (hereinafter referred to as ‘**PWM Rules 2016**’), Committee has given its observation as under:

**“9.1 Observations of Effluent Treatment Plant (ETP)**

- *During inspection the all units of the ETP and RO system was found in operation and treated effluent was utilized in boiler feed, washing in plant and irrigation of green belt within premises.*
- *As per the data of **borewell total water abstraction (267999 KL) is lesser than total treated water (446175 KL)** which is indicated that treated water in recycle in process and rejects of U.F, and RO rejects are also recycle in equalization tank.*
- *At the time of inspection SMP manufacturing plant not in operation. Due to that hot air generator was also not in operation.*
- *The unit was operating at 9.51 lakh litter/day milk handling on the day of inspection, which is about 82.6% of consented production capacity. Hence effluent generating was less compared to ETP installed capacity 1750 KLD.*
- *Based on 9 months logbook data the average quantity of effluent reaching to ETP for treatment it 1522.78 KLD which is within installed capacity 1750 KLD.*
- *The unit has also provided flow meter at outlet point of the ETP. During visit the flow meters are showing discharge rate 61.4m<sup>3</sup>/hr.*
- *Flow meter is installed at ETPs and logbook for the same is maintained by the unit.”*

**9.2 Observations on Sewage Treatment Plants (STPs)**

- *Unit has installed **three no. of Septic tank and soakpit in different location within premises for workers and staff.***
- *As reported by the unit representative the **sewage treated plant is under planning.**”*

17. On Emission Management System, Committee has recorded its observations as under:

**“10.1 Emission Management System at Boiler**

- *The unit has installed three nos of rice husk/agro waste fired Boilers having capacity of 14TPH, 10 TPH and 8 TPH and 01 hot air generator having capacity 20 lakh kilo calory.*

**Table no. 6**

**Details of Boiler are as below:**

<b>S. No.</b>	<b>Capacity</b>	<b>Fuel</b>	<b>APCS device</b>	<b>Stack</b>	<b>Remarks</b>
1.	14 TPH	Rice Husk or Bio mass 60 TPD	Cyclone & Beg filter	Common stack 40 mtr	Only 14 TPH Boiler operated at the time of inspection
2.	10 TPH				
3.	08 TPH	Rick Husk 60 TPD	Multi cyclone dust	Common stack 30 mtr	Maintained as Stand by
4.	10 TPH				
5.	Hot air Generator 10 lakh kilo calory	Rice Husk 10 TPD	Multi Cyclone dust	30	Not operated
6.	03 no of 750 KVA DG. Sets	Diesel	Only Stack	5.2 mtr each	Depend on power demand

At the time of inspection, only 14 TPH Boiler found in operation.

- The unit has provided **monkey ladder with stack of the boiler, which is not as per the CPCB guidelines.**
- 14 TPH boiler stack was monitored by UPPCB and the monitoring result is as below:

**Table 7**  
**Monitoring of boiler stack**

<b>Parameters</b>	<b>Monitored value</b>	<b>Emission standard</b>
SPM (mg/NM <sup>3</sup> )	139.68	150
SO <sub>2</sub> (mg/NM <sup>3</sup> )	ND	600
NO <sub>x</sub> (mg/NM <sup>3</sup> )	ND	300

18. The unit possessed authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (hereinafter referred to as '**HWMTM Rules 2016**') for generation, collection, utilization, storage and disposal of Waste oil, for 4 TPA. Authorization is valid upto 02.02.2023. On Plastic Waste Management, Committee has reported as under:

- The unit has utilizing multilayer polyfilms for packing of milk pouches which is ultimately disposed in environment and covered under the plastic rule 2016.
- In compliance of the Plastic Rule 2016 obtain authorization/registration by CPCB vide letter no B-17011/7/UPC-II-PWM(MLP/2020(UDL) date 16-07-2020.
- In compliance of the EPR of the plastic rule 2016 unit is being submitting the quarterly returned of plastic waste disposed to UPPCB and CPCB."

19. Conclusions/Recommendations of Committee are as under:

**“Conclusions:**

1. **Chemicals dosing in ETP, such as dosing of coagulant, flocculants were done either manually or with pumps in uncontrolled manner.**
2. Unit has 3 nos. of borewell to meet the fresh water requirement. Average fresh water withdrawal from borewells is 992.259 KL per day. Flow meter was found installed at all three borewells and logbook for withdrawal of ground water is maintained by the unit, as per logbook records one borewell maintain as stand by.
3. **Unit does not have valid NOC from CGWA for abstraction of ground water. The NOC was expired on 18.05.2019 and unit has applied for renewal of the same on 24.04.2019.**
4. Till date of inspection i.e. 21.10.2020, NOC for withdrawal of ground water is not obtained by the unit. Hence, **it can be concluded that, the unit does not have valid permission for withdrawal of ground water.**
5. Considering the ground water quality of Gajraula, CGWA shall assess the renewal applications of M/S UMANG DAIRY LTD., 03 KM, HASANPUR ROAD, GAJRAULA, AMROHA and shall decide whether the unit shall be allowed to abstract the ground water or not. CGWA shall decide in accordance to the Hon'ble NGT order in this regards.
6. As per **the logbook data some discrepancy in tubewell nos 2 in the month of July to September was found.** Industry should ask for clarify the discrepancy found in the ground water abstraction logbook of tubewell nos 02 from July 20 to Sep 20.
7. The sample collected from borewell within the premises indicates that the underground water is within permissible norms as per BIS standard.
8. The final treated effluent (RO permeate) is used in Boiler feed and other rest treated water is being utilizing in washing process of plant, floor washing, milk tankers and irrigation of Green belt within premises and nearby farmers. **A separate metered pipe line is also maintaining in unit for giving treated water to nearby farmers for irrigation to agriculture farming area on the demands of the farmers.**
9. At the time of inspection without treated effluent was not found disposed nearby the area. **Most of the farmers of the area were receiving treated effluent through flexible plastic pipeline from inside the factory, no permanent pipeline found in this area for irrigation purpose.**
10. As per the analysis report of the borewell ground water of premises and Harjeet Singh farm house were found within permissible as per the BIS norms except the colour.
11. Dedicated energy meter was installed at ETP, RO, UF etc. and logbook for same has been maintained.
12. OCEQMS at ETP was installed and found operational at the time of inspection and connected with server of UPPCB and CPCB.
13. At the time of inspection pH-7.95, TSS-13.2 mg/l, BOD-5.5 mg/l and COD-30.7 mg/l was showing on the screen of OCEQMS installed at outlet of ETP, photograph of screen enclosed.
14. The unit has also installed PTZ camera in premises, targeting the stacks of the units so that stack emission can be observed through UPPCB control room.
15. The final treated effluent is used as boiler feed, plant washing and irrigation of green belt showed complaint w.r.t. to effluent discharge norms prescribed under Environment (Protection) Rule, 1986.

16. As per the stack monitoring report of the 14 TPH boiler showed complaint w.r.t. to emission norms prescribed under Environment (Protection) Rule, 1986.

### **Recommendations**

1. Unit shall make sure, **no untreated/partially treated effluent and seepage/run-off from the industrial process area are discharged outside the premises.**
2. Unit shall strictly follow the conditions laid down in consent to operate issued by UPPCB
3. The unit should carry out adequacy assessment of ZLD system at full operational capacity or 1.77MT/day, by a reputed Government technical institute.
4. Unit shall make sure, the air pollution control devices provided work efficiently and complied the air emission norms.
5. **Unit shall get renewal NOC from CGWA for abstraction of ground water.**
6. Unit shall install proper capacity of the STP to treat the sewage generated from the premises and treated effluent utilized in green belt irrigation to decrease the fresh water abstraction.
7. Unit shall maintain record for generation and disposal of all types of hazardous wastes generated within the premises.
8. Unit shall make sure the ETP operation provided work efficiently and complied the water discharge norms.
9. A separate logbook for RO and UF shall be maintained in unit.
10. **As per the logbook data some discrepancy in tubewell no 2 in the month of July to September was found. Industry should ask for clarify the discrepancy found in the ground water abstraction logbook of tubewell nos 02 from July 20 to Sep 20.**
11. The flow meter installed before the inlet of UASBR should be replace at inlet of ETP.
12. Quartile Ambient air quality report and air monitoring report of all the stacks provided in unit shall be submitted to UPPCB.
13. Facility for dosing and mixing of alum and polyelectrolyte shall be provided in separate tanks.
14. Ladder facility with stack shall be provided as per CPCB guidelines.
15. Regular calibration of water flow meters and OCEQMS attached to ETP shall be ensured.
16. Water audit report shall be carried out by approved institution and to be submitted to UPPCB.”

20. The inspection report is signed by Mr. Vijay Shankar, SDM, Hasanpur, Amroha, Mr. J.P. Maurya, RO, UPPCB Bijnor, Mr. Tapan Kumar Pant, Scientist ‘D’, CGWB Lucknow and Mr. A.K. Sharma, AEE, UPPCB, Bijnor. Copy of **consent order dated 13.06.2020** is annexed as annexure 1 to the report which was issued under Section 25/26 of Water Act 1974 and valid upto 31.12.2021. Quantity of maximum daily discharge, as per para 2 of conditions of consent is as under:

<b>Effluent Discharge Details</b>			
<b>S. No.</b>	<b>Kind of Effluent</b>	<b>Maximum daily discharge, KL/day</b>	<b>Treatment facility and discharge point</b>
1	Domestic	12.5 KLD	Septic Tank
2	Industrial	1750 KLD (Reused in process)	ETP

21. The standards of domestic and industrial effluents, after treatment, permissible, are mentioned in para 4(a) and 4(b) as under:

<b>Domestic Effluent</b>		
<b>S. No.</b>	<b>Parameter</b>	<b>Standard</b>
1	Total Suspended Solids	100 mg/l
2	BOD	30 mg/l
3	COD	250 mg/l
4	Oil & Grease	10 mg/l
5	Quantity of Discharge	12.5 KLD

<b>Industrial Effluent</b>		
<b>S. No.</b>	<b>Parameter</b>	<b>Standard</b>
1	Total Suspended Solids	100 mg/l
2	BOD	30 mg/l
3	COD	250 mg/l
4	Oil & Grease	10 mg/l
5	Quantity of Discharge	1750 KLD (Reused in process)

22. Specific conditions mentioned in consent order, in para 8, read as under:

- “1. This Consent to Operate is valid for 11.5 Lakh liter raw milk processing and products are cultured Product-4800 MT/month, Poly Pouch Milk-18000MT/month, Milk Powder-1410 MT/month and Ghee/Butter-960 MT/month.
2. **Industrial Effluent generation is 1750 KLD treated through ETP.** The permeate from Reverse Osmosis plant shall be utilized in process again and **no discharge is allowed outside the premises.**
3. **No effluent is allowed to discharge outside the premises and in surface water body i.e. river/drain/well etc.**
4. Unit shall make arrangement for the treatment of Domestic sewage 12.5 KLD and shall use the treated water in irrigation on land.
5. **Unit shall obtain NOC from CGWA for ground water extraction within 3 months or shall make alternate arrangement for water requirement with prior permission of competent authority, failing which this consent shall be considered for revocation.**
6. Unit shall comply with the provision of Rule 10 and 11 of Ground Water (Management and Regulation) Act 2019.

7. Unit shall operate and maintain properly the installed electromagnetic flow meter at water source and outlet of ETP, and maintain the records of water abstracted and treated effluent recycled.
8. Unit shall ensure the connectivity of the installed online effluent monitoring system and web camera to the servers of CPCB and UPPCB.
9. Unit shall comply with the provisions of Rule 9 and rule 13 of Plastic Waste Management Rule 2016 as amended, **and shall obtain authorization for disposal of plastic waste.**
10. Unit shall **develop Green Belt in minimum 33 percent area of Industrial Premises** as per the provisions laid down in office order no. H16405/220/2018/02 dated 16-02-2018 of U.P. Pollution Control Board. The copy of said office order is available on the website of U.P. Pollution Control Board [www.uppcb.com](http://www.uppcb.com).
11. Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended, Air (Prevention and Control of Pollution) Act 1981 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA No. 200/2014, M.C. Mehta v/s Union of India.
12. Unit shall submit treated effluent monitoring report of the ETP and ground water quality of premises done by MoEF & CC approved laboratory in every 3 months.
13. Unit shall comply to the direction issued by Hon'ble Supreme Court in Writ no. 418/98 Imtiyaz Ahmad V/s Govt of India and others.
14. This Consent order shall automatically become invalid on issuance of Closure Order by CPCB/ UPPCB and further on Revoking of Closure order, the Consent order shall become valid.”

23. Consent order issued under Section 21/22 of Air Act 1981 is also dated 13.06.2020 and valid up to 31.12.2021. Air pollution details and maximum permissible rate of emission are mentioned as under:

“3(a) The maximum rate of emission of fuel gas should not be more than the emission norms for the stacks.

3(b) Air Pollution Source Details.

<b>Air Pollution Source Details</b>					
<b>S. No.</b>	<b>Air Pollution Source</b>	<b>Type of Fuel</b>	<b>Stack No.</b>	<b>Parameters</b>	<b>Height</b>
1	3 Boiler of 10 TPH and 14 TPH	Rice husk is used as a fuel, 60 TPD or bio mass-60 TPD	1	Particular Matter	Individual bag filter and multicyclone dust collector and individual stack height of 40 meter from ground level.
2	Stand by boilers of 8 TPH	Rice husk is used as a fuel, 60 TPD or bio	2	Particular Matter	Individual bag filter and multicyclone dust collector

	<i>and 10 TPH</i>	<i>mass-60 TPD</i>			<i>and individual stack height of 40 meter from ground level.</i>
3	<i>DG set of 750 KVA, 750 KVA and 750 KVA</i>	<i>Diesel</i>	3	<i>Particular Matter</i>	<i>Stack height of 5.2 meter, 5.2 meter and 5.2 meter above the roof of nearest building.</i>

3(c) *The emissions by various stacks into the environment should be as per the norms of the Board.*

<b>Emission Quality Details</b>			
<b>S. No.</b>	<b>Stack No</b>	<b>Parameters</b>	<b>Standard</b>
1	1	<i>Particulate Matter</i>	<i>150 mg/NM3</i>
2	2	<i>Particulate Matter</i>	<i>150 mg/NM3</i>
3	3	<i>Particulate Matter</i>	<i>As per Environment (Protection) Rules 1986</i>

24. Specific conditions mentioned in consent order dated 13.06.2020 issued under Air Act, 1981 are as under:

- “1. *This Consent to Operate is valid for 11.5 Lakh liter raw milk processing and products are Cultured Product-4800 MT/month, Poly Pouch Milk-18000MT/month, Milk Powder-1410 MT/month and Ghee/ Butter-960 MT/month.*
2. *Show Cause notice issued vide its letter number H41315/C7/Nodal Plastic-222/19 dated 16.9.2019 under Section 5 of Environment (Protection) Rule 1986 read with Plastic Waste Management Rule 2016 as amended is hereby Revoked by the approval of competent authority.*
3. *Unit shall operate and maintain the APCS i.e. Multi cyclone dust collector, bag filter and stack height of 40 meter from ground level at the boilers.*
4. *Boiler of 10 TPH and 14 TPH are equipped with individual bag filter and multicyclone dust collector and individual stack height of 40 meter from ground level.*
5. *Stand by boilers of 8 TPH and 10 TPH are equipped with individual multicyclone dust collector and individual stack height of 40 meter from ground level.*
6. *DG set of 750 KVA, 750 KVA and 750 KVA shall always be equipped with canopy proper stack height of 5.2 meter, 5.2 meter and 5.2 meter above the roof of nearest building.*
7. *Unit shall install online emission monitoring system at the stack of boilers and shall ensure the connectivity with the servers of CPCB and UPPCB*
8. *Unit shall use Bio-briquette as co-fuel with main fuel in the ratio of minimum 20 percent in boiler subject to its availability.*
9. *Unit shall comply with the provisions of Rule 9 and rule 13 of Plastic Waste Management Rule 2016 as amended, and shall obtain authorization for disposal of plastic waste.*

10. Unit shall develop Green Belt in minimum 33 percent area of Industrial Premises as per the provisions laid down in office order no. H16405/220/2018/02 dated 16-02-2018 of UP. Pollution Control Board. The copy of said office order is available on the website of U.P. Pollution Control Board [www.uppcb.com](http://www.uppcb.com).
  11. The overall noise levels in and around area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc, on all sources of noise generation. The ambient noise level shall conform to the standards under the Environment (Protection) Act, 1986.
  12. Fly ash shall be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with storm water. Direct exposure of workers to fly ash & dust shall be avoided.
  13. Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended, Air (Prevention and Control of Pollution) Act 1981 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta vs Union of India.
  14. Unit shall submit emission monitoring report of the stack of air polluting sources and ambient air of the premises done by MoEF & CC approved laboratory in every 3 months.
  15. This Consent order shall automatically become invalid on issuance of Closure Order by CPCB/UPPCB and further on Revoking of Closure order, the Consent order shall become valid.”
25. NOC dated 23.05.2017 (Annexure 2) was issued by CGWA for abstraction of 1650m<sup>3</sup>/day groundwater. However, para 3 of NOC, imposed a condition for implementation of groundwater recharge at least to the tune of 6,03,000 m<sup>3</sup>/year for augmenting groundwater resources of the area within 6 months from the day of issue of NOC. It reads as under:
- “M/s Umang Dairies Ltd. shall, in consultation with the Regional Director, Central Ground Water Board Northern Region, Lucknow **implement ground recharge measures atleast to the tune of 6,03,000 cu.m/year as proposed for augmenting the ground water resources of the area within six months from the date of issue of this letter. In addition, the firm shall adopt 2 nos. of villages for Water Security Plan in District Amroha, Uttar Pradesh. The necessary guidelines for the Water Security Plan is available on website of Ministry of Water Resources, RD and GR ([www.mowr.gov.in](http://www.mowr.gov.in)). Both, the Demand Side Management/Supply Side Management with maintenance of structures in the said villages to be ensured and a comprehensive plan to be submitted to Regional Director, CGWB, Firm to take up area specific plantation to enhance the recharge measures. Firm shall also undertake periodic maintenance of recharge structures at its own cost.**”*
26. Para 4 of NOC said that photographs of recharge structures, after completion of the same, shall be furnished to Regional Director, Central

Ground Water Board, Northern Region, Lucknow for verification and under intimation to CGWA. Para 9 said that permission is liable to be cancelled in case of non-compliance of any of the conditions mentioned in S.No. 1 to 8. NOC was operative for the period of 19.05.2017 till 18.05.2019. Copy of NOC was forwarded to Member Secretary, UPPCB with the request to ensure that conditions mentioned in NOC are complied by the firm in consultation with District Magistrate, District Amroha, Uttar Pradesh.

27. Before expiry of NOC, PP, on 24.04.2019 submitted online application to CGWA for renewal of NOC. It submitted another application dated 9.05.2019 to Regional Director, CGWB, Northern Region, Lucknow, copy whereof is on page 67 of inspection report.

28. Authorisation dated 02.02.2019 under HOWMTM Rules 2016 is annexure 4 to inspection report, which is valid upto 02.02.2023, permitting mode of disposal or recycling or utilization or co-processing etc. by TSDF/Authorized recyclers and quantity is 4 TPA. Annexure 5 to the inspection report is a copy of letter dated 30.12.2107 (date appears to be wrongly typed and might be 30.12.2017) communicating about up-gradation of ETP from 1000 KLD to 1750 KLD. Inspection report is also appended with a copy of application dated 09.12.2014 submitted to UPPCB for consent to establish stating that online application for consent to establish was already submitted on 29.11.2014. A certificate of incorporation dated 07.12.2006 issued by Registrar of Companies, U.P. Kanpur has been filed as annexure 6 to inspection report which shows that PP was initially incorporated as M/s. J.K. Dairy and Foods Limited vide certificate dated 02.12.1992 under Companies Act, 1956 and permitted to change its name to Umang Dairies Limited vide certificate dated 07.12.2006. Certificate for brand owner under Rule 13(2) of PWM Rules, 2016, as amended in 2018, issued by CPCB on 16.07.2020, is

annexure 8 to the inspection report. Analysis report dated 21.10.2020, of industrial waste water sample, collected at the point of inlet of ETP, shows different parameter as under:

<b>S. No.</b>	<b>PARAMETERS</b>	<b>RESULTS</b>	<b>STANDARDS</b>
1	Colour	Milky	Absent
2	Odour	Foul	Absent
3	pH	7.19	5.5-9.0
4	TDS	1180.0	2100.0
5	<b>BOD</b>	<b>620.0</b>	<b>30.0/20.0</b>
6	<b>COD</b>	<b>1600.0</b>	<b>250.0/150-200</b>
7	<b>TSS</b>	<b>1283.0</b>	<b>100.0/30.0</b>
8	<i>Specific Parameters</i>		
I.	TS	2463.0	
II.	Oil & Grease	192.0	

Note: All Values are in mg/l except pH, Colour and odour"

29. Analysis report of industrial waste water, sampling point outlet of UASBR, dated 21.10.2010 reads as under:

<b>S. No.</b>	<b>PARAMETERS</b>	<b>RESULTS</b>	<b>STANDARDS</b>
1	Colour	Slight Blackish	Absent
2	Odour	unpleasant	Absent
3	pH	7.7	5.5-9.0
4	TDS	1130.0	2100.0
5	<b>BOD</b>	<b>230.0</b>	<b>30.0/20.0</b>
6	<b>COD</b>	<b>400.0</b>	<b>250.0/150-200</b>
7	<b>TSS</b>	<b>689.0</b>	<b>100.0/30.0</b>
8	<i>Specific Parameters</i>		
I.	TS	1819.0	
II.	Oil & Grease	18.0	

Note: All Values are in mg/l except pH, Colour and odour

30. Analysis report of industrial waste water, sampling point liquor of aeration point tank, dated 21.10.2010, on different parameters is as under:

<b>S. No.</b>	<b>PARAMETERS</b>	<b>RESULTS</b>	<b>STANDARDS</b>
1	Colour	Brownish	Absent
2	Odour	unpleasant	Absent
3	pH	7.62	5.5-9.0
4	TDS	1060	2100.0
5	BOD	16.0	30.0/20.0
6	COD	80.0	250.0/150-200
7	<b>TSS</b>	<b>3856.0</b>	<b>100.0/30.0</b>
8	<i>Specific Parameters</i>		
I.	TS	4916.0	
II.	Oil & Grease	8.0	

Note: All Values are in mg/l except pH, Colour and odour

31. Analysis report dated 21.10.2010 of industrial waste water, sampling point outlet of ETP (before MGF), on different parameters is as under:

<b>S. NO.</b>	<b>PARAMETERS</b>	<b>RESULTS</b>	<b>STANDARDS</b>
1	Colour	Colourless	Absent
2	Odour	Odourless	Absent
3	pH	7.80	5.5-9.0
4	TDS	1070.0	2100.0
5	BOD	12.0	30.0/20.0
6	COD	64.0	250.0/150-200
7	TSS	62.0	100.0/30.0
8	<i>Specific Parameters</i>		
I.	TS	1132.0	
II.	Oil & Grease	4.0	

*Note: All Values are in mg/l except pH, Colour and odour*

32. Ground water analysis report dated 21.10.2010 reads as under:

**“Sampling Point: Ground water, Tubewell Near Farm House, Outside premises of M/s Umang Dairy Ltd. Gajraula Amroha**

S. N.	Sampling Date	pH	Colour	T.D.S. Mg/Lit	T.S.S. Mg/Lit	Hardness Mg/Lit	Calcium Mg/Lit	Magnesium Mg/Lit	Chloride Mg/Lit
1	21.10.20	<b>8.09</b>	<b>30.00</b>	<b>465.00</b>	211.00	<b>160.00</b>	<b>24.00</b>	<b>136.00</b>	<b>93.00</b>
<b>Ground Water Quality Standards according to BIS IS 10500:1991</b>		6.5-8.5	5.0-25.0	500-2000	NS	300-600	75-200*	30-100	250-1000

**Sampling Point:- Ground water, Tubewell No. 3 in the premises of M/s Umang Dairy Ltd. Gajraula Amroha**

S. N.	Sampling Date	pH	Colour	T.D.S. Mg/Lit	T.S.S. Mg/Lit	Hardness Mg/Lit	Calcium Mg/Lit	Magnesium Mg/Lit	Chloride Mg/Lit
1	21.10.20	8.29	Colorless	<b>175.00</b>	56.00	<b>94.00</b>	<b>26.00</b>	68.00	<b>18.00</b>
<b>Ground Water Quality Standards according to BIS IS 10500:1991</b>		6.5-8.5	5.0-25.0	500-2000	NS	300-600	75-200*	30-100	250-1000

**Compliance report dated 08.11.2021 by UPPCB pursuant to order dated 26.08.2021:**

33. Another report has been submitted by UPPCB on 08.11.2021, pursuant to inspection made at the site on 01.10.2021 by Regional Officer, UPPCB, Bijnor and the contents of report are as under:

**“3.0 The Inspection Report**

- *In compliance of the direction of Hon’ble NGT in it’s order dated 26.08.2021, inspection of M/s Umang Dairy Ltd., 03 km Hasanpur Road, Gajraula, Amroha, Uttar Pradesh (hereinafter referred as ‘the Unit’) was carried out on 01.10.2021 by the Regional Officer, Uttar Pradesh Pollution Control Board (UPPCB), Bijnor.*
- *The team inspected the unit and assessed the air pollution, waste water management and the compliance status of environmental norms of the unit.*
- *The Umang Dairy ltd was earlier established in the name of M/s J.K. Dairy ltd. which is take over by Singhanian group in December 2006 and till now operated in the name of M/s Umang Dairy ltd.*
- *M/s Umang Dairy Ltd. is engaged in production of Pasteurised milk, curd, Ghee, chhach, SMP, butter and dairy products, having consented capacity Raw milk handling 11.5 Lakh liter/day. On the day of inspection, the unit was found operational at 08 lac liter/day milk handling which is about 69.5 percent of consented production capacity.*

**3.1 Installed Production Capacity and Products Details**

- *The unit consented production Installed capacity 11.5 Lakh liter milk handling/day for manufacturing of milk products likes Pressurised milk, curd, Ghee, chhach, SMP, butter and dairy products etc.*
- *On the day of inspection, the unit was found operational at production capacity of 08 Lakh litre milk/day which is approx. 69.5 percent of consented production capacity.*
- *The unit is using cow and buffalo milk as a main raw material which is procured from nearby areas. Monthly milk handling data in monsoon season (from July to September 2021) is as per the table below.*

**Table No. 1**

S.no.	Month & year	Total Milk Process (lakh liter)	Remarks (Ltr/Day)
1	Jul-21	254.40	8.20
2	Aug-21	249.04	8.03
3	Sep-21	208.59	6.953
4	Total	712.03	7.73
5	Average Per day Production	712.03/92= 7.73	

- The Unit has obtained Consent to operate dated 13.06.2020 under the Water (Prevention & Control of Pollution) Act, 1974 & under the Air (Prevention & Control of Pollution) Act, 1981 from Uttar Pradesh Pollution Control Board (UPPCB) having validity upto 31.12.2021 (Copy placed at Annexure-1).
- As per the Consent condition the production capacity Milk products cultured products 4800 mt/month, poly Pouch milk 18000mt/month, Skimmed milk powder-19100mt/month and Ghee/Butter-960mt/month.

#### 4.0 Freshwater Consumption

##### 4.1 Sources of Fresh Water

- The unit is using ground water through abstraction from three borewells. **The water from borewell is used for industrial as well as domestic purposes.**
- **The unit has obtained NOC for abstraction of ground water from the State Ground Water Board which is valid upto dated 11-07-2026. The copy of NOC placed at Annexure-2.**

##### 4.2 Quantity of Fresh Water Consumption

- Unit has three borewells to meet daily fresh water requirement. Electromagnetic flow meters are installed at all three borewells. During visit the following data was at the site

**Table-2**

<b>S No.</b>	<b>Borewell No. and location</b>	<b>Meter Reading</b>	<b>Flow rate (m<sup>3</sup>/hr)</b>	<b>Latitude and Longitude</b>
1.	1, Near Boiler House	677904	43.65	28°48'32.369" N 78°15'9.211"E
2.	2, Near Main gate	32577	20.03	28°48'42.314"N 78°15'12.41"E
3.	3, Near old hostel	593043	0.0	28°48'38.439"N 78°15'11.665"E

As per the logbook data collected during visit the **total fresh water consumption by the unit from 01.07. 2021 to 30.09.2021** is as below.

**Table 3**

##### **Water Consumption Details**

<b>S. No.</b>	<b>Month</b>	<b>Tubewell No. 1</b>	<b>Tubewell No. 2</b>	<b>Tubewell No. 3</b>	<b>Total Water abstraction</b>
1.	Jul-21	20866	739	14228	35833
2.	Aug-21	19449	0.0	14937	34386
3.	Sep-21	17218	457	13406	31081
	<b>Total</b>	<b>57533</b>	<b>1196</b>	<b>42571</b>	<b>101300</b>
<b>Total Days 92</b>					<b>1101.08 KLD</b>

- Average fresh water withdrawal from borewell is calculated as 1101.08 KL per day from the logbook data

## 5.0 Water & waste water samples collection

- The Regional Office, UPPCB, Bijnor team collected samples from the different section of waste water treatment system and outlet of STP to assess the impact of the industrial waste water discharge of the unit.
- Collected waste water samples have been submitted to UPPCB Bijnor laboratory for analysing. The details of analysis report are being enclosed.
- The unit has installed continues effluent monitoring system at outlet of ETP and connected to CPCB & UPPCB server.
- The unit has installed the proper stair and porthole on the common stack of boiler having capacity of 10 TPH and 14 TPH as per the CPCB guideline and recommendation of joint team visited on dated 21.10.2020.

## 6.0 Characteristics of the wastewater of ETP & ST system

### 6.1 Effluent Management system

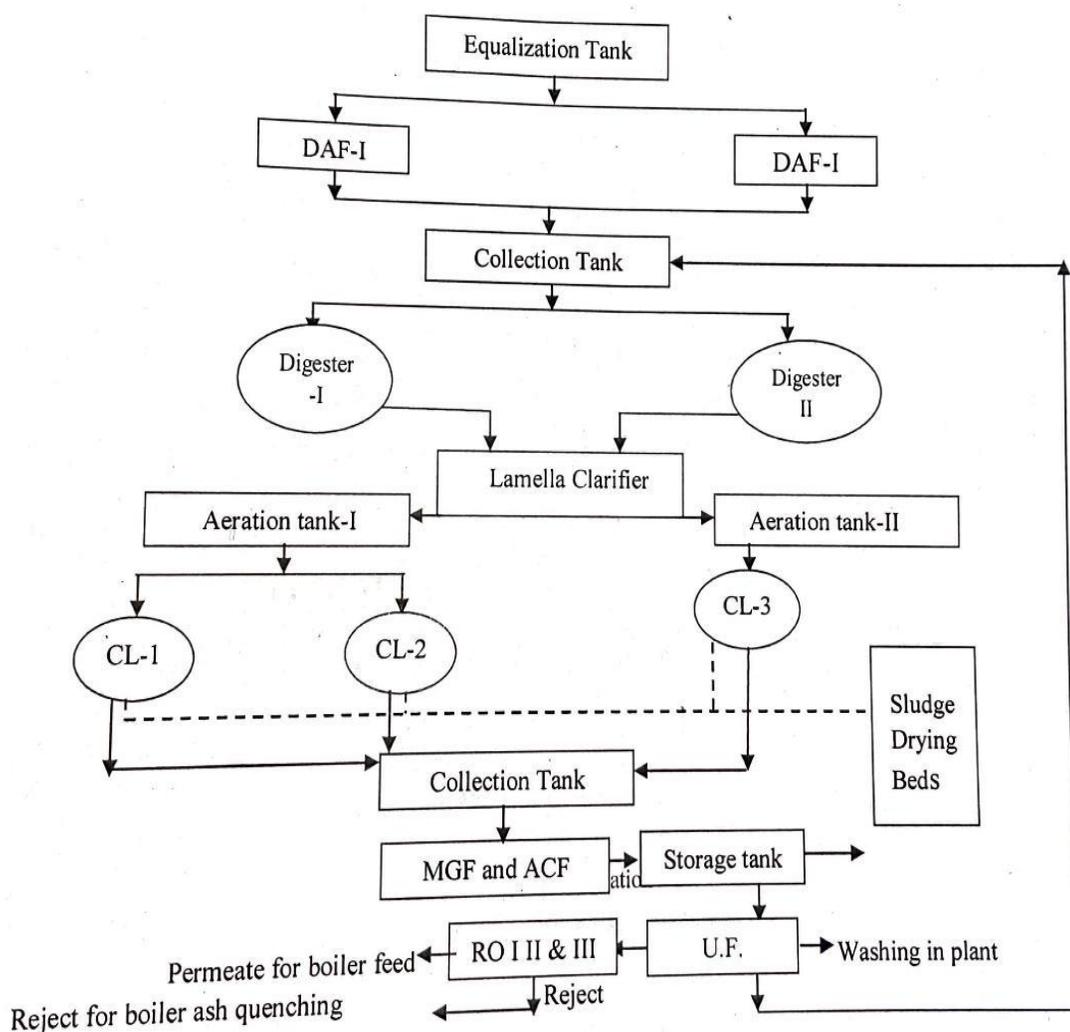
- The unit has installed effluent treatment plant/system (1750 KLD) based on the anaerobic and aerobic treatment unit on activated sludge process and flow meter installed at different section of ETP. The Flow meters readings found at the time of inspection is as below:

**Table No. 4**  
**ETP Meters Reading**

<b>S No.</b>	<b>Location of Flow meter</b>	<b>Reading</b>
1.	Inlet of ETP (DAF)	424016 m <sup>3</sup>
2.	Inlet of UASBR-I & II	110171 m <sup>3</sup>
3.	Outlet of ETP	
	A) Irrigation line	175458 m <sup>3</sup>
	B) UF/RO feed line	146429 m <sup>3</sup>
4.	Outlet of U.F.	5154.06 m <sup>3</sup>
5.	RO-I Permeate	16788.5 m <sup>3</sup>
6.	RO-III reject	0036468 m <sup>3</sup>

- The unit has installed one common water flow meter at inlet of USABR I & II in compliance of the previous recommendation provided by the joint committee on dated 21.10.2020.
- ETP received effluent from different plant, production sections and consists of physiochemical treatment, biological treatment, tertiary treatment followed by three stage RO System and ultra-filtration has been installed having total capacity of 1750 KLD. The flow diagram of the ETP installed in unit is as below:

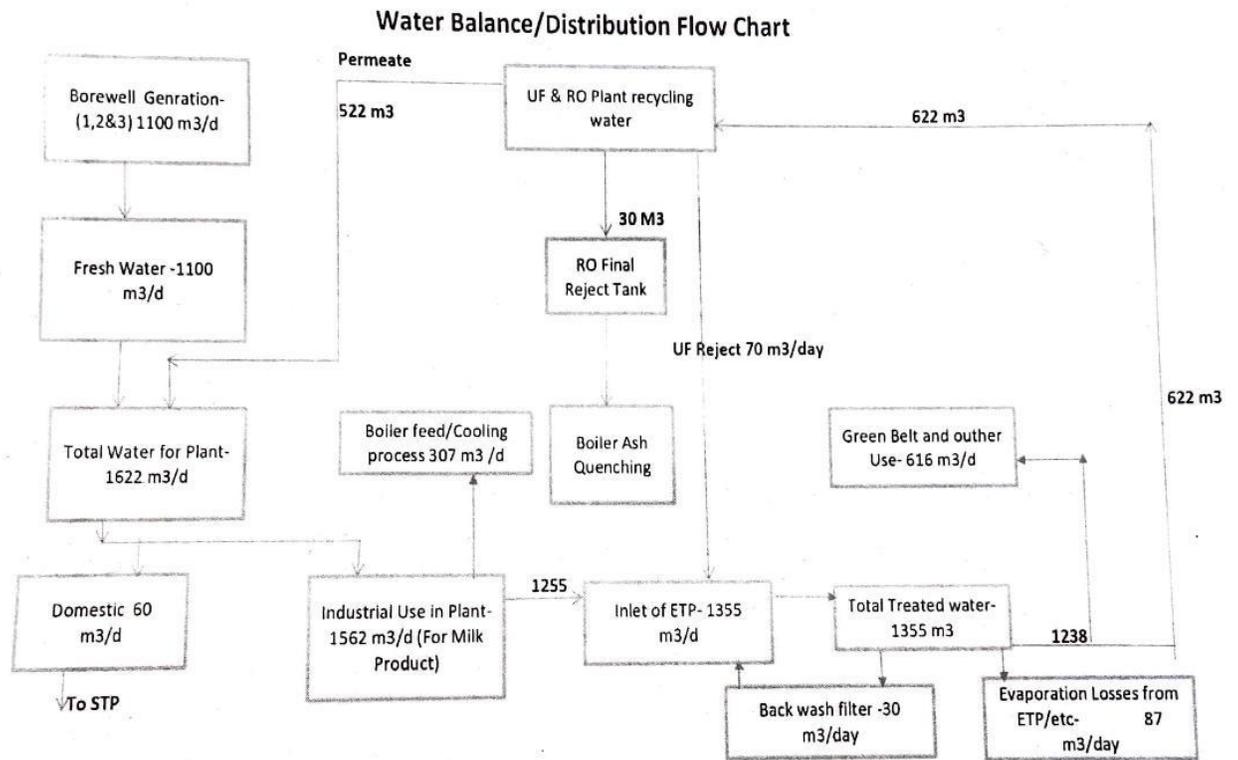
**ETP FLOW DIAGRAM**



**Details of treated water in ETP**  
**Table-5**

S. No.	Month	ETP Inlet			ETP Outlet						
		Final	Initial	Difference in KL	WTP			Horticulture			
					Final	Initial	Difference in KL	Final	Initial	Difference in KL	
1.	July 2021	339611	298453	61158	136538	117759	18779	110023	89430	20593	39372
2.	Aug 2021	382234	339611	22623	156878	136538	20340	127343	110023	17320	37660
3.	Sep 2021	423127	382234	40893	174918	156878	18040	146166	127343	18823	36863
	Total 92 days			124674			57159			56736	113895
	Per day			1355			622			616	1238

- Water used for back wash of MGF and ACF and evaporation losses= 1355-1238=117 KLD



**Details of treated water in STP**  
**Table-6**

S. No.	Month	ETP Inlet			STP Outlet		
		Final	Initial	Difference in KL	Final	Initial	Difference in KL
1.	July 2021	4838	3278	1560	6662	5319	1343
2.	Aug 2021	5977	4838	1139	7658	6662	996
3.	Sep 2021	7494	5977	1517	8994	7658	1336
	<b>Total</b>			<b>4216</b>			<b>3675</b>

- Water used for back wash of MGF and ACF and evaporation losses =  $4216 - 3675 = 541 / 92 \text{ Days} = 5.8 \text{ KLD}$
- RO permeates of ETP is sent for further treatment through DM plant and use in boiler feed and reject of the RO-III is used for quenching of boiler ash and dust suppression in premises.
- The partially reject of the RO-III and reject of UF is recycle/disposed in inlet of ETP.
- Sludge received from the clarifier and DAF are dewatered through decanter/sludge press unit and it is sent to sludge drying beds for drying and is used as a manure.
- **Ash generated from the boilers is being disposed for filling of low lands in nearby area.**
- The analysis result of collected samples are presented below.

**Table-7**  
**Chart for ETP & STP Waste Water Analysis Report**

<b>Parameter</b>	<b>Inlet of ETP</b>	<b>Outlet of ETP</b>	<b>Outlet of Aeration I and II</b>	<b>ROI PERMEATE</b>	<b>Outlet of STP</b>
pH	6.42	7.68	6.86	7.72	7.26
Colour	Milky	Colourless	Brownish	Colourless	Colourless
Odour	Unpleasant	Odourless	Odourless	Odourless	Odourless
TDS (mg/l)	4200	548	570	142	368
TSS	1210		3560	18	28
BOD	740	22	210	8	14
COD	1440	192	688	88	32
Oil and Grease	92	07	8	ND	06
Total Coliform	-	-	-	-	2200 MPN/ 100 ML
Fecal Coliform	-	-	-	-	330 MPN/ 100 ML

### **7.0 Sewage Treatment System:**

- The unit has installed STP of capacity 100 KLD for treatment of sewage generated from the premises. At the time of inspection all unit of STP was found operational and final treated sewage is being used for irrigation of green belt in the premises.

### **8.0 Observation on the Water consumption of the unit & Analysis result of sample collected from ETP.**

#### **8.1 Observation on the water consumption of the unit**

- As per logbook data, average fresh water withdrawal from borewells 1101.08 KLD, which is within the permitted quantity of withdrawal (1650 KLD) **as per the NOC issued from SGWB Lucknow, certificate no.-NOC026536, NOC049507 and NOC048652 valid upto 11.07.2026.**
- In compliance of the condition of previous NOC issued by the CGWA unit has **installed 2 Numbers roof top rain water harvesting system within a premises and 10 ponds in the villages have also adopted** and developed rain water harvesting system to preserve the rain water so that water level of the area can be increase.

#### **9.0 Observations on Effluent Treatment Plant (ETP)**

- During inspection the all units of the ETP and RO system was found in operation and **treated effluent was being utilized in boiler feed, washing in plant and irrigation of green belt and nearby farming area within premises.**
- As per the data of borewell total water abstraction (1101.08 KLD) is lesser than total treated water (1650 KLD) which is indicated that treated water in recycle in process and rejects of U.F. and RO rejects are also recycle in equalization tank.
- At the time of inspection SMP manufacturing plant not in operation. Due to that hot air generator was also not in operation.
- The unit was operating at approx. 08 lac litter/day milk handling on the day of inspection, which is about 69.5% of consented production capacity. Hence effluent generating was less compared to ETP installed capacity 1750 KLD.
- Based on 03 months (monsoon season) logbook data the average quantity of effluent reaching to ETP for treatment is 1355 KLD which is within installed capacity 1750 KLD of the ETP.
- Flow meters is installed at inlet and outlet of ETps and logbook for the same is maintained by the unit.

**9.1 Observations on Sewage Treatment Plants (STPs)**

- The unit has installed STP of capacity 100 KLD for treatment of sewage generated from the premises. At the time of inspection all unit of STP was found operational and **final treated sewage is being used for irrigation of green belt in the premises.**

**10 Existing Emission Management System**

**10.1 Emission Management System at Boiler**

- The unit has installed three nos of rice husk/ agro waste fired Boilers having capacity of 14 TPH, 10 TPH & 8 TPH and 01 hot air generator having capacity 20 lakh kilo calory/hr to supply of steam and hot air in milk processing.

**Table no. 8**  
**Details of Boiler are as below**

<b>S. No</b>	<b>Capacity</b>	<b>Fuel</b>	<b>APCS device</b>	<b>Stack</b>	<b>Remarks</b>
1.	14 TPH	Rice Husk or Bio mass 60 TPD	Cyclone & Beg filter	Common	Only 14 TPH Boiler Operated at the time
2.	10 TPH			Stack 40 mtr	
3.	08 TPH	Rice Husk 60 TPD	Multi cyclone dust	Common	Maintained as Stand by
4.	10 TPH			Stack 30 mtr	
5.	Hot air Generator 10 lakh kilo calory	Rice Husk 10 TPD	Multi cyclone dust	30	Not operated
6.	03 no. of 750 KVA D.G. Sets	Diesel	Only Stack	5.2 mtr each	Depend on power demand

At the time of Inspection only 14 TPH Boiler found in operation.

- The unit has installed the proper stair and porthole on the common stack of boiler having capacity of 10 TPH and 14 TPH as per the CPCB guideline and recommendation of joint team visited on dated 21.10.2020.

**11 Conclusions**

1. Unit has 3 nos. of borewell to meet the fresh water requirement. Average fresh water withdrawal from borewells is 1101.08 KL per day. Flow meter was found installed at all three borewells and logbook for withdrawal of ground water is maintained by the unit.
2. **Unit has obtained NOC from SGWB for abstraction of ground water.**
3. The final treated effluent (RO permeate) is used in Boiler feed and other rest treated water is being utilizing in washing process of plant, floor washing, milk tankers and irrigation of Green belt within premises **and nearby farmers.** A separate meter is installed as pipe

line for measuring of treated water used irrigation of in-house green belt area **and farming area on the demands of the farmers.**

4. At the time of inspection without treated effluent was not found disposed nearby the area. **Most of the farmers of the area were receiving treated effluent through flexible plastic pipeline from inside the factory, no permanent pipeline found in this area for irrigation purpose.**
5. Dedicated energy meter was installed at ETP, RO, UF etc. and logbook for same has been maintained.
6. At the time of inspection OCEQMS at ETP was found installed and operational and also it is connected to server of UPPCB and CPCB.
7. The unit has also installed PTZ camera in premises, targeting the stacks of the units so that stack emission can be observed through UPPCB control room.
8. The final treated effluent is used as boiler feed, plant washing and irrigation of green belt showed compliant w.r.t. to effluent discharge norms prescribed under Environment (Protection) Rule, 1986.
9. As per the above table no. 04 total water abstracted from the ground in monsoon season from 1<sup>st</sup> July to 30<sup>th</sup> September is found 1101.08 KLD. Fresh water and 522 KLD treated water (total 1623 KLD) is being used in milk processing units. As per the logbook of the ETP 1355 KLD waste water generated in premises including washing of floor and plant, recycling of UF, RO reject and back wash of the MGF/AC filter (100 KLD), is being treated in the installed ETP having capacity 1750 KLD. **1238 KLD of the treated water is being used in WTP (622 KLD) and irrigation of green belt (616 KLD).** Approx. 30 Kl treated water used for washing of MGF/ACF and rest 87 KLD water is found in evaporation and other losses in the ETP like scum collection DAF, underflow of clarifiers and sludge drying beds.
10. **As per the unit provided the details total green belt area available in the premises is approx. 3400sqm.** which is being used for irrigation by treated ETP & STP water. The layout plan of the premises of the unit is enclosed as annexure-7.

**Reply by M/s. Umang Dairies Ltd. (R-5):**

34. The proponent has also filed reply dated 25.09.2021 denying the allegations made in OA. PP, earlier known as JK Dairy & Foods Limited is manufacturer of various dairy products. It is ISO certified company with combined capacity of processing 11.5 lakh litres of milk per day, producing a variety of dairy products including ghee, cow ghee, dairy creamer, whole milk powder, butter, fresh cream, paneer, and milk for large institutional consumers which include Indian Army, Airlines, Indian Railways. Its unit is a state of art plant. It has received Food Safety and System Certification 22000. PP was granted Consent to Operate under Water Act 1974 and Air Act 1981. Recent one is valid from 01.01.2020 to 31.01.2021. It is utilising

ground water since no fresh water supply by local authorities is available. Water requirement is 1600-2000cm/d out of which 700-800 cm/d is obtained by recycling. CGWA granted NOC vide letter dated 23.05.2017 for abstraction of ground water. It was valid up to May 2019. NOC permitted withdrawal of 1650 cm/d subject to conditions mentioned in NOC. PP has complied with those conditions and submitted compliance report. For recharge, PP has constructed rain water harvesting tanks and artificial recharge structures. Recharge shafts were constructed at 18 ponds in nearby villages of Gajraula. Such techniques aim at extending recharge period in post monsoon season, resulting in enhanced sustainability and availability of ground water. Photographs of structures are filed collectively as Annexure P-3. PP has constructed 2 rain water harvesting shafts at plant, and implemented water conservation measures.

35. Before expiry of NOC on 23.05.2019, PP submitted application for renewal on 24.04.2019 before CGWA. Application was complete in all respect. Several letters sent to enquire about status of renewal application. In the interregnum UPGWMR Act 2019 was promulgated and came into force on 02.10.2019. Section 10 contemplated registration of existing borewells for commercial and industrial operations in notified areas. Rules were framed under above Act. PP sent letter dated 07.04.2020 to CGWA to apprise about status of renewal application. CGWA sent email dated 30.10.2020 requiring PP to submit certain documents for expediting process of renewal of NOC. PP vide letters dated 12.11.2020 and 15.01.2021 submitted necessary documents which included WAR and IAR. Thereafter, PP submitted application dated 03.04.2021 before UPGWD under UPGWMR Act, 2019 for grant of NOC for abstraction of ground water. Director, UPGWD sent letter dated 23.04.2021 to District Collector, Amroha directing disposal of applications filed for NOC for

abstraction of ground water. Letter also mentioned that renewal application dated 24.04.2019 submitted by PP to CGWA was received by office of Director, UPGWD on 08.04.2021. Thus Director, UPGWD recommended renewal with effect from 18.05.2019. Consequently, NOCs bearing no. NOC026536, NOC048652, and NOC049507 were issued by UPGWD, valid upto 11.07.2026. PP has complied all recommendations of joint Committee report dated 21.10.2020. Thus, grant of renewal validates entire period of abstraction of ground water by PP. CGWA vide guideline dated 06.09.2021 has provided that approval for grant of NOC shall be processed by respective State Governments on applications filed on line on CGWA portal. Criteria is provided vide guidelines Dated 24.04.2020. UPPCB, vide letter dated 30.06.2021, served joint Committee report dated 21.10 2020 and sought clarifications on some aspects. PP submitted reply dated 12.07.2021. It also furnished Adequacy Assessment Report vide letter dated 25 .08.2021. PP said that ladder facility with stack has been installed. UPPCB vide letter dated 13.09.2021 sought response pursuant to Tribunal's order dated 26.08.2021. PP filed reply dated 22.09.2021 stating:

- “a) The Unit have 1750 KLD Effluent treatment Plant and is treating the effluent as per standard norms of PCB and treated water is used in process of manufacturing i.e. Boiler, Cooling Tower, Washing and **the balance water is being used in the Green Belt of the Plant premises. It was further clarified that on the request of farmers only treated water is given and the letters from the farmers confirm that crop is not impacted at all rather it is better with the treated water;***
- (b) Online Water Monitoring System is already there at the outlet of ETP Water and all parameters under CPCB norms are being complied with;*
- (c) The quarterly treated water is tested by approved NABL Lab and same reports are also submitted to the Board from time to time. The Respondent also attached the copy of the Report for one year with its reply;*
- (d) The **testing of the soil of nearby farmer's land by approved NABL Lab has been carried out and as per the Reports***

***obtained, there is no water contamination and treated water does not cause any soil flooding /soil sickness.”***

36. After exchange of pleadings and response received from PP i.e. respondent 5, matter was heard on 09.12.2021 with the consent of all the parties to decide this OA finally by adjudicating issues on merits.

37. **Arguments:** Applicant pressed upon the issues raised in the application. Referring to the findings recorded by joint Committee as also UPPCB in their reports, and reply of PP, applicant said that NOC for extraction of ground water was issued on 23.05.2017, effective from 19.05.2017 to 18.05.2019. Admittedly, PP did not have any NOC on and after 19.05.2019 and, therefore, abstraction of ground water in the subsequent period when there was no NOC issued by Competent Authority, is nothing but theft of natural resources belong to general public of which State is the trustee, and unauthorised abstraction of ground water amounts to an offence under Section 379 IPC besides violation of the provisions of EP Act, 1986 and the conditions laid down for abstraction of ground water under orders issued under Section 5 of the said Act as also the mandate of Supreme Court in ***MC Mehta vs. UOI (1997)11SCC312***. He further said that consent to establish for extended capacity was issued on 29.11.2017 and consent to operate was issued on 13.06.2020 but PP started with enhanced capacity to function unit without any consent to operate from 2017 itself and thereby violated environmental laws and acted illegally. Unfortunately, all these aspects have been ignored by Statutory Regulators and no stringent action has been taken against PP including imposition of environmental compensation. Earlier capacity of ETP was only 1000 KLD, which according to PP himself, was enhanced to 1750 KLD vide consent to establish dated 29.11.2017. It is admitted that with the increase of production capacity, PP continued to run unit without bothering for having

requisite consent/NOC/clearance before operating unit with enhanced capacity, therefore such operation is apparently in violation of environmental laws and in appearing particular, EP Act, 1986 and the directions issued thereunder. Further discharge of treated effluent outside the premises to supply to farmers is clear contravention of conditions of consent. Infirmities noted by joint Committee regarding log book of second borewell was not explained by PP which renders all record maintained by PP unreliable. Abstraction of ground water is not as per conditions of NOC and also discharge of treated water. PP's claim of use of more than 600 KLD in green belt in the premises is fictitious in as much as daily such quantity of water cannot be absorbed in small area of 3400 sq.meter maintained by PP as green belt inside the premises.

38. Learned counsel for UPPCB relied on the report submitted by its authorities and said that though NOC granted by CGWA for abstraction of ground water expired on 18.05.2019 but thereafter, UPGWD has granted NOCs under the provisions of UPGWMR Act 2019, which are valid up to 11.07.2026. When questioned, whether authorities of UPGWD could have validly granted NOC without taking into consideration guidelines and conditions provided by CGWA applicable for grant of NOC and also that the existing provisions of NOC with reference to EP Act 1986 conferred power only upon CGWA to grant NOC and in such circumstances whether any NOC could be granted by UPGWD or not, learned counsel stated that after enactment of Provincial enactment, power has been exercised and its legality may be considered by Tribunal.

39. Learned senior counsel appearing for PP contended that PP is a prestigious dairy product unit, having state of art equipment and machineries, functioning in utmost compliance of statutory provisions including environmental laws and at no point of time, has violated any

provision of environmental laws. He did not dispute that NOC for abstraction of ground water, issued by CGWA, expired on 18.05.2019 but submitted that whatever was possible and permissible, had been done by applying for renewal on 24.04.2019, online, and by submitting hard copy on 09.05.2019 but CGWA did not pass any order, hence there was no fault on the part of PP. He said that in any case, NOCs have been granted by UPGWD under the provisions of UPGWMR Act 2019 and no violation of prescribed standards in discharge of effluent has been found by any other authorities, therefore, application is misconceived and deserves to be dismissed. He pressed entire defence of PP, taken in reply and said that the same be examined by Tribunal.

40. **ISSUES:** In the above factual matrix, the issues need adjudication from Tribunal are;

- (i) Whether PP has violated environmental laws and caused damage to environment;
- (ii) Whether abstraction of ground water by PP after expiry of NOC on 18.05.2019 is valid or amounts to violation of provisions of EP Act 1986 and mandate of Supreme Court in ***M.C. Mehta vs. UOI and others (supra)***;
- (iii) Whether UPGWD had power to issue NOC for abstraction of ground water with effect from 18.05.2019 when even UPGWMR Act 2019 had not been enacted and enforced and even UP Ground Water Authority was not constituted;
- (iv) Whether any authority, under UPGWMR Act 2019, even otherwise, can issue NOC permitting abstraction of ground water, particularly in stressed area, contrary to provisions of EP Act 1986 and guidelines of CGWA;

- (v) Whether provisions of UPGWMR Act 2019 can continue despite contrary provisions made by MoEF&CC and CGWA under EP Act 1986;
- (vi) What remedial order needed to be passed if questions 1 and 2 are returned against PP i.e., respondent 5?

**Discussion:**

41. From the pleadings referred above as also information available in public domain, brief facts, not disputed, as borne out are, that on 02.12.1992, a company i.e., M/s. J.K. Dairy and Foods Limited was incorporated under Companies Act 1956, promoted by Straw Products Ltd. and J.K. Industries Ltd., to set up a project to process 3 lakh litres of milk per day to manufacture ghee, dairy whitener and whey powder. The unit was set up in 1994 and launched ghee and skimmed milk powder under 'Umang' brand and 'White Magic' Dairy cream etc. Vide certificate of incorporation dated 07.12.2006, it was renamed as M/s Umang Dairies Limited. Production capacity of the plant was increased to 8 lakh litres. For further increase up to 11.5 lakh litres of milk processing, **consent to establish** was granted by UPPCB vide order dated 29.11.2017. The quantity of discharge of effluent was also allowed to be increased from 1000 KLD to 1750 KLD. As per joint inspection report, **consent to operate** was issued on 13.06.2020 under Section 25/26 of Water Act, 1974 and Section 21/22 of Air Act, 1981. Vide registration certificate for brand owner dated 16.07.2020, PP was registered as a brand owner under PMW Rules, 2016, as amended from time to time, and the validity period of the said certificate was one year from the date of issue.

42. On 23.05.2017, CGWA issued NOC to PP permitting abstraction of 1650 m<sup>3</sup> ground water/day. NOC was valid for two years. In order to comply with the condition of recharge of ground water, proponent claims

that it took steps of providing rain water harvesting tanks, artificial recharging structures etc. Recharge shafts were constructed at 18 ponds in nearby villages of Gajraula. Record shows that NOC was issued by CGWA on 23.05.2017 permitting abstraction of ground water to the extent of 1650 m<sup>3</sup>/day (not exceeding 602250 m<sup>3</sup>/year) and it was valid for the period of 19.05.2017 to 18.05.2019.

43. On 24.04.2019, proponent applied for renewal of NOC which was going to expire on 18.05.2019. No order was passed by CGWA on renewal application. Provincial Legislature enacted Uttar Pradesh Ground Water (Management and Regulation) Act, 2019 (hereinafter referred to as '**UPGWMR Act 2019**') which came into force on 02.10.2019 in view of notification dated 11.09.2019, published in U.P. Gazette, Extraordinary, of the same date.

44. On 03.04.2021, proponent filed application before UPGWD to issue NOC for extraction of ground water. On 23.04.2021, Director, Ground Water Department, UP sent letter to District Collector, Amroha directing for disposal of pending cases of District Amroha with regard to issue of NOC or application for renewal for abstraction of ground water pending before CGWA. Director, UPGWD also recommended renewal of Proponent's request for renewal with effect from 18.05.2019. UPGWD issued NOC for abstraction of ground water valid up to 2026. PP, however continued to abstract ground water throughout.

45. Thus, substantive issue in this case is about abstraction of ground water in an area which came in category of over-exploited in 2017.

#### **GROUND WATER – CONCEPT - PAST AND PRESENT**

46. Before dealing with the issues on merits, it would be appropriate to have a glance on the concept of ground water since ancient times.

47. Water is one of the five elements which constitute human body. It is needed for very sustenance of civilization. Interest of society, in general, and common man's need of water for drinking purposes, domestic uses etc., in particular cannot be doubted. In many areas, people find it difficult to get potable water, due to scarcity. Almost every second day we find crises of water, reported in media, in one or the other city. Simultaneously, there is commercial interest of individuals who contribute to the economy of the country and they require water for commercial purposes. The scarcity of water is well known. Search of solution of this problem is Global. Scarcity of water is being faced almost by all countries. Attempts have been made at different levels, including national and international, to take steps for making potable water available to the common man but simultaneously there cannot be a complete denial or prohibition for use of water in commercial and industrial activities which is the backbone of development and economy. A balance has to be made but when situation comes in a given case, to select any one of them, obviously saving of life will have to be preferred.

**Life cannot be imagined without water (बिन पानी सब सून्):**

48. No one can dispute the importance of water. It is essential for life on earth. It is available on the planet in all the three phases namely solid, liquid and gas. Water ties together, major parts of earth climatic system, in the form of air, clouds, ocean, lakes, vegetation, snowpack and glaciers. Conversion and reconversion of one form of water to any other, is commonly known as water cycle which shows continuous movement of water within earth and atmosphere. In the form of liquid and solid, it is available on earth, on the surface and beneath the surface. Snowpack and glaciers are solid forms on the surface while in liquid form, it is available in the running condition as oceans, rivers, streams, waterfalls etc. and

sometimes as water body or wetland in the form of lakes, ponds and other wetlands. Inside/beneath the surface, it percolates the sand and rocks and is available as ground water. Existence of ground water is necessary and integral part of water cycle in as much as it contributes to the surface water which is involved in the process of conversion as vapour/cloud due to heat or in cold areas solidify as snow. In the areas where large quantity of water evaporates, and results in scarcity of water on the surface, it is ground water which helps to maintain surface water and also contributes to fill water in wells. Water influences intensity of climate variability and change. It is key part of extreme events like drought and floods. If surface water exceeds the limit of carrying capacity, it will flood the plains and if evaporation of surface water is very high and recharge is not as per the requirement, it may result in causing drought. Not only for human sustenance, but, for every activity or in other words, in every walk of life, mankind needs water.

49. Water has its role as an intimate part of the human existence, as an individual, or, in group or society, for personal life or social life, for household needs or commercial or industrial needs, etc. Everywhere water is required. It is fundamental and basic need of life cycle, whether it is animal kingdom or plant kingdom. It is, therefore, extremely important that water resources are protected, both, for human uses and eco-system.

50. Our forefathers at a very early stage, had recognized importance of water and educated people to respect nature, giving it spiritual and religious stature. Mountains, rivers, waterfalls, streams, ponds, wells, trees etc., all were treated as divine objects, and worshipped. The idea was that the people would be obliged not only morally but socially and religiously to protect nature including water sources, resources and, practice its reasonable utilization. Unfortunately, in the last few centuries,

above learnings and teachings, handed down to us, by our learned, wise and farsighted esteemed forefathers/ancestors, have been ignored under a misconception of a materialistic kind of development. We have compromised with water resources, exploited indiscreetly, misused gift of nature i.e., free availability of minerals, wood, clean air and water, in all possible manner. That is how rivers, streams, and water bodies are drying, ground water table is depleting, glaciers are melting and world is facing a severe crisis of water supplies. True, the developmental activities cannot be made solely responsible in as much as population explosion, our negligence towards environmental pollution, etc. are some other root causes which have also contributed to this problem.

51. Sometimes, it is said that scientifically, water is never lost but only changes form, therefore, alleged crisis is artificial and a hollow cry. But this is not true. When we consider in the context of need of water for human activities, it is true that earth water is always in movement and there is a natural water cycle known as hydrologic cycle. There is continuous movement of water on, above, and below the surface of the earth. But the cardinal fact is, if water, available on surface and under the surface, is used in an unplanned manner, irrespective of the quantum of water available at a particular place, there will be a scarcity and this will reflect not only on the hydrologic cycle but adversely affect water availability at other places also. If surface water for one or the other reason, goes down, recharge of ground water will also get reduced and it will create scarcity of ground water, reflect when it is sought to be extracted through wells and this will ultimately reflect upon the quantum of surface water also.

52. Water is important for the very sustenance, not only for Homo Sapiens but the entire animal kingdom. With water regime, civilizations

have developed and disappeared. Interestingly, everybody knows that mankind cannot survive without fresh, healthy and sustained air, water and clean atmosphere, still ground level efforts for its protection are not so serious. Globally, though every country talks seriously about environment and its protection, shows concern about its depletion, but in practice, their action is not true to the words spoken in global meetings. Developed countries find themselves free to damage environment in the manner they like but blame underdeveloped or developing countries and so is the reverse. The developing and underdeveloped countries lack resources to take care and leave climate at its fate, and making it free to its inhabitants to use and consume natural resources in whatever manner they like. Extensive exploitation of water, either unregulated or with superficial or shallow regulation becomes destiny of water.

53. So far as India is concerned, historically, environment has been given a very pious place and regard, since pre-*vedic* as well as *vedic* era. “Water”, since pre-*vedic* era, has been recognized as a spiritual symbol. *Rigveda* identifies “water” as the first residence or ayana of nara, the Eternal Being. Therefore, water is said to be *pratishtha*, the underlying principle, or the very foundation of this universe. In Sataptha, it is said:

*“Water may pour from the heaven or run along the channels dug out by men; or flow clear and pure having the Ocean as their goal...In the midst of the Waters is moving the Lord, surveying men’s truth and men’s lies. How sweet are the Waters, crystal clear and cleansing...From whom... all the Deities drink exhilarating strength, into whom the Universal Lord has entered..”.*

54. Early *Vedic* texts also identify “water” as a manifestation of the feminine principle, commonly as *Sakti*. *Rigveda* said:

*“I call the Waters, Goddesses, wherein our cattle quench their thirst; Oblations to the streams be given...”.*

55. It is said that the primordial cosmic man or Purusa was born of the Water. Later Vedic texts identify that, “*Water is female..*” (Satapatha). Philosophically, *vedas* bestows a sacred character on water, identified therein, a medium to attain spiritual enlightenment. *Vedas* identify water as the very essence of spiritual sacrifice, or as stated in *Atharvaveda* “*the first door to attain the divine order*”. The use of water in daily life as well as in ritualistic ceremony was referred to as spiritual sacrifice, a process of attaining eternity. *Rigveda* said:

“...*Whatever sin is found in me, whatever wrong I may have done, if I have lied or falsely sworn, Waters remove it far from me...*”.

56. Besides, philosophical and spiritual status given to environment including water, in ancient vedic scriptures, even on the issue of hydrology, we find a lot of material in *vedic* literature showing that since ancient time science of water was well developed in ancient India. Certain concepts of modern hydrology, we find, scattered, in various verses of *Vedas, Puranas, Meghmala, Mayurchitraka, Vrhat Sanhita* and other ancient scriptures. Our forefathers in *Vedic* age, had developed the concept that water gets divided into minute particles due to the effect of sun rays and wind. In *Puranas*, at various places, it is alluded that water cannot be created or destroyed, and that, only its state is changed through various phases of hydrological cycle. Evaporation, condensation, cloud formation, precipitation and its measurements were well understood in ancient India as we find from the study of *Vedic* and *Puranic* scriptures. During the time of *Kautilya*, contrivances to measure rainfall were developed which had the same principle as that of modern hydrology, except that weight measures were adopted instead of modern linear measurement of rainfall.

57. Indians, in ancient times, had well developed concepts of groundwater occurrence, distribution and utilization. Ancient literature

also reveals that hydrologic indicators such as physiographic features, termite mounds, soils, flora, fauna, rocks and minerals were used to detect presence of groundwater. In *Vrhat Sanhita*, chapter 54, we find a detailed description of variation in the height of water table with place, hot and cold springs, ground water utilization by means of wells, construction methods of well and requisite equipments. Chapter 54 of *Vrhat Sanhita* is named as '*Dakargala*'. As early as 550 A.D., *Varamihira* presented a simple method for obtaining potable water from a contaminated source of water. Efficient water use, lining of canals, construction of dams, tanks, essential requirements for the construction of good tanks, bank protection methods, spillways and other minor aspects were given due consideration in ancient times in India.

58. "National Institute of Hydrology", (Ministry of Water Resources, River Development & Ganga Rejuvenation) (hereinafter referred to as **MOWRRD&GR**), Jal Vigyan Bhawan, Roorkee, in a work, published in December 2018, has recognized that knowledge of hydrology was permissive in ancient India starting from pre and dusk valley civilization days and has been discussed in depth in Vedas, Puranas, Arthashastra, Astadhyayi, Brihat Samhita, Ramayana, Mahabharata, Meghamala, Mayurchitraka, Jainist and Buddhist and many other ancient literature. In the aforesaid work of MOWRRD&GR, ground water is the subject of discussion in chapter 6. It is stated that in Rigveda, Samveda and Yajurveda, concept of hydrological cycle and water use through wells etc. was present which clearly imply use of ground water in chapter 54 of *Vrhat Sanhita*. Its author Varahamihira (AD 505-587) has dealt with ground water exploration and extraction with various surface features that are used as hydrologic indicators to look at sources from ground water at different depths in well, from 2.29 meters to 171.45 meters. In verses 54.1

and 54.61-62, chapter 54 of Vrhat Sanhita, two technical terms shira and shiravigyan have been used. The term shira implies arteries of water or streams. Shiravigyan exactly conveys the meaning of water table. Verse 54.2 says that the water which falls from the sky, originally, has the same colour and same taste, but assumes different colour and taste after coming down on the surface of the earth and after percolation. In a very scientific manner, ground water and its explanation were dealt with, keeping in mind the preservation of water and its availability for all times to come, without getting it polluted or contaminated by any external means or operations.

59. The science of water in India is ancient but unfortunately forgotten in the last few centuries. Indian sub-continent, was invaded and ruled by people from other areas having different concepts, convictions and religious culture. The ancient scientific knowledge went in dormancy. The invaders treated inhabitants in a very crude manner, did not hesitate in destroying treasure of knowledge given in this sub-continent by great Saints and Rishis, and compelled common folk to believe that their cultural wealth was a myth. Huge collection of research and knowledge stored in educational institutes of repute were set on fire or damaged otherwise. Volumes of ancient knowledge treasure was also taken away by later invaders and rulers. The resultant subsequent unscientific, unmindful and irrational massive excavation, extraction and consumption, not only of surface water, but ground water, in the name of development of civilization, has created a situation where in some parts of country, even drinking water is not available or has become a serious scarcity.

60. Availability of water in all the areas is not uniform, whether it is surface water or ground water. Water covers about 71% of the earth

surface. It comes to about 333 million cubic miles on the planet. In a U.S. Geological Survey's Water Science School, taking data source from Igor Shiklomanov's chapter "World freshwater resources" in Peter H. Gleick (editor), 1992, availability of earth water has been shown in three parts:

- i.) For total global water available, 96.5% is in oceans, 0.9% is other saline water and only 2.5% is fresh water.
- ii.) For 2.5% fresh water available, further division is that 68.7% thereof is in the form of glaciers and ice caps, 30.1% is ground water and only 1.2% is surface or other fresh water.
- iii.) For 1.2% surface/other fresh water available, again it is in different forms, i.e. 69.0% as ground ice and permafrost, 20.9% lakes, 3.8% soil moisture, 2.6% swamps and marshes, 0.49% rivers, 0.26% living things and 3% in atmosphere.

61. In other words, as a rough estimate, out of total water supply of about 333 million cubic miles (1386 million km<sup>3</sup>), more than 97% is saline. Only a small percentage, i.e., 2.5% fresh water is available. There against also, substantial part, i.e., 68% is locked up in ice and glaciers. A very small amount is available as surface water for human uses, i.e. 1.2%, which comes around 22300 cubic miles (93100 km<sup>3</sup>) which is about 0.007% of total water available on earth. These figures should not surprise us. Despite a very small fragment of water, available on surface, is consumable by human being, yet rivers are source of most of the water, the people use.

62. The quantum of ground water, comparing to the surface water, is definitely much more. However, comparing with global availability of water, it is a very small fraction thereof.

## **LAW ON USE OF GROUND WATER**

63. In past, there was no control, regulation or supervision in respect of extraction of ground water. On the contrary, a recognition of owner's right to use ground water, we find in Section 7 of Indian Easement Act 1882 wherein Illustration (g) provides that land owners have the right to collect and dispose of all water under the land within their own limits. Availability of water vis a vis population and activities, was enough. Hence owners right on water was given recognition without any restriction or regulation. Habitation was village centric. It is 20<sup>th</sup> century urbanization which made drastic change in the life of common man creating various scarcities, most important whereof, is water including ground water.

64. In India, we had a persistent problem of acute and severe drought as also floods in various parts of the country, if not every year, then quite frequently. Some States are such which experience problem of flood and drought almost every year. A gigantic growth of infrastructure and industrial development in various forms also substantially consumed, not only surface water but also ground water. Almost at the end of 20<sup>th</sup> century, it was realized that a systematic water regime is the only option to protect human race, existence whereof was imperilled, and in furtherance thereof, Government of India, though reluctantly, attempted to create common awareness. It sought cooperation of all the States when it prepared Model Bill 1970 and circulated to all the States with request for adoption. It did not result into immediate positive response though subsequent amendments and re-circulations were made in 1992, 1996 and 2005. However, some Provincial Governments responded by making Provincial enactments for regulation of ground water. These enactments may have the objective of regulation of ground water so as to protect and preserve water table but in effect the provisions showed identification of

areas where ground water level was depleted, declaration of such hard areas as notified area, and thereafter, bringing in, the concept of permission, from a Ground Water Authority, allowed very leniently, without any scientific study, impact assessment, carrying capacity etc. It was like importing the idea of license-raj, in the field of consumption of water, in notified areas. The provisions necessary for recharge, restoration and replenishment and its effective monitoring to ensure that it is actually done, were lacking.

65. International community ultimately, more particularly in the last about fifty years, realized danger of scarcity of water, so much so, sometimes it is said that third world war will be fought for water. Consequently, some steps were sought to be taken to mitigate, restore and rejuvenate but positive effect is still a mirage.

66. In the context of environment, it has been held from time to time that a clean and healthy environment is part of Fundamental Right of life, conferred by Article 21 of Constitution. In **Subhash Kumar vs State of Bihar (1991)1SCC598**, Supreme Court said:

*“the right to live includes the right of enjoyment of pollution free water and air for full enjoyment of life.”*

67. In **Narmada Bachao Andolan vs Union of India (2000)10SCC664**, Court said:

*“ Article 21 of the Constitution of India provides for right to life and right to live with human dignity. The right to clean environment and further, pollution free water has been protected under the broad rubric of the right to life guaranteed under Article 21”.*

68. Reference is also made to Article 48A, inserted in Part 4, (Directive Principle of State Policy) by 42<sup>nd</sup> amendment of Constitution, w.e.f. 03.01.1977, which reads as under:

**“48A. Protection and improvement of environment and safeguarding of forests and wild life:** *The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.*”

69. Further, Part 4A, comprises of Article 51A, was also inserted in the Constitution by 42<sup>nd</sup> amendment w.e.f. 03.01.1977 and reads as under:

**“51A. Fundamental duties:** *It shall be the duty of every citizen of India-*

*(a) to abide by the Constitution and respect its ideals and institutions, the national Flag and the National Anthem;*

*(b) to cherish and follow the noble ideals which inspired our national struggle for freedom;*

*(c) to uphold and protect the sovereignty, unity and integrity of India;*

*(d) to defend the country and render national service when called upon to do so;*

*(e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;*

*(f) to value and preserve the rich heritage of our composite culture;*

***(g) to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;***

*(h) to develop the scientific temper, humanism and the spirit of inquiry and reform;*

*(i) to safeguard public property and to abjure violence;*

*(j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.”*

70. Concern about pollution of rivers and streams, render water unsuitable for supporting aquatic and surface life, causing damage to irrigation/agriculture, untreated discharge of domestic and industrial effluents in rivers etc., were certain issues which drew attention of Government India resulting in constitution of a Committee in 1962 to prepare a draft enactment for Prevention of water pollution. The report submitted by Committee was forwarded to various State Governments. It

was also considered by Central Council of local self-Government in September 1963. Council resolved that a comprehensive law dealing with the issue of water pollution and control, at Central and State level, may be enacted by Central legislature. Since subject matter of legislation was relatable to entry 17 list 2 of Seventh Schedule of the Constitution, Parliament lacked legislative competence to make law on the subject (except as provided in Article 249 and 250 of the Constitution), i.e., unless legislatures of 2 or more States pass resolution in pursuance of subject. Consequently, Provincial legislatures of Gujarat, Jammu and Kashmir, Kerala, Haryana and Mysore passed such resolution. Thereafter, Bill of Water Act 1974 was prepared and passed by Parliament. It was also passed under 252(1) of the Constitution by Provincial legislatures of Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Rajasthan, Tripura and West Bengal. Ultimately Water Act 1974 came into force on 23-03-1974.

71. At the first instance, it was made applicable to States which had passed resolution under Article 252 (1) adopting the said Act. Section 1 sub-section 3 said that it shall come into force at once in those States. Further it shall apply to the States which would adopt the said Act from the date of such adoption.

72. In the meantime, conference on human environment was held in Stockholm in June 1972 at the instance of United Nations in which India also participated.

73. In 1972 in Stockholm Convention, world leaders, showed global concern with respect of depleting environment and endeavoured to protect and preserve it by taking appropriate steps. Decisions were taken therein to take appropriate steps for preservation of natural resources. In

furtherance to the said decision and in order to give effect to the International resolution passed at United Nations, Central Legislature enacted Air Act, 1981 which came into force on 16.05.1981.

74. Subsequently, it was realized that the existing laws focused on specific types of pollution or on specific categories of hazardous substance and major areas of environmental hazards are not covered. There were several aspects untouched and several gaps, needing a comprehensive statute, for protection and improvement of environment and matters connected therein. It resulted in enactment of EP Act 1986 which came into force on 19.11.1986.

75. In fact, Stockholm declaration caused amendment of Constitution and insertion of Article 48A in Fundamental duties chapter and also part of fundamental duties. The concept was that it is fundamental human right to live in an unpolluted environment and it is fundamental duty of every individual to maintain purity of environment. The issue of environment assumed such an importance that Supreme Court in ***M.C. Mehta vs. Union of India A.I.R.1992S.C.382***, directed University Grants Commission to prescribe a course on environment.

76. Since Statues for protection of environment were enacted to implement decision reached at Stockholm conference, the same are referable, to Article 253, to confer legislative competence upon Central Legislature, irrespective of subject in the list of legislation, under Schedule

7. Article 253 reads as under:

*“253. Legislation for giving effect to international agreements: Notwithstanding anything in the foregoing provisions of this Chapter, Parliament has power to make any law for the whole or any part of the territory of India for implementing any treaty, agreement or convention with any other country or countries or any decision made at any international conference, association or other body.”*

77. An enactment referable to Article 253 is further referable to entry 13 List 1 of Schedule 7 of the Constitution, which says:

*“13. Participation in international conferences, associations and other bodies and implementing of decisions made thereat.”*

78. Further, there was no specific penal legislation dealing with the matter of environment in India. In Indian Penal Code, 1860 (hereinafter referred to as “I.P.C.”), Section 268, defined “Public Nuisance” and abatement of public nuisance was covered by Sections 133 to 144 I.P.C. Section 269 to 278 I.P.C. made provisions which means that a person guilty or violating any of the above provisions would be liable to prosecution and punishment.

79. University Grants Commission (India) in February 1997, launched its symposium on development of environmental studies in Indian universities. This symposium was organized in collaboration with some other organizations. The consensus arrived in this symposium was that ecology and environmental issues should form part of the courses of study at all levels. Government of India however treated environmental violations with more seriousness and in 2012, brought amendment in Prevention of Money Laundering Act, 2002 (hereinafter referred to as ‘**PMLA 2002**’) by incorporating environmental laws i.e., Biological Diversity Act, 2002; Water Act 1974; Air Act 1981 and EP Act 1986 in Part A of the Schedule of PMLA 2002.

### **Provincial Enactments for Regulation of Ground Water:**

80. Earlier the only available legislation was Indian Easement Act, 1882 which conferred certain rights upon the owner of a property to use water (groundwater) with ownership rights. There was no regulation governing abstraction of ground water. Government of India prepared a Model Bill in 1970 for ground water regulation and circulated to States for adoption.

This version was revised in 1992, 1996 and 2005 but there was no substantial progress.

81. With the awareness of protection of environment, and international resolutions passed in United Nations, three enactments were made in India, Water Act, 1974, Air Act, 1981 and EP Act, 1986 but specifically, problem of exploitation of groundwater was not dealt with. Lead was taken by some State Legislatures, and in brief, we refer to these Provincial enactments, to complete our stock of Statutory Provisions, available in India, to regulate ground water.

**a) Andhra Pradesh:**

- (i) The **Andhra Pradesh Ground Water (Regulation for Drinking Water Purposes) Act, 1996** received assent of Governor on 05.02.1996. Section 1(3) provided that

*“it shall come into force on such date and in such local area of the State as the State Government may, by notification appoint, and different dates may be appointed for different local areas”.*

- (ii) The terms ‘Ground Water’ and ‘Over-exploited Watershed’ are defined in Section 2(4) and (6) as under:

*“(4) ‘**ground water**’ means water existing in an aquifer below the surface of the found at any particular location of the local area regardless of the geological structure in which it is stationary or moving and include all ground water reservoirs;*

*(6) ‘**Over exploited watershed**’ means a watershed where the estimated annual ground water extraction is more than eighty five percent of the estimated average annual ground water recharge, calculated in the prescribed manner, and declared as such under section 6;”*

The term ‘water scarcity area’ is defined in Section 2(12) and “watershed” is also defined in Section 2(13) as under:

*“(12) ‘**water scarcity area**’ means an area declared as such by the Appropriate Authority under section 4;*

*(13) ‘**watershed**’ means an area confined within the topographic water divide line, as identified and notified by the Ground Water Department from time to time having regard to the purposes of this Act;”*

(iii) Section 3 imposes restriction upon sinking of any well for any purpose, in the vicinity of a public drinking water source within a distance of two hundred meters if it is a source with Hand Pump or open well, and within a distance of two hundred and fifty meters if the source is used with a Power-Driven Pump. Sub Section 2 directs that any person, so desiring, will have to seek permission of the appropriate authority in such manner and on payment of such fee as may be prescribed. Section 4 confers power upon appropriate authority on the advice of Technical Officer, having regard to the quantum and pattern of rainfall and any other relevant factor, to declare water scarcity area, if he is of the view that public drinking water sources in any area of the district are likely to be affected adversely. Such declaration would be for a period not exceeding one year at a time. Sub-section 2 of Section 4 empowers appropriate authority to regulate extraction of water from any well by restricting or prohibiting extraction in the area declared as “water scarcity area” under Sub-section (1). Sub-section (5), empowers appropriate authority to declare a watershed as over- exploited watershed on the advice of Technical Officer. When an “over-exploited watershed” is declared, Sub-section (2) imposes restriction upon any person for sinking well within the said area without permission of appropriate authority. Sub-section (6) empowers appropriate authority to prohibit extraction of water from existing well in the area of over exploited watershed, if found to be adversely affecting any public drinking water source, having regard to the quantum and pattern of rainfall and other relevant factors. The provisions for penalty and compensation are also

made therein and procedure for passing orders adverse to any person giving remedy of an appeal are also provided.

**b) Bihar**

- (i) **Bihar Groundwater (Regulation and Control of Development and Management) Act, 2006:** The Act was published in Bihar Gazette (Extraordinary), dated 29.01.2007. Section 1(3) stated that it shall come into force on such date as the State Government may appoint by notification in the Official Gazette. Here definitions of “Artificial Recharge to Ground Water” and “Ground Water” are given in Section 2(b) and (f) as under:

*“(b) “Artificial Recharge to Ground Water” means the process by which ground water reservoir is augmented at a rate exceeding that under natural condition of replenishment.*

*“(f) “Ground Water” means the water which exists below the ground surface in the zone of saturation and can be extracted through wells or any other means or emerges as springs and base flows in streams and rivers.”*

- (ii) It provided for establishment of an Authority, namely Bihar State Ground Water Authority, by State Government, by publication of a Notification in an Official Gazette. Section 3 contemplates an advice from the Authority after consulting expert bodies including CGWA, if it is necessary, to control and regulate extraction or use of ground water in any form in any area, to the State Government, to declare such area to be notified area for the purpose of aforesaid Act. When an area is notified then for extraction and use of ground water, a permit would be necessary, as provided under Section 6.

- c) In National Capital Territory of Delhi,** Department of Environment, has issued an order dated 18.05.2010, purported to be a direction under Section 5 of EP Act, 1986 observing that continued extraction of ground water has led to severe depletion of ground water resources; has serious long term environmental implications and over extraction

of ground water may result in drying up of ground water resources which may also affect water quality. CGWA by Notification in March, 2006 notified East New Delhi, North-East, North-West and West District of Delhi as “Over-exploited” areas, needing regulation and restriction of ground water extraction structures in those districts, mandatory. The directions issued by Lt. Governor, National Capital Territory of Delhi say that in the whole of NCT of Delhi, no one shall draw ground water through bore well/tube well (new as well as existing) for domestic, commercial, agricultural and/or industrial uses without prior permission of the Competent Authority, i.e., Delhi Jal Board (DJB) or New Delhi Municipal Council (NDMC), as the case may be. Then, procedure for regulation of the above directions is given. Detailed Guidelines as to the factors to be considered for grant of prior permission, we find, are not mentioned in the said directions except that in certain cases, requirement is that the provisions for Rain Water Harvesting System shall be made.

**d) Goa Ground Water Regulation Act, 2002:** Here also the concept of declaration of Scheduled area having regard to the potential of availability of ground water and other relevant factors, has been propounded and restriction on existing well or new wells in the Scheduled area is provided.

**e) Kerala Ground Water (Control and Regulation) Act, 2002 (Act 19 of 2002):** Enacted for conservation of ground water and regulation of its extraction. Here also is a provision for constitution of State Ground Water Authority and declaration of an area as “Notified area” where Government is satisfied that it is in public interest to regulate extraction of use of ground water in that area. In the “Notified area”,

any person desiring to use ground water, will have to seek a permit from the appropriate Authority.

**f) Karnataka Ground water (Regulation and Control of Development and Management) Act, 2011:** In State of Karnataka, pursuant to Government of India, Ministry of Water Resources's circulation of a Model Bill for regulation and control of development and management of ground water in 1992 and 1996, initially, Karnataka Ground Water (Regulation for Protection of Sources of Drinking Water) Act, 1999, (Karnataka Act 44 of 2003) was passed in 2003. It was substituted by Act, 2011 to control indiscriminate exploitation of ground water, especially in "Notified areas" in the State. Above Act received assent of Governor on 05.04.2011.

**g) Lakshadweep Ground Water (Development and Control) Regulation, 2001,** published in Lakshadweep Gazette (Extraordinary), dated 14.09.2001, made for regulation of ground water. It contemplated a Ground Water Authority and declaration of any island as a "Notified Island" to control and regulate extraction or use of ground water.

**h) Maharashtra Groundwater (Development and Management) Act, 2009,** published in the Maharashtra Government Gazette (Extraordinary), dated 03.12.2013, was enacted to ensure and protect drinking water resources and regulate exploitation of ground water in State of Maharashtra. It contemplates constitution of Maharashtra Water Resources Regulatory Authority and empower State Government, on the recommendation of the authority, to declare any area as "Notified area" where it finds, in public interest, to regulate extraction or use of ground water in a watershed or aquifer area.

- i) Pondicherry Ground Water (Control and Regulation) Act, 2002 (Act No. 2 of 2013)** was enacted to regulate and control development of ground water and for matters connected therewith.
- j) Tamil Nadu Municipal Laws and the Chennai Metropolitan Area Groundwater (Regulation) Amendment Act, 2014 (Act No. 23 of 2014)**, was enacted to make amendment in Tamil Nadu District Municipalities Act, 1920, inserting provisions for permit for sinking any well in any area of third grade municipality, town panchayat or municipality etc. It also makes similar amendments in some Metro Cities enactments namely, Madurai City Municipal Corporation Act, 1971, Coimbatore City Municipal Corporation Act, 1981 and Chennai Metropolitan Area Groundwater (Regulation) Act, 1987.
- k) The West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005 (Act XVIII of 2005)**, published in Kolkata Gazette, (Extraordinary), dated 31.08.2005, to manage, control and regulate indiscriminate extraction of ground water. It contemplates a State Level Authority, i.e., West Bengal State Level Groundwater Resources Development Authority, an Authority at District level as well as Corporation level. The powers and duties of the Authority are given in different provisions, and basically, they have to take into consideration various aspects of managing groundwater resources in West Bengal, its Districts and Corporations.
- l)** Besides above, following enactments are also operating for control and regulation of ground water:
- (i) **Assam** Ground Water Control and Regulation Act, 2012.
  - (ii) **Gujarat** Irrigation and Drainage Act, 2013.

- (iii) **Himachal Pradesh** Ground Water (Regulation and Control of Development and Management) Act, 2005.
- (iv) **Madhya Pradesh** **Peya** Jal Parirakshan Adhiniyam, 1986.
- (v) **Punjab** Preservation of Subsoil Water Act, 2009.
- (vi) **Rajasthan** Soil and Water Conservation Act, 1964.
- (vii) **Uttarakhand** Ground Water (Regulation and Control of Development and Management) Act, 2016.
- (viii) In **Jammu and Kashmir**, it is Water Resources (Regulation and Control of Development and Management) Act, 2010.
- (ix) **Union Territory of Chandigarh** Water Supply Byelaws, 2011 (Amendment 2018).
- (x) **Haryana** Water Resources (Conservation, Regulation and Management) Authority Act, 2020 published in the Gazette of Haryana dated 07.12.2020 (Extraordinary).

**m) Uttar Pradesh:**

- i. Lastly, we come to **UPGWMR Act 2019**, which was published in UP Gazette (Extraordinary), dated 07.08.2019. It has come into force on w.e.f. **02.10.2019** vide Notification dated 11.09.2019 issued under Section 1(3) of UPGWMR Act 2019. The terms 'Aquifer', 'Bulk user', 'Commercial user', 'Ground Water', 'Infrastructural User', 'Notified area', 'Pollution', 'Rainwater harvesting' and 'Urban Area' are defined in Sections 2(b), 2(e), 2(g), 2(q), 2(s), 2(u), 2(w), 2(x) and 2(aa) as under:

*“(b) ‘**Aquifer**’ means an underground layer of geological formation, group of formations or part of a formation, comprising fractured rocks, sand, gravel and like sediments, that is sufficiently porous, permeable and saturated with water and that transmits/accepts and yields significant quantity of water to a well or spring;*

*(e) ‘**Bulk User**’ means a person or a group of persons including any establishment such as hotels/lodges/private residential buildings /housing colonies/resorts/private hospitals/nursing homes/ business complexes/malls/ water parks, which*

*extract and use ground water for the purpose of his or her or their operational water needs;*

*(g) ‘Commercial user’ means a person or a group of persons including any institution or any agency or any establishment who or which extract and use ground water for the purpose which directly or indirectly benefits his/her or their business or trade to make financial gain or profit;*

*(q) ‘Ground Water’ means the water occurring in its natural state below the ground surface in the zone of saturation and that can be extracted through wells or any other means or emerges as springs and base flows in streams and rivers;*

*(s) ‘Infrastructural User’ means a person or a group of persons including a firm or any company, who or which extract and use ground water for the purpose of carrying out such activities or projects which are directly related to infrastructural development;*

*(u) ‘Notified area’ means the **area notified as such under section 9 which includes Over-exploited, Critical blocks and Stressed Urban Areas;***

*(w) ‘Pollution’ means such contamination of ground water or surface water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage, Plastic, Thermocol or trade effluent or of any other liquid, gaseous, or solid substance into ground water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such ground water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms;*

*(x) ‘Rainwater harvesting’ means the technique or system of collection and storage of rainwater, at micro watershed scale, including roof-top harvesting, for storage or for recharge of groundwater;*

*(aa) ‘Urban Areas’ means the areas notified by a development authority or a municipality or a regulatory body as the case may be, excluding such areas/lands as are classified for agriculture use in the master plan of a development authority or a municipality or a regulated area;”*

- ii. Further, in exercise of powers under Section 7 of UPGWMR Act 2019, **UP State Ground Water Management and Regulatory Authority** (hereinafter referred to as ‘**UPSGWMRA**’) was constituted vide Notification dated **13.11.2019**, published in UP Gazette (Extraordinary), of the same date. By another Notification dated **02.01.2020**, published in UP Gazette (Extraordinary) of the

same date, Governor in exercise of powers under Section 6(1) of UPGWMR Act 2019 directed UP SGWMRA to constitute **District Ground Water Management Committee** (hereinafter referred to as '**DGWMC**') for each district of the State, consisting of Chairman and Members, in accordance with provisions of the said Section. Thereafter, by Notification dated **25.05.2020**, published in UP Gazette (Extraordinary), of the same date, in exercise of powers under Section 49, State framed "UP Ground Water (Management and Regulation) Rules, 2020" (hereinafter referred to as '**UPGWMR Rules 2020**'). In exercise of powers under Section 9(1) of UPGW Act, 2019, Notification dated 17.06.2020 was published, notifying rural and urban areas of State of UP, mentioned in the schedule, as 'Notified area' for taking up appropriate measure for overall management and regulation of ground water **w.e.f. 02.10.2020**. The rural areas of UP, in respect of Amroha included Blocks-Dhanora, Gajraula, Hasanpur, and Joya. Vide Notification dated **03.07.2020**, published in UP Gazette (Extraordinary), of the same date, Governor, in exercise of powers under Section 3 of UPGWMR Act 2019, directed DGWMC to constitute **Gram Panchayat Ground Water Sub Committee** (hereinafter referred to as '**GPGWSC**') for each Gram Panchayat for each District.

- iii. Under the scheme of UPGWMR Act 2019, Section 3 contemplates constitution of a GPGWSC in every Gram Panchayat, being the lowest public unit in rural areas, within a block, to protect and manage ground water resources under UPGWMR Act 2019. Its functions include collection of information from all resources; prepare GPGW security plan and carryout such other functions as may be prescribed.

- iv. In Urban areas, Section 5 of UPGWMR Act 2019, contemplates constitution of a **Municipal Water Management Committee** (hereinafter referred to as “**MWMC**”), for managing water in an integrated manner. Its functions include work in coordination with water related institutions within the respective municipality; to determine the sources of water supply (surface water and ground water) and integrate them; to prepare an overall municipal ground water security plan; register all the wells within notified and non-notified areas other than those of existing commercial, industrial, infrastructural and bulk users; to monitor implementation of municipal ground water security plan and to carry out such other functions as may be prescribed.
- v. Section 6 of UPGWMR Act 2019, contemplates constitution of a DGWMC being an overall unit for management of ground water resources at district level. Its function includes consolidation of Block Panchayat and Municipal Ground Water Security Plan into District Level Ground Water Security Plan, based on macro watershed approach and as per guidelines prescribed, implementation of District Ground Water Security Plan; monitor, implementation of District Ground Water Security Plan; conduct water awareness programs; register all existing commercial, industrial, infrastructural and bulk users in notified and non-notified areas and grant authorization certificate/NOC for ground water abstraction in non-notified areas and registration of drilling agencies; carry out such other functions, as may be prescribed or assigned by UPSWMRA and to coordinate with WPGW Sub-Committee, Block Panchayat Ground Water Management Committee and Municipal Water Management Committee as well as SGWMRA. Section 7 empowers State Government to constitute

UPSGWMRA, which was constituted by Notification dated **13.11.2019**.

- vi. Chapter III comprises of a single Section, i.e., Section 8 and lays down duties of Ground Water Department. It says that Department shall develop a mechanism to coordinate with the appropriate body namely, MGWMC and BPGWMC for rural areas and DGWMC for urban areas. They shall work as Technical Secretariat for SGWMRA. Sub-section (3) requires Ground Water Department to identify and delineate the areas, such as over-exploited and critical blocks, categorized as per latest Ground Water Resource Estimation, carried out by Ground Water Department and CGWB, in consultation with SGWMRA. It shall also identify and delineate stressed Municipal/Urban areas (where decline of ground water levels is significant, i.e., more than 20cm/year, recorded during the last five years), for taking up appropriate measures for overall management and regulation of ground water in such areas. The areas so identified, shall be designated as 'Notified areas' for the purpose of regulation through Notification.
- vii. Section 9 contemplates identification and delineation of 'Notified areas' for management and regulation of ground water resources and read as under:

*"9. (1) Where the State Ground Water Management and Regulatory Authority, after consultation with appropriate authorities (based on inputs from the Ground Water Department) is of the opinion **that it is necessary or expedient in the public interest to manage and regulate ground water for various purposes in any form in any area and to enforce rain water harvesting/ground water recharge and to implement various appropriate water conservation/water saving/water efficient practices mover-exploited/critical blocks and stressed urban areas (as identified and delineated by the Ground Water Department) where ground water levels have depleted to critical or alarming levels, it shall advise the State Government in such***

manner as may be prescribed to declare by notification such areas as Notified Areas for the purposes of this Act with effect from such date as may be specified in the notification :

*Provided that-*

*(a) the date specified in the notification under this sub-section shall not be earlier than three months from the date of publication of the notification;*

*(b) every notification in Hindi as well as in English languages under this section shall, in addition to its publication in the Gazette, be published in not less than three daily regional newspapers Waving wide circulation in that region and also be served in such other manner as may be prescribed.*

*(2) The Procedure for Demarcation and issuance of notification of the areas referred in sub-section (1) shall be such as may be prescribed.*

*(3) The notification issued under sub-section (1) shall be reviewed periodically under the new Ground Water Assessment Report and according to the findings of the report, shall be in such manner as may be prescribed.”*

- viii. Section 10 talks of registration of existing commercial, industrial, infrastructural and bulk users of Ground Water in Notified Areas, and says:

**“10. (1) Registration of existing commercial, industrial, infrastructural and bulk users of Ground Water:** *Every existing well for commercial, industrial, infrastructural and bulk user located in Notified Areas (both urban and rural areas) shall apply to the respective District Ground Water Management Council for grant of a certificate of registration. The procedure, time limit, forms, fee etc. and other provisions for the grant of registration certificate shall be such as may be prescribed:*

*Provided that-,*

***(a) where any existing Commercial user or Bulk user is found extracting ground water without registration, he or she or a group of persons or an agency (as the case may be) shall be liable to be punished under Chapter-VIII;***

*(b) where a registered well becomes defunct, the fact shall immediately be brought to the notice of the respective District Ground Water Management Council by the user of ground water;*

*(c) where any such user of ground water, having' certificate of registration wants to carry-out any modification or alteration in a registered well, he or she or a group of persons or an agency (as the case may be) shall obtain*

*clearance for the same from the State Ground Water Management and Regulatory Authority in such manner as may be prescribed.*

*(2) Every existing and future users of ground water, other than those mentioned in sub-section (1), including domestic and agriculture users of ground water shall register online, or directly to the respective Block Panchayat Ground Water Management Committee/Municipal Water Management Committee for ground water usages. The web-portal for online intimation shall be informed by the said committee.”*

- ix. Section 11 deals with similar registration of existing commercial, industrial, infrastructural and bulk users of Ground Water in Non-notified Areas.

*“11. (1) Every well (existing or to be sinked) for commercial, industrial, infrastructural and bulk use of ground water in non-notified areas shall apply to the respective District Ground Water Management Council for grant of a certificate of registration. The procedure, time limit, forms, fee etc. and other provisions for the grant of registration certificate shall be such as may be prescribed*

*Provided that-*

***(a) if any Commercial, Industrial, Infrastructural or Bulk user of ground water is found extracting ground water without registration, he or she or a group of persons or an agency (as the case may be) shall be liable to be punished under Chapter-VIII;***

*(b) if a registered well becomes defunct, this fact shall immediately be brought to the notice of the respective District Ground Water Management Council by the user of ground water;*

*(c) if any such user of ground water, having certificate of registration wants to carry-out any modification or alteration in a registered well, he or she or a group of persons or an agency (as the case may be) shall have to obtain clearance for the same from the respective District Ground Water Management Council in such manner as may be prescribed.*

*(2) Every existing and future user of ground water, other than those mentioned in sub-section (1), including a domestic or an agriculture user of ground water shall register online or directly to the respective Block Panchayat Ground Water Management Committee/Municipal Water Management Committee for ground water usages. The web-portal for online intimation shall be informed by the said committee.”*

- x. Section 12 imposes restriction on new well constructions in Notified areas and reads as under:

*“12. (1) No person or group of persons or institution or agency or establishment shall construct/sink any new well for Commercial, Industrial, Infrastructural and Bulk use including construction of borings/tube-wells under Government Schemes **within the Notified areas**, except Government schemes for drinking water supplies and tree plantations. If anyone contravenes the provisions of this sub-section, he or she will be liable for punishment under Chapter-VIII. Such ban shall continue till the area is de-notified by the State Government on advice of Uttar Pradesh State Ground Water Management and Regulatory Authority on the basis of new Ground Water Recourse Estimation Report or significant improvement in declining trend of urban ground water levels after seeking approval from the State Government.*

*(2) **Extraction, sale and supply of raw/unprocessed/untreated ground water in Notified Areas by a person or class of persons or institution or agencies or any other establishment for the purpose of commercial/bulk uses will not be allowed and such an act will be punishable under Chapter-VIII.***

- xi. Section 15 empowers SGWMRA, in consultation with Ground Water Department, to fix ground water abstraction limit for existing Commercial, Industrial, Infrastructural or Bulk users of ground water, while issuing registration for well in Notified as well as non-notified areas, on such terms and conditions as may be prescribed.
- xii. Section 24 deals with demarcation and protection of ground water quality sensitive zones for the purpose of prevention and control of ground water pollution in such areas and also to find safe quality zones for potable water supplies. Sub-section (2) says that the areas demarcated in sub-section (1) of Section 24 shall be declared as Ground Water Quality Sensitive Zones by Notification issued by State Government.
- xiii. Section 28 imposes ban on direct recharging from open areas into aquifers and says:

*“28. (1) In the process of Artificial Recharge to Ground Water from **rain water (except from rooftop) falling on open land, ground, roads (paved/unpaved), agricultural farms shall not be allowed for direct recharging into the***

***aquifers through recharge well, bore well, recharge shaft, injection well etc.***

*(2) Any person who contravenes the provision of sub-section (1) shall be liable to be punished under sub-section (2) of section 39.”*

- xiv. Section 34 imposes an obligation on the appropriate authorities to work for revival and rejuvenation of rivers, ponds, wells, etc. in every village. The said Authority shall develop and execute efficient plans to conserve such rivers, ponds, wells etc.
- xv. Section 35 imposes a duty upon appropriate Authority to undertake impact assessment of both social and environment aspects of such activities to be implemented in the area of their jurisdiction in accordance with the provisions of UPGWMR Act 2019. Sub-section 2 of Section 35 provides that the process of impact assessment, shall include short-term and cumulative impact assessment in the following fields and specifically-
  - (a) Impact on right to water for life;
  - (b) Impact on drinking water sources;
  - (c) Impact on quality and quantity of groundwater;
  - (d) Impact on agricultural production;
  - (e) Impact on the ecosystem including rivers and water bodies;
  - (f) Impact on land use.
- xvi. Section 39 in Chapter VIII provides offences and penalties and by virtue of Section 49 offence punishable under Section 39(1)(b)(i) is compoundable. District Magistrate of each District in State of UP is to act as District Ground Water Grievance Redressal Officer, vide Section 43(1).
- xvii. In UPGWMMR Rules 2020, Chapter III provides a procedure of registration of Wells in Notified and Non-notified areas and Rule 6 reads as under:

*“(1) Any existing Commercial or Industrial or Infrastructural or bulk user, who has sunk a well for extracting or using ground water in notified area or non-notified area before the date of coming into force of the Act, or any future Commercial or Industrial or Infrastructural or bulk user in Non-notified area shall make, in Form 1(A), an application referred to in sub-section (1) of section 10 or sub-section (1) of section 11 of Act, within a period of ninety days from the date of coming into force of the Act, to the District Ground Water Management Council;*

*(2) Any existing Commercial or Industrial or Infrastructural or bulk user, **who has sunk a well for extracting or using ground water in notified area or non-notified area before the date of coming into force of the Act, and have valid No Objection Certificate issued by either Central Ground Water Authority or by Ground Water Department, Uttar Pradesh for extracting or using ground water**, shall make, in Form 1(B), an application referred to in sub-section (1) of section 10 or sub-section (1) of section 11 of Act, within a period of ninety days from the date of coming into force of the Act, to the District Ground Water Management Council;*

*(3) Every existing users of ground water, other than those mentioned in sub-clause (1) of rule 6, including domestic and agriculture users of ground water, who have sunk well or boring in his or her premises or agricultural land holdings, shall make, in Form 1(C), an application referred to in sub-section (2) of section 10 or sub-section (2) of section 11 of Act, within a period of six months from the date of coming into force of these rules, to the Block Panchayat Ground Water Management Committee or Municipal Water Management Committee, as the case may be;*

*(4) Every future users of ground water, other than those mentioned in sub-clause (1) of rule 6, including domestic and agriculture users of ground water, who desires to sink well or boring in his or her premises or agricultural land holdings, shall make, in Form 1(D), an application referred to in sub-section (2) of section 10 or sub-section (2) of section 11 of Act to the Block Panchayat Ground Water Management Committee for Municipal Water Management Committee, as the case may be, prior to sinking of such well;*

***Provided that a user who has sunk more than one well for extracting or using ground water in the area shall be required to submit separate application Form for each well.***

*(5) Form I shall be downloaded free of cost from the online web portal [www.upgwdonline.in](http://www.upgwdonline.in).*

*(6) Improper filling up of Form, and failure to annex all necessary documents specified in, Form 1 shall make the application liable to be rejected.*

*(7) All applications as mentioned in above sub clauses shall be submitted online at web portal [www.upgwdonline.in](http://www.upgwdonline.in).”*

xviii. Rule 13 says that any future or existing user, under Rule 6(1), who does not have NOC by CGWA or Ground Water Department, Uttar Pradesh shall make, in Form 8(A), an application to DGWMC for issue of grant of Authorization/NOC. Rule 14 talks of similar users who have NOC issued by CGWA or Ground Water Department before the date of commencement of UPGWMR Act 2019, desires to continue extraction of ground water, and says that they shall also make an application but in Form 8(B). Rule 14(2) says that a user, having pre-existing right of ground water, shall apply for renewal of NOC after one year from the date of commencement of UPGWMR Act 2019 or on expiry of validity of existing NOC, whichever is earlier. Rule 15 empowers DGWMC to grant or reject Authorization/NOC when application is submitted under Rule 13. However, when an application is submitted under Rule 14, DGWMC is to forward the same to Ground Water Department for technical comments.

xix. Chapter V comprised of Rules 18 and 19. It deals with identification and demarcation of Notified areas and read as under:

*“18. Identification and demarcation of areas to be declared as Notified Areas, - in the manner -*

*(1) Rural Areas: Under the provisions of the Act, **for the purpose of demarcation of the Notified Areas, the over-exploited and critical blocks shall be considered.** The Ground Water Department, therefore, **shall identify and prepare the district wise list of blocks categorized as over-exploited and critical blocks, based on the latest ground water resource assessment report.***

*(2) Urban Areas: In the Urban sector, as provided in the Act, the **stressed areas where ground water levels have depleted to critical/alarming levels shall be considered for the purpose of declaring such areas as Notified Areas.** The Ground Water Department **shall identify and delineate those urban areas as stressed, where ground water levels have recorded a significant decline of more than 20 cm per year during the last five years.***

*(3) The Ground Water Department shall submit the list of over-exploited and critical blocks and the stressed urban areas to the State Ground Water Management and Regulatory Authority for notifying the said areas, as provided in the Act.*

*19. Issuance of Notification, -*

*(1) The State Ground Water Management and Regulatory Authority shall have necessary consultations on the inputs provided by the Ground Water Department related to Over-exploited and Critical blocks categorized as per the latest Ground Water Resource Assessment and the Stressed Urban areas identified by the Department on the basis of analysis of ground water depletion.*

*(2) The Authority, thereafter, shall advise the State Government to declare by Notification such areas as Notified Areas for the purpose of implementation of different provisions of the Act. On the basis of recommendation of Ground Water Department, the State Ground Water Management and Regulatory Authority shall also advise State Government to discontinue or redesign such Government schemes which are directly dependent on ground water extraction.*

*(3) The State Government shall duly consider the recommendation and advice of the State Authority for declaration of such areas as Notified Areas by Notification. in the Gazette.*

*(4) The notification referred to in sub rule (3) shall be uploaded on the websites of all concerned departments And shall also be published in two widely circulated newspapers in the area.”*

- xx. Chapter VI contains a solitary provision i.e. Rule 6 which deals with fixing limit of abstraction of ground water for commercial, industrial, infrastructural or bulk users and reads as under:

*“20. (1) For fixing ground water abstraction limit for all the existing Commercial, Industrial, Infrastructural or Bulk users of ground water, the Ground Water Department, in consultation with stake holders, shall, submit a proposal to the State Ground Water Management and Regulatory Authority within six months from the date of commencement of these rules.*

*(2) On the basis of proposal submitted by Ground Water Department, State Ground Water Management and Regulatory Authority **shall fix ground water abstraction limits for all the Commercial, Industrial, Infrastructural or Bulk users of ground water.***

*(3) **Ground water abstraction limits fixed under sub rule (2) shall be written in the registration or authorization certificate/ No-objection certificate for wells of existing Commercial, Industrial, Infrastructural or Bulk users of***

**ground water in Notified as well as Non-notified** areas and for all the new Commercial, Industrial, Infrastructural or Bulk users of ground water in Non-notified areas, as the case may be, for the purpose of Section 15.”

xxi. Demarcation and declaration of Ground Water Quality Sensitive

Zones are governed by Chapter VII, Rule 21 which reads as under:

**“21. Demarcation of Ground Water Quality Sensitive Zone:**

(1) To collect, evaluate and analyze ground water quality data and related information for the purpose of generating an overview of the problem, the Ground Water Department shall hold technical consultations with the expert bodies such as Central Ground Water Board, Uttar Pradesh Jal Nigam, Central and State Pollution Control Boards, Indian Institute of Toxicological Research, National Institute of Hydrology, IITs and also those Institutions, which have conducted area specific ground water quality studies, for providing the existing data, reports and information on ground water quality for both rural and urban segments of Uttar Pradesh.

(2) Based on the evaluation, analysis and mapping of such available data, the Ground Water Department shall proceed to generate and develop a comprehensive quality data base for the entire state. Subsequently, **the department shall identify those areas which are found affected with poor ground water quality along with risk of pollution hazards on drinking and irrigation water supplies. Such areas shall be demarcated and mapped as Ground Water Quality Sensitive Zones.**

(3) The department shall prepare a detailed district wise list of such Ground Water Quality Sensitive Zones with their GPS locations.

(4) The complete information on ground water quality for the entire state shall be submitted to the State Ground Water Management and Regulatory Authority for onward action, with the objective to ensure protection of ground water quality in such delineated zones through appropriate measures for prevention and control of pollution and finding safe quality areas for potable water supplies.

(5) State Ground Water Management and Regulatory Authority shall take immediate action and will issue directions to concerned departments to change or redesign their existing policies or schemes to ensure protection of ground water quality in such delineated zones. All concerned departments shall have to change or redesign their existing policies or schemes in such delineated zones.

(6) After issuance of direction in sub rule (5), if District Ground Water Management Council finds that any particular scheme of

*any department is responsible for pollution of ground water in that district, the Council in such cases shall immediately take action in consonance with the provision of the Act and also shall submit a case to State Ground Water Management and Regulatory Authority.”*

- xxii. Rule 22 requires issue of notification to declare the identified area for Ground Water Quality Sensitive Zone for the purpose of UPGWMR Act 2019. The said notification is not only to be published in the Gazette but also to be placed as Public Notice by publication in three daily regional newspapers and also to be uploaded on the website. There are further procedures and process for fixing standards of treated waste water and installation of treatment plant which we are omitting at this stage. Rain Water Harvesting is governed by Chapter IX.
- xxiii. UPGWMR Act 2019 read with UPGWMR Rules 2019 show that different Authorities have to conduct study in respect of ground water, following the procedure laid down therein and the Competent Authority only then must issue NOC/permission/clearance mentioning requisite conditions and data including quantity of permissible abstraction of ground water and not otherwise.

**History of CGWA, its origin and relevant provisions relating to its powers, duties etc.:**

82. Issue relating to depletion of ground water, for the first time, caught attention of Supreme Court in ***M.C. Mehta vs. Union of India & Others. (1997)11SCC312***. On 20.03.1996, in daily newspaper “Indian Express”, published on 18.03.1996, a news item was published under the caption of “Falling Groundwater Level Threatens City”. Court took judicial notice on 20.03.1996 and required CGWB and Delhi Pollution Control Committee to respond. On 03.04.1996, Court issued notices to Municipal Corporation of Delhi and Delhi Waterworks and Sewerage Disposal Undertaking. One

scientist Dr. P.C. Chaturvedi, (Director), CGWB filed affidavit stating that since 1962 and onwards, water levels in country are declining. During the years 1971 to 1983, fall in water level was 4 meters to 8 meters in National Capital Territory. There was a further fall of water level from 4 meters to more than 8 meters during 1983 to 1985. One of the reasons stated in the affidavit for decline of water level was, enhanced pumpage. Consequently, Supreme Court issued notice to Government of India through Secretary, Ministry of Water Resources and Government of National Capital Territory, Delhi. The factual position regarding fall of water levels in the country was admitted in the affidavits filed by various authorities before Supreme Court. Thereafter, vide order dated 04.09.1996, Supreme Court requested Director, NEERI to examine the matter at institute level, by experts in the field, and submit report. NEERI was also required to submit suggestions and recommendations for checking further decline of underground water level. Consequently, NEERI submitted report dated 23.09.1996 with the title **“Water Resources Management in India, Present Status and Solution Paradigm”**. An affidavit dated 24.10.1996 was filed on behalf of Ministry of Water Resources, by Additional Secretary, making comments on NEERI report, indicating an overall declining water level picture in the country, and also, schemes and activities undertaken by Government of India through various departments to monitor ground water. It was pointed out that in order to arrest depleting trend and to avoid indiscriminate withdrawal of ground water, Government of India had circulated a Model Bill to States/Union Territories, in 1970, to help them to bring out suitable legislation on the lines of Model Bill to regulate and control development of ground water in the respective areas. It was stated in the affidavit that in more than 120 blocks i.e. 231 blocks, in 6 Mandals, and 12 Talukas, level of ground water is over exploited. Noticing all these facts, Supreme Court, accepted one of the suggestions of NEERI, regarding

constitution of an Authority under Section 3(3) of EP Act 1986, and passed order on 05.12.1996, over ruling objection taken by Ministry of Water Recourses, Government of India that water being a State subject, it would not be possible to constitute an Authority under Section 3(3) of EP Act 1986, and held that **EP Act, 1986 is made by Parliament under Entry 13 List I Schedule 7 read with Article 253 of the Constitution of India and shall have an over-riding effect.** There was already an Organization namely CGWB having its Office across the country, hence Supreme Court directed that Central Government may consider to issue a Notification constituting the “Board” itself as an “Authority” under Section 3(3) of EP Act, 1986. It also observed that the said Authority would have all statutory powers under Section 3(3) of EP Act 1986 and would be in a position to have effective control all over India. **Supreme Court also said that any institution/department constituted by State Government can independently function in its own field with the cooperation and under the guidance of the organization set up by CGWB.**

83. As a result, thereof, we find Notification dated 14.01.1997 issued by Ministry of Environment and Forest (hereinafter referred to as ‘**MoEF**’), in exercise of power conferred by Section 3(3) of EP Act 1986 constituting CGWB as an Authority i.e. CGWA, for the purpose of regulation and control of ground water management and development, from the date of publication of the said Notification in the official Gazette. It was published in the Gazette of India on the same date.

84. As per para 1 of Notification of 1997, CGWA would constitute of the following:

- (i) Chairman, CGWB-Chairperson
- (ii) Member (Exploratory Drilling and Materials Management), CGWB-Member

- (iii) Member (Sustainable Management and Liaison), CGWB-Member
- (iv) Member (Survey, Assessment and Monitoring), CGWB-Member
- (v) An officer not below the rank of the Joint Secretary to the Government of India to be appointed by the Central Government-Member

85. Para 2 of the said Notification dated 14.01.1997, provided powers and functions of CGWA, and said:

*“2. The Authority shall exercise the following powers and perform the following functions, namely: -*

- (i) exercise of powers under section 5 of the Environment (Protection) Act, 1986 for issuing directions and taking such measures in respect of all the matters referred to in sub-section (2) of section 3 of the said Act;*
- (ii) to resort to the penal provisions contained in sections 15 to 21 of the said Act;*
- (iii) **to regulate indiscriminate boring and withdrawal of ground water in the country and to issue necessary regulatory directions with a view to preserve and protect the ground water.”***

86. The jurisdiction of the said Authority was declared to be whole of India, vide para 3.

87. Supreme Court in ***M.C. Mehta vs. Union of India & Others. (1997)*** (*supra*) also said that the Authority i.e., CGWA can resort to penal provisions contained in Section 15 to 21 of EP Act 1986. It also observed that main object for constitution of said Authority being the urgent need for regulating indiscriminate boring and withdrawal of underground water in the country, the said Authority so constituted, shall apply its mind to this urgent aspect of the matter and issue necessary regulatory directions with a view to preserve and protect underground water.

88. Initially, constitution of CGWA was for one year as provided in para 1 of Notification dated 14.01.1997. It was amended by Notification dated 13.01.1998, published in the Gazette of India (Extraordinary) of the same date and in place of one year, it was made five years.

89. Another amendment was brought in Notification dated 14.01.1997 by Notification dated 05.01.1999, published in the Gazette of India (Extraordinary) dated 08.01.1999 and thereby, CGWA was made six persons Authority by adding Regional Director or an officer of equivalent rank, CGWB as Member Secretary.

90. The constitution of CGWA and its functions underwent a major amendment vide Notification dated 06.11.2000, published in Gazette of India (Extraordinary) dated 16.11.2000. Thereby, in para 1, period of CGWA was deleted, hence CGWA became an Authority without any limitation of period. Further, composition of CGWA was also changed by making it a ten members Committee including Chairman, with a further provision authorizing it to have some special invitees, as and when required. The new composition of CGWA was as follows:

- (i) Chairman, CGWB-Chairman
- (ii) Member (Survey, Assessment and Monitoring), CGWB-Member
- (iii) Member (Exploration Drilling and Materials Management), CGWB-Member
- (iv) Member (Sustainable Management and Liaison), CGWB-Member
- (v) Member (Training and Technology Transfer), CGWB-Member
- (vi) Joint Secretary (Administration), Ministry of Water Resources-Member
- (vii) Joint Secretary and Financial Adviser, Ministry of Water Resources-Member
- (viii) Joint Secretary, MoEF-Member
- (ix) Chief Engineer, Irrigation Management Organisation (Water, Planning and Projects), Central Water Commission-Member
- (x) Director/General Manager (Exploration), Oil and Natural Gas Corporation Ltd.-Member

91. The aforesaid Notification further authorized CGWA to invite, from time to time, following, as special invitees, as and when required:

- (i) Joint Secretary (Soil and Water Conservation), Department of Agriculture and Co-operation
- (ii) Joint Secretary (Water Supply), Ministry of Urban Development
- (iii) Joint Secretary (Department of Drinking Water Supply), Ministry of Rural Development
- (iv) Director, National Institute of Hydrology, Roorkee
- (v) Director, National Geo-physical Research Institute, Hyderabad.

92. The powers and functions of CGWA described by Notification dated 14.01.1997 were also amended and for clause (iii), the following clause (iii) and (iv) were substituted:

***“(iii) to regulate and control, management and development of ground water in the country and to issue necessary regulatory directions for this purpose;***

*(iv) exercise of powers under Section 4 of the Environment (Protection) Act, 1986, for appointment of officers.”*

93. CGWA was conferred with powers to issue directions under Section 5 and also to exercise powers on the matters referred to in Section 3(2) of EP Act 1986. Thus, it would be appropriate to have a bird eye-view of Section 3(3), 3(2) and 5 of EP Act 1986. Section 3(2) and (3) read as under:

***“3(2) In particular, and without prejudice to the generality of the provisions of sub-section (1), such measures may include measures with respect to all or any of the following matters, namely:***

- (i) co-ordination of actions by the State Governments, officers and other authorities-*
  - (a) under this Act, or the rules made thereunder, or*
  - (b) under any other law for the time being in force which is relatable to the objects of this Act;*
- (ii) planning and execution of a nationwide programme for the prevention, control and abatement of environmental pollution;*
- (iii) laying down standards for the quality of environment in its various aspects;*
- (iv) laying down standards for emission or discharge of environmental pollutants from various sources whatsoever:*

*Provided that different standards for emission or discharge may be laid down under this clause from different sources having regard to the quality or composition of the emission or discharge of environmental pollutants from such sources;*

*(v) restriction of areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards;*

*(vi) laying down procedures and safeguards for the prevention of accidents which may cause environmental pollution and remedial measures for such accidents;*

*(vii) laying down procedures and safeguards for the handling of hazardous substances;*

*(viii) examination of such manufacturing processes, materials and substances as are likely to cause environmental pollution;*

*(ix) carrying out and sponsoring investigations and research relating to problems of environmental pollution;*

*(x) inspection of any premises, plant, equipment, machinery, manufacturing or other processes, materials or substances and giving, by order, of such directions to such authorities, officers or persons as it may consider necessary to take steps for the prevention, control and abatement of environmental pollution;*

*(xi) establishment or recognition of environmental laboratories and institutes to carry out the functions entrusted to such environmental laboratories and institutes under this Act;*

*(xii) collection and dissemination of information in respect of matters relating to environmental pollution;*

*(xiii) preparation of manuals, codes or guides relating to the prevention, control and abatement of environmental pollution;*

*(xiv) such other matters as the Central Government deems necessary or expedient for the purpose of securing the effective implementation of the provisions of this Act.*

**“3(3)** *The Central Government may, if it considers it necessary or expedient so to do for the purpose of this Act, by order, published in the Official Gazette, constitute an authority or authorities by such name or names as may be specified in the order for the purpose of exercising and performing such of the powers and functions (including the power to issue directions under section 5) of the Central Government under this Act and for taking measures with respect to such of the matters referred to in sub-section (2) as may be mentioned in the order and subject to the supervision and control of the Central Government and the provisions of such order, such authority or authorities may exercise the powers or perform the functions or take the measures so mentioned in the order as if such authority or authorities had been empowered by this Act to exercise those powers or perform those functions or take such measures.”*

94. Section 5 confers power to give directions which was also conferred upon CGWA by Central Government in its notification under Section 3(3).

Section 5 reads as under:

**“5. POWER TO GIVE DIRECTIONS:**

*Notwithstanding anything contained in any other law but subject to the provisions of this Act, the Central Government may<sup>1</sup>, in the exercise of its powers and performance of its functions under this Act, issue directions in writing to any person, officer or any authority and such person, officer or authority shall be bound to comply with such directions.*

**Explanation-***For the avoidance of doubts, it is hereby declared that the power to issue directions under this section includes the power to direct-*

*(a) the closure, prohibition or regulation of any industry, operation or process; or*

*(b) stoppage or regulation of the supply of electricity or water or any other service.”*

95. Perusal of above, shows that Section 5 has been given an overriding effect over any other law but directions issued under Section 5 have to be within the compass of EP Act 1986 and cannot travel beyond. Further sub-section 2 of Section 3 has to be read with sub-section 1 which shows that power to take such measure as deemed necessary and expedient, was conferred with the clear objective that it should be for the purpose of protecting and improving quality of environment and preventing, controlling and abating environmental pollution. Further the aforesaid power is also subject to the provisions of EP Act 1986.

96. Section 24 of EP Act 1986 also made a declaration that subject to sub-section 2, provisions of EP Act 1986 and the rules or orders made therein, shall have effect notwithstanding anything inconsistent therewith contained in any enactment other than EP Act, 1986.

97. Therefore, not only provisions of EP Act 1986 but even rules or orders issued under EP Act 1986 shall prevail over any other enactment except EP Act 1986. In other words, if, there is anything otherwise provided in EP Act 1986, then the rules/orders etc. will have to be read consistent therewith and as per legislative or statutory hierarchy, the one which is superior in hierarchy, shall prevail.

98. The steps, taken by Central Government or the Authority constituted under Section 3(3) with power to issue directions under Section 5 or to take such measures as are necessary under sub-section 2 of Section 3, are the orders in respect whereof, Section 24 sub-section 1 provides that the same shall prevail over any other enactment having any inconsistent provision. The only exception is with regard to the offences and punishment, subject to the provisions of sub-section 2 of Section 24, which provides, where any Act or omission constitutes any offence punishable under EP Act 1986 and also under any other Act, then the offender found guilty of such offence, shall be liable to be punished under the other Act and not EP Act 1986.

99. Section 25 of EP Act 1986 confers power upon Central Government to frame rules and Section 26 provides procedure which obviously would not include or cover the direction or orders or steps taken by virtue to Section 3(2) or Section 5 of EP Act 1986.

100. Hence directions issued under Section 5 or orders issued on the matters referable to Section 3(2), in our opinion, are statutory orders. We have already discussed that EP Act 1986 is referable, to Entry 13 List I Schedule VII of the Constitution read with Article 253, having been enacted pursuant to the International Conference and resolutions and to give effect thereto, it shall prevail over Provincial legislation. All Provincial enactments, relating to ground water, therefore, would have to subserve the Guidelines issued by CGWA since these guidelines are referable, to Section 5 read with Section 3(2) of EP Act 1986. These guidelines are not mere executive orders but statutory orders and, in any case, having been issued in exercise of powers under EP Act 1986, as stated above, shall prevail over Provincial enactments/legislations. To the extent, subject is

covered by EP Act 1986 and the orders issued by CGWA, Provincial legislature would lack power to make law, and if made, shall sub serve.

101. The limitation upon CGWA is that the guidelines, not only, are subject to the provisions of EP Act 1986 but should also conform the mandate that it should be for the purpose of protecting and improving quality of environmental and preventing, controlling and abating environmental pollution.

102. Supreme Court in its order dated 10.12.1996 in ***M.C. Mehta vs. Union of India & Others (1997) (supra)***, made it very clear, in para 12 of the judgment, that the main object for constitution of CGWB, as an Authority, is the urgent need for regulating indiscriminate boring and withdrawal of ground water in the country. Court further said that it has no doubt that the Authority, i.e., CGWA shall apply its mind to this urgent aspect of the matter and issue necessary regulatory directions with a view to preserve and protect ground water. Court reiterated its above directions by stating *“This aspect may be taken up by the Authority on an urgent basis”*.

103. Supreme Court also took notice of the fact that there are some legislations in the States to regulate water resources development but by and large, ground water was being exploited all over the country, without any effective regulatory regime. It is in this regard, Court directed that an Authority under EP Act 1986 be constituted with powers necessary to deal with situation created by indiscreet abstraction of ground water causing depletion of ground water levels, dwindling surface water resources, deterioration of surface and ground water quality and haphazard land use.

104. In the same case, i.e., ***M.C. Mehta vs. Union of India & Others. (1997) (supra)***, in earlier order dated 05.12.1996, Court had also rejected

contention advanced on behalf of Government of India, Ministry of Water Resources that under the constitution, water is State subject and, therefore, Central Government or Parliament has no role. Court said that:

*“We are prima facie of the view that the Act being an Act made by Parliament under Entry 13 List I read with Article 253 of the Constitution of India, it has an overriding effect.”*

105. In **S. Jagannath vs. Union of India & Others., 1997 (2) SCC 87**, Supreme Court in its judgment dated 11.12.1996, was confronted with the situation where provincial legislations on coastal aquaculture regulating industries, set up in coastal areas, contained provisions which were not in consonance with Central enactment i.e., EP Act 1986 and notification issued by Government of India under Section 3(3) of the said Act, i.e. Coastal Regulation Zone (CRZ). Supreme Court held:

*“...we are of the view that the Act being a Central legislation has the overriding effect. The Act, (the Environment Protection Act, 1986) has been enacted under Entry 13 of list I Schedule VII of the Constitution of India. The said entry is as under:*

*“Participation in international conferences, assessment and other bodies and implementing of decisions made thereat.”*  
*The preamble to the Act clearly states that it was enacted to implement the decisions taken at the United Nations’ Conference on the Human Environment held at Stockholm in June, 1972. Parliament has enacted the **Act under Entry 13 of List I Schedule VII read with Article 253 of the Constitution of India. The CRZ notification having been issued under the Act shall have overriding effect and shall prevail over the law made by the legislatures of the States.**”*

(Emphasis added)

106. In **Mantri Techzone Pvt. Ltd. vs. Forward Foundation & Others (2019)18SCC494**, it was reiterated when a similar question with respect to Provincial legislation vis-a-vis law on environment was raised. Supreme Court said:

*“A Central legislation enacted under Entry 13 of Schedule VII List I of the Constitution of India will have the overriding effect over State Legislations. The corollary is that the Tribunal while providing for restoration of environment in an area, can specify ‘Buffer Zones around specific lakes and water bodies in*

**contradiction with zoning regulations under these statutes or RMP".** (Para 47)

(Emphasis added)

107. Recently, in **Civil Appeal No. 6932 of 2015, The Director General (Road Development) National Highways Authority of India vs. Aam Aadmi Lokmanch & Others.**, the above view taken in **Mantri Technoze Pvt. Ltd. vs. Forward Foundation (Supra)** has been referred and followed.

108. Therefore, it is now established that irrespective of the legislative list contained in Schedule 7, whenever matter relates to environment is to be seen, if governed by the laws enacted on environment by Parliament, referable to entry 13 List 1 of 7<sup>th</sup> Schedule, the same shall prevail. In other words, when a subject is covered by a legislation referable to list 1 of Seventh Schedule of the Constitution, to the extent matter is covered by such Central legislation, Provincial legislature would cease to have any legislative competence to that extent, irrespective of entry in list 2. Provincial legislature can make law only on the aspects not covered by Parliamentary enactment.

109. Thus, we are clearly of the view that on the subject of regulation of ground water, provisions of EP Act 1986, the orders issued by Central Government under Section 3(3), and by CGWA under section 5 and/or section 3(2) of EP ACT 1986 shall hold field and on this subject Provincial legislation cannot be brought in to impede, obstruct or deny or deprive CGWA, in its function for protection, perseveration and sustenance of ground water in the country.

110. Though CGWA was constituted in January 1997, we do not find much activity on its part initially for about two years. Only in 1999, CGWA issued "Guidelines for granting NOC for withdrawal of ground water by

industries/projects w.e.f. 01.01.1999” (hereinafter referred to as ‘**Guidelines 1999**’). It permits all industries seeking NOC for ground water abstraction, to submit application in the prescribed proforma, in the Office of Regional Director, CGWB of the concerned State or Member Secretary, CGWA, New Delhi. Proponent was to submit a referral letter from Statutory Organizations like State Pollution Control Boards, MoEF, Bureau of Indian Standards, etc. for processing of its case. Proponent was also required to submit detailed designs for Rain Water Harvesting which was mandatory for areas falling in critical blocks. For evaluation of proposal, Guidelines 1999 provided, in respect of over-exploited, critical and semi-critical blocks, as under:

***“Over-Exploited Blocks-*** *It was decided that clearance to industries in Critical/Over-Critical areas needs to be considered on case to case basis and in case of severely over-exploited areas which are devoid of any deeper potential aquifers clearances for industrial use of ground water may be denied as per the policy. (21<sup>st</sup> meeting held on 24.5.2006).*

***Critical Blocks-****granting permits to industries for ground water extraction be considered subject to implementation of Rain Water Harvesting/Ground Water Recharge matching the proposed draft. (23<sup>rd</sup> meeting held on 28.8.2007).*

***Semi-critical Blocks-****granting permits to industries be considered subject to implementation of Rain Water Harvesting/Ground Water Recharge. (23<sup>rd</sup> meeting held on 28.8.2007).”*

111. Thereafter, a new set of Guidelines was issued, with effect from 20.10.2009, i.e., “Guidelines for evaluation of proposals/requests for ground water abstraction for drinking and domestic purposes in Notified areas and Industry/Infrastructure project proposals in non-notified areas” (hereinafter referred to as ‘**Guidelines 2009**’). It recognized high intensive development of ground water in certain areas, i.e. irrigation, drinking, domestic and industrial uses in the country, resulting in over-exploitation, leading to long term decline in ground water levels. In certain situations, quality of ground water was found deteriorated. As per the study available up to 2004, out of 5723 assessed units (Blocks, Mandals, Talukas and

Districts), 839 were over-exploited, 226 critical, and 550 semi-critical. However, details of Guidelines 2009 show, since CGWA had notified only 43 areas for the purpose of regulation of ground water development, hence it confined its regulatory action only to “notified areas”. Guidelines also said that NOC can be accorded for construction of tube wells/replacement of existing defunct well for drinking and domestic purpose to Government department entrusted with the water supply; other Government organizations if Water Supplying Department is not providing water in the area; schools/institutions/universities; hospitals; Embassies and State Bhawans. Pre-conditions for grant of NOC for abstraction of ground water to above categories were also given in said Guidelines.

112. Chapter A, para 1, of **Guidelines 2009**, gives details of the purpose for which NOC could be accorded, and pre-conditions for grant of NOC mentioned therein, are as under:

- “I) NOC can be accorded for construction of tube wells/replacement of existing defunct well for drinking and domestic purpose to:*
- (i) Government department entrusted with the water supply*
  - (ii) Other Government organizations if Water Supplying Department is not providing water in the area*
  - (iii) Schools/Institutions/Universities*
  - (iv) Hospitals*
  - (v) Embassies*
  - (vi) State Bhawans*
  - (vii) For Individuals for individual households.”*

113. **Guidelines 2009** further laid down pre-conditions for grant of NOC for abstraction of ground water to categories under serial no. (i) to (vi) in notified areas, as under:

*“Pre-conditions for grant of NOC for abstraction of ground water to categories under Sl. No. (i) to (vi) are:*

- 1. Maximum diameter of the tube well should be restricted to 100 mm only and capacity of the pump should not exceed 1HP except in case of Government water supply agencies. In case of Govt. water supply agencies, tubewell size/dia. can be more depending on the ground water availability and requirement.*

2. Concurrent with the construction of tube well, **the owner of the tube well shall undertake installation of the rain water harvesting structure in the premises** within 45 days of issuance of NOC and will confirm to the Authority for verification.
3. The water from the tube well be used for drinking and domestic purposes only.
4. All details of the drilling like rock formations encountered, the depth and diameter of the constructed tube well, type of pipes used, yield of bore well/ tube well and ground water quality etc. have to be furnished to the nodal agency authorized by district administration head within 15 days of the completion of the construction.
5. **This permission is valid for a period of two months from the date of issue of NOC** except in case of Government water supplying agencies/ departments.”

114. In respect of Sl. No. (vii) i.e. For Individuals for individual households, in notified areas, **Guidelines 2009** imposed conditions as under:

- “1. Only one tube-well is allowed for construction in the premises to meet the drinking and domestic purposes. No tube-well/ bore-well will be constructed, if any working tube-well already exists. In case the existing well has become non-functional and is to be replaced, it should be converted into recharge well, if possible or properly sealed and no water be pumped from it.
2. The persons(s) intending to construct new tube-well will intimate the Authorized office/ Advisory Committee, 10 days in advance along with the name and address of the drilling agency, which will undertake construction of tube-well. Authorities/Nodal Agency can ask the user to supply additional information.
3. The maximum diameter of the tube-well should be restricted to 100mm only and the capacity of the pump should not exceed 1HP.
4. **Concurrent with the construction of tube-well, the owner of the tube-well shall undertake installation of the rainwater harvesting system in the premises.**
5. **The water from the tube-well/bore-well will be used exclusively for drinking and domestic purposes only.**
6. All details of the drilling like rock formations encountered, the depth and diameter of the constructed tube well, type of pipes used in tube-well, yield of bore well/ tube well and ground water quality etc. shall be kept for record and are to be provided at the time of inspection.

7. Any violation of the above conditions will attract legal action under section 15 of the Environment (Protection) Act, 1986.”

115. Chapter A, para II of **Guidelines 2009** said that permission will not be accorded for construction of tube well for agriculture, industrial, commercial, horticulture and construction purposes in “notified areas”.

116. Chapter B of **Guidelines 2009**, laid down Guidelines for evaluation of proposals/requests for abstraction of ground water for industrial/infrastructure projects, in **non-notified areas**. Para B-1, mentioned 12 criteria on which the proposals shall be evaluated i.e. (i) purpose of ground water use, (ii) area of ground water against its availability, (iii) availability of shallow aquifer, (iv) availability of deeper aquifer, (v) Criteria for recycling and reuse of effluents, (vi) adoption of water conservation measures, (vii) installation of water meters, (viii) examining the scope of rain water harvesting and ground water recharging potential, (ix) land use, (x) ground water draft, (xi) saline ground water aquifers and (xii) mining areas.

117. It was stated further that project proposals for various purposes would be evaluated for consideration of ground water abstraction, under different hydrological conditions, including water conservation measures in safe, semi-critical, critical and over-exploited areas. A chart was given for evaluation of proposals to abstract ground water for industries, as under:

**“Evaluation of Proposals to Abstract Ground Water for Industries**

<b>Category</b>	<b>Stage of Development</b>	<b>Recycle/Reuse</b>	<b>Other Water Conservation Practices</b>	<b>Withdrawal permitted (%age of proposed recharge)</b>
Safe	<70	Mandatory recycling and reuse of water	Water audit measures to be adopted	To be brought under the purview if quantity of abstraction exceeds 1000

				<i>m<sup>3</sup> /day in hard rock areas and 2000 m<sup>3</sup> /day in alluvial areas. RWH to be adopted.</i>
<i>Semi-critical</i>	<i>70-100</i>	<i>Efficient utilization of recycled water and reuse of water should be mandatory.</i>	<i>Water audit measures to be adopted</i>	<i>Withdrawal may be permitted subject to undertaking of recharge measures. Since the area is less stressed, <b>at least 50% recharge be made mandatory.</b></i>
<i>Critical</i>	<i>90-100</i>	<i>Efficient utilization of recycled water and reuse of water should be mandatory.</i>	<i>Water audit measures to be adopted</i>	<i>Withdrawal may be permitted subject to undertaking of recharge measures. <b>The quantum of recharge should be equal to or more than the proposed withdrawal.</b></i>
<i>Over-exploited</i>	<i>&gt;100</i>	<i>Efficient utilization of recycled water and reuse of water should be mandatory.</i>	<i>Water audit measures to be adopted</i>	<i><b>Withdrawal</b> may be permitted <b>up to 60% of proposed recharge.</b> Also <b>withdrawal should not exceed a maximum limit of 1500 m<sup>3</sup> /day for each unit.</b></i>

118. Chapter B, Para B-2 of **Guidelines 2009**, laid down certain conditions for abstraction of ground water for infrastructure projects in non- notified areas, as under:

**“B-2 ABSTRACTION OF GROUND WATER FOR INFRASTRUCTURE PROJECTS**

- *Run-off from the entire project area is to be utilized for artificial recharge to ground water.*
- *In case of residential township and colony, the quantum of water for usage other than drinking/ domestic shall not exceed 25% of the total requirement.*
- *The concerned State Government, while sanctioning any infrastructure project is to look into the ground water availability aspect also.*
- *Proponents are to submit a status report on water supply available from water supplying agencies stating the quantum of water that would be provided by the agency.”*

119. In para B-3, conditions for abstraction of ground water for industrial projects in non - notified areas was laid down as under:

**“B-3 ABSTRACTION OF GROUND WATER FOR INDUSTRIAL PROJECTS**

**a) Areas having Deeper Aquifers:**

***In all Over-exploited and Critical areas having deeper potential aquifers, withdrawal may be permitted irrespective of the stage of development subject to:***

- (a) Withdrawal of water from deeper aquifers only,*
- (b) Implementing recharge measures to recharge shallow/deeper aquifers to the extent possible within the lease/industry area*
- (c) Recommendation of concerned Regional Directorate on feasibility of exploitation of deeper aquifers.*

**b) Water table intersection by mining industries and dewatering of mine pit water**

*Abstraction of ground water by mining industry intersecting water table can be permitted and dewatering of mine pit water be permitted subject to the following conditions:*

- The mine water is to be put to gainful use. This may include water supply to adjacent areas and local water supply agencies, utilization for dust suppression by the industry, utilization by the mining industry for different processes, utilization for artificial recharge to ground water etc.*
- Piezometers for monitoring the ground water level are to be mandatorily installed within the mine lease area and in peripheral areas. The record of water level data be maintained and to be provided whenever demanded by the regulating agency.*

**c) Abstraction of saline ground water by Industries**

*Due care to be taken in respect of disposal of the effluents by the units so as to protect the water bodies and the sub-surface shallow aquifers from pollution. Proposals pertaining to the cases must have a detailed report elucidating the mechanism of handling the effluent water and its various uses. All precautions must be taken for protection of environment. Large scale recharge mechanism is mandatory in such cases to improve the ground water quality in the region.”*

120. Certain exemption of industries from obtaining NOC was provided in para-B-3 (IV) as under:

**“IV Exemption of Industries from obtaining NOC from CGWA.**

*(i) Industries requiring ground water upto 25 m<sup>3</sup>/day located in over exploited areas; upto 50 m<sup>3</sup>/day for critical areas; and upto 100 m<sup>3</sup>/day in semi-critical areas are exempted from obtaining NOC for ground water abstraction from CGWA.*

- The responsibility of verifying the actual requirement and withdrawal is vested with the State Pollution Control Boards.*

- *It should also be mandatory for such industries to undertake Rain Water Harvesting to the extent possible and enforcement of the same is vested with the State Pollution Control Boards.*
- (ii) *Industries located in Safe category areas, are required to obtain NOC from CGWA if ground water abstraction by the industry exceeds 1000 m<sup>3</sup> /day for hard rock areas and 2000m<sup>3</sup>/day for alluvial areas. Such cases will be examined as in 'B'.  
**(The above will not include industries which are using water as a raw material like packaged drinking water industries, distilleries and breweries)***

121. For the purpose of monitoring of implementation of **Guidelines 2009**, CGWA made State Pollution Control Boards, responsible. Further, a Committee was constituted at District level for evaluation of industry/infrastructure project proposals seeking ground water clearances, comprising of:

- (i) District Collector - Chairman
- (ii) Hydrogeologist, CGWB of concerned District - Member
- (iii) Representative from Industry - Member
- (iv) Representative from Pollution Control Boards - Member
- (v) Additional member to be adopted if required.

122. The aforesaid Guidelines show that all substantially highly affected areas, facing scarcity of ground water, already placed in the category of over-exploited and critical, were not managed/regulated on a mere pretext that CGWA has notified only 43 areas and, therefore, CGWA without any reason, in an unwarranted and unauthorized manner, defied directions of Supreme Court issued in ***M.C. Mehta vs. Union of India & Others (1997) (supra)***, by restricting its activity of regulation to only 43 “notified areas” for protection of ground water. This approach of CGWA was not consistent with the directions given by Supreme Court in ***M.C. Mehta vs. Union of India & Others (1997) (supra)***. Further, unfortunately, CGWA assumed role of mere licensing Authority, permitting abstraction of ground water by industrial and other establishments, and failed to withstand the

expectations and objective with which it was constituted. It restricted its statutory duties on its own, ignoring mandate of Supreme Court requiring it to take immediate steps to protect depletion of ground water where its level had gone down to alarming level, unconcerned to whether it is notified or not, in the entire country.

123. Vide instruction no. 26-1/CGWA/D1/09/744 dated 08.10.2009, CGWA issued directions to Heads of Central Road Research Institute, National Highway Authority of India, Central Public Works Department, State Public Works Department, Indian Railways, Sports Authority of India, Board of Cricket Control of India, Airport Authority of India, Ministry of Civil Aviation, Ministry of Sports and Youth Affairs to take up rain water harvesting/adopt artificial recharge of ground water to augment ground water resources and to save it from further depletion. In furtherance of above, CGWA said:

*“1. The Director, Central Road Research Institute, Chairman, National Highway Authority of India, Director General, Central Public Works Department; Heads of the State Public Works Department whether called as Secretary, Principal Secretary or by any other name; Chairman, Railway Board; Head of Sports Authority of India; Chairman, Airport Authority of India; Director General, Ministry of Civil Aviation; Heads of Ministry of Youth Affairs and Sports, **shall ensure taking up rain water harvesting/adoption of artificial recharge to ground water in the country by their respective organizations/Departments, within a period of 365 days from the date of receipt of this direction, to augment ground water resources and to save it from further depletion.***

*2. The above authorities shall obtain site-specific designs and other technical guidance from the Regional Director/Office-in-Charge of Central Ground Water Board or the Ground Water Department of the State/Union Territory.*

*3. The Regional Director/Officer-in-charge of Central Ground Water Board or the Ground Water Department of the State/UT, upon request from the above authorities shall extend all necessary technical assistance/design input.*

*4. The authorities mentioned in the directions No. 1, shall intimate the action taken report in this connection, to Central Ground Water Authority within a period of 90 days of completion of rainwater harvesting/recharge structure.”*

124. Another direction was issued vide instruction no. 26-1/CGWA/D1/09/743/783 dated 08.10.2009, directing all residential group housing societies/institutions/schools/hotels/industrial establishments falling in the over-exploited and critical areas as specified in the Schedule, to adopt roof top Rain Water Harvesting systems in their premises. They were directed to complete the systems, by May 2010.

125. CGWA issued a new set of Guidelines namely “Criteria for Evaluation of Proposals/Requests for Ground Water Abstraction” (hereinafter referred to as ‘**Guidelines 2012**’) which came into force on 15.11.2012.

126. **Guidelines 2012** laid down different parameters for notified areas and non-notified areas. Chapter A with the title ‘Notified Areas’ said that permission to abstract ground water through any energized means will not be accorded for any purpose other than drinking water. In para II, it provided that NOC can be accorded for construction of ground water abstraction structures/replacement of existing defunct well for drinking purpose only to:

- a. Government department/Agency/Undertaking entrusted with the water supply*
- b. Other Government organizations/State Government Guest Houses/Registered Housing societies*
- c. Schools/educational & State/Central Government recognized research Institutions/ Universities*
- d. Hospitals.”*

127. It further stated that NOC for items (b) to (d) will be considered only if Water Supplying Department is not providing adequate water in the area/ premises. Further it laid down pre-conditions for grant of NOC for abstraction of ground water to categories (a) to (d) as under:

- “1. Maximum diameter of the groundwater abstraction structures should be restricted to 150 mm (6 inches) only and capacity of the pump should not exceed 1 HP. In case of Government water supply agencies, housing societies, tube well size/dia. & HP of*

- prime mover can be more depending on the ground water availability and requirement.
2. Concurrent with the construction of groundwater abstraction structures, the **organization shall undertake artificial recharge to groundwater through rain water harvesting structure in the premises** within 45 days of issuance of NOC and will confirm to the Authorised Officer for verification.
  3. **Water meter installation in the abstraction structure is mandatory** and confirmation of water meter installation shall be given to the Authorised Officer under intimation to the concerned Regional office of CGWB immediately after construction. **The daily water meter reading should be maintained and quarterly report should be submitted to Authorised Officer.**
  4. The water from the groundwater abstraction structures will be used for drinking and domestic purposes only.
  5. All details of the drilling like rock formations encountered, the depth and diameter of the constructed groundwater abstraction structures, type of pipes used, yield of bore well/ tube well (Fracture zones encountered/zones tapped) and ground water quality etc. have to be furnished to the nodal agency authorized by district administration head within 15 days of the completion of the construction.
  6. The permission for construction of groundwater abstraction structure would be valid for a period of six months from the date of issue of NOC.
  7. The NOC issued would be non-transferable.”

128. Another category, “Individual Household” also could be accorded NOC for drinking purposes. Conditions for the same, provided in Guidelines 2012, read as under:

“e. For Individual households:

1. Permission to be granted only for such cases where public water supply system does not exist. The permission shall be valid only till such time there is no public water supply provided. In that case, the abstraction structure shall be exclusively utilized for artificial recharge to groundwater or sealed.
2. A certificate from the water supply agency regarding non-availability of government water supply to the area/individual is to be submitted by the applicant.
3. The premises should have only one Groundwater abstraction structure (either existing or new) to meet the drinking and domestic requirements. No tube-well/bore-well will be constructed, if any working tube-well already exists. In case the existing well has become non-functional and is to be replaced, it should be converted into recharge well, if possible or properly sealed and no water be pumped from it. **An undertaking as per Annexure-II is to be submitted by individual.**
4. The person(s) intending to construct new tube-well will seek permission from the Authorized officer/ Advisory Committee,

at least 30 days in advance along with the name and address of the drilling agency, which will undertake construction of tube-well. Authorities/Nodal Agency can ask the user to supply additional information.

5. The maximum diameter of the tube-well should be restricted to 110 mm (4 ½ inches) only and the capacity of the pump should not exceed 1HP. In case of deep water level the capacity/dia. of the structure will be decided by the Authority based on the site specific recommendations.
6. **Concurrent with the construction of groundwater abstraction structure, the owner of the tube-well shall undertake artificial recharge to groundwater through rainwater harvesting in the premises.**
7. The water from the tube-well/bore-well will be used exclusively for drinking and domestic purposes only within the premises.
8. All details of the drilling like rock formations encountered, the depth and diameter of the constructed tube-well, (Fracture zones encountered/zones tapped) type of pipes used in tube well, yield of bore well/tube well and ground water quality etc., shall be kept for record and are to be provided at the time of inspection.
9. Any violation of the above conditions will attract legal action under section 15 of the Environment (Protection) Act, 1986.

*In case the notified area is de-notified subsequently, the conditions pertaining to “non-notified areas” shall be followed.”*

129. **Guidelines 2012** said, if a notified area is subsequently de-notified, conditions pertaining to non-notified areas shall be followed.

130. Chapter B of **Guidelines 2012** dealt with “non-notified areas”. It is stated that NOC for ground water withdrawal will be considered for **industries/infrastructure projects** which are either **new or under expansion** as per the criteria given in Para I to VI, which reads as under:

**“B. NON-NOTIFIED AREAS**

*NOC for Ground Water withdrawal will be considered for Industries/Infrastructure projects **which are either NEW or under EXPANSION** as per the criteria given below:*

**I. Industries**

<b>Category*</b>	<b>Recycle/Reuse</b> <i>(for various purposes except recharge to ground water)</i>	<b>Withdrawal permitted</b> <i>(% of proposed recharge)</i>
<i>Safe</i>	<i>Mandatory recycling and reuse of water</i>	<i>NOC is required for groundwater withdrawal if quantity of groundwater abstraction exceeds 100 m<sup>3</sup>/day. AR to groundwater to be adopted.</i>

		However, <b>Industries under B-VI have no exemption from obtaining NOC.</b>
Semi-critical	Major and Medium industries shall recycle and reuse at least 50% of the waste water	Withdrawal may be permitted subject to undertaking of recharge** measures. The <b>withdrawal should not exceed 200% of the recharged quantity.</b>
Critical	Major and Medium industries should fully recycle and reuse the waste water	Withdrawal may be permitted subject to undertaking of recharge** measures. The <b>withdrawal should not exceed 100% of the recharged quantity.</b>
Over-exploited <b>(except industries falling under category mentioned in B(VI))</b>	Full utilization of recycled water and reuse of water should be mandatory	Withdrawal may be permitted subject to undertaking of recharge** measures. The <b>withdrawal should not exceed 50% of the recharged quantity.</b>

\*The present guidelines will follow the assessment of Ground Water Resource Estimation (GWRE) 2009 till it is revised.

\*\*The **recharge should be implemented within the premises and/or preferably in the same water shed/assessment unit.** Detailed Project Proposal (DPR) shall be included along with the application for NOC.

## **II. Infrastructure Projects**

(SEZ, Group Housing projects, Residential townships, Hospitals, Educational Institutions, Roads, Bridges, Technology parks, Malls, Multiplex, etc.)

- a. Run-off from the entire project area is to be utilized for artificial recharge to ground water unless risk of contamination exists or area is water logged. The runoff from the entire premises shall be utilized for harvesting/ storage also, apart from recharge.
- b. The quantum of ground water for usage other than drinking/ domestic shall not exceed 25% of total ground water abstraction in case of Housing projects/ Residential Townships.
- c. Proponents are to submit a status report stating the quantum of water required and the quantity that would be provided by the Government Water Supplying agency. This should be supported by a letter from the agency.

## **III. Areas Having Specific Depth Zones Notified:**

- a. In areas where specific depth zones are notified, permission to withdraw groundwater can be considered based on the site specific recommendations of Regional Directorate of CGWB from the depth zones, which are not coming under the notification.

## **IV. Mining and Dewatering Projects**

Abstraction of ground water by mining industries intersecting water table for dewatering of mine pit water, and dewatering ground water for basement construction of buildings, etc., may be

permitted subject to the following conditions in addition to those already specified under Para B-I.

- a. The dewatered quantum of water is to be put to gainful use. This may include water supply and provide to water supply agencies, agriculture, dust suppression by the industry, utilization by the mining industry, utilization for artificial recharge to groundwater, etc.
- b. Piezometers for monitoring the ground water level are to be mandatorily installed within the premises and in peripheral areas. The record of water level data be maintained and to be provided periodically or whenever demanded by the regulating agency.
- c. Wherever the mines/dewatering project is situated in the coastal area special care should be taken to prevent sea water ingress. This should be supported by a technical evaluation report.
- d. In case of mining projects detailed and continuous study on the groundwater regime, including groundwater modeling should be carried out and the results should be submitted to the Regional Directorate of CGWB periodically.

**V. Abstraction of Saline Ground Water by Industries/ infrastructure Projects**

Industries/infrastructure projects desirous of utilizing saline ground water would be permitted to extract saline groundwater. However, due care to be taken in respect of disposal of the effluents by the units so as to protect the water bodies and the aquifers from pollution. Proposals pertaining to such cases must have a detailed project report elucidating the mechanism of handling the effluent water and its various uses. All precautions must be taken for protection of environment especially fresh water aquifers in and around the area. Large scale recharge mechanism should be adopted wherever feasible in such cases to improve the ground water conditions in the region.

**VI. Industries Using Groundwater as Raw Material and other Water Intensive Industries**

Industries using **water as raw material/water intensive industries like packaged drinking water, mineral water industries, distilleries, breweries, soft drink manufacturing industries, textiles, paper & pulp, etc. shall not be granted NOC for groundwater withdrawal from OE areas.** In Safe, Semi-Critical & Critical areas NOC for ground water withdrawal is mandatory for these industries as per Section B-1. However, ground water withdrawal will be limited as follows:

<b>Category</b>	<b>Ground water withdrawal limit</b>
Safe	Withdrawal limited to 200% of ground water recharge
Semi-critical	Withdrawal limited to 100% of ground water recharge
Critical	Withdrawal limited to 50% of ground water recharge
Over-exploited	<b>No permission for industries under this category</b>

131. Some further conditions are provided in clause D as under:

**“D. OTHER CONDITIONS (Applicable for all cases):**

- a. Sale and supply of raw/unprocessed/untreated ground water by unauthorized agencies for commercial use is not permitted.
- b. **Non-compliance of conditions mentioned in the NOC may be taken as sufficient reason for cancellation of NOC accorded/ non-renewal of NOC.**
- c. **Wherever State Government Authorities are in existence to manage and control ground water regimes, the Groundwater Regulation would be done by them.** The State Ground Water Authority (SGWA) shall send a quarterly progress report to CGWA for records.
- d. In case of any delay in executing the project for bona fide reasons within the set time, for which NOC has been granted, the firm shall apply to CGWA for extension. CGWA may consider extension based on its merits.
- e. No application for NOC shall be entertained without proper referral letters from the statutory authority (Central and State Govt. Dept and Agencies).
- f. The referral letter shall contain verification on the quantum of water for the industry/project with detailed break up of groundwater consumption, recycle & reuse of the waste water, so that the wastage of the precious resource can be avoided. In case this is not given by the referral authority, applicant should obtain a letter from the Industries Dept/Project Sanctioning Authority on the same line.
- g. The CRZA rules and regulation shall be applicable wherever in vogue.
- h. No permission required for withdrawal of ground water from any area if withdrawal is done through non-energized means.
- i. Mandatory clause on RWH may be relaxed in case of water logged/ shallow water level (<5 m bgl during pre-monsoon) areas.
- j. **Relaxation in the quantity of ground water withdrawal in over-exploited areas, and/or quantity of recharge being affected by the firm can be permitted by CGWA if it feels it absolutely necessary in national interest.**
- k. The artificial recharge proposals are required to be vetted by any competent authority of State/ Centre.
- l. **Treated water shall not be used for recharge to ground water, since it may contain heavy metals & other toxic elements. The treated waters shall be fully used by the proponent or any other agency, who can utilize it without contaminating the underlying aquifer / water bodies.**
- m. NOC issued is non-transferable.”

132. Thus **Guidelines 2012** show that study of State wise resources as on 31.03.2009 was available, showing that out of 5842 assessment units (Blocks, Mandals, Talukas, districts), 802 were over-exploited, 169 critical, 523 semi-critical, 4277 safe and 71 saline. Annual replenishable ground water resources was estimated as 431 billion cubic meters (hereinafter

referred to as 'bcm'), net ground availability was 396 bcm and overall stage of ground water development of the country was 61%.

133. **Guidelines 2012** further stated that CGWA has notified 82 areas for the purpose of regulation of ground water development. District Administrative Head i.e. Divisional Commissioner or District Magistrate in case of Administrative Block or Taluka or Head of Municipality in case of municipal area of notified area, was appointed Authorized Officer by CGWA under Section 4 of EP Act, 1986. All issues pertaining to grant of NOC for ground water withdrawal, checking violations, sealing of ground water abstraction structure, launching of prosecution against offenders, attending to complaints etc. were to be addressed by Authorized Officers. In "notified area", Guidelines said, that permission to abstract ground water through any energized means will not be accorded for any purpose other than drinking water. In notified area, NOC was open for sanction for drinking purposes only and that too to the limited categories of Government departments entrusted with water supply, other Government organizations and educational institutions-private or Governmental including research institutions/universities and also hospitals where water supply is not available from Government or semi-governments water supply departments. In non-notified areas, directions for grant of NOC for withdrawal of ground water to new and under expansions industries and infrastructure projects with certain conditions, were mentioned in **Guidelines 2012**.

134. Here again we find that CGWA, in respect of over-exploited and critical areas, assumed jurisdiction in a restricted manner by confining it to 82 areas which it had notified, though it is evident from Guidelines, that as per Ground Water Resource Estimates of 2009, 802 areas were identified as over-exploited and 169 as critical and 523 semi-critical. This

restricted regulation assumed by CGWA was clearly in defiance of dictates of Supreme Court in ***M.C. Mehta vs. Union of India & Others. (1997)*** (*supra*).

135. At this stage, we find that ***OA No. 59/2012, Vikrant Kumar Tongad vs. Union of India & Others*** was filed before Tribunal, raising grievance that there is under regulated, large scale dewatering of areas particularly in NOIDA and Greater NOIDA, by various construction companies, excessive use of ground water and non-compliance of notifications and guidelines issued under EP Act 1986 which is causing depletion of ground water level in district Gautam Buddha Nagar, (State of Uttar Pradesh). Applicant, Vikrant Kumar Tongad requested Tribunal to direct authorities concerned to, make proper assessment of depletion in ground water level in district Gautam Buddha Nagar, stop dewatering activity in violation of guidelines, regulate ground water extraction for commercial, industrial, residential and other purposes, stop illegal water packaging units, make assessment of their impact on ground water, implement regulations related to ground water harvesting and take penal action against defaulting industries, infrastructure units and establishments etc. State of UP contested the matter by filing reply dated 06.02.2013 wherein it admitted depletion of ground water level in NOIDA and Greater NOIDA, at certain places, but pleaded its compulsion on the ground of fulfilment of daily requirement of urban and rural populace. It also brought before Tribunal the efforts taken by State of UP for conservation of ground water resources by taking steps as under:

- (i) An Executive Committee under Chairmanship of Chief Secretary, Government of UP was constituted in 2004 to review rain water harvesting and ground water recharge programmes in State of UP;

- (ii) Roof top rain water harvesting systems was made mandatory for individual plots having size of 300 square meters or more, made compulsory for existing as well as new Government and Semi-Government buildings;
- (iii) Housing schemes/plans of 20 acres or more at the layout level, 5% of total areas was to be kept aside for pond/water bodies while maximum depth of ponds is to be kept 3 meters;
- (iv) Pucca construction in parks would be allowed only up to 5% of total area and as far as possible, pavements would be made of permeable or semi-permeable/perforated material;
- (v) For new schemes, geological and hydrological surveys need be carried out so that ground water recharging system can be adopted as per local conditions;
- (vi) For monitoring of ground water level and assessment of ground water quality in all industrial units, installation of piezometers (ground water monitoring system) was made compulsory;
- (vii) Steps were taken for spreading awareness amongst general public;
- (viii) Ground Water Department of State was assigned job of regular monitoring of ground water level, in both, urban and rural areas and also to conduct block wise ground water resource estimation.
- (ix) Central Government had not framed any norms for ground water resource assessment in urban areas but the State Government of U.P. issued various Government orders dated 12.04.2001, 08.09.2004, 19.11.2004, 02.12.2004, 28.09.2004, 25.04.2006, 01.07.2008, 19.06.2009 and 05.08.2010 wherein, besides other thing, more emphasis was laid on rain water harvesting.

136. A separate reply was filed by CGWA, dated 12.02.2013, wherein it referred to Guidelines 2012 and reiterated that State wise assessment of

ground water resources was last assessed, as on 31.03.2009 which revealed 802 units in the category of over-exploited but there against only 162 units were notified and therein extraction of ground water was made impermissible for any purpose other than drinking water. In respect of Gautam Buddha Nagar, it pointed out that it had four blocks-Bisrakh, Dadri, Dankaur and Jewar. As per estimation on 31.03.2004, all the four blocks were in the category of safe but as per the estimation on 31.03.2009 Bisrakh and Dankaur entered the category of “semi-critical” and Block Jewar shifted to the category of “over-exploited”. Only Dadri could maintain its category of “safe” though ground water development had gone from 25.98% (as on 31.03.2004) to 73.03% (as on 31.03.2009).

137. CGWA, however, did not give any reason, why despite identification of large number of units as over-exploited only fraction thereof were notified. Boldly it continued to ignore and defy mandate of Supreme Court, given in ***M.C. Mehta vs. Union of India & Others (1997) (supra)***.

138. From the record, we find that application filed by Vikrant Kumar Tongad was admitted on 21.11.2012 and an interim order was also passed on 11.01.2013 granting injunction against abstraction of ground water by builders in NOIDA and Greater NOIDA.

139. When the above matter was pending, CGWA issued an **additional Guideline/criteria** which **came into force on 05.04.2013**, permitting abstraction of saline ground water in notified areas subject to certain conditions mentioned therein.

140. At this stage, one more application i.e., **OA No. 108/2013, Legal Aid National Green Tribunal Bar Association vs. NCT of Delhi & Others** was filed under Section 18(1) read with 14, 15 and 17 of NGT Act, 2010 which raised grievance concerning illegal abstraction of ground water

in State of Delhi resulting into abnormal fall in ground water level. It refers to a notification dated 12.07.2010 published in Delhi Gazette dated 9<sup>th</sup>-15<sup>th</sup> July, 2010 issued by Lieutenant Governor of National Capital Territory of Delhi, in exercise of powers under Section 5 of EP Act 1986 stating that no person etc. shall draw ground water through bore well or tube well (new or existing), without permission, for domestic, commercial, agriculture and/or industrial uses. Applicant therein sought relief from this Tribunal directing authorities concerned to implement relevant provisions for effective management and regulation of ground water and rain water harvesting. This application was taken up on 23.04.2013 and notices were issued to the respondents. Tribunal required respondents to specifically place on record how many bore wells/tube wells were working in Delhi and how many of them were authorized or unauthorized. In the reply filed by Delhi Jal Board and other authorities, it was stated that there were 106 tube wells operating with permission and 205 were functioning unauthorizedly and illegally. Tribunal found that the persons operating tube wells, illegally, were not paying any charges to the authorities and it had become an incentive for illegal and unauthorized use of ground water leading to depletion of underground water and the common problem of water scarcity to the people of Delhi. Consequently, a Committee was constituted to collect complete data of legal and illegal tube wells working in NCT of Delhi, take potential action against illegally operating tube wells/bore wells, recommend measures to be taken to prevent fall of level of ground water in Delhi and also to suggest methods and means for encouraging rain water harvesting and efforts for recharging level of ground water in Delhi.

141. A similar grievance/complaint was made in **OA No. 179/2013, Raj Hans Bansal vs. Ministry of Water Resources & Others** in respect of

NCT of Delhi. Notices were issued in this matter to the respondents on 23.08.2013 and subsequently, it was clubbed with **OA No. 108/2013 (supra)** vide order dated 19.11.2013.

142. During pendency of above matters, **Guidelines 2012** underwent a minor amendment by **CGWA Notification dated 06.08.2014** stating that Guidelines/Criteria thenceforth will follow report on ground water resources estimation as on March 2011 for evaluation of project proposal of industries/infrastructures/mining, seeking ground water extraction.

143. Neither the above Guidelines resulted in any improvement to pathetic condition of constant depletion of ground water nor CGWA made any serious attempt for betterment of the situation. The water level continued to deplete.

144. Complaints about ineffective, inadequate and improper regulatory measures adopted and/or omissions on the part of CGWA, and indiscriminate extraction of ground water continuously, across the country, were brought before Tribunal in several other matters. One of such matters is **OA No. 176/2015 (supra)** wherein grievance raised was that large number of hotels in State of UP were drawing ground water for commercial purposes without having any permission/sanction from CGWA and authorities including UPPCB, CPCB; and that CGWA is not taking any action against them though their action of withdrawal of ground water illegally is causing harm to environment, ground water level and global warming. This application was entertained and notices were issued to the respondents on 26.05.2015. It was found that 3 hotels namely Hotel Holiday Regency, Moradabad, Hotel Clark Awadh, Lucknow and Hotel Country Inn, Sahibabad were extracting ground water without permission while Hotel Sunshine Park, Ghaziabad claimed that it was

having a separate water connection from Ghaziabad Nagar Nigam. Hotel Raddisson Blu, Kaushambi informed that it has both sources of water i.e. ground water and water supply from Nagar Nigam. Extraction of ground water was not with the permission of CGWA though after filing of OA, some hotels moved application and subsequently got permission from CGWA.

145. CGWA, in response, relied on **Guidelines 2012** and took the stand that it is regulating only notified areas where abstraction of ground water is permissible only for drinking water but in non-notified areas the permission can be granted subject to conditions mentioned in Guidelines 2012.

146. Thereupon, CGWA issued another set of Guidelines (a draft at that stage) namely “Guidelines/Criteria for evaluation of proposals/request for ground water abstraction”, (hereinafter referred to as “**Guidelines 2015**”), giving effect from 16.11.2015, claiming that the same have been framed as per Tribunal’s direction for further betterment of ground water regulatory processes. CGWA invited objections/suggestions/comments till 15.01.2016. These Guidelines show that latest assessment of State wise ground water resources was available to CGWB as on 31.03.2011. According to which, out of 6607 assessment units (Blocks, Mandals, Talukas, districts), 1071 were over-exploited, 217 critical, 697 semi-critical, 4580 safe and 92 saline. Annual replenishable ground water resource was estimated as 433 bcm and net ground water availability as 398 bcm. Overall stage of ground water development of country was 62%. Guidelines 2015 also show that till that time, CGWA had notified only 162 areas for the purpose of regulation of ground water development. Guidelines 2015 sought to supersede all earlier Guidelines w.e.f. 16.11.2015. In respect of notified areas, it provided that permission to abstract ground water through any energized means will not be accorded

for any purpose other than drinking water. However, in respect of non-notified areas, CGWA followed very flexible stand which it had earlier also, but with certain conditions. It provided that NOC for ground water withdrawal will be considered for industries/infrastructure/mining projects, as per categorization of the areas i.e., safe, semi-critical, critical and over-exploited. It also said that industries using water as raw material/water intensive industries shall not be granted NOC for ground water withdrawal in over-exploited area.

147. The ineffectiveness and casual approach of CGWA was brought to the notice of Tribunal, with further complaint that ground water level in entire country is continuously depleting and going down, in **OA No. 176/2015 (supra)**. It was also pointed out that by order dated 15.04.2015 in **OA No. 204/2014, Krishan Kant Singh vs. M/s. Deoria Paper Ltd.**, Tribunal directed that it shall be obligatory upon CGWA to ensure that any person operating tube well or any means to abstract ground water should obtain its permission and operate the same subject to law in force, whether it is existing unit or still to be established, and in compliance thereof, **Guidelines 2015** were published, inviting objections.

148. The matter of **Vikrant Kumar Tongad (supra)** came up for consideration on 26.07.2018. During the course of arguments, it was brought to the notice of Tribunal that water is depleting in certain areas regularly as per study of CGWA and, therefore, a Rational Policy has to be adopted so as to make water available to cope up the need of society, and simultaneously, preserving water for further generation by preventing wastage of preventable use based on the principle of “sustainable development”. It was also noticed that problem of depletion of ground water was not limited to Delhi or NCR but needs be considered for entire country and effective enforcement of regulatory measures PAN India,

particularly, in respect of semi-critical, critical and over-exploited areas. Draft Guidelines 2015 were also referred. Tribunal did not find effective regulatory measures either on the part of CGWA or concerned Ministry, hence, directed an expert from Ministry of Water Resources to remain present on next date with latest updates. Para 15 to 18 of order dated 26.07.2018 in **Vikrant Kumar Tongad (supra)** read as under:

“15. Certain Affidavits have been filed with regard to the inference about the extent of extraction of ground water. In its compliance report dated 31.05.2018 the Senior Town Planners, Department of Country Town and Planning, State of Haryana has suggested a formula for tentative calculation of water consumption for constructions which broadly is 0.75 kilo litre per sqm to 1 kilo litre per sqm. Actual requirement was found to be 2 kilo litre per sqm. for the building upto 20 stories if the number of storeys is more, the use of water per sqm. was more. On that basis it is suggested as follows:

<b>Sr. No.</b>	<b>Building/Tower</b>	<b>Factors for Water consumption (In Litres per sqm. of build up area)</b>
1.	Buildings upto 5 stories	750 litres per sqm.
2.	Buildings 5 to 10 stories	1000 litres per sqm.
3.	Buildings 10 to 20 stories	1500 litres per sqm.
4.	Buildings above 20 stories	2000 litres per sqm.

16. When the matter taken up for hearing today, learned counsel for the parties submitted that the concern for ground water depletion is not limited to Delhi or NCR. This Tribunal may, instead of going **into the issue limited to NCR region, consider various aspects of the said issue comprehensively including the existing mechanism for regulation of ground water extraction as well as recharge of ground water.**

17. On the one hand there is the need for the water which is the basic necessity, on the other compulsion of restricting its use in view of the fact that the availability of water is inadequate and level of water is depleting atleast in certain areas as per the study of Central Ground Water Authority. The Policy has to be rational, meeting the basic need of everyone and at the same time preserving the water for the future generation by preventing wastage or preventable use based on the principle of Sustainable Development. **Incidental to such policy is the issue of punitive measures and recovery of damages for those who have extracted ground water in the past who go on doing unauthorised/illegal extraction, leading to alarming depletion in the ground water.** Further question will be steps to be taken to tap all relevant sources specially the rain water harvesting, persevering the water bodies etc.

18. Our attention has been drawn in this regard to the guidelines for the criteria for evaluation of proposal for extraction of ground water w.e.f. 16.11.2015. These guidelines provide for notified and non-

*notified areas depending upon the availability of water and criteria adopted for permitting extraction and the area where there is water scarcity. Learned counsel for the Applicant submits that further guidelines have been prepared though the same may be at the draft stage.*

*For this purpose, we may direct an Expert from Ministry of Water of Resources to remain present on the next date with the latest updates.”*  
(Emphasis added)

149. In **OA No. 176/2015 (supra)**, Tribunal on 28.08.2018, taking note of complaints of inaction of CGWA, and ineffective regulation of extraction of ground water in critical areas, observed:

*“we are disappointed at the apathy shown by the CGWA. **On the one hand the CGHWA has classified over-exploited, critical and semi-critical areas for regulation, on the other it has refused to regulate such areas on a specious plea that it is only concerned with the notified area.** Being the Central Authority for the whole country under the binding mandate of the order of the Hon’ble Supreme Court, such apathy can hardly be appreciated and such pleas is against the concept of rule of law.”*

(Emphasis added)

150. Consequently, vide order dated 28.08.2018, Tribunal directed Ministry of Water Resources, in consultation with MoEF and Ministry of Agriculture, to forthwith review existing mechanism so as to ensure effective steps for conserving ground water, at least in areas which are over-exploited, critical and semi-critical. Tribunal further said, the **policy framework should include monitoring mechanism with provision for coercive measures required**, consistent with the directions of Supreme Court in ***M.C. Mehta vs. Union of India & Others (1997) (supra)***; policy must also **provide for recovery of damages for illegal drawl of ground water**; and **damages should include penalty as well as environmental compensation.**

151. On 29.08.2018, matter of ***Vikrant Kumar Tongad (supra)*** came up before Tribunal when it expressed its displeasure, for non-finalization of Guidelines, despite order of Supreme Court passed as long back as in 1996

in ***M.C. Mehta vs. Union of India & Others (1997) (supra)*** pursuant whereunto, CGWA was constituted by Government of India vide Notification dated 14.01.1997. Referring to all its earlier orders passed in ***Vikrant Kumar Tongad (supra)*** and also in some other cases which came up before Tribunal later, namely ***OA No. 176/2015 (supra)*** and ***OA No. 484/2015, Shailesh Singh vs. Hotel the Oberoi Amarvilas & Other*** (order dated 28.08.2018), it was observed that CGWA has failed to perform its duty of coming out with clear rational policy for conserving ground water despite Supreme Court orders in ***M.C. Mehta vs. Union of India & Others (1997) (supra)***. Tribunal also referred to its orders in ***OA No. 108/2013 (supra)***, ***OA No. 179/2013 (supra)*** and ***Appeal No. 67/2015, Apex Chambers of Commerce and Industries of N.C.T. of Delhi & Others vs. Govt. of NCT Delhi & Others*** which pertained to Delhi Jal Board, wherein stand of Board was that for commercial packaging or supply, permission to abstract ground water would not be granted. Hence Tribunal by order dated 10.07.2018 prohibited such abstraction.

152. In another matter taken up on the same date i.e., 29.08.2018 i.e., ***OA No. 411/2018, M/s. A-One Mineral Water Industry vs. Central Ground Water Authority & Others***, Tribunal deprecated and disapproved approach and working of CGWA including its Chairman and Administrator and required Secretary, MoEF&CC to look into the matter and report before Tribunal.

153. Several matters namely ***OA No. 59/2012 (supra)***, ***OA No. 108/2013 (supra)***, ***OA No. 179/2013 (supra)***, ***OA No. 176/2015 (supra)***, ***OA No. 484/2015 (supra)***, ***OA No. 327/2018, Shailesh Singh Vs Panchsheel Buildtech Pvt. Ltd. & Others.***, ***OA No. 115/2017, Shailesh Singh Vs. Central Ground Water Board & Others***, ***OA No. 411/2118 (supra)*** and ***Appeal No. 67/2015 (supra)*** came up on 22.10.2018 when no progress

was shown by the authorities before Tribunal, despite categorical orders passed earlier. Deprecating, Tribunal observed that the authorities are comfortably sleeping over the matter, and in spite of pendency, no concrete steps were shown to have been taken by them. The matter was adjourned to 12.11.2018 directing Secretary, Water Resources, Govt. of India to remain personally present to show cause why action for defiance and non-compliance of Tribunal's order be not taken.

154. All these matters led by **OA No. 59/2012 (supra)** came up before Tribunal on 12.11.2018. In its order, Tribunal noticed that even in over-exploited, critical and semi-critical area, with or without permission underground water continued to be extracted on a specious plea that though critical, the area was not notified and thus, not regulated. Before Tribunal, CGWA sought to disown its responsibility stating that water is a subject matter of 'State' and, therefore, Central bodies have limited role. Similar defence taken before Supreme Court, by Government of India, was already negated in **M.C. Mehta vs. Union of India & Others (1997) (supra)**, still CGWA repeated the same. This was deprecated by Tribunal. Various observations made by Tribunal, demonstrating failure of CGWA in functioning as per directions and observation of Supreme Court in **M.C. Mehta vs. Union of India & Others (1997) (supra)**, in paras 3 to 8, read as under:

*"3. As a result of the survey of the geographical areas in the country, over exploited, critical and semi critical areas have been declared. The CGWA had issued 2012 guidelines and **thereafter prepared draft guidelines on 16.11.2015 which are pending finalization for the last three years.** The Tribunal noticed that **even in over exploited, critical and semi critical areas, with or without permission, underground water continues to be extracted on a specious plea that though critical the area was not declared notified and is, thus, not regulated.** The CGWA has also sought to disown its responsibility by saying that the matter was State subject.*

*4. The Tribunal has passed several order prohibiting extraction of underground water for commercial purposes with or without permission. **Mechanical condition of requiring recharge of the***

**underground water, which does not actually happen, and on that basis permitting drawal of underground water for commercial purposes has been held to be unjustified.**

**5. The underground water has been found to be extracted for building construction, for bottling plants, for swimming pools, threatening availability of the underground in over exploited, critical and semi critical areas specially in absence of adequate steps for rain water harvesting for recharge of the underground water.**

**6. The plea that industries are allowed to draw underground water against charges is ridiculous and beyond comprehension in over exploited, critical and semi critical areas. It is against the precautionary principle, sustainable development as well as inter generational equity principle. One may understand the drawal of underground for drinking purposes where no other source for such purpose exists but for no other purpose, much less the industrial purpose such drawal of underground water can be allowed with or without payment in such areas. The Tribunal has also noted that drawal of ground water in the catchment areas of rivers may affect e-flow of the rivers which in turn affect aquatic life and the river water quality.**

*7. We do appreciate the difficulties of the agriculturists but the option of providing alternative of use of treated sewage water etc. or switching over to less water consuming crops needs to be considered. Equally significant is the need for checking contamination of underground water by who are discharging untreated effluents in the earth or in the water bodies. Comprehensive planning and execution thereof on the subject with utmost priority is necessary and absence thereof has led to emergency situation in certain areas.*

*8. In several orders, we have noted the apathy of the Authorities in the last six years in neglecting the subject in breach of the trust reposed in such Authorities. It was this concern that led to our earlier observations and direction to require the presence of Secretary, Department of Water Resources in person. We have no information about steps taken in compliance of earlier directions, including action for illegal activities of the CGWA except a statement that the said Authority is ill equipped. If so, we do not know why? We note that presence of the said Secretary today and also affidavit filed before this Tribunal on 16.10.2018 to the effect that policy framework has been evolved and re-framing of policy guidelines are “under consideration” for reference to the Ministry of Law.”*

(Emphasis added)

155. Thereafter, CGWA came up with a new set of Guidelines, vide Notification S.O. 6140(E) dated 12.12.2018, published in Gazette of India (Extraordinary), of the same date, titled as “Guidelines to regulate and

control ground water extraction in India”. It was given effect from 01.06.2019 (hereinafter referred as ‘**Guidelines 2018**’).

156. Para 2 thereof stated that these Guidelines shall supersede all earlier guidelines issued by CGWA and will have PAN India applicability.

157. Para 2.1 referred those categories of users who were exempted from obtaining NOC for ground water abstraction and read as under:

**“2.1. Exemptions**

*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 up to 1" diameter*
- iii. Agricultural users*
- iv. Armed Forces Establishments during operational deployment or during mobilization in forward locations.*

*The following categories of users shall be granted exemption from the requirement of NOC for ground water withdrawal, subject to submission of particulars as per the proforma (Annexure III) to CGWA.*

- i. Strategic and operational infrastructure projects for Armed Forces*
- ii. Defence Establishments and Paramilitary Forces Establishments*
- iii. Government water supply agencies in safe and semi critical areas*

*The agencies mentioned under Sl. Nos. i, ii and iii shall install digital water flow meters to monitor monthly ground water abstraction, construct observation wells (piezometers) equipped with Digital Water Level Recorders (DWLR) for regular monitoring of ground water levels if the proposed ground water extraction is > 10 m<sup>3</sup>/day. Data sharing mechanism will be the same as in Section 2.3.1.VII. They will also monitor ground water quality from the abstraction structures once in a year during the month of April/ May. Guidelines for construction of piezometer are given in Annexure IV. The ground water samples collected shall be analysed at an NABL accredited laboratory. The data on ground water abstraction, ground water levels and ground water quality shall be submitted to the concerned Regional Office of Central Ground Water Board on the web portal.”*

158. Para 2.2 deals with drinking and domestic use and said as under:

## **“2.2. Drinking & Domestic use**

*Request for NOC shall be considered only in cases where the water supply department/agency concerned is unable to supply adequate amount of water in the area. For granting NOC for ground water withdrawal for drinking & domestic purposes, two broad categories identified are as follows:*

- a) Individual households/connections*
- b) Infrastructure projects/industries/mining projects/water supply agencies/others”*

159. Para 2.2.1 deals with the conditions and procedure for grant of NOC to individual household. Para 2.2.2 deals with infrastructure projects/industries/mining projects/public water supply agencies/ others requiring water only for drinking & domestic use. These paras 2.2.1 and 2.2.2 read as under:

### **“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. NOC for ground water extraction shall be granted subject to the following conditions:*

- i. Application for NOC shall be accompanied by the proof of ownership of household(s).*
- ii. NOC for new wells shall be granted only in such cases where public water supply system does not exist/water supply is inadequate.*
- iii. Applicant shall submit an affidavit on non-judicial stamp paper of Rs. 10/- confirming non/inadequate availability of public water supply.*
- iv. The NOC shall be valid for a period of 5 years from the date of issue or till such time public water supply is provided to the household, whichever is earlier. The applicant shall apply for renewal of NOC at least 90 days prior to expiry of its validity.*
- v. The user shall install digital water flow meter on the tube well/ bore well / dug well and submit the data through the web-portal*
- vi. The user shall submit ground water abstraction data through the web-portal.*
- vii. If the existing well becomes defunct within the validity period of NOC, the user can construct a replacement well under intimation to the Regional Director of CGWB. The defunct well shall be properly sealed as per guidelines given in Annexure V.*
- viii. The owner shall implement roof top rain water harvesting as per the prevalent building bye laws. However, no recharge shall be undertaken in areas prone to water logging (water levels within 5 metres below ground level).*
- ix. The owner shall pay Water Conservation Fee based on quantum of ground water extraction as applicable (Refer Sub-section 2.6).*

- x. *The NOC shall become void in case of change in land use of the property/ water use. It will then become mandatory for the owner to apply for fresh NOC.*

**2.2.2. Infrastructure projects/ industries/ mining projects/ public water supply agencies/other 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 will be granted based on the following conditions:*

- I. *Application for NOC shall be accompanied by the following documents:*
- i) *Approval in the form of Terms of Reference / Consent to Establish/Consent to Operate / License issued by the statutory bodies viz. Ministry of Environment, Forests& Climate Change (MoEF & CC) / State Level Expert Appraisal Committee (SEAC)/State Level Environment Impact Assessment Authority (SLEIAA) / State Pollution Control Board (SPCB) / Urban/ Rural Development Authority / Department of Industries or any other authority mandated by Central/State Government.*
  - ii) *Details of water requirement computed as per National Building Code, 2016 (Annexure VII), taking into account recycling/ reuse of treated water for flushing etc. (in case of new buildings).*
  - iii) *Affidavit on non-judicial stamp paper of Rs. 10/- by the applicant, confirming non/ inadequate availability of public water supply in case of users requiring ground water up to 10 m<sup>3</sup>/day for drinking/ domestic use.*
  - iv) *Certificate of non-availability of water from government water supply agency in case of infrastructure project/industry/mine requiring ground water in excess of 10 m<sup>3</sup>/day for drinking/ domestic use.*
  - v) *Water quality data of bore well/tube well/ dug well in respect of existing projects from NABL accredited laboratory.*
- II. *Use of recycled/ treated waste water for purposes like flushing, green belt etc. shall be mandatory for new projects requiring >12.5 m<sup>3</sup>/d of ground water.*
- III. *NOC for new /existing wells shall be granted only in such cases where the required amount of water is not available from the public water supply system.*
- IV. *If the existing well becomes defunct within the validity period of NOC, the user can construct a replacement well under intimation to CGWA on web portal. The defunct well shall be properly sealed (Refer Annexure V).*
- V. *The proponent shall mandatorily install roof top rain water harvesting system in the project area, wherever the ground water level is deeper than 5 metres below ground level.*

- VI. *The proponent shall pay Water Conservation Fee based on quantum of ground water extraction as applicable (Refer Sub-section 2.6).*
- VII. *Installation of digital water flow meter (conforming to BIS standard) in the abstraction structure(s) shall be mandatory and intimation regarding the same shall be communicated to the CGWA within 30 days of grant of NOC through the web-portal. Monthly water meter reading shall be digitally recorded and reports of ground water abstraction shall be submitted through the web portal to CGWA.*
- VIII. *Construction of purpose-built observation wells (piezometers) for monthly ground water level monitoring shall be mandatory for proponents drawing/ proposing to draw 10m<sup>3</sup>/day or more of ground water. Detailed guidelines for construction of piezometers are given in Annexure IV. Depth and zone of aquifer tapped in the piezometer should be commensurate with that of the pumping well.*
- IX. *Installation of Digital Water Level Recorders (DWLR) in the observation well shall be mandatory for projects requiring ground water from 50 to less than 500 m<sup>3</sup>/day in safe and semi critical assessment units and 20 to less than 200 m<sup>3</sup>/day in critical and overexploited assessment units. The list of safe, semi critical, critical, overexploited and saline assessment units is available at [www.noc-cgwb.gov.in](http://www.noc-cgwb.gov.in).*
- X. ***For projects requiring ground water extraction of 500 m<sup>3</sup>/day or more in safe and semi critical assessment units and 200 m<sup>3</sup>/day or more in critical and overexploited assessment units, installation of DWLR with telemetry in the observation well shall be mandatory.*** *The data server shall be maintained by the supplier of the instrument and access will be provided to CGWA through the web portal. It shall be the responsibility of the applicant to provide user ID and password to the above agency.*
- XI. *Monthly water level data shall be submitted to CGWA through the web portal.*
- XII. *All proponents shall monitor quality of ground water from the abstraction structure(s). Water samples from borewells/ tube wells / dug wells shall be collected during April/May every year and analyzed from NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.*
- XIII. ***The NOC shall be valid for a period of 5 years from the date of issue or till such time public water supply is provided to the project area, whichever is earlier.***
- XIV. *The proponent/ authorized representative of the occupants of the infrastructure project shall apply for renewal of NOC at least 90 days prior to expiry of its validity.”*

160. The indicative list of “Infrastructure projects” governed by para 2.2.2, as mentioned in annexure VI to the **Guidelines 2018**, referred to: residential apartment, Residential township, Office building, School College, University, Industrial Area (Drinking use), SEZ (Drinking use), Metro Station, Railway Station, Bus Depot, Airport, Seaport, Highway infrastructure, Fire station, Warehouse, Business Plaza, Malls & Multiplex, Hospitals, Nursing Homes, Water Park/Theme Park/Amusement Park, Resort, Hotel/Restaurant/Food Plaza, Holiday home/Guest house, Banquet Hall/Marriage Gardens, IT Complex, Logistics & Cargo, Clubs and Trade Centre.

161. Para 2.3 deals with industrial/mining/infrastructure projects and separate conditions are provided for industries, mining projects and infrastructure projects and the conditions are as under:

**“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 the Central Ground Water Authority.*

**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. The applications for NOC shall be considered as per the criteria given below.*

*I. Application for NOC shall be accompanied by the following documents:*

*i) Approval in the form of Terms of Reference/ Consent to Establish/ License issued by statutory bodies viz. Ministry of Environment, Forests & Climate Change (MoEF&CC) or State Pollution Control Board (SPCB) or State Level Expert Appraisal Committee (SEAC) or State Level Environment Impact Assessment Authority (SLEIAA) or Bureau of Indian Standards (BIS) or Food Safety and Standards Authority of India (FSSAI) or Department of Industries or any other authority mandated by Central or State Government.*

*ii) A valid Consent to Operate issued by the Industry Department/ Pollution Control Board/ copy of application submitted for renewal of Consent to Operate.*

*iii) Certificate regarding non/partial availability of fresh water/treated waste water supply from the concerned government*

agency in cases where requirement of ground water is more than 10 m<sup>3</sup>/day.

iv) An affidavit on nonjudicial stamp paper of Rs. 10/- regarding non availability of water supply from government agencies in cases where ground water requirement is up to 10 m<sup>3</sup>/day.

v) Water quality data of bore well/tube well/dug well in respect of existing industries from NABL accredited laboratory.

II. **Hydrogeological report** prepared by NABET accredited consultant shall be mandatory for users drawing/ proposing to draw ground water to the tune of 2000 m<sup>3</sup>/day or more in safe assessment units, **1500 m<sup>3</sup>/day or more in semi critical and critical assessment units and 1000 m<sup>3</sup>/day or more in over-exploited assessment units.** Pro-forma for hydrogeological report is given in Annexure VIII. Installation of **digital water flow meter** (conforming to BIS standard) in the abstraction structure(s) **shall be mandatory** and intimation of the same shall be communicated to the CGWA through the web portal within 30 days of grant of NOC.

III. **Monthly water flow meter readings shall be recorded and reports of ground water extraction shall be submitted to CGWA through the web portal.**

IV. Industries shall minimize the use of fresh ground water through recycling and reuse of waste water.

V. All industries abstracting ground water to the tune of 500 m<sup>3</sup>/day or more in safe and semi critical and **200 m<sup>3</sup>/day or more in critical and over-exploited assessment units shall be required to undertake water audit** (Annexure IX) through CII/ FICCI/ NPC certified auditors and submit report within three months of completion of the same to CGWA through the web portal. **The first audit shall be done within a year of grant of NOC.** Subsequent audits shall be conducted once in 3 years for Safe/Semi critical assessment units and once in 2 years in critical/over-exploited assessment units.

VI. Construction of observation well(s) (**piezometers**) **within the premises, for monthly ground water level monitoring, shall be mandatory for industries drawing/ proposing to draw more than 10 m<sup>3</sup>/day of ground water.** Depth and aquifer zone tapped in the piezometer shall be commensurate with that of pumping well/ wells. The number of observation wells (piezometers) shall be specified in the No Objection Certificate. Detailed guidelines for construction of piezometers are given in Annexure IV. Monthly water level data shall be submitted to the CGWA through the web portal.

VII. Industries drawing/proposing to draw ground water from 50 to less than 500 m<sup>3</sup>/day in safe and semi critical assessment units and those drawing/proposing to draw **20 to less than 200 m<sup>3</sup>/day of ground water in critical and over-exploited assessment units shall install digital water level recorder (DWLR) in the observation well for continuous monitoring of ground water levels.** Depth to water levels shall be monitored at 12 hour intervals and the DWLR data shall be retrieved and submitted to CGWA through the web portal.

VIII. Industries drawing/proposing to draw ground water to the tune of 500 m<sup>3</sup>/day or more in safe and semi critical areas and **200 m<sup>3</sup>/day or more in critical and over-exploited areas would be required to install DWLR with telemetry in the observation well for continuous monitoring of ground water levels.** The server will be maintained by the supplier of the instrument and access shall be provided to CGWA. It shall be the responsibility of the proponent to provide User ID and password to the CGWA.

IX. All industries shall monitor quality of ground water from the abstraction structure(s). Water samples from bore wells/tube wells/dug wells shall be collected during April/May every year and analysed from NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/organic compounds etc. Water quality data shall be made available to CGWA through the web portal.

X. All industries except those falling in red and orange categories as per CPCB (list available on [http://envfor.nic.in/sites/default/files/Latest\\_118\\_Final\\_Directions.pdf](http://envfor.nic.in/sites/default/files/Latest_118_Final_Directions.pdf)) shall implement roof top rain water harvesting within six months of grant of NOC. Recharge of harvested water shall not be permitted in areas prone to water logging (water level within 5 m.bgl).

XI. Industries shall deposit **Water Conservation Fee (WCF)** based on quantum of extraction as applicable (see Subsection 2.6). Industries which are not able to implement roof top rain water harvesting due to likely threat of pollution or any other valid reason shall be required to pay additional water conservation fee to compensate for the quantum of water that could have been recharged by the unit.

**XII. NOC shall be valid for a period of 3 years in safe and semi critical areas and 2 years in critical and overexploited areas.**

XIII. The applicant shall apply for renewal of NOC at least 90 days prior to expiry of its validity.

XIV. Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary measures to ensure prevention of ground water pollution (Annexure X).

**XV. Recharge/ injection of treated/untreated waste water within/ outside the plant premises is strictly prohibited.**

XVI. Existing industries, which have already obtained NOC and have implemented recharge measures as specified in the NOC, shall be exempted from paying WCF. However, if the industry is going for expansion, WCF will have to be paid for the additional quantum of ground water withdrawal as per applicable rates.

XVII. Existing industries, which have obtained NOC and adopted pond/ ponds but have not been able to implement the specified volume of recharge due to various reasons, shall have an option to de-adopt pond/ ponds and pay WCF within six months of the effectiveness of these guidelines. **If at the time of renewal it is**

**observed that the industry has not been able to comply with the recharge condition specified in the NOC, the industry shall have to pay WCF in addition to the penalty as specified in the Environment (Protection) Act, 1986.**

XVIII. Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled/treated waste water.

XIX. If an existing well becomes defunct within the validity period of NOC, the proponent shall construct a replacement well under intimation to the CGWA through the web portal. The defunct well shall be properly sealed (Annexure V).

XX. In case of change of ownership, new owner of the industry will have to apply for necessary changes in the NOC with documentary proof within 45 days of taking over possession of the premises.

### **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. NOC for abstraction of ground water shall be granted subject to the following conditions:

I. Application for NOC shall be accompanied by the following documents:

- i) Approval from statutory bodies viz. Ministry of Environment, Forests & Climate Change (MoEF & CC) or State Pollution Control Board (SPCB) or State Level Expert Appraisal Committee (SEAC) or State Level Environment Impact Assessment Authority (SLEIAA).
- ii) Certified mine lease map.
- iii) Document showing ownership/ lease of land.
- iv) Mining plan approved by the concerned Govt. agency/ department.
- v) Comprehensive report prepared by NABET accredited consultant on ground water conditions in both core and buffer zones of the mine, depth wise and year wise mine seepage calculations, impact assessment of mining and dewatering, details of recycling, reuse and recharge, reduction of pumping with use of technology for mining and water management to minimize and mitigate the adverse impact on ground water, based on local conditions. Format for report is given in Annexure VIII.

II. The water available from de-watering operations shall be put to gainful use such as water supply, irrigation, dust suppression, mining process etc.

III. Installation of digital water flow meter (conforming to BIS standard) in the abstraction structure(s) shall be mandatory and intimation of the same shall be communicated to the CGWA through the web portal.

IV. Water flow meter reading shall be digitally recorded and submitted to the CGWA through the web portal.

V. The proponent shall have to pay WCF based on quantum of ground water extraction as applicable (see Subsection 2.6).

VI. Construction of observation well(s) (piezometers) within the premises along the periphery, for monthly ground water level monitoring, shall be mandatory for mines drawing/ proposing to draw more than 10 m<sup>3</sup>/day of ground water. Depth and aquifer zone tapped in the piezometer shall be commensurate with that of pumping well/ wells. The number of observation wells (piezometers) shall be specified in the No Objection Certificate. Detailed guidelines for construction of piezometers are given in Annexure IV. Monthly water level data shall be submitted to the CGWA through the web portal.

VII. Proponents drawing/proposing to draw ground water from 50 to less than 500 m<sup>3</sup>/day in safe and semi critical assessment units and those drawing/proposing to draw 20 to less than 200 m<sup>3</sup>/day of ground water in critical and over-exploited assessment units shall install digital water level recorder (DWLR) in the observation well(s) for continuous monitoring of ground water levels. Depth to water levels shall be monitored at 12 hour intervals and the DWLR data shall be retrieved and submitted to the CGWA through the web portal.

VIII Proponents drawing/proposing to extract ground water to the tune of 500m<sup>3</sup>/day or more in safe and semi critical areas and 200 m<sup>3</sup>/day or more in critical and over-exploited areas would be required to install DWLR with telemetry in the observation well for continuous monitoring of ground water levels. The server will be maintained by the supplier of the instrument and access shall be provided to CGWA. It shall be the responsibility of the proponent to provide User ID and password to CGWA.

IX. In addition, the proponent shall monitor ground water levels by establishing key wells in the core and buffer zones as specified in the NOC.

X. All mining units shall monitor quality of ground water from the abstraction structure(s). Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analyzed from NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to the CGWA through the web portal.

XI. The NOC shall be valid for a period of 2 years from the date of issue of NOC.

XII. The proponent shall apply for renewal of NOC at least 90 days prior to expiry of its validity.

### **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. The NOC will be granted subject to the following conditions:

I. Application for NOC shall be accompanied by the following documents:

i) Approval letter from statutory bodies viz. Ministry of Environment, Forests & Climate Change (MoEF & CC) or State Pollution Control Board (SPCB) or State Level Expert Appraisal Committee (SEAC) or State Level Environment Impact Assessment Authority (SLEIAA) or Urban/Rural/Area Development Authority.

ii) In cases where dewatering of more than 100 m<sup>3</sup>/day is required, hydrogeological report prepared by NABET accredited consultant on the ground water situation in the area giving detailed plan of pumping, proposed usage of pumped water and comprehensive impact assessment of the same on the ground water regime. The report should highlight environmental risks and proposed management strategies to overcome any significant environmental issues.

iii) An affidavit on nonjudicial stamp paper of Rs. 10/- regarding non availability of water from any other source for construction in safe and semi critical areas.

iv) Certificate from the government agency regarding non availability of treated sewage water for construction within 10 km radius of the site in critical and over-exploited areas.

II. The proponent shall be required to adopt roof top rain water harvesting in the project premises after completion of building construction. Recharge measures shall not be implemented in areas prone to water logging (water level within 5 metres below ground level).

III. The proponent will have to pay WCF based on quantum of ground water extraction as applicable (see Sub-section 2.6).

IV. Proponent shall be required to carry out regular monitoring as mentioned below:

<i>Parameter to be monitored</i>	<i>Frequency</i>	<i>Submission to the CGWA</i>
<i>Dewatering discharge rate (using a digital water flow meter)</i>	<i>Continuous</i>	<i>Through the web-portal</i>
<i>Water levels in the surrounding area by constructing observation wells (piezometers) in consultation with the concerned Regional Office of CGWB</i>	<i>Fortnightly</i>	<i>Through the web-portal</i>

Monitoring records and results should be retained by the proponent for up to two years, for inspection or reporting as required by CGWA.

V. NOC shall be valid for the specific period as per the detailed proposal submitted by the project proponent.”

162. Para 2.4 deals with agriculture sector and said that it shall be exempted from obtaining NOC for ground water withdrawal but placed responsibility upon concerned State Governments to undertake sustainability of ground water source. Para 2.5 deals with the abstraction of saline/contaminated ground water. It is said that 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. The list of such assessment units having saline ground water at all depths as per the latest assessment of dynamic ground water resources will be made available by the Authority in the web-based application system. Packaged drinking water units shall be encouraged to be set up in quality affected areas. All precautions must be taken for protection of environment, especially fresh water aquifers in and around the area. Other conditions for granting NOC would be the same as mentioned in Para 2.3 for industries and infrastructure projects, respectively. Some additional conditions were provided which we are omitting being non-relevant at this stage. Para 2.6 is a provision for Water Conservation Fee (hereinafter referred to as '**WCF**'), made in compliance of Tribunal's order dated 13.07.2017 in **OA No. 200/2014** dealing with Ganga matter, wherein it was observed that all users must be required to pay for ground water extraction. The rates of WCF were claimed to have been determined by CGWA after considering factors namely, i) **Cost of implementation of rainwater harvesting/artificial recharge structures** by industries/infrastructure units/mines which have been mandated to implement the same as per NOCs granted earlier; and ii) **charges** being levied by various State Governments **for use of surface water by industries.**

163. On 18.12.2018, leading cases **OA 176/2015 (supra)** and **OA 59/2012 (supra)** came up before Tribunal along with **OA 108/2013 (supra)**, **OA 179/2013 (supra)**, **OA 484/2015 (supra)**, **OA 327/2018 (supra)**, **OA 115/2017 (supra)**, **OA No. 411/2118 (supra)**, **OA 613/2017, Mohd. Javed Asghar vs. M/s Upper Ganges Sugar and Industries Ltd. (Distillery Unit) & Others** and **OA 614/2017, Mohd. Javed Asghar vs. State of U.P. & Others** and **Appeal 67/2015 (supra)**. After hearing, order was uploaded on 03.01.2019. Entire historical background and also litigation going on in Tribunal, in respect of massive abstraction of ground water and failure of statutory body like CGWA in effective regulation, consistent depletion of ground water level worsening the condition, was noticed and then Tribunal also examined Guidelines 2018. Deprecating the same, in para 22 to 27 of order dated 03.01.2019, Tribunal said:

*“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.”*

(Emphasis added)

164. Consequently, Tribunal directed not to implement said Notification.

Its direction in para 28, reads as under:

*“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.**”*

(Emphasis added)

165. Tribunal directed MoEF&CC 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 (over exploited, critical and semi-critical) areas by way of **appropriate replenishment practices which can be properly accounted and measured for, as well as to sustain floodplains of rivers in terms of e-flow and other water bodies**. Giving this direction in para 29 of the judgment, Tribunal directed MoEF&CC and also Ministry of Water Resources to finalize the issue of subject, inter-se, with regard to ground water reserve and its quality. Committee was to be constituted in two weeks and report was directed to given by Committee in two months. **Committee was also required to indicate projection of its impact study in the light of projected data for next 50 years (in phased manner with action plan for each decade)**. Thereafter, the concerned Ministry was to issue fresh guidelines and submit report to Tribunal on or before 30.04.2019. In para 32, Tribunal directed CPCB to 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. Tribunal further said that all the matters related to illegal extraction of ground water by individuals are disposed of with these directions.

166. Thus, vide order dated 03.01.2019, all individual matters relating to extraction of ground water illegally, stood disposed of. However, when the matters were next listed on 07.05.2019, Tribunal found that MoEF&CC has failed to perform its duty, and directions, issued by Tribunal vide order dated 03.01.2019, were not complied. In fact, Committee required to be constituted within two weeks, was actually constituted only on 29.03.2019. Tribunal deprecated it and said:

***“We do not appreciate such attitude of Government departments when under a statutory enactment, violation of orders of this Tribunal is a criminal offence. The Committee has not acted promptly and no significant progress has been brought to our notice. Lack of sensitivity of serious issues of environment such as fast depleting ground water is a matter of concern.”***

167. Having said so, Tribunal directed Committee to submit report positively by 30.06.2019, failing which Joint Secretary concerned of MoEF&CC was directed to remain present to explain as to why action be not taken for violation of Tribunal's orders. Further, report dated 30.04.2019 submitted by CPCB vide e-mail, was also considered wherein it had taken the stand that assessment of environmental compensation for illegal extraction of ground water has been done. This report was not accepted by Tribunal, giving following reasons:

***“i. The OCS areas which need regulation for conservation of ground water cannot be further treated separately as notified or non-notified. Conservation of ground water in the said areas is of equal necessity. Depletion of ground water in the said areas affects the sub-terranean flow and results in contamination of ground water and also poses a potential danger***

- for drying up of important natural resource in violation of established principle of 'Intergenerational Equity'.
- ii. **The compensation to be recovered for illegal extraction has to be deterrent specially when it is for commercial or industrial purpose and linked to the quantum of ground water extracted and the period for which such extraction takes place.**
  - iii. **Scenario analysis with robust scientific logic is required for all the classes considered in comparable terms which has not been done in the present report.**

168. CPCB was directed to submit fresh report on or before 30.06.2019.

169. Referring to ground water development on the basis of Guidelines 2015 for existing industries, infrastructure in the said mining projects, Tribunal said that it did not find any safeguards suggested to address the concern, earlier expressed against depleting ground water. It further held:

***"The mandate of CGWA is not exploitation of ground water in depleted areas but to conserve it. Any policy which results in further depletion obviously cannot be permitted in OCS areas. CGWA is free to lay down and follow stringent norms to ensure that there is no depletion of ground water in OCS areas and depleted water level is improved and replenished. Any policy has to be in that direction and not in reverse direction as is unfortunately being attempted by CGWA, as noticed in earlier orders."***

170. Tribunal also observed that MoEF&CC must come up with an appropriate policy. Strangely, MoEF&CC took the plea that CGWA has not cooperated, which has caused delay. This stand was denied by CGWA. In this situation, Tribunal observed that the fact remains that failure is on the part of both. Entrusted with the responsibility of protecting ground water, CGWA and all other Authorities must cooperate and collaborate in the exercise to come out with a policy which must result in checking further depletion of ground water and enhance replenishment. Tribunal directed concerned Secretaries to monitor compliance of directions, having regard to the importance of the issue.

171. Mistakenly, Registry failed to notice that individual matters were already disposed of vide order dated 03.01.2019, and thus, should not

have listed on 07.05.2019, except the matter relating to status of compliance of directions of Supreme Court in NGT, to check depletion of ground water level in the country. This mistake occurred on 23.08.2019 also.

172. In the meantime, pursuant to order dated 03.01.2019 and 07.05.2019, MoEF&CC filed affidavit on 18.07.2019. Report of CPCB dated 26.06.2019 was also filed. Both these were taken into consideration on 23.08.2019 and order of Tribunal was uploaded on 11.09.2019.

173. The listing of disposed matter was noticed by Tribunal in the order dated 11.09.2019, hence, it was clarified that all the above matters be treated to be disposed of and shall be dealt with by concerned Regulatory Authority in accordance with law. The relevant extract of order dated 11.09.2019 passed in **OA 59/2012 (MA 34/2016 & MA 190/2016) (supra), OA 108/2013 (supra), OA 179/2013 (supra), Appeal No. 67/2015 with MA 107/2019 (supra), OA 176/2015 (supra), OA No. 484/2015 (supra), OA 327/2018 (supra), OA 115/2017 (supra), OA 411/2018 (supra), OA 613/2017 (supra) and OA 614/2017 (supra),** reads as under:

*“These matters involve the issue of conservation of ground water.*

*Vide order dated 03.01.2019 in O.A. No. 176/2015, this Tribunal directed as follows:*

*“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.**”*

***In view of above, the above matters having been disposed of were wrongly listed on 07.05.2019 and on 23.08.2019. The same be treated and disposed of and may be dealt with by the concerned regulatory authorities in accordance with law. The report of CPCB dated 26.06.2019 may be following on the subject of***

*assessment of recovery of compensation for illegal drawl of ground water apart from prosecution and stoppage of illegal drawl of ground water in accordance with law.”*

174. A separate order in **OA 176/2015 (supra) (MA 133/2015)** was uploaded on the issue of conservation of ground water. Considering the said issue, Tribunal found that the report was deficient on the issue of prevention or depletion of ground water and the same was not addressed at all. No effective enforcement mechanism of conditions, subject to which ground water extraction may be allowed in OCS areas, was provided. Mere condition of recharge without clear strategy of enforcement was not found appropriate and adequate safeguard, for permitting extraction of ground water. The report left many issues for being considered. Some aspects of the report were considered in paras 20 and 21 of the order dated 11.09.2019 passed in **OA 176/2015 (supra)**, which read as under:

*“20. The **report of CPCB dated 26.06.2019 deals with methodology for assessing environmental compensation (EC)**, Formula for Environmental Compensation for illegal extraction of ground water, Environmental Compensation Rate (ECRGw) which has been further dealt with in different categories, i.e. ECRGw for Drinking & Domestic use for household purposes and those for institutional activity, commercial complexes, townships etc., ECRGw for Packaged Drinking Water Units, ECRGw for Mining, Infrastructure and Dewatering Projects, ECRGw for Industrial Units, Deterrent factors to compensate losses and environmental damage (for packaging drinking water units, mining, industrial and commercial purposes) and Deterrent Factor . Formula for Environmental Compensation for illegal extraction of ground water is as follows:*

**“5. Formula for Environmental Compensation for illegal extraction of ground water**

*The committee recommended that the formula considering water consumption, no. of days, rates for imposing Environmental Compensation based on the purpose for illegal abstraction of ground water as well as the deterrent factor detailed below:*

$$\text{ECGw} = \text{Water consumption per day} \times \text{Environmental Compensation rate for illegal extraction of ground water (ECR}_{Gw}) \times \text{No. of Days} \times \text{Deterrent Factor}$$

*Where, water consumption is in m<sup>3</sup>/day and ECRGw in Rs/m<sup>3</sup>”*

All other details can be seen from the report which is available on the website of CPCB. The report also gives recommendations as follows:

21. The committee has given following recommendations:

1. In case of **fixation of liability, it always lies with current owner of the premises** where illegal extraction of groundwater is taking place.
2. **Violation duration** may be assumed as **at least one year** in case where no evidence for period of installation of **borewell could be established**.
3. For illegal industrial ground water abstraction, where metering system is not available, water consumption may be estimated as per consent conditions imposed by SPCB/PCC.
4. **Water intensive industries should only be permitted in safe, semi-critical and critical area, and should not be allowed to establish new industries in overexploited area.**
5. **Water in over-exploited area should be permitted only for drinking purposes** and industries established in this area without prior consent or NOC from CGWA or another concerned department must be closed down with immediate effect. No expansion in existing industrial activity should be permitted, irrespective of additional water demand arises or not.
6. **Present categorization of area (Over-exploited, Critical and Semi-Critical), as per CGWA shall be considered for calculation of EC, regardless of the area category when the period of violation started.**
7. In case of **all existing cases having more than 5000 KLD ground water demand, permission may be given only after examining scientific assessment of water availability and assessing intergenerational equity by CGWA.**
8. The industrial units should be directed to adopt State of the Art technologies, use of surface water, treated waste water and reduce specific water consumption, thereby ground water demand is reduced by 10% over three years' period. **The industries also be encouraged to create facilities for storage of excess storm water and adequate measures such as groundwater recharge as well as restoration of lakes /ponds in the vicinity of the industry.**
9. In addition, **all repeated violations will attract EC at 1.25 times the previous EC.**
10. Authorities assigned for levy EC and taking penal action are listed below:

S. No.	Actions	Authority
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1.	<i>To seal illegal borewell/tube-well to stop extraction of water and further closure of project</i>	<i>District Magistrate</i>
2.	<i>To levy ECGw as per prescribed method</i>	<i>District Magistrate/CGWA</i>
3.	<i>To levy EC on industries involved in illegal abstraction of Groundwater , as per the method prescribed in report of CPCB- “EC for industrial units”</i>	<i>CPCB/SPCB/PCC</i>
4.	<i>Prosecution of Violator</i>	<i>CGWA under Environment (Protection) Act, 1986 (or)</i>
		<i>SPCB/PCC under Water (Prevention and Control of Pollution), Act, 1974</i>

175. Tribunal then constituted another Committee comprising of Joint Secretary, MoEF&CC, concerned Joint Secretary, MoWR, CGWB, National Institute of Hydrology, Roorkee, National Remote Sensing Center, Hyderabad and CPCB to go into the following questions:

- “(a) Steps required to be taken for preventing depletion of ground water.*
- (b) Robust monitoring mechanism to ensure that no ground water is unauthorisedly extracted, including review of manning and functioning of CGWA.*
- (c) Robust mechanism to monitor conditions laid down for grant of permission for extraction of ground water.*
- (d) Recommendations in the report of the CPCB dated 26.06.2019 referred to above.”*

176. Tribunal, however, accepted report of CPCB with regard to compensation as an interim arrangement and directed that the same may be acted upon by Regulatory Authorities and compensation be recovered from violators, for the period of violation, which may be assessed on case to case basis. Further, **Tribunal said that report of CPCB that water intensive industries can be allowed even in semi-critical and critical area without any further safeguards, may not be acted upon, till further orders.**

177. The association of Industrial Manufactures, Ghaziabad filed **I.A. No. 640/2019** in **OA No. 176/2015 (supra)**, seeking review of order dated 11.09.2019 on the ground that order has caused prejudice to them, hence needs reconsideration. This I.A. was considered on 10.10.2019 and rejecting the same, in para 6, Tribunal said:

**“6. Since the OCS areas have been found to be seriously affected by over-drawl of ground water, regulation of such drawl for commercial purposes cannot be dispensed with for any industry even in industrial area. Availability of water for drinking is a first priority. The ‘Precautionary’ principle, ‘Sustainable Development’ principle and the Inter-generational equity are part of life and in absence of replenishment of ground water, unregulated drawl thereof cannot be held to be right of any commercial entity. Shortage of availability of water for commercial purposes cannot be remedied by drawl of groundwater in over exploited, critically exploited and semi-critical exploited (OCS) areas. Water is certainly a scarce resource and the industry has to put up with such scarcity. It is for the industry and the concerned authorities to find out alternative ways and means for sustenance of the industries instead of permitting indiscriminate drawl of groundwater in such areas till situation improves. Alternative means may be shifting to areas where water is not scarce or to processes where water is not required. As already noted, groundwater is depleting in such areas and measures are required to check such depletion. If industries continue to draw ground water without NOC from CGWA as per current guidelines and orders of this Tribunal in OCS areas, the industries will have to face legal consequence of such illegal action.”**

178. As per directions contained in order dated 11.09.2019, report submitted on 16.03.2020 was placed before Tribunal along with **OA No. 176/2015 (supra)** on 13.07.2020. It was brought to the notice of Tribunal that illegal extraction of ground water is neither being effectively checked nor there is any recovery of compensation from defaulters. In an article, published in **“Times of India”**, dated 06.06.2017, it was stated that four crore litres of water was being illegally extracted in Gurgaon daily. Similar complaints of huge quantity of ground water extraction by tanker mafias were reported in NCT of Delhi which require constant action by Regulatory Authorities and robust mechanism for effective review. A news item was published in daily newspaper **“Tribune”**, on 15.07.2020, under the title

“Decline in water table caused crack in Mahendragarh Field: Experts”. Drying of main rivers including Ganga due to depletion of ground water, water bodies running dry at alarming rate and extraction of ground water resulting in fall of water table beyond the level of replenishment, various studies and articles published in different magazines of repute etc. were considered by Tribunal in its order uploaded on 20.07.2020. In respect of State of Uttar Pradesh, in particular, district Gautam Buddha Nagar, Tribunal considered complaint of fast depletion of ground water due to large scale extraction by various commercial entities, including hotels in Ghaziabad, Moradabad and Agra etc. Giving reference of earlier orders passed from time to time, including order dated 03.01.2019, Tribunal observed that preparation of Guidelines, without studying “Impact Assessment” would be against the principle of “sustainable development”. The principal vulnerable features, on account whereof Guidelines 2018 were criticized and Regulatory Authorities were directed not to give effect to it, were noted in para 15 of judgment dated 20.07.2020, as under:

***“15. In its order of 03.01.2019, the Tribunal disapproved the notification, holding that ultimately, it is the result of all the measures, shown by the data on the ground, which has to be the basis of any policy and not just laying down of measures. It was observed that the notification granted exemptions in OCS areas without having regard to the impact on groundwater, or a roadmap for controlling the falling ground level. Doing so without impact assessment was against sustainable development.***

*Some further vulnerable features of the notification were noted 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.*

*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 could be allowed to get NOC and the said industries are in Annexure-VI.”*

179. Tribunal said that Guidelines had to show an application of mind as to how the Policy adopted by Regulatory Authorities would prevent extraction of water beyond desired level in OCS areas. Tribunal also noted its order dated 07.05.2019, considering CPCB report dated 30.04.2019, with regard to compensation regime, which was found unsatisfactory and CPCB was directed to give a fresh report observing that compensation to be recovered for illegal extraction has to be deterrent, especially when it is for commercial or industrial purpose, and should be linked to the quantum of ground water extraction and period for which such extraction takes place. It was also observed that scenario analysis with robust scientific logic is required for all the classes considered in comparable terms. Tribunal considered affidavit dated 16.03.2020, filed by CGWA for Ministry of Jal Shakti, and pointed out that **Committee report annexed to the affidavit continues to be entirely unsatisfactory.** The observations made in para 24 of the judgment dated 20.07.2020, are:

*“24. The matter is being taken up in continuation of order dated 11.09.2019. We have heard Shri Vikramjit Banerjee, learned ASG appearing for MoJS and CGWA, We have considered the CGWA affidavit dated 16.3.2020 filed for MoJS which annexes the report of the Committee purporting to be in compliance of Tribunal order dated 11.9.2019. **The situation continues to be entirely unsatisfactory. Several issues in the report are same which were rejected in the order dated 3.1.2019.** The MoJS appears to be avoiding its Constitutional obligation of complying with the judgement of the Hon’ble Supreme Court and repeated directions of this Tribunal. Surprisingly and regretfully, a wholly untenable prayer is made that the Tribunal should review its earlier orders, which have attained finality, never having been challenged. It is thus clear that there is no intent or effort to comply with the said orders. **The report is not in compliance of this Tribunal’s orders but rather, largely violates the spirit of the said mandate.** We proceed to record the reasons.”*

180. Several issues in the report were same as already rejected by Tribunal vide order dated 03.01.2019. Ministry of Jal Shakti was found avoiding its Constitutional obligation of complying with the judgment of Supreme Court and repeated directions of Tribunal. Observing that report

was not in compliance of Tribunal's earlier orders, rather violates their spirit, Tribunal gave its reasons, in para 25 to 30, as under:

- “25. The CGWA affidavit states that **the restriction on extraction of groundwater in OCS areas is likely to have adverse impact on industrial production, employment opportunities and GDP of some States**. It seeks vacation of the Tribunal order dated 03.01.2019, so as to issue NOCs for groundwater extraction as per proposed guidelines or as per 2015 guidelines.
26. **As mentioned earlier, the report practically reiterates the regime earlier brought out on 12.12.2018, which was rejected by the Tribunal on 3.1.2019** being against sustainable development and mandate of law laid down by the Hon'ble Supreme Court. We do not find it necessary to reproduce the report in extenso but refer to and comment upon the main aspects thereof.
- a. The report states at the outset, contrary to the Hon'ble Supreme Court judgment:  
“Water being a State subject, **initiatives on water management including conservation and water harvesting in the Country is primarily States' responsibility**. Further, to supplement the efforts of the State Governments, Government of India provides technical and financial assistance to encourage sustainable development and efficient management of water resources through various schemes and programmes.”  
However, as against the above stand, the report also mentions that the CGWA is vested with the regulation, control, management and development of groundwater in the country. It has issued guidelines (including the 2015 and the 2018 guidelines), and enumerated its various initiatives and policy decisions.
- b. For the same reasons for which notification dated 12.12.2018 was found unacceptable, the proposed recommendations, **liberalizing groundwater extraction across the board to certain categories without any impact assessment and effective checks, are against law**.
- c. Exemptions for infrastructure projects, MSMEs or other industries or commercial purposes except drinking water, where supply is not otherwise available in water stressed areas, will be against **sustainable development and public trust doctrine unless individual impact assessment is conducted and permitting such extraction found viable**.
- d. There has to be listing of priorities within available limited resources and unlimited demands and impact assessment of such activity and policy of permitting extraction has to be based on **carrying capacity in the form of the water levels**.
- e. No **road map has been provided how the new regime will check and neutralize falling ground water levels. There is neither a claim that in the last 24 years of regulation by the CGWA, ground water levels have improved, nor any projection for**

**future improved.** Data compiled by Niti Ayog in its report published in 2018 'composite water index' is clear evidence of over exploitation at several locations. Moreover, CGWA itself has conducted survey and identified 1868 out of 6585 assessment units as OCS areas. Its failure is in not having effective regulatory regime. There is no adequate implementation of conditions for drawal of ground water for commercial purposes. Such failure is shown by falling levels and news of **mafias engaged in illegal drawal of ground water in OCS areas without effective check.** Further liberalization will defeat the purpose of having CGWA and be contrary to the mandate of public trust doctrine. Effective steps for protecting ground water in OCS areas against **singularly commercial considerations** are critical.

f. The report observes:

“During the discussions, it was observed that ground water is a replenishable resource and the aquifer zones from which ground water is extracted gets replenished every year from rainfall and other sources. **Therefore, there is a need to extract groundwater by various users including industries/agriculture needs in safe, semi-critical and critical areas as space is to be created in the aquifers for replenishment of water through rainfall/other sources.** It is pertinent to mention here that in case we do not allow extraction of ground-water in these areas the precious rainfall may be lost through runoff as the void in aquifers may not be available for recharge purposes through rainfall.

In safe, semi-critical and critical areas, annual ground water withdrawal is less than the annual ground water recharge and in over-exploited areas, it exceeds annual recharge. In view of this,, the Committee was of the view that it may not be appropriate to club semi-critical and critical with over-exploited assessment units, provided necessary measures to compensate the ground water withdrawal are ensured and at no point groundwater extraction exceeds 100% of recharge. **Hence, the committee was of the opinion that two broad categories of assessment units namely i) over-exploited and ii) critical, semi-critical & safe be considered for framing the guidelines. Stricter regulatory regime was suggested for over-exploited assessment units to avoid further deterioration.”**

We find the statement that withdrawal to the extent of replenishment **must be done** to avoid wastage of rain water is contradicted by **continually falling levels of ground water in OCS areas.** There is no question of wastage of rain water where water level is falling. In such areas, the withdrawal has to be reduced not only to the extent of replenishment but to enhance the ground water to safe and sustainable levels. Replenishment and raising of water level are both important in OCS areas. Falling groundwater levels dry up water bodies and reduce the flow of the rivers. CPCB website acknowledges **351 river stretches as polluted for reasons including non-availability of flow which prevents adequate dilution capacity. This affects the aquatic life, wildlife and food-chain and the entire eco-system.**

- g. The report states, under the heading '**action being taken for preventing depletion of groundwater and recharge**':

*"The focus of this report is therefore to create a balanced approach, **with emphasis on demand side management and practical regulation that does not impede development.** Committee was also apprised about the fact that Water being a State subject, initiatives on **water management including conservation of ground water is primarily States' responsibility.** However, Central government supplements the efforts of states Government through technical and financial assistance."*

*There is clear contradiction in mentioning need for balanced approach on the one hand and **emphasis on the demand side.** Such approach is against the mandate of 'Sustainable Development', including Precautionary principle, intra and inter-generational equity and 'public trust' doctrine.*

- h. The report's recommendation under the heading '**Industry, Infrastructure and Mining projects**' that extraction of groundwater by existing industries need not be checked as it may obstruct growth, is an argument against the principle of 'Sustainable Development'. **There is no absolute right even of existing industries to continue to draw ground water without regard to depleting groundwater levels as held even in 2015.** Such extraction cannot be at the cost of environment and ignoring intra and intergenerational, precautionary and sustainable development principles. **Development and growth must be undertaken but not without ignoring the sustainable groundwater level.**
- i. Recommendation for robust monitoring mechanism by restructuring CGWA, strengthening manpower having network upto District Level etc. may be looked into by the concerned authorities and action taken for implementation so as to ensure that there is effective regulatory mechanism as per the mandate of law. Our observations are same with regard to robust mechanism to monitor conditions laid down for grant of permission for extraction of groundwater.
- j. Recommendation in para 13.0, on quantum of compensation and action required against violators, are contrary to CPCB recommendations for closing down industries in over exploited areas for extracting groundwater illegally, and cannot be accepted. The present proposal is against stringent action against violators committing criminal offence which cannot be appreciated. To regulate and control groundwater extraction in India, the overriding principle of carrying capacity has to apply to every category of commercial use of groundwater, including industrial use, mining projects, infrastructure projects. Compensation for unlawful groundwater extraction must be on the bases of **restitution and deterrence.**
- k. The water rates in para 6.0 of the report with regard to various categories including packaged water and beverages and mining infrastructure projects **in OCS have to be in the nature of deterrent because groundwater extraction for such purposes is not permissible beyond carrying capacity. The proposed rates do not meet such test.** Thus, unregulated drawal of water being a criminal offence under the law, **compensation may be**

**recovered as per CPCB report dated 26.06.2019 until any further appropriate mechanism is prepared.** The 2015 CGWA guidelines and the MoEF report itself provides that groundwater extraction for commercial purposes was impermissible in OCS areas. Instead of moving in that direction, present proposal is in reverse direction which is not permissible.

27. In terms of the Tribunal's previous orders (dated 03.01.2019, Paras 29 and 31, and dated 11.09.2019, Para 24), **the core issues that are required to be considered are:**

**a. Has a robust institutional monitoring mechanism been evolved**

- i. To define 'assessment unit' - wise carrying capacity and accordingly set (a) target replenishment levels and (b) plan for permissible levels of extraction, of ground water levels in OCS areas;**
- ii. to assign individual target replenishment levels as a condition for granting extraction permits, and to audit such replenishment by those who are extracting groundwater; as well as to audit and measure actual carrying capacity periodically;**
- iii. to monitor real-time implementation of conditions for permitting extraction of ground water;**
- iv. to withdraw permits for extraction of ground water failing target replenishment levels; as well as**
- v. to sustain the flow of rivers in terms of e-flows and sustain other water bodies?**

**b. Is there a provision for an impact study in light of projected data for the next 50 years (in phased manner with action plan decade-wise)?**

**c. Has an effective and measurable plan been prepared for preventing depletion and unauthorized extraction of ground water backed by requisite mechanism in the form of manning and effective functioning of CGWA so as to ensure sustainable ground water management in terms of the Hon'ble Supreme Court mandate by which CGWA was created?**

**d. Is the compensation regime against violators adequately deterrent?**

28. The answer is 'no'. If implemented, **the current report would nullify the mandate of the Hon'ble Supreme Court by seeking to deregulate ground water extraction, ignoring its impact on the e-flow of rivers, water bodies and overall sustainable management of scarce natural resources with emphasis on industrial development, without balancing development and environment. Irreversible damage cannot be allowed by extracting water beyond safe levels, without impact assessment.**

29. We, thus, hold that as per mandate of sustainable development under Section 20 of NGT Act, 2010, which has been held to be part of right to life under Article 21 of the Constitution, **the regulatory authority must direct its policy towards preventing further**

**depletion of and upgrading the groundwater levels based on impact assessment.** Extraction can neither be unregulated or allowed across the board without individual consideration. For this purpose, there is need to compile data by **mapping all the assessment units individually in terms of current and estimated water level, drawal and replenishment and preparing a management plan for all such units.** The CGWA being a statutory regulator for the country has to exercise **overriding power in the form of statutory regulatory orders.** It may have its own network and, to the extent found viable, utilize the network of existing Authorities like District Magistrates, Environment Departments, Departments of Irrigation and Public Health etc. **The ground water assessment has to be done annually and placed on the respective websites of the Districts or States.** Any extraction of groundwater has to be permitted keeping in mind availability of groundwater ensuring that there is no further depletion and ground water level remains at safe level.

30. At this stage, **we may notice that the regulatory mechanism of the CGWA has not been adequate, as the report also notes.** CGWA does not appear to have requisite strength nor enforcement mechanism nor strategies. This may be one of the reasons for failure in effective monitoring, defeating the object of law. This has led to large number of petitions before this Tribunal pointing out that illegal groundwater extraction was rampant. The plans for **rain water harvesting and many other steps to a great extent remain largely only on paper.** Remedial measures need to be taken in view serious challenges in protection of groundwater level, to save rivers and water bodies and the entire chain of environment.”

181. Thereafter, following directions were issued in para 39:

**“Directions**

39. In the light of the above discussion, we direct as follows:
- a. MoJS may ensure requisite manning and effective functioning of CGWA so as to ensure **sustainable ground water management** in terms of the Hon’ble Supreme Court mandate by which CGWA was created.
  - b. **Let CGWA and MoJS comply with the directions of this Tribunal in orders dated 3.1.2019, 7.5.2019 and 11.9.2019, to have a meaningful regulatory regime and institutional mechanisms for ensuring prevention of depletion and unauthorized extraction of ground water and sustainable management of groundwater in OCS areas. Regard must be had to water availability and safe levels to which its drawal can be allowed, especially for commercial purposes, based on available and assessed data in each “Assessment unit”.** Procedures for assessment of individual applications and institutional mechanism may be clearly laid down.
  - c. As per orders dated 3.1.2019, undertaking an impact study in light of projected data for the next 50 years (in phased manner with action plan decade-wise).
  - d. There must be **no general permission for withdrawal of ground water, particularly to any commercial entity, without**

**environment impact assessment of such activity on individual Assessment units in cumulative terms covering carrying capacity aspects by an expert committee.** Such permission should as per Water Management Plans to be prepared in terms of this order based on mapping of individual assessment units. Any permission should be for specified times and for specified quantity of water and not in perpetuity, and be necessarily subject to digital flow meters which cannot be accessed by proponents, with mandatory annual calibration by authorized agency at proponents' cost. **An annual review by independent and expert evaluation must audit and record ground water levels as well as compliance with the conditions of the permission.** Such audits must be published online for transparency and to track compliance and year-on-year change in ground water levels, and swift action taken against those who fail audit, including withdrawal of permission, blacklisting, initiation of prosecution and recovery of deterrent compensation as per CPCB regime. Records must be maintained online and for a sufficient and reasonable time.

- e. As observed in para **Error! Reference source not found.(a)** and **Error! Reference source not found.(a)** above, **all OCS assessment units must undergo water mapping. Water Management Plans need to be prepared for all OCS assessment units in the country based on the mapping data, starting with Over-exploited blocks. The Water Management Plans, data on water availability or scarcity and policy of CGWA must be uploaded on its website for transparency and public involvement. Such exercise may be done expeditiously, preferably within next three months.**"

182. Interestingly, Ministry of Jal Shakti, after referring to earlier orders and order dated 20.07.2020, passed by Tribunal, issued a fresh notification dated **24.09.2020**, published in Gazette of India (Extraordinary) dated 24.09.2020, laying down Guidelines to regulate and control ground water extraction in India, in supersession of all earlier Guidelines issued by CGWA (hereinafter referred to as '**Guidelines 2020**'). These Guidelines have come into force from the date of publication in the Gazette i.e., 24.09.2020. It further says that Guidelines shall have PAN-India applicability.

183. Guidelines 2020 says that Ground water abstraction in States/ UTs (which are not regulating ground water abstraction) shall continue to be regulated by CGWA. Further, wherever States/UTs have come out with their own ground water abstraction Guidelines, which are inconsistent

with the CGWA Guidelines, the provisions of CGWA Guidelines will prevail. However, in case, Guidelines followed by such States/UTs contain some more stringent provisions than CGWA Guidelines, such provisions may also be given effect to, by the States/UTs Authorities, in addition to those contained in the CGWA Guidelines. States may be at liberty to suggest additional conditions/criteria based on the local hydro-geological situations which shall be reviewed by CGWA/Ministry of Jal Shakti, Government of India before acceptance. All new/existing industries, industries seeking expansion, infrastructure projects and mining projects abstracting ground water, unless specifically exempted under para 1.0 below, will be required to seek NOC from CGWA, or, the concerned State/UT Ground Water Authority, as the case may be. Guidelines 2020 said that water management plans shall be prepared by all State Ground Water Authorities/Organizations for all over-exploited, critical and semi-critical assessment units, starting with over-exploited units.

184. Para 1.0 of **Guidelines 2020** deals with exemptions from seeking NOC. It is more or less similar to the earlier exemption clause contained in the preceding Guidelines, with a solitary difference that this time industrial units in the category of Micro and Small Enterprises drawing less than 10 cum/day, are added in the category of exempted categories. It says:

***“1.0 Exemptions from seeking No Objection Certificate:***

*Following categories of consumers shall be exempted from seeking No Objection Certificate for ground water extraction:*

- (i) Individual domestic consumers in both rural and urban areas for drinking water and domestic uses.*
- (ii) Rural drinking water supply schemes.*
- (iii) Armed Forces Establishments and Central Armed Police Forces establishments in both rural and urban areas.*
- (iv) Agricultural activities.*
- (v) **Micro and small Enterprises drawing ground water less than 10 cum/day.”***

185. For Drinking & domestic use for Residential apartments/Group housing societies/Government water supply agencies in urban areas, procedure for NOC is provided in para 2.0. It says that for new and existing wells, where Government water supply agency is unable to supply requisite amount of water in the area, NOC shall be granted, subject to following specific conditions:

- “i) Installation of **Sewage Treatment Plants** shall be mandatory for all residential apartments/ Group Housing Societies where ground water requirement is more than 20 m<sup>3</sup>/day. **The water from Sewage Treatment Plants shall be utilized for toilet flushing, car washing, gardening etc.***
- ii) The No Objection Certificate shall be valid for a period of five years from the date of issue or till such time local Government water supply is provided to the project area, whichever is earlier. In case the project proponent receives water supply from the concerned local Government Water Supply Agency during the validity of the No Objection Certificate, intimation regarding availability of public water supply shall be sent by the project proponent to CGWA and No Objection Certificate will be cancelled by the Authority. In other cases, the project proponent will apply for renewal of No Objection Certificate, ninety days before the expiry of No Objection Certificate.*
- iii) Proponents shall be liable to pay ground water abstraction charges for the quantum of ground water proposed to be extracted, as per rates mentioned in Table 5.1.”*

186. Vide para 3.0, Agriculture sector was exempted from obtaining NOC for ground water extraction. For commercial use, para 4.0 of Guidelines, 2020, says that no new major industry shall be granted NOC in over-exploited assessment areas except as per the policy Guidelines.

187. Para 4.1 deals with the case of industrial use and says that in over-exploited assessment units, NOC shall not be granted for ground water abstraction to any new industry except those falling in the category of Micro, Small and Medium Enterprises (hereinafter referred to as ‘**MSME**’). However, an exception has been provided for grant of NOC for drinking/domestic use for work force, green belt use by these new industries. Expansion of existing industries involving increase in quantum

of ground water abstraction in over-exploited assessment units shall not be permitted. NOC shall not be granted to new packaged water industries in over-exploited areas, even if they belong to MSME category. Thereafter, certain specific conditions have been mentioned for grant of NOC to industries, and the same are as under-

- i) *No Objection Certificate shall be granted only in such cases where local government water supply agencies **are not able to supply the desired quantity of water.***
- ii) *All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.*
- iii) *All **industries abstracting ground water in excess of 100 m<sup>3</sup>/d** shall be required to **undertake annual water audit** through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.*
- iv) *Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in Section 15 shall be mandatory for industries drawing/ proposing to draw more than 10 m<sup>3</sup>/day of ground water and. **Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 15 m from the bore well/production well.** Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/wells. Detailed guidelines for design and construction of piezometers are given in Annexure II. Monthly water level data shall be submitted to the CGWA through the web portal.*
- v) *The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. **Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.***
- vi) *Injection of treated/untreated waste water into aquifer system is strictly prohibited.*
- vii) *Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution (Annexure III).*

- viii) **All industries drawing ground water in safe, semi-critical and critical assessment units shall be required to pay ground water abstraction charges as applicable as per Tables 5.2 A and 5.3 A.**
- ix) **All existing industries drawing ground water in over-exploited assessment units shall be liable to pay ground water restoration charges as applicable as per Tables 5.2 B and 5.3 B.”**

188. The documents to be submitted along with application for grant of NOC, included an IAR, which was made mandatory, where abstraction of ground water proposed is in excess of 100 m<sup>3</sup>/day in over-exploited, critical and semi-critical areas. The aforesaid report shall be on the ground water regime and also socio-economic impacts to be prepared by accredited consultants.

189. In respect of mining projects, Para 4.2 says that there is no restriction on grant of NOC even in over-exploited areas. It reads as under:

*“All existing as well as new mining projects will be required to obtain No Objection Certificate for ground water abstraction. **Since mining projects are location specific, there will be no ban on grant of No Objection Certificate for abstraction of ground water for such projects in over-exploited assessment units.**”*

190. However, specific conditions attached for issue of NOC for mining projects are provided in para 4.2, as under:

- “i) It shall be mandatory for all the mining industries to ensure that water available from de-watering operations is properly treated and should be gainfully utilized for supply for irrigation, dust suppression, mining process, recharge in downstream and for maintaining e-flows in the river system.*
- ii) Construction of observation well(s) (piezometers) along the periphery in the premises, for monthly ground water level monitoring, shall be mandatory for mines drawing/ proposing to draw more than 10 m<sup>3</sup>/day of ground water. Depth and aquifer zone tapped in the piezometer shall be commensurate with that of pumping well/ wells.*
- iii) In addition, the proponent shall monitor ground water levels by establishing observation wells (piezometers) in the core and buffer zones as specified in the No Objection Certificate.*
- iv) In case of coal and other base metal mining the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to avoid contamination of surface water.*

- v) *In addition to this, all mining units shall also monitor the water quality of mine seepage and mine discharge through NABL accredited/ Govt. approved laboratories and the same shall be submitted at the time of self-compliance.*
- vi) *All mining projects drawing ground water in safe, semi-critical and critical assessment units shall be required to pay ground water abstraction charges as applicable as per Tables 5.4 A.*
- vii) *All mining projects drawing ground water in over-exploited assessment units shall be liable to pay ground water restoration charges as per Table 5.4 B.”*

191. The documents required to be submitted along with application for NOC in respect of a mining project, include, besides mining plan approved by the concerned Authorities and proposals for rain water harvesting/recharge within the premises, a comprehensive report, made mandatory vide clause(c), which reads as under:

*“(c) Comprehensive report prepared by accredited consultant on ground water conditions in both core and buffer zones of the mine, depth wise and year wise mine seepage calculations, impact assessment of mining and dewatering on ground water regime and its socio-economic impact, details of recycling, reuse and recharge, reduction of pumping with use of technology for mining and water management to minimize and mitigate the adverse impact on ground water, based on local conditions. Format for report is given in Annexure V.”*

192. In Para 4.3 of **Guidelines 2020**, issue of NOC to infrastructure project has been dealt with. Here, it is said that since infrastructure projects are location specific, grant of NOC to such projects located in over-exploited assessment units shall not be banned. It reads as under:

**“4.3 Infrastructure projects:**

***Since infrastructure projects are location specific, grant of No Objection Certificate to such projects located in over-exploited assessment units shall not be banned. New infrastructure projects/residential buildings may require dewatering during construction activity and/or use ground water for construction. In both cases, applicants shall seek No Objection Certificate from CGWA before commencement of work. However, in over-exploited assessment units, use of ground water for construction activity shall be permitted only if no treated sewage water is available within 10 km radius of the site. New as well as existing Infrastructure projects shall also be required to seek No Objection Certificate for abstraction of ground water.”***

193. However, it is also provided in para 4.3 that no NOC shall be granted for extraction of groundwater for water parks, theme parks and amusement parks in over-exploited assessment units. Thereafter, specific conditions for grant of NOC for ground water abstraction in infrastructure projects are provided, in para 4.3 in clauses (i) to (v), as under:

- “i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data through the web portal to CGWA/SGWA as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by CGWA/SGWA.*
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m<sup>3</sup>/day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc.*
- iii) For infrastructure dewatering/ construction activity, No Objection Certificate shall be valid for specific period as per the detailed proposal submitted by the project proponent.*
- iv) All infrastructure projects drawing ground water in safe, semi-critical and critical assessment units shall be required to pay ground water abstraction charges as applicable as per Table 5.3 A.*
- v) All infrastructure projects (new/existing) drawing ground water in over-exploited assessment units shall be liable to pay ground water restoration charges as per Table 5.3 B.”*

194. For documents required to be submitted along with the application, clauses (a), (c) and (e) to (g) of Para 4.3, talk of the following documents:

*“(a) In cases where dewatering is involved, submission of impact assessment report prepared by an accredited consultant on the ground water situation in the area giving detailed plan of pumping, proposed usage of pumped water and comprehensive impact assessment of the same on the ground water regime shall be mandatory. The report should highlight environmental risks and proposed management strategies to overcome any significant environmental issues such as ground water level decline, land subsidence etc.*

*(c) Certificate from a government agency regarding non availability of treated sewage water for construction within 10 km radius of the site in critical and over-exploited areas.*

*(e) Proposal for rain water harvesting/ recharge within the premises as per Model Building Bye Laws issued by Ministry of Housing & Urban Affairs.*

*(f) Details of water requirement computed as per National Building Code, 2016 (Annexure I), taking into account recycling/ reuse of treated water for flushing etc. (in case of completed infrastructure projects for commercial use).*

*(g) Completion certificate from the concerned agency for infrastructure projects requiring water for commercial use.”*

195. More attention has been paid in **Guidelines 2020** on ground water abstraction charges. It is payable by all residential apartments/group housing societies/Government water supply agencies in urban areas and industries/mining/infrastructure projects. Ground water abstraction charges, based on quantum of ground water extraction and category of assessment units as per details given in Guidelines, are payable by all industries/mining/infrastructure projects drawing ground water in safe, semi-critical and critical assessment units. Ground water restoration charges, based on quantum of ground water abstraction, are payable by all existing mining/infrastructure projects and existing industries including MSME drawing ground water in over-exploited assessment units. Ground water restoration charges are also payable by new MSME, new infrastructure and new mining projects in over-exploited areas.

196. Para 6.0 deals with Bulk Water Supply and says that all private tankers, abstracting ground water, and use it for supply as bulk water suppliers, will now mandatorily seek NOC for ground water abstraction. Bulk water suppliers through tankers drawing ground water in safe, semi-critical and critical assessment units shall pay ground water abstraction charges as per Table-6.1A. Bulk water suppliers drawing ground water in over-exploited assessment units shall pay ground water restoration charges as per the Table-6.1B. All tankers will have to install GPS based system for their monitoring of movement/area of operation.

197. Para 7.0 deals with abstraction of saline ground water and here the provision is broadly similar as it was in earlier Guidelines.

198. A new provision with regard to protection of wetland areas is added vide para 8.0 and it reads as under:

**“8.0 Protection of Wetland Areas**

*The wet land areas in the country are very crucial as they are direct reflection of the presence of ground water in such areas. The protection of the wetland areas is being separately handled by the Wetland Authorities. **Since ground water is very crucial for the survival of the wetland area, any excessive ground water development within the zone of wetland area would affect the volume of water in that wetland.***

***Projects falling within 500 m. from the periphery of demarcated wetland areas shall mandatorily submit a detailed proposal indicating that any ground water abstraction by the project proponent does not affect the protected wetland areas.** Furthermore, before seeking permission from CGWA, the projects shall take consent/approval from the appropriate Wetland Authorities to establish their projects in the area.”*

199. Thereafter, in para 9.0 some general compliance conditions of NOC are mentioned which we are omitting at this stage.

200. In para 11.0, subject of renewal of NOC is dealt with. The term of renewal is specified in para 11.0 (v) as under:

*“v. **No Objection Certificate will be renewed for the terms specified for various uses as follows:***

<b>Category</b>	<b>Use</b>	<b>Term of renewal</b>
<i>Critical, Semi-critical and safe</i>	<i>Infrastructure projects for drinking &amp; domestic use and urban Water Supply Agencies</i>	<i>5 years</i>
	<i>Industries</i>	<b>3 years</b>
	<i>Mines</i>	<i>2 years</i>
<i>Over-exploited</i>	<i>All users in ‘Over-exploited areas’</i>	<b>2 years</b>

201. If there is delay in finalization of NOC, Para 11.0 (vi) contains provision for deemed grant of NOC and reads as under:

*“vi. If the application for renewal is submitted in time and the CGWA/the respective State/UT Authority is unable to process the application in time, **No Objection Certificate shall be deemed to be extended till the date of renewal** of No Objection Certificate.”*

202. However, if PP has delayed in applying for renewal, provision has been made that he will have to pay only environmental compensation for the period starting from the date of expiry of NOC till NOC is renewed by Competent Authority. However continued withdrawal/extraction of ground water by PP, despite expiry of NOC, will not be illegal. This is what is provided in para 11.0 (vii) which reads as under:

*“vii. **If the proponent fails to apply for renewal within 3 months** from the date of expiry of No Objection Certificate, the proponent **shall be liable to pay Environmental Compensation** for the period starting from the date of expiry of No Objection Certificate till No Objection Certificate is renewed by the competent authority.”*

203. **Guidelines 2020**, vide para 13.0 has appointed District Magistrate/District Collector/Sub Divisional Magistrates of each Revenue District/Sub division as Authorized Officers, delegating power to seal illegal wells, disconnect electricity supply to the energized well, launch prosecution against offenders etc., including grievance redressal related to ground water in their respective jurisdictions. It is also provided that to decentralize and strengthen monitoring and compliance mechanism as per the Guidelines, officials of concerned Departments of Revenue and industries of States/UTs shall be appointed as Authorized Officers in consultation with State/UT Governments. Copy of NOC issued by CGWA shall be forwarded to the respective District Magistrate/District Collector. It is provided in Para 13.0 that for any violation of directions of CGWA and non-fulfilment of the conditions laid down in NOC, Authorized Officers will file appropriate petition/original application etc. under Sections 15 to 21 of EP Act 1986, in appropriate Courts.

204. Para 14.0 direct all Project Proponents (drawing ground water more than 10m<sup>3</sup>/day) to have mandatorily constructed piezometers (observation wells) within their premises for monitoring of ground water levels.

205. Determination of environmental compensation and formula thereof is provided in para 15.0 of **Guidelines 2020**, and, it reads as under:

***“Extraction of ground water for commercial use by industries, infrastructure units and mining projects without a valid No Objection Certificate from appropriate authority shall be considered illegal and such entities shall be liable to pay Environmental Compensation for the quantum of ground water so extracted. The norms prescribed by Central Pollution Control Board (CPCB) shall be utilized for calculating the Environmental compensation as mentioned below:***

*ECGW = Ground water consumption per day x Environmental Compensation rate (ECRGW) x No. of days x Deterrence factor  
where ground water consumption is in m<sup>3</sup>/day and ECRGW in Rs./Cum”*

206. Rates of environmental compensation are prescribed in para 15.1 which are different for different kinds of units in as much as table 15.1 provides rates of environmental compensation for packaged drinking water units; table 15.2 in respect of mining/infrastructure dewatering projects; and table 15.3 for industrial units. It is, however, provided in all the 3 tables mentioned above that minimum environmental compensation shall not be less than Rs. One lakh.

207. Para 15.2 lays down deterrent factors to compensate losses and environmental damage (packaged drinking water units and mining/infrastructure dewatering projects). Para 16.0, besides, and/or in addition of environmental compensation, provides penalty liable to be imposed on Proponents for non-compliance of NOC conditions issued by appropriate authority and rates of penalty are given in Table 16.1.

208. Para 17.0 provided other important conditions applicable to all and reads as under:

**“17.0 Other important Conditions (Applicable to all):**

- i. Sale of ground water by a person/agency not having valid no objection certificate from CGWA/State Ground Water Authority is not permitted.*
- ii. In infrastructure projects, paved/parking area must be covered with interlocking/perforated tiles or other suitable measures to ensure groundwater infiltration/harvesting.*
- iii. In case of Infrastructure projects, the firm/entity shall ensure implementation of dual water supply system in the projects. Compliance of the same shall be submitted through the web portal.*
- iv. Non-compliance of conditions mentioned in the No Objection Certificate may be taken as sufficient reason for cancellation of no objection certificate accorded/non-renewal of No Objection Certificate.***
- v. No application shall be entertained without supporting documents as specified in relevant sections.*
- vi. Abstraction structure(s) should be located inside the premises of project property.*
- vii. Self compliance of conditions laid down in the no objection certificate shall be reported by the users online in the web portal of Central Ground Water Authority/state Ground Water Authority.*
- viii. Processing fee prescribed, if any, from time to time shall be charged for various services.*

**Note:**

- 1. Guidelines are subject to modification from time to time.*
- 2. In case of any discrepancy between Hindi and English versions of this document including the annexures, the English version shall prevail.”*

209. Thus, the concerned Ministry namely Ministry of Jal Shakti (Department of Water Resources, river Development and Ganga Rejuvenation) issued **Guidelines 2020** in purported compliance of directions contained in Tribunal’s orders dated 11.09.2019, 20.7.2020 and earlier orders referred in this judgment, but as a matter of fact, we find that Guidelines 2020 broadly do not satisfy directions as given repeatedly and persistently, reposing confidence in the Authorities who are responsible and accountable for preservation and protection of

environment, that they would understand their statutory obligations, sensitize themselves with the traumatic condition of environment, show patent endeavour for improvement, march with a conviction that not only present day people but coming generations also get a healthy environment with clean air, non-contaminated water, adequate for drinking and other daily uses, enough ground water necessary for agriculture and simultaneously for developmental activities; and perform with a real sense of devotion and determination. To our utter dismay, they have failed. We do not find much improvement in **Guidelines 2020**. Virtually, it is only a new cover provided to the old scheme with minor variations, alterations and modifications, here and there, but having no substantial consequences to the root cause and central issue, i.e. protection and preservation of ground water, prevention of, not only further depletion, but a serious and effective attempt for recharge and restoration.

210. So far as exemption for requirement of NOC is concerned, the category of consumers namely domestic, requiring water for drinking and domestic uses, whether in rural and urban areas, Establishments of Security Forces like Armed Forces and Central Armed Police Forces etc. and agricultural activities, we, at this stage, do not find any reason to make any comment but inclusion of some commercial and industrial activities i.e. micro and small industrial entrepreneurs category i.e. MSME, drawing ground water less than 10m<sup>3</sup>/day, even in the area where ground water level is critical or over exploited, is incomprehensible. The number of such units and impact of drawl of ground water, by such units, on the water level, it appears, has not been examined at all, in as much as the Tribunal passed order on 20.07.2020 and notification containing **Guidelines 2020** has been issued 24.09.2020 i.e. within less than two months.

211. Further, in respect of other commercial and industrial activities also, the alleged restrictions are only an eye wash. For commercial uses, it is provided that no NOC to new major industries shall be granted in over-exploited assessment areas except as per Policy Guidelines. In the context of commercial use, only for industrial use, it is provided that NOC shall not be granted for ground water extraction to a new industry, except those falling in the category of MSME. The existing units are not covered by it. More over in the new units, NOC for abstraction of ground water for drinking/domestic use for work force, green belt etc. shall be permitted. Expansion of existing units involving increase of ground water extraction in over-exploited assessment areas shall not be permitted. There is a twist when it says that NOC shall not be granted to new packaged water industries in over-exploited areas even if they belong to MSME category. In Guidelines 2015, no NOC was to be given to any water intensive industry, even if it is MSME, in over exploited assessment areas. Now it is restricted to packaged water industries. Apparently, a drastic relaxation has been given in respect of water intensive industries, for no reason, and that too in flagrant defiance of order of Tribunal.

212. The critical and semi-critical areas have been left untouched and there is no such restriction at all. The only reference to these areas in para 4.1 (viii) is that industries drawing ground water in safe, semi-critical and critical assessment areas shall be required to pay ground water extraction charges which will also be paid by existing industries. The charges are provided as per table 5.2 A and 5.3 A for safe, semi-critical and critical assessment units and tables 5.2 B and 5.3 B for over-exploited areas. The rates provided therein are:

**“Table 5.2 A: Rates of ground water abstraction charges for packaged drinking water units (Rs per m<sup>3</sup>)**

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal				
		Up to 50m <sup>3</sup> /day	51 to <200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Safe	1.00	3.00	5.00	8.00	10.00
2.	Semi-critical	2.00	5.00	10.00	15.00	20.00
3.	Critical	4.00	10.00	20.00	40.00	60.00

**Table 5.3 A: Rates of Ground Water abstraction charges for other industries & infrastructure projects (Rs per m<sup>3</sup>)**

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal			
		< 200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Safe	1.00	2.00	3.00	5.00
2.	Semi-critical	2.00	3.00	5.00	8.00
3.	Critical	4.00	6.00	8.00	10.00

**Table 5.2 B: Rates of ground water restoration charges for packaged drinking water units (Rs per m<sup>3</sup>)**

S.No.	Category of area ↓ Ground water use →	Quantum of ground water withdrawal				
		Up to 50 m <sup>3</sup> /day	51 to <200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Over-exploited (existing industries only)	8.00	20.00	40.00	80.00	120.00

**Table 5.3 B: Rates of ground water restoration charges for other industries & infrastructure projects (Rs per m<sup>3</sup>)**

S.No.	Category of area ↓  Ground water use →	Quantum of ground water withdrawal			
		< 200 m <sup>3</sup> /day	200 to <1000 m <sup>3</sup> /day	1000 to <5000 m <sup>3</sup> /day	5000 m <sup>3</sup> /day and above
1.	Over-exploited (existing industries / new Industries as per the present Guidelines)	6.00	10.00	16.00	20.00

213. Rates prescribed above are very nominal and virtually permits abstraction of ground water in stressed area almost free. Water charges prescribed by local bodies by supplying surface water are much more. Such nominal rates for abstraction of ground water would in fact encourage more abstraction for commercial purpose and frustrate the gigantic efforts being made by Supreme Court and this Tribunal to preserve and protect ground water particularly in stressed areas.

214. In respect of mining and infrastructure projects, it is specifically provided that NOC shall not be denied or banned for existing as well as new projects in over-exploited areas. Though some conditions are there for monitoring of quantity of ground water extraction in the said area, payment of abstraction charges or the restoration charges as the case may be, but effective steps capable of execution for recharge/restoration are clearly wanting.

215. Thus, the issue of constant depletion of water level, initially brought before Tribunal, in the context of NOIDA and Greater NOIDA which are part of district Gautam Buddha Nagar, but subsequently, extended to the entire country since this problem was/is being faced by people throughout the country, remained unexecuted. This Tribunal repeatedly required Statutory Regulators to take effective steps for prevention of depletion of water level and also for recharge/restoration/rejuvenation of water level;

enough power is conferred by Statute upon Statutory Regulator i.e. CGWA to take all permissible, possible and effective steps for the purpose, but it is not understandable why it has been/is reluctant to execute and enforce the said power, in the manner it was desired to protect and preserve ground water level across the country. It is admitted, as also demonstrated in earlier paragraphs, that when study of ground water level was made in different phases, extreme alarming level of ground water was noted in sufficiently large number of places but for regulation purposes a very small fragment thereof was selected by CGWA. In its own discretion, without specifying the criteria on which only a few areas were so selected, CGWA notified a very small numbers and made some provisions, that too, very superficial, for regulating the same. In respect of others, termed as non-notified area, very relaxed and concessional provisions were made, that too, like grant of a license i.e. NOC, in a very smooth and casual fashion, unmindful of the fact that its statutory duty was to take steps for protection and conservation of ground water level and not to grant easy access for abstraction, that too, to commercial institutions/establishments/bodies, to extract ground water for commercial/industrial purposes without having any corresponding actual recharge/restoration of ground water, particularly, in the area where it had already depleted to a very low level and was classified as over-exploited, critical or semi critical. Tribunal did not appreciate this approach, expressed its displeasure and disapproval repeatedly, but, and despite that, CGWA, on the pretext of effective functioning of economy, issued revised Guidelines repeatedly and frequently but all failed, when tested at the anvil of conservation and protection of ground water level in stressed or highly stressed areas.

216. Major deficiencies, observed by Tribunal, in various guidelines issued by CGWA, are summarized here as under:

- i. Policy to be followed by CGWA has to be rational, meeting basic need of everyone and at the same time preserving water for future generation by preventing wastage or preventable use based on the principle of “sustainable development”.
- ii. Policy must have punitive measures and recovery of damages from those who have extracted ground water in past and continue to do so unauthorizedly, i.e., illegal extraction, leading to alarming depletion of ground water.
- iii. Steps to be taken to tap all relevant sources specially the rain water harvesting and preservation of water bodies;
- iv. When CGWA has classified, over-exploited, critical and semi critical areas for regulation, it has no reason to refuse regulation of such areas on the plea that it would govern/regulate only notified area;
- v. Being Central Authority, CGWA has to regulate ground water in the whole country under the mandate of Supreme Court, hence cannot show apathy on the pretext of notified area, ignoring other areas where ground water level is similarly stressed i.e., over-exploited, critical or semi-critical;
- vi. Extraction of ground water in over-exploited, critical and semi-critical area with or without permission, only on the pretext of being non-notified, amounts to failure of Statutory duty on the part of CGWA;
- vii. Mechanical imposition of condition of recharge of underground water without any mechanism for ensuring its compliance or to check, whether complied or not, at all, while continuing to permit drawl of ground water for commercial purposes, is unjustified;**
- viii. Abstraction of ground water for building construction, watering plants, swimming pools, threatening availability of ground water in

over-exploited, critical and semi- critical areas, specially, in absence of adequate steps for recharge of ground water, is unjustified;

- ix. **Mere provision for realization of some amount/charges for drawl of ground water is ridiculous and illegal, in respect of extraction of ground water in over-exploited, critical and semi-critical area;**
- x. CGWA has to observe in its functions, precautionary principle, sustainable development as well as inter-generational equity principle. Drawl of ground water for industrial purposes with or without payment, in OCS areas, should be banned.
- xi. Checking of contamination of ground water by discharge of untreated effluents in water bodies need comprehensive planning and execution and on priority basis, it is necessary, failing whereof, has led to emergency situation in certain areas;
- xii. Apathy of authorities in last several years, in neglecting subject in breach of trust, reposed in such authorities, has been noted by Tribunal still no information was given with regard to compliance of earlier orders including action for illegal activities of CGWA.
- xiii. Instead of laying down strict 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 ground situation and likely impact, it will have on environment.
- xiv. No study or data has been furnished or collected to justify this approach.
- xv. Drawl of ground water for all practical purposes made unregulated in all areas including OCS.
- xvi. So called regulation is illusory.

- xvii. **Water conservation fee in effect a license to harness ground water to any extent even in OCS areas.**
- xviii. No institutional mechanism to monitor removal and replenishment of ground water;
- xix. No check on injunction of pollutants in ground water;
- xx. No provision to check water quality and remediation, if there is contamination;
- xxi. Instead of conservation of ground water necessary for providing access to drinking water in OCS areas, Guidelines would result in fast depletion of ground water and damage to water bodies;
- xxii. Mandate of CGWA is not exploitation of ground water in depleted area but to conserve it;
- xxiii. OCS areas need regulation for conservation of ground water, cannot be treated separately as notified or non-notified;
- xxiv. Compensation to be recovered for illegal abstraction, has to be deterrent, linked to the quantum of ground water extracted and period for which such extraction took place;
- xxv. CGWA must lay down and follow stringent norms to ensure that there is no depletion of ground water in OCS areas and depleted water level is improved and replenished;
- xxvi. The abstraction of ground water in over-exploited area should be permitted only for drinking purposes;
- xxvii. For calculation of environmental compensation, present categorization of area (over-exploited, critical and semi-critical) shall be considered, irrespective of when violation started or committed;
- xxviii. In case of demand of more than 5000 KLD in existing cases, permission be given only after examining scientific assessment of water availability and inter-generational equity. In case of repeated

violations, environmental compensation shall be computed at 1.25 times of the previous environmental compensation;

- xxix. Since OCS areas have been found seriously affected by over-drawl of ground water, regulation of such drawl for commercial purposes cannot be dispensed with for any industry, even in industrial area;
- xxx. In absence of replenishment of ground water, unregulated drawl cannot be permitted to any commercial entity;
- xxxi. Shortage of availability of water for commercial purposes cannot be remedied by permitting drawl of ground water in OCS areas.
- xxxii. Water is a scarce resource; hence, industry has to cope up with such scarcity and find out its own alternative ways to meet the requirement of water;
- xxxiii. They cannot be permitted indiscriminate drawl of water in such areas till situation improves;
- xxxiv. Liberalization of ground water extraction across the board, to certain categories, without any impact assessment and effective checks, are against law;
- xxxv. No road map has been prepared by CGWA as to how revised Guidelines will check and neutralize falling ground water level particular, when it has continuously gone down. Liberalization of abstraction of ground water would defeat the purpose of Constitution of CGWA and is contrary to mandate of Public Trust doctrine;
- xxxvi. Effective steps for protecting ground water in OCS areas against individual commercial considerations are must to serve general people.

217. In the backdrop of the aforesaid observations which we have culled out from various orders of Tribunal, referred above, ultimately, in the order

dated 20.07.2020, 4 issues were formulated in para 27 and in para 28, Tribunal said that the answer to the said issues is 'no'. Tribunal held that as per mandate of sustainable development under Section 20 of NGT Act 2010, Regulator must direct its policy towards preventing further depletion of, and upgrading, ground water levels, based on impact assessment. Extraction can neither be unregulated nor allowed across the board without individual consideration. The directions were consequently issued to prepare meaningful regulatory regime, institutional mechanism for ensuring prevention of depletion, unauthorized extraction of ground water and sustainable management in OCS areas.

218. Unfortunately, the concerned Ministry and Regulator have acted in haste and just in 2 months i.e., 24.09.2020, have published Guidelines 2020 wherein most of the infirmities, irregularities, and failures, pointed out on the part of CGWA, in earlier Guidelines, as such, are present. Though there are minor variations and alterations, but the same are wholly inconsequential, looking to the gravity of the situation, arising due to consistent depletion of ground water.

219. The Notification issued by UPGWD shows that in the State of UP almost every district, and some districts as a whole, are in serious stressed condition, having depletion of water to the extent of critical and over-exploited level, and a very few are exceptions.

220. The condition of NCT of Delhi, as already noticed, is already, seriously alarming.

221. Just a few days back, a newspaper report was published that in Chennai city, ground water level has disappeared up to 2000 feet, meaning thereby, virtually ground water has disappeared thereat.

222. In this backdrop, we will examine the issues formulated above.

**Issues 1, 2 and 3:**

223. Issue 1 deals with the specific aspect of abstraction of ground water during particular period, while Issue 2 deals with general compliance/non-compliance with environmental laws, that is why we have bifurcated both issues. Firstly, we proceed to consider the specific issue with regard to validity of abstraction of ground water during the period prior to issue of NOC by CGWA on 23.05.2017 w.e.f. 19.05.2017 and then, for the period after expiry on 18.5.2019.

224. As already said, OA has been filed on 02.09.2020 and registered on 04.09.2020. Therefore, in view of Section 15(3) of NGT Act, 2010, we will examine complaint of violation of environmental laws only to the extent it comes within the period of limitation prescribed under Section 15(3) of NGT Act 2010. To be more precise, **we shall not go beyond to 02.09.2015** while considering **Issues 1, 2 and 3**.

225. Though voluminous documents have been filed but still we find that facts in a strict and wholesome manner have not been placed. We have to cull out relevant information from documents, filed in one or the other pleadings of the parties, but that will not obstruct our way in adjudication of various issues involved in this OA including **Issue 1**.

226. In the report dated 30.10.2021 filed along with letter dated 08.11.2021 submitted by UPPCB through Chief Environment Officer, Circle-7, UPPCB, Lucknow, UPPCB has filed authorization/NOC for sinking of wells issued by Ground Water Department, Ministry of Jal Shakti, Govt. of UP with reference to Section 14 of UPGWMR Act 2019 read with Rule 8(1) of UPGWMR Rules 2020. Details of borewells mentioned in these authorizations/NOCs are as under:

S. N	NOC No.	Date of construction /sinking of well	Date of Energization	Depth of well (in meter)	Maximum allowable rate of withdrawal (m <sup>3</sup> /hr)	Maximum allowable running hours per day	Maximum allowable annual extraction of ground water
1	NOC 026536	12.01.1994	19.01.1994	99.77	40.00	4.00	24000
2	NOC 049507	10.09.2009	25.09.2009	96.00	50.00	15.00	225000
3	NOC 048652	10.09.2009	25.09.2009	98.00	50.00	15.00	225000

227. From the above chart, it is evident that maximum daily abstraction of ground water from 3 borewells was permitted to the extent of 160, 750 and 750m<sup>3</sup> or KLD which comes to total 1660m<sup>3</sup>/day or 1660 KLD/day.

228. All the above 3 NOCs have been issued with reference to use of well for industrial purposes and location has been shown as khasras nos. 152, 155 and 156 in the premises of PP.

229. First NOC for abstraction of ground water was issued on 23.05.2017 which permitted abstraction of ground water from 19.05.2017 to 18.05.2019. The quantity of abstraction permitted was 1650 KLD/day. Neither it is the case of PP nor any material has been placed on record to show that before above NOC was issued by CGWA on 23.05.2017, any other earlier permission was granted by CGWA. On what authority, PP was withdrawing/abstracting ground water prior to 19.05.2017, is not stated anywhere in the reply submitted by PP. The obvious inference would be that withdrawal/abstraction of ground water, prior to 19.05.2017, was without any authority of law.

230. Further, it is also not the case of PP that though one borewell was installed in 1994 and other two in 2009, but they were not operated till 19.05.2017. It is true that in 1994, there was no specific provision requiring PP to seek clearance/NOC from any authority for abstraction of ground water from its own premises but after constitution of CGWA and

issue of guidelines in 1999 requiring NOC, continued abstraction of ground water without such NOC by PP was unauthorized. Facts noted above show that First Guideline was prepared and issued by CGWA in 1999 effective from **01.01.1999** which required industries to seek NOC for abstraction of ground water. It was substituted by **Guidelines 2009** and Chapter B thereof dealt with the matter of abstraction of ground water for industrial/infrastructure products in non-notified areas. It is not disputed that in 2009, area in question was non-notified. The criteria on which proposal for abstraction of ground water for industrial purposes would be considered was duly prescribed in the aforesaid guidelines. For the area which fell in the category of semi-critical, critical and over-exploited, one of the required conditions was “**Water Audit measures**” and another with regard to “**Recharge**”. There were certain categories exempted from NOC as detailed in para **B-3 (VI)** of Guidelines 2009 but PP in question, did not qualify the categories entitled/eligible for exemption. Third set of guidelines were issued in 2012 i.e., **Guidelines 2012** and here also, Chapter B dealt with non-notified areas and also lay down conditions etc. for grant of NOC for abstraction of ground water for industrial/infrastructure products which were either new or under extension. Next set of guidelines are of 2015 which are stated to have been formulated pursuant to provisions or direction for further betterment of ground water regulatory processes. It has come on record that this Tribunal passed an order on 15.04.2015 *in Krishan Kant Singh vs. M/s Deoria Paper Ltd. (supra)* that **it shall be obligatory upon CGWA to ensure that any person operating tube well for any need to abstract ground water, should obtain its permission, whether it is existing unit or still to be established.** The aforesaid order of Tribunal, at least on and after 15.04.2015, made it mandatory that no industrial establishment shall abstract ground water without having obtaining NOC from CGWA.

In the present case, we have confined ourselves to consider the situation on and after 02.09.2015 when the above order had already been issued and, therefore, it was incumbent upon PP to obtain NOC from CGWA, for continuing to abstract ground water but nothing has been placed on record to show that abstraction of ground water on and after 02.09.2015 for industrial purposes, was valid in law and has been executed under the authority of NOC issued by CGWA. Even otherwise PP got expansion of plant twice. Initially PP started unit with capacity of processing 3 lacs litres of milk per day which it sought to increase to 11.5 lacs per day in 2017. In between it got expansion from 3 lacs to 8 lacs. With every expansion, NOC from CGWA for abstraction of ground water was necessary. However, NOC was obtained by PP only on 23.05.2017. Therefore, **abstraction of ground water by PP from 02.09.2015 to 18.05.2017 would apparently be unauthorized and illegal, damaging groundwater table.**

231. The second phase is after 18.05.2019. NOC dated 23.05.2017 issued by CGWA, admittedly expired on 18.05.2019. PP did not stop abstraction of ground water but continued to do so. On this aspect, there is no dispute. Sole defence is that before expiry of NOC, PP had applied for its renewal vide application submitted online on 24.04.2019. Mere submission of an application, does not mean a deemed grant or renewal of NOC by CGWA.

232. There is/was neither any provision of deemed grant of NOC nor any such deemed NOC is/was permissible in the matter dealing with environment. This aspect has already been considered and rejected by Supreme Court repeatedly and it has been held that environmental laws do not recognise any deemed grant of clearance/NOC/permission etc.

233. In ***Alembic Pharmaceuticals Ltd. v. Rohit Prajapati & Others*** (2020) SCC OnLine SC 347, a circular issued by MoEF on 14.05.2002, which envisaged grant of ex post facto Environmental Clearance, was challenged before Tribunal. Circular was held illegal holding that in environmental law, there is no concept of ex post facto Environmental Clearance etc. Matter was taken before Supreme Court and therein an objection was raised on behalf of PP that Tribunal cannot declare Government of India, MoEF's orders ultra vires or illegal. Reliance was placed on behalf of PP, on the judgment in ***TechiTagi Tara v. Rajendra Singh Bhandari & Others.*** (supra) and ***Tamil Nadu Pollution Control Board v. Sterlite Industries (India) Ltd.*** (2019)19SCC479. Supreme Court relied upon an earlier judgment in ***Common Cause v. Union of India*** (2017)9SCC499, wherein an argument in support of ex post facto Environmental Clearance was rejected, and said in para 125 as under:

*“We are not in agreement with learned counsel for the mining lease holders. There is no doubt that the **grant of an EC cannot be taken as a mechanical exercise. It can only be granted after due diligence and a reasonable care since damage to the environment can have a long term impact.** EIA 1994 is therefore very clear that if expansion or modernization of any mining activity exceeds the existing pollution load, a prior EC is necessary and as already held by this Court in **M.C. Mehta v. Union of India, (2004)12SCC118** even for the renewal of a mining lease where there is no expansion or modernization of any activity, a prior EC is necessary. Such importance having been given to an EC, the **grant of an ex post facto environmental clearance would be detrimental to the environment and could lead to irreparable degradation of the environment. The concept of an ex post facto or a retrospective EC is completely alien to environmental jurisprudence** including EIA 1994 and EIA 2006. We make it clear that an **EC will come into force not earlier than the date of its grant.**”*

234. Having referred to the above law, laid down in Common Cause (supra), Supreme Court in ***Alembic Pharmaceuticals Ltd. v. Rohit Prajapati & Others.***, (supra), in para 23, said:

*“23. **The concept of an ex post facto EC is in derogation of the fundamental principles of environmental jurisprudence and is an anathema to the EIA notification dated 27 January 1994. It is, as***

*the judgment in Common Cause holds, detrimental to the environment and could lead to irreparable degradation. **The reason why a retrospective EC or an ex post facto clearance is alien to environmental jurisprudence is that before the issuance of an EC, the statutory notification warrants a careful application of mind, besides a study into the likely consequences of a proposed activity on the environment. An EC can be issued only after various stages of the decision-making process have been completed.** Requirements such as conducting a public hearing, screening, scoping and appraisal are components of the decision-making process which ensure that the likely impacts of the industrial activity or the expansion of an existing industrial activity are considered in the decision-making calculus. Allowing for an ex post facto clearance would essentially condone the operation of industrial activities without the grant of an EC. In the absence of an EC, there would be no conditions that would safeguard the environment. Moreover, if the EC was to be ultimately refused, irreparable harm would have been caused to the environment. In either view of the matter, **environment law cannot countenance the notion of an ex post facto clearance. This would be contrary to both the precautionary principle as well as the need for sustainable development.***”

235. Consequently, Court upheld order of Tribunal to the extent the said circular of MoEF was held illegal/invalid.

236. Thus, after expiry of NOC on 23.05.2019, neither PP could have taken shelter behind deemed NOC nor continued abstraction could have been justified by obtaining NOC later on since retrospective NOC was impermissible.

237. CGWA, during continuance of NOC dated 23.05.2017 published a new set of guidelines i.e., Guidelines 2018 though it came into effect on 01.06.2019 i.e., just after 13 days when NOC of PP had expired. It has also come on record that in 2017, area in question was in the category of **over-exploited**, though in 2011, area was in the category of **semi-critical**. This fact has been mentioned in joint Committee report dated 21.10.2020 filed along with letter dated 24.11.2020 and the relevant extract is as under:

*“As per CGWB report “Dynamic Ground Water Resources Assessment of India-2017” (Page no. 146) Gajraula, District-Amroha has been deteriorated from Semi-Critical (2011) to **Over-Exploited category (2017).**”*

238. This finding of joint Committee has not been challenged or disputed by PP. In fact, PP himself has filed Artificial Recharge Report dated April 2020 (at page 170 of reply) and in para 2.0 (p/171), there is table 1 giving salient features of the project and at S.no. 4, under the column of particulars, category is mentioned as '**over-exploited**' (**earlier semi-critical**). This also shows that as per the said report, which was prepared in April 2020, ground water level in area in question was in over-exploited category and earlier it was in semi-critical category.

239. Thus, ground water table in the area in question was in extreme stressed condition, not only when NOC was granted but also in April 2020. The fact that area was brought in the category of 'over-exploited', though in 2011 it was in the category of semi-critical, shows that ground water level has gone down considerably bringing the area in the category of 'over-exploited'.

240. Learned Senior Counsel Shri Pinaki Mishra, appearing for PP, drew our attention to a recently prepared block wise ground water report 2020 wherein Gajraula block (assessment unit of district Amroha, State of UP) has been shown in the category of '**critical**' and said that ground water level has improved, changing category from over-exploited to critical which means that the efforts made by industrial units and other stakeholders for recharge of ground water have shown positive results and there is improvement in ground water table in the area in question. In our view the argument, though attractive but cannot be accepted since we can take cognizance of the fact that due to extraordinary situation created by pandemic since March 2020, almost all the activities including industrial activities, virtually remained closed for sufficiently long time which obviously means that there was substantially lesser abstraction of ground water in this period and assessment made in 2020, based on such period

when industrial activities for substantial period of the year 2020 were closed, cannot give a correct information about recharge condition of ground water table.

241. Moreover, even '**critical**' category is highly stressed category. The above report of 2020 also shows that there are 6 blocks/assessment units in district Amroha and none of them is in the category of safe. Two blocks/assessment units are in semi-critical category, 3 in critical and 1 over-exploited as under:

<b>S. No.</b>	<b>District</b>	<b>Assessment unit/Block name</b>	<b>Categorisation</b>
1	Amroha	Amroha	Semi- Critical
2	Amroha	Dhanora	Critical
3	Amroha	Gajraula	Critical
4	Amroha	Gangeshwari	Semi- Critical
5	Amroha	Hasanpur	Critical
6	Amroha	Joya	Over-exploited

242. For the purpose of respondent 5, whether matter is considered under Guidelines 2015 or Guidelines 2018, the situation remains same, that is, the area had been continuously in stressed condition i.e., semi-critical and then over-exploited.

243. Abstraction of ground water without NOC from CGWA was impermissible. Therefore, without anything more, we find no hesitation in recording a finding that ground water abstraction by PP after 18.05.2019 was also illegal.

244. Abstraction of ground water affects water table adversely. Therefore, damage to environment is obvious. Learned Senior Counsel said that mere abstraction of ground water, even if it is illegal, cannot result in any fiscal liability to be fastened upon PP in the absence of any positive finding or material to show that there was any damage to environment. On this aspect, we may refer to some extracts from report published by Ground

Water Action Group titled as ‘State of ground Water in Uttar Pradesh-a situation analysis with critical over-view and sustainable solutions’ by Ravindra Swaroop Sinha in 2021. In the operative part of the aforesaid publication, there is executive summary stating that withdrawal rate of ground water in India is in the range of 250 bcm per year putting India on top among World’s biggest groundwater exploiting nations, being responsible for 25% of total global abstraction. Almost every State in the country is over-pumping ground water for years, particular after the advent of Green Revolution in eighties, and, amongst them, State of UP is the largest extractor State taking out billion of litres of groundwater from the aquifers, every year, equal to almost one-fifth of country’s total annual withdrawal. 70% of irrigated agriculture is groundwater dependent, while it also provides majority of supplies for drinking water, industrial, commercial, infrastructural and horticultural uses. Ground water has become a dominant source of water for most of the developmental activities of State and contributing largely to the growth of State’s economy. As a consequence, large scale, unabated extraction has put various rural and urban areas of State under heavy ground water depletion to an extent that potential aquifers of Ganga basin are taking their last breaths. Added to this crisis is ground water pollution, which has emerged as a much greater threat for water security in different parts of the State. Further, due to hugely pumped aquifers, rapid decline of water table severely impacted ground water fed rivers of the State. Natural discharges/base flows from ground water system to rivers, wetlands have significantly reduced or almost vanished. A chart giving per capita water availability; projected scenario starting from 1951 and projected in the next 100 years i.e., up to 2051, has been given as under:

*“Table - 1: Per Capita Water Availability: Projected Scenario*

<i>Per capita water Availability Scenario (m<sup>3</sup>/capita/year)</i>
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<b>Year</b>	<b>Based on Annual Water Availability (as reported)</b>	<b>Probable Projection based on Utilizable Water</b>
1951	5177	3107
1971	3785	2044
1981	2960	1640
1891	2209	1263
2001	1820	1047
2011	1545	900
2018	1380	829
2021	1341 (projected)	808 (likely projection)
2051	1140 (projected)	656 (likely projection)

**(Source: Sinha, R.S., 2019  
Water Scarcity -1000 m<sup>3</sup>/capita/year;  
Water Stress- 1700 m<sup>3</sup> /capita/year**

245. Relative scenario for State of UP and Country has also been given in the form of chart as under:

“Groundwater Resources -A Relative Scenario

<b>Status of Groundwater</b>	<b>India</b>	<b>Uttar Pradesh</b>
<b>Annual Extractable Groundwater</b>	392.70 bcm	65.32 bcm
<b>Annual Groundwater Extraction</b>	248.69 bcm	45.84 bcm
1. Irrigation/agriculture use	<b>221.45 bcm</b>	<b>40.89 bcm</b>
2. Domestic use	<b>24.86 bcm</b>	<b>4.95 bcm</b>
3. Industrial use	<b>2.38 bcm</b>	<b>Not reported</b>
<b>Net Availability for Future Use</b>	144.01 bcm	19.48 bcm
<b>Stage of Groundwater Extraction</b>	63.33 %	70.18 %
<b>OCS Units (Over-exploited, Critical and Semi-critical)</b>	2471 nos.	290 nos.

246. Ground water contamination means increase of various kinds of toxicities and metals like Arsenic toxicity, salinity, fluoride, nitrate pollution, heavy metal toxicity, bacteriological contamination etc. It is in fact not disputed that abstraction of ground water can alter natural flow regime either directly changing surface water flows or entirely by lowering ground water levels and consequently affecting flows to a spring, wetlands, lakes and rivers. Extraction of ground water is a removal of water permanently or temporarily from water bodies such as rivers, lakes,

canals, reservoirs and from ground water. When such abstraction is from ground water which is one of the sources to provide water to surface water sources, such abstraction obviously affects natural flow regime of surface flow water also. An environmental scientist well recognised that natural flow regime is a bench mark for a healthy environment. Altering these material conditions, through abstraction or flow regulation can have direct or indirect adverse impact on the health of environment and its ecology. As we have already said that ground water provides substantial resource of water for all out activities in the life of common man which include personal consumption of water and also consumption for agricultural purposes, industrial purposes etc. Abstraction of ground water, therefore, cannot be avoided but where ground water table is in stressed condition, extraction of ground water in such areas has to be regulated so as to protect environment and also to allow developmental activities to continue and a balanced approach has to be adopted which is in furtherance of the principles of sustainable development. Without examination of necessary aspects like assessment of impact of abstraction of ground water in stressed areas, carrying capacity of water table in such areas and permitting extraction, only compelled by the consideration of industrial development would cause a serious damage to environment and such approach and activities are impermissible.

247. In the present case, we take up the issue of permission granted for extraction of ground water in stressed areas by proponent later but while considering **Issue 1**, we are confined to the aspect where extraction of ground water is without any authority of law and in such a case, it cannot be doubted that such abstraction being illegal, deserves for consequences like imposition of environmental compensation, criminal action and if necessary, even closure of unit.

248. The fallacy of the argument of retrospective NOC with effect from 18.05.2019, is also writ large from the fact that Rule 15(3) of UPGWMR Rules 2020 provides that validity period of NOC shall be 5 years. This is an admitted case and also evident from record that NOC granted by UPGWD to PP relied by Learned Senior Counsel appearing for PP, are valid up to 11.07.2026. No date of issue of NOCs has been mentioned but it is also admitted on record that application for issue of NOC under UPGWMR Act 2019 read with UPGWMR Rules 2020 were submitted on 03.04.2021 as have been stated by PP in its reply and copy of the application has been filed as annexure P/8 collectively. It cannot be conceived that an NOC could have been issued for a period even prior to the date of application. In any case, since the date of issue of NOC by UPGWD, has not been shown in the above-mentioned NOCs but since the same are valid up to 11.07.2026, if we go 5 years earlier thereto, it will commence from 12.07.2021 and hence the period of 5 years of NOC issued by UPGWD would be from 12.07.2021 to 11.07.2026. If we accept the arguments advanced by Learned Senior Counsel, it will make the period of validity of NOCs beyond 5 years which is not permissible even under the provisions of UPGWMR Act 2019 read with UPGWMR Rules 2020. This is another ground for rejection of the argument of relate back NOC to the date when earlier NOC expired. Hence entire argument advanced by Learned Senior Counsel on behalf of PP, endeavoring to cover up the period of validity of NOCs when as a matter of fact, PP did not have any valid authority for abstraction of ground water, has no merit, hence rejected.

249. There is one more reason to infer that continued abstraction of ground water was illegal. Under Guidelines 2020, NOC for 3 years in critical area and 2 years in over exploited area could have been issued. In Guidelines 2020 it is mentioned that, "*Further, wherever States/UTs have*

*come out with their own groundwater abstraction guidelines, which are inconsistent with the CGWA guidelines, the provisions of CGWA Guidelines will prevail*". Thus, period of NOC could have renewed for 5 years which was inconsistent with CGWA Guidelines 2020. The provisions of guidelines 2020 would prevail over UPGWMR Act 2019 and rules framed thereunder.

250. This inference and conclusion drawn by us for the reasons discussed above comes to the automatic result that abstraction of ground water on and after 19.05.2019 was unauthorized and illegal and this illegality continued at least till 11.07.2021. In fact, NOC issued by UPGWD is also prima facie illegal hence even subsequent abstraction of ground water is illegal. However, we propose to leave the issue of validity of NOC to be examined by CGWA, therefore confining us up to date of issue of this NOC.

251. In view of the discussed, **Issue 1 is answered** in favour of applicant and against PP i.e., respondent 5 and we hold that abstraction of ground water by PP was illegal for period of 02.09.2015 to 18.05.2017 and thereafter from 19.05.2019 to 11.07.2021.

252. Our answer to Issue 1 itself constitutes a finding in affirmance to **Issue 2** since abstraction of ground water illegally amounts of violation of environmental laws causing damage to environment and this issue therefore, has to be answered affirmatively.

253. However, in the present case, we find that abstraction of ground water is not the only violation but there are some other violations of environmental laws on the part of PP. Joint Committee report dated 27.10.2020 shows that samples collected by it shows non-compliance of certain parameters which we have dealt above and this also amounts to violation of environmental laws. With regard to maintenance of log book

data of tube well no. 2 for the period of July to September, joint Committee found some discrepancies which have not been explained by PP. PP is also supplying treated water directly to farmers outside the industrial premises for the use of irrigation purposes. The consent order dated 13.06.2020 issued under Section 25/26 of Water Act 1974 had certain conditions, General and Specific, for the purpose of discharge of treated effluent and the relevant conditions are reproduced as under:

*“3. Arrangement should be made for collection of water used in process and domestic effluent separately in closed water supply system. The treated domestic and industrial effluent if discharged outside the premises, if meets at the end of final discharge point, arrangement should be made for measurement of effluent and for collecting its sample. Except the effluent informed in the application for consent no other effluent should enter in the said arrangements for collection of effluent. It should also be ensured that domestic effluent should not be discharged in storm water drain.*

*4(a) The domestic effluent should be treated in treatment plant so that it should be in conformity with the following norms dated treated effluent:*

<b>Domestic Effluent</b>		
<b>S. No.</b>	<b>Parameter</b>	<b>Standard</b>
1	Total Suspended Solids	100 mg/l
2	BOD	30 mg/l
3	COD	250 mg/l
4	Oil & Grease	10 mg/l
5	Quantity of Discharge	12.5 KLD

*4(b) the industrial effluent should be treated in treatment plant so that the treated effluent should be in conformity with the following norms:*

<b>Industrial Effluent</b>		
<b>S. No.</b>	<b>Parameter</b>	<b>Standard</b>
1	Total Suspended Solids	100 mg/l
2	BOD	30 mg/l
3	COD	250 mg/l
4	Oil & Grease	10 mg/l
5	Quantity of Discharge	1750 KLD (Reused in process)

**Specific Conditions:**

*“2. Industrial Effluent generation is 1750 KLD treated through ETP. The permeate from Reverse Osmosis plant shall be utilized in process again **and no discharge is allowed outside the premises.***

*3. **No effluent is allowed to discharge outside the premises** and in surface water body i.e. river/drain/well etc.*

*4. Unit shall make arrangement for the treatment of Domestic sewage 12.5 KLD and shall use the treated water in irrigation on land.”*

254. The joint Committee report dated 27.10.2020 under the heading ‘conclusion’, sub-para 8, said: “*The final treated effluent is used ..... irrigation of green belt within premise and **nearly farmers.***” this fact is also admitted by PP in its reply in para 15(a). Firstly, he said that the treated water is being used in process of manufacturing and balanced water is being used in the green belt of plant premises then PP has said that on the request of farmers only treated water is given. The above stand has sought to be justified on the ground that the said supply of treated water was firstly on the demand of farmers, secondly, the farmers had confirmed that crop is not impacted at all rather it is better with treated water and thirdly that there is no water contamination and treated water does not cause any soil flooding/soil sickness. We find it difficult to accept above defence, particularly in view of the specific condition of consent that outside the premises treated effluent could not have been discharged. No permission was obtained by PP from the Competent Authority for discharging treated effluent outside the unit premises. There is no examination of soil quality on different parameters and whether treated effluent from PP unit would cause any change of soil standard. It was not permissible for PP to allow discharge of treated effluent outside the unit premises on the pretext that it was demanded by the farmers. In our country, agriculture is the main vocation and majority of rural people are engaged in agricultural activities. However, level of education and awareness with respect to scientific management of the requisite resource material like water, soil etc. with the farmers is considerably low. Farmers lack requisite awareness. Damage to top soil takes time and adverse impact may not surface in a few years. Farmers also lack bargaining position instead it is a case of exploitation. The area in question is in stressed water conditions meaning thereby,

water level has gone down to large extent making abstraction of ground water costlier. No other irrigation resource is available in the area concern. Towards discharge of social responsibility, it would have been understandable if PP would have arranged supply of fresh water to farmers for agricultural purposes or after a proper study and testing of treated water vis-a-vis soil of the farmers and finding coherence among them, thereafter seeking permission from the Competent Authority, if treated water would have been discharged outside premises, there may not have any valid objection but that course has not been followed by PP. Thus, this is another violation of environmental laws on the part of PP.

255. In its reply, PP has placed water balanced chart in which entire treated water has been shown to have used in green belt and other use as also plant re-cycling. The chart shows that out of 1622 m<sup>3</sup>/day water supply to plant, 1355 m<sup>3</sup>/day became available as treated water where from 87 m<sup>3</sup>/day is evaporation loss from ETP etc. and the remaining 1238 m<sup>3</sup> is divided in 616 m<sup>3</sup>/day for green belt and other use and 622 m<sup>3</sup>/day for plant re-cycling etc. It is difficult to understand as to how everyday such huge quantity of water could be absorbed in green belt in the unit premises. If watering of such a huge quantity is allowed every day, it will flood the area particularly when total green belt area in the premises of PP is 3400 sqm as stated in para 10 under the heading Conclusion of UPPCB report dated 08.11.2021. It is difficult to accept that 3400 sqm area may fetch more than 600 m<sup>3</sup>/day treated water every day. This shows that either the figures supplied by PP are not correct or actually discharge of treated water outside the premises is in very heavy quantity and that is why no measuring instrument was installed to measure quantity of water supplied outside the premises, in utter violation of condition of the consent order dated 13.06.2020 issued under Section 25 and 26 of Water Act 1974.

256. Learned senior counsel Shri Mishra submitted that application for renewal of NOC was submitted much before expiry of NOC and subsequently, NOC has been granted by Ground Water Department of State of UP with the validity period up to 11.07.2026 and it must be taken to relate back to the date when earlier NOC had expired. This aspect we have discussed above. In any case, for the time being, we do not enter into this question, whether UPGWD had any authority to grant NOC and whether NOC issued by UPGWD had any valid legal consequences but for the purpose of adjudication of the **Issues - 2 and 3** at this stage, we find that on 19.05.2019, neither there was any Statute available to permit and authorize, any authority of State Government to grant NOC for abstraction of ground water nor UPGWD had any statutory power to issue such NOC. UPGWMR Act 2019 itself was enacted and published in UP Gazette (Extraordinary), dated 07.08.2019 and came into force on 02.10.2019 by notification dated 11.09.2019 issued under Section 1(3) of UPGWMR Act 2019. UPSGWMRA was constituted by notification dated 13.11.2019. The said body i.e., UPSGWMRA was directed to constitute District Ground Water Management Committee (hereinafter referred to as 'DGWMC') by notification dated 02.01.2020 and UPGWMR Rules 2020 were published by notification dated 25.05.2020. Notification under Section 9(1) of UPGWMR Act 2019 was published on 17.06.2020, notifying rural and urban areas of State of UP as 'Notified Area' for taking up appropriate measures for overall management and regulation of ground water w. e. f. 02.10.2020 by notification dated 03.07.2020. DGWMC was directed to constitute GPGWSC. Neither UPGWMR Act 2019 nor UPGWMR Rules 2020 have been given retrospective effect. That being so, there was no scope for grant of NOC under Rule 8 of UPGWMR Rules 2020 which were not even published in May 2019 since even Act had not been born on that day.

Therefore, submission of learned Senior Counsel that NOC issued by UPGWD, valid upto 11.07.2026, would relate to the period when earlier NOC expired, is fallacious. This argument *ex - facie* has no merit. Hence rejected. We hold that abstraction of ground water prior to 19.05.2017 (02.09.2015 to 18.05.2017) on and after 19.05.2019 by PP was unauthorized and illegal.

257. In view of the above discussion, **we answer Issues 1, 2 and 3 in affirmance that is against PP (respondent 5).**

258. **Issue 4 and 5 :** Both these issues can be considered together. On the statutory enactments and other relevant aspects, we have already considered relevant facts above. CGWA was constituted pursuant to direction of Supreme Court in ***M.C. Mehta (supra)*** vide notification dated 14.01.1997. The said notification was issued by MoEF&CC under Section 3(3) of EP Act 1986. Argument that water is in state list i.e. list 2 schedule 7 of the Constitution and therefore, Central enactments may not cover regulation of water was rejected by Supreme Court vide order dated 05.10.1996 holding in ***M.C. Mehta (supra)*** holding that EP Act 1986 was made by Parliament under Entry 13 list 1 schedule 7 read with Article 253 of the Constitution and shall have over-riding effect. Similar view was taken by Supreme Court in respect to other enactments made by provincial legislature exercising power referable to entries under List 2 schedule 7 of the Constitution, holding that EP Act 1986 since referable to Entry 13 List 1 schedule 7 of the Constitution hence would prevail over provincial enactment.

259. The notification dated 14.01.1997 as amended by notification dated 06.11.2000 says that CGWA shall exercise power and perform functions to regulate and control, management and development of ground water in

the country and issue necessary regulatory directions for this purpose. CGWA is an authority constituted under 3(3), also have power to issue direction under Section 5 of EP Act 1986 and the said directions shall prevail over provincial enactments if any, contrary to the directions issued by CGWA.

260. In the back drop of this ex-position of law on the legislative competence, we now proceed to consider UPGWMR Act 2019 and Rules framed thereunder. As already said UPGWMR Act 2019 was enacted and published in the Gazette on 07.08.2019 and came into force on 02.10.2019. On that date directions issued by CGWA regulating abstraction of ground water were Guidelines 2018 but Tribunal vide its order dated 03.01.2019 passed in **OA 176/2015 (supra)** has already said that the notification dated 12.12.2018 shall not be given effect to in view of their shortcomings therein. That being so, the operative provision on 02.09.2019 when UPGWMR Act 2019 came into force were the Guidelines 2015. Later these guidelines have been substituted by Guidelines 2020 i.e., notification dated 24.09.2020.

261. First, we will examine inconsistency or contrary provision if any, between Guidelines 2015 and UPGWMR Act 2019 as also rules framed thereunder. Guidelines 2015 lays down criteria for allowing withdrawal of ground water by industries in non-notified areas in para 3.1 and the relevant para 3.1.1 and 3.1.1.b are reproduced as under:

**“3.1. Criteria for Industries/Infrastructure/Mining Projects  
3.1.1. Industries:**

<i>Category*</i>	<i>Mandatory Recycle/Reuse (for various purposes except recharge to ground water)</i>	<i>Withdrawal permitted (% of proposed recharge) #</i>
<i>Safe</i>	<i>Major and Medium Industries to recycle</i>	<i>NOC is required for ground water withdrawal subject to</i>

	<i>and reuse at least 40% of the waste water</i>	<i>adoption of artificial recharge to ground water.</i>
<i>Semi-critical</i>	<i>Major and Medium Industries to recycle and reuse at least 50% of the waste water</i>	<i>Withdrawal may be permitted subject to undertaking of ground water recharge** measures. The withdrawal should not exceed 200% of the recharged quantity.</i>
<i>Critical</i>	<i>Major and Medium industries should fully recycle and reuse the waste water</i>	<i>Withdrawal may be permitted subject to undertaking of ground water recharge** measures. The withdrawal should not exceed 100% of the recharged quantity</i>
<i>Over-exploited</i>	<i>All Industries to fully recycle and reuse the waste water</i>	<i>Withdrawal may be permitted subject to undertaking of ground water recharge** measures. The withdrawal should not exceed 50% of the recharged quantity.</i>

\* *The guidelines will follow the assessment as on Ground Water Resource Estimation (GWRE) 2011 till further revision.*

# *Refer section 3.1.1.b for recharge criteria for Water Intensive Industry*

\*\**The recharge should be implemented within the premises and/or same water shed/assessment unit. Detail project proposal shall be included along with the application for NOC.*

### **3.1.1. (b). Water Intensive Industries**

*Industries using ground water as raw material/water intensive industries shall not be granted NOC for ground water withdrawal in Over-Exploited areas. A list of different industries categorised as water intensive is given in Annexure V. In Safe, Semi-Critical & Critical areas NOC for ground water withdrawal is mandatory for these industries as per Section 3,1. However, ground water withdrawal will be limited as follows:*

<b>Category</b>	<b>Ground Water Withdrawal Limit</b>
<i>Safe</i>	<i>Withdrawal limited to 200% of ground water recharge</i>
<i>Semi- Critical</i>	<i>Withdrawal limited to 100% of ground water recharge</i>
<i>Critical</i>	<i>Withdrawal limited to 50% of ground water recharge.</i>
<i>Over- Exploited</i>	<i>No permission for Industries under this category.</i>

262. With respect of withdrawal of ground water in stressed area, the conditions mentioned in Guidelines 2015 are absent in UPGWMR Act 2019 as also UPGWMR Rules 2020. There is complete prohibition for grant of NOC for withdrawal of ground water to water intensive industries in the

Guidelines 2015, list whereof is given annexure 5 to Guidelines 2015 which is as follows:

- i.) Packaged drinking water;
- ii.) Mineral water plant;
- iii.) Tannery;
- iv.) Distillery;
- v.) Brewery;
- vi.) Soft drink;
- vii.) Paper & pulp-Fertilizer;
- viii.) Textile Dyeing;
- ix.) Textile Printing;
- x.) Textile spinning;
- xi.) Sugar;
- xii.) **Dairy Product;**
- xiii.) Water Park & Amusement center.

263. However, we do not find any such prohibition in UPGWMR Act, 2019 and UPGWMR Rules, 2020. Moreso PP is a water intensive industry as evident from above list hence could not have been issued NOC.

264. Para 7 of Guidelines 2015 says that NOC will be accorded in non-notified areas for period of 2 years initially and will be renewed for period of 3 years subject to compliance of conditions mentioned in NOC. Only thereafter NOC shall be renewed every 5 years subject to compliance of conditions mentioned in renewed NOC. In the present case, under Rule 15 the very initial period for NOC is given as 5 years which is directly in contradiction to para 7 (a) (b) of Guidelines 2015. There are many other inconsistencies in Guidelines 2015 and UPGWMR Act 2019 read with UPGWMR Rules 2020 which we do not find necessary to discuss further at this stage.

265. Lastly, recent Guidelines issued by CGWA are Guidelines 2020 issued by notification dated 24.09.2020. Here also, we find that for

industrial purposes several conditions are provided for issue of NOC for extraction of ground water but not in UPGWMR Act 2019. We, therefore, **answer Issue 4 and 5 in affirmative** holding that since broad substantive and effective provisions of UPGWMR Act 2019 and UPGWMR Rules 2020 framed under are ex-facie not consistent with the Guidelines issued by CGWA, the same cannot over-ride the guidelines issued by CGWA.

266. We are further of the view that the matter should be examined by MoEF&CC and CGWA in consultation with Department of Environment and Jal Shakti of State of UP and appropriate consequential action be taken so as to avoid any further complications and confusion. Continuance of different provisions would create practical inconvenience to all stakeholders and it must be avoided.

267. **Issue 6:** Violation of environmental norms including extraction of ground water illegally for certain period is established. The violators in our view are liable to pay environmental compensation besides other action as permissible in law. The question would then arise as to what compensation would be justified in the facts and circumstances of the case and what should be the methodology of determination of such compensation.

**Environmental Compensation-Assessment/Methodology:**

268. The question of **assessment of environmental compensation** includes the principles/factors/aspects, necessary to be considered for computing/assessing/determining environmental compensation. Besides judicial precedents, we find little assistance from Statute. Section 15 of NGT Act 2010 talks of relief of compensation and restitution. It confers wide powers on this Tribunal to grant relief by awarding compensation for the loss suffered by individual(s) and/or for damage caused to environment. Section 15 reads as under:

**“15. Relief, compensation and restitution** -( 1) *The Tribunal may, by an order, provide;*

*a) **relief and compensation** to the victims of pollution and **other environmental damage arising under the enactments** specified in the Schedule I (including accident occurring while handling any hazardous substance);*

*b) for **restitution of property damaged;***

*c) **for restitution of the environment** for such area or areas, as the Tribunal may think fit.*

*(2) The relief and Compensation and restitution of property and environment referred to in clauses (a), (b) and (c) of sub-section of (1) shall be in addition to the relief paid or payable under the Public Liability Insurance Act, 1991 (6 of 1991).*

*(3) No application for grant of any compensation or relief or restitution of property or environment under this section shall be entertained by the Tribunal unless it is made within a period of five years from the date on which the cause for such compensation or relief first arose:*

*Provided that the Tribunal may, if it is satisfied that the' applicant was prevented by sufficient cause from filing the application within the said period, allow it to be filed within a further period not exceeding sixty days.*

*(4) The Tribunal may, **having regard to the damage** to public **health, property and environment**, divide the compensation or relief payable under separate heads specified in Schedule II so as to provide compensation or relief to the claimants and for restitution of the damaged property or environment, as it may think fit.*

*(5) Every claimant of the compensation or relief under this Act shall intimate to the Tribunal about the application filed to, or, as the case may, be, compensation or relief received from, any other Court or authority.*

269. Sub-section 1 enables Tribunal to make an order providing relief and compensation to (i) the victims of pollution, (ii) other environmental damage arising under the enactments specified in the Schedule I. Tribunal is also conferred power to pass an order providing relief for restitution of property damaged. Section 15(1)(c) enables Tribunal to pass an order providing relief for restitution of the environment for such area or areas, as Tribunal may think fit. Section 15 sub-section 4 says that Tribunal may divide compensation or relief payable under separate heads specified in Schedules II, having regard to the damage to public health, property and environment so as to provide compensation or relief, (i) to the

claimants and (ii) for restitution of the damaged property or environment, as it may think fit.

270. Schedule II of NGT Act 2010 gives a list of heads under which compensation or relief for damage may be granted. It has 14 heads in total out of which item (a) to (f), (l), (m) and (n) relates to loss, damage etc. sustained to the person or individual or their property. Item (i) to (k) relates to harm, damage, destruction etc. of environment or environmental system including soil, air, water, land, and eco-system. Items (i) to (k) of Schedule II of NGT Act 2010 are as under:

*“(i) Claims on account of any harm, damage or destruction to the fauna including milch and draught animals and aquatic fauna;*

*(j) Claims on account of any harm, damage or destruction to flora including aquatic flora, crops, vegetables, trees and orchards;*

*(k) Claims including cost of restoration on account of any harm or damage to environment including pollution of soil, air, water, land and eco-systems;”*

271. Items (g) and (h) relate to expense and cost incurred by State in providing relief to affected person; and loss caused in connection with activity causing damage. The damage to environment covers a very wide variety of nature as is evident from definition of environment under section 2 (c) which is inclusive and says; ‘environment includes water, air, and land and the interrelationship, which exists among and between water, air and land and human beings, other living creatures, plants, micro-organism and property’.

272. Section 20 of NGT Act 2010 requires Tribunal to apply principles of sustainable development, the precautionary principle and the polluter pays principle.

273. Thus, broad principles of environmental laws are given but the methodology for assessing/determining compensation is not provided in

the statute. Even Rules framed under NGT Act 2010 are silent on this aspect. Issue of determination of EC is significant in the sense that it should be proportionate to or bears a reasonable nexus with the environmental damage and its remediation/restoration. Similarly in case of compensation to be determined for a victim, it needs to co-relate to injury caused or damage suffered by such person as also cost incurred for treatment/remediation.

274. Taking into consideration multifarious situations relating to violation of environmental laws *vis-a-vis* different proponents, nature of cases involving violation of environmental laws can be categorized as under:

- (i) Where Project/Activities are carried out without obtaining requisite statutory permissions/consents/clearances/NOC etc., affecting environment and ecology. For example, EC under EIA 2006; Consent under Water Act 1974 and Air Act 1981; Authorisation under Solid Waste Management Rules 2016 and other Rules; and NOC for extraction and use of ground water, wherever applicable, and similar requirements under other statutes.
- (ii) Where proponents have violated conditions imposed under statutory Permissions, Consents, Clearances, NOC etc. affecting environment and ecology.
- (iii) Where Proponents have carried out their activities causing damage to environment and ecology by not following standards/norms regarding cleanliness/pollution of air, water etc.

275. The above categories are further sub-divided, i.e., where the polluters/violators are corporate bodies/organisations/associations and group of the people, in contradistinction, to individuals; and another category, the individuals themselves responsible for such pollution.

276. Further category among above classification is, where, besides pollution of environment, proponents/violators action also affect the community at large regarding its source of livelihood, health etc.

277. The next relevant aspect is, whether damage to environment is irreversible, permanent or is capable of wholly or partially restoration/remediation.

278. Determination/computation/assessment of environmental compensation must, not only conform the requirement of restoration/remediation but should also take care of damage caused to the environment, to the community, if any, and should also be preventive, deterrent and to some extent, must have an element of "being punitive". The idea is not only for restoration/remediation or to mitigate damage/loss to environment, but also to discourage people/proponents from indulging in the activities or carrying out their affairs in such a manner so as to cause damage/loss to environment.

279. To impose appropriate 'environmental compensation' for causing harm to environment, besides other relevant factors as pointed out, one has to understand the kind and nature of 'Harmness cost'. This includes risk assessment. The concept of risk assessment will include human-health risk assessment and ecological risk assessment. U.S. Environmental Protection Agency has provided a guideline to understand harm caused to environment as well as people. For the purpose of human-health risk assessment, it comprised of three broad steps, namely, planning and problem formulation; effects and exposure assessment and risk categorization. The first part involves participation of stakeholders and others to get input; in the second aspect health effect of hazardous substances as well as likelihood and level of exposure to the pollutant are

examined and the third step involves integration of effects and exposure assessment to determine risk.

280. Similarly, ecological risk assessment is an approach to determine risk of environmental harm by human activities. Here also we can find answer following three major steps, i.e., problem codification; analysis of exposure and risk characterization. First part encompasses identification of risk and what needs to be protected. Second step insists upon crystallization of factors that are exposed, degree to exposure and whether exposure is likely or not to cause adverse ecological effects. Third step is comprised of two components, i.e., risk assessment and risk description.

281. In totality, problem is multi-fold and multi-angular. Solution is not straight but involves various shades and nuances and vary from case to case. Even Internationally, there is no thumb-rule to make assessment of damage and loss caused to environment due to activities carried out individually or collectively by the people, and for remediation/restoration. Different considerations are applicable and have been applied.

282. In India, where commercial activities were carried out without obtaining statutory permissions/consents/clearance/NOC, Courts have determined, in some matters, compensation by fixing certain percentage of cost of project. In some cases, volume of business transactions, turnover, magnitude of establishment of proponent have also been considered as guiding factors to determine environmental compensation.

283. Nature is extremely precious. It is difficult to price elements of nature like light, oxygen (air), water in different forms like rain, snow, vapour etc. When nature is exploited beyond its carrying capacity, results are harmful and dangerous. People do not understand the value of what nature has given free. Recently in Covid-19 wave II, scarcity of oxygen

proved its worth. In dreadful second phase of the above pandemic, any amount offered, in some cases, could not save life for want of oxygen. Further, damage to environment, sometimes do not reflect in individuals immediately and may take time but injury is there. In such cases, process of determination of compensation may be different.

284. In an article, '*the cost of pollution-Environmental Economics*' by Linas Cekanavicius, 2011, it has been suggested, where commercial activities have been carried out without consent etc., and pollution standards have been violated, Total Pollution Cost (hereinafter referred to as '**TPC**') can be applied. It combines the cost of abatement of environment pollution and cost of pollution induced environmental damage. The formula comes to **TPC(z)=AC(z)+ED(z)**, where **z** denotes the pollution level. Further, clean-up cost/remediation cost of pollution estimated to be incurred by authorities can also be used to determine environmental compensation.

285. When there is collective violation, sometimes the issue arose about apportionment of cost. Where more than one violator is indulged, apportionment may not be equal since user's respective capacity to produce waste, contribution of different categories to overall costs etc. would be relevant. The element of economic benefit to company resulting from violation is also an important aspect to be considered, otherwise observations of Supreme Court that the amount of environmental compensation must be deterrent, will become obliterated. Article 14 of the Constitution says that unequal cannot be treated equally, and it has also to be taken care. Determination/assessment/computation of environmental compensation cannot be arbitrary. It must be founded on some objective and intelligible considerations and criteria. Simultaneously, Supreme Court also said that its calculations must be based on a principle which is simple and can be applied easily. In other

words, it can be said that wherever Court finds it appropriate, expert's assessment can be sought but sometimes experts also go by their own convictions and belief and fail to take into account judicial precedents which have advanced cause of environment by applying the principles of 'sustainable development', 'precautionary approach' and 'polluter pays', etc.

286. Clean-up cost or TPC, may be a relevant factor to evaluate damage, but in the diverse conditions as available in this Country, no single factor or formula may serve the purpose. Determination should be a quantitative estimation; the amount must be deterrent to polluter/violator and though there is some element of subjectivity but broadly assessment/computation must be founded on objective considerations. Appropriate compensation must be determined to cover not only the aspect of violation of law on the part of polluter/violator but also damage to the environment, its remediation/restoration, loss to the community at large and other relevant factors like deterrence, element of penalty etc.

287. Committee in its reports dated 21.06.2021 and 06.08.2021 has made certain recommendations determining environmental compensation under certain heads. The computation by Committee is based on certain formulas it has suggested. We have to examine mechanism suggested by Committee and also the value provided to factors like constant quotient and value of "R" i.e., Rupee, to find out whether the same satisfy all aspects necessary to determine appropriate environmental compensation. Applying principle of absolute liability, Polluters Pay along with Precautionary Principle and sustainable development, it has to be seen whether PPs are liable to pay environment compensation as suggested by Committee and also to undergo other statutory sanctions provided in the

statutes including criminal prosecution, or computation of compensation requires some other method.

288. **CPCB Guidelines:** CPCB has suggested in a report methodology for assessment of environmental compensation which may be levied or imposed upon industrial establishments who are guilty of violation of environmental laws and have caused damage/degradation/loss to environment. It does not encompass individuals, statutory institutions and Government etc. Report is titled as “*Report of the CPCB In-house Committee on Methodology for Assessing Environmental compensation and Action Plan to Utilize the Fund*” which was finalized in the meeting held on 27.03.2019. It shortlisted the incidents requiring an occasion for determining environmental compensation. Six such incidents, shortlisted, are:

**“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.”*

289. For the instances at item (a), (b) and (c), report says that ‘Pollution Index’ (hereinafter referred to as ‘**PI**’) would be used as a basis to levy environmental compensation. CPCB had already published Guidelines categorizing industries into Red, Orange, Green and White, based on the concept of **PI**. The **PI** is arrived after considering quantity and quality of emissions/effluents generated, types of hazardous waste generated and

consumption of resources. **PI** of an industrial sector is a numerical number in the range of 0 to 100 and is represented as follows:

**PI=f** (Water Pollution Score, Air Pollution Score and HW Generation Score).

290. Since range of PI is 0 to 100, increase in value of PI denotes increasing degree of pollution hazard from industrial sector. Accordingly, report says, for determining environmental compensation in respect of cases covered by item (a), (b) and (c), it will apply 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”*

291. The formula incorporates anticipated severity of environmental pollution in terms of PI, duration of violation in terms of number of days, scale of operation in terms of micro and small/medium/large industry and location in terms of proximity to the large habitations. A note is also given under the aforesaid formula and it reads as under:

“Note:

- a. 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.
- b. 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.
- c. 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.
- d. 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.
- e. 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**

<b>S. No</b>	<b>Population* (million)</b>	<b>Location Factor# (LF)</b>
<b>1</b>	1 to <5	1.25
<b>2</b>	5 to <10	1.5
<b>3</b>	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 1<sup>st</sup> repetition, 4 times on 2<sup>nd</sup> 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 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> 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**

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

292. We find that **R** which is a factor in Rupees (₹) is taken to be 100 minimum and 500 maximum. It has suggested that R value be taken as average i.e. Rs. 250/-. On what basis this minimum and maximum has been determined and why average is suggested, beyond any comprehension. We do not find any material in the above report which may throw light for taking value of R as above. Similarly, for determining value of S i.e. Factor for Scale of Operation from 0.5 to 1.5, we find no Guidelines

as to on what basis, it has been determined and only on the size of the industry, divided in small, medium and large, the said factor has been prescribed. The note further says that minimum environmental compensation would be Rs. 5000/- per day. From table 1.2, we find that in the highest case i.e., large industry, depending on the level of PI, maximum environmental compensation would be Rs. 60,000/- per day and minimum Rs. 10,000/- per day. The above determination excludes the actual loss to the environment and cost of remediation including damage to *flora-fauna* and human beings. Moreover classification of industries for industrial policy, or for some licensing purpose, banking purpose etc. would be wholly irrelevant for environment. A small industry may be capable of causing much more pollution than medium or even large industry. For example pollution caused by a brick kiln using coal as fuel may be much more than many medium category industries.

293. In respect of items (d), (e) and (f), report says that for determining environmental compensation, one has to consider the matters in two parts, one for providing immediate relief and another long term relief, such as remediation. In such cases, detailed investigations are required from Expert Institutions or Organizations, based on which environmental compensation will be decided. Second part of report is with regard to utilization of environmental compensation fund. For this purpose, report says that CPCB will finalize a scheme for utilization of fund for protection of environment. Certain schemes identified by CPCB for utilization of the said fund are mentioned in para 1.4.1, as under:

- 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.*”

294. All the above, except item (e), relate to establishment/infrastructure for monitoring/prevention of pollution which in fact is the statutory duty and function of officials of State PCB and CPCB. It appears that CPCB has attempted to utilize environment fund to meet expenses which is the responsibility of Government.

295. Chapter II of report deals with determination of environment compensation for violations of **Graded Response Action Plan (GRAP)** in NCR. Here a fixed amount of environmental compensation has been recommended in table 2.1, as under:

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

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

296. Chapter III considers determination of environmental compensation where a proponent has discharged pollutants in water bodies or failed to prevent discharge of pollutants in water bodies and also failed to implement Waste Management Rules. Laying down Guidelines for determination of environmental compensation in this category, report has

referred to Tribunal's order dated 06.12.2018 in **OA No. 125/2017 and MA No. 1337/2018, Court on its own motion vs. State of Karnataka**, stating as under:

*“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.**”*

297. It is suggested that determination of environmental compensation in this category would have two components, (i) Cost saved/benefits achieved by the concerned individual/authority by not having proper waste/sewage managing system; and (ii) Cost to the environment (environmental externality) due to untreated/partially treated waste/sewage because insufficient capacity of waste/sewage management facility. It further says that Cost saved/benefits achieved would also include interest on capital cost of waste/sewage management facility, daily operation and maintenance (O & M) cost associated with the facility. The determination of environmental compensation, therefore, is suggested, applying following formula:

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

***EC= Capital Cost Factor × Marginal Average Capital Cost for Establishment of Waste or Sewage Management or Treatment Facility × (Waste or Sewage Management or Treatment Capacity Gap) + O&M Cost Factor × Marginal Average O&M Cost × (Waste or Sewage Management or Treatment Capacity Gap) × No. of Days for which facility was not available + Environmental Externality”***

298. Environmental externality has been placed in two categories (i) untreated/partially treated sewage discharge and (ii) improper municipal solid waste management and detailed in table 3.1 and 3.2, as under:

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

<b>Sewage Treatment Capacity Gap (MLD)</b>	<b>Marginal Cost of Environmental Externality (Rs. per MLD/day)</b>	<b>Minimum and Maximum value of Environmental Externality recommended by the Committee (Lacs Rs. Per Day)</b>
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**

<b>Municipal Solid Waste Management Capacity Gap (TPD)</b>	<b>Marginal Cost of Environmental Externality (Rs. per ton per day)</b>	<b>Minimum and Maximum value of Environmental Externality recommended by the Committee (Lacs Rs. Per Day)</b>
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. 0.3
1001-2000	40	Min. 0.50, Max. 0.60
Above 2000		Max. 0.80

299. CPCB has further recommend a fixed cap for minimum and maximum cost for capital and O & M component for environmental compensation in table 3.3 and 3.4, as under:

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

<b>Class of the City/Town</b>	<b>Mega-City</b>	<b>Million-plus City</b>	<b>Class-I City/Town and others</b>
<b>Minimum and Maximum values of EC (Total Capital Cost Component) recommended by the Committee (Lacs Rs.)</b>	Min. 2000 Max. 20000	Min. 1000 Max. 10000	Min. 100 Max. 1000
<b>Minimum and Maximum values of EC (O&amp;M Cost Component) recommended by the Committee (Lacs Rs./day)</b>	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**

<b>Class of the City/Town</b>	<b>Mega-City</b>	<b>Million-plus City</b>	<b>Class-I City/Town and others</b>
<b>Minimum and Maximum values of EC (Capital Cost</b>	Min. 1000 Max. 10000	Min. 500 Max. 5000	Min. 100 Max. 1000

<b>Component) recommended by the Committee (Lacs Rs.)</b>			
<b>Minimum and Maximum values of EC (O&amp;M Cost Component) recommended by the Committee (Lacs Rs./day)</b>	<i>Min. 1.0 Max. 10.0</i>	<i>Min. 0.5 Max. 5.0</i>	<i>Min. 0.1 Max. 1.0</i>

300. Para 3.3 deals with the method of determining environmental compensation for damage/untreated/partially treated sewage by concerned individual/authority. Under this head, CPCB has considered that for population above 1 lakh, requirement of water supply, would be minimum 150 to 200 lpcd and 85% whereof would result in sewage generation. It takes capital cost for 1 MLD STP ranges from 0.63 crores to 3 crores and O & M cost around Rs. 30,000 per month. Consequently, it suggested to assume capital cost for STPs as Rs. 1.75 crores/MLD (marginal average cost). Expected cost for conveyance system is assumed as Rs. 5.55 crore/MLD and annual O& M as 10% of combined capital cost. Based on the above assumptions, Committee has recommended/suggested environmental compensation, to be levied on urban local bodies, by applying formula and here CPCB has suggested two formulas and any of them may be adopted.

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

301. Para 3.4 deals with the method of environmental compensation to be levied on concerned individual/authority for improper solid waste management, chargeable from urban local body based on the following formula:

**“ $EC = \text{Capital Cost Factor} \times \text{Marginal Average Cost for Waste Management} \times (\text{Per day waste generation} - \text{Per day waste disposed as per the Rules}) + \text{O\&M Cost Factor} \times \text{Marginal Average O\&M Cost} \times (\text{Per day waste generation} - \text{Per day waste disposed as per the Rules}) \times \text{Number of days violation took place} + \text{Environmental Externality} \times N$**

*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;*

**$EC \text{ (Lacs Rs.)} = 2.4(\text{Waste Generation} - \text{Waste Disposed as per the Rules}) + 0.02(\text{Waste Generation} - \text{Waste Disposed as per the Rules}) \times N + \text{Marginal Cost of Environmental Externality} \times (\text{Waste Generation} - \text{Waste Disposed as per the Rules}) \times N$**

302. Here also certain assumed figures have been taken by CPCB. Report says that municipal solid waste generation is approximately 1.5 lakh MT/day in India as per MoHUA Report-2016. As per principles of Solid Waste Management Rules 2016 and PWM Rules 2016, total cost of municipal solid waste management in city/town includes cost for door to door collection, cost of segregation at source, cost for transportation in segregated manner, cost for processing of municipal solid waste and disposal through facility like composting bio-methanation, recycling, co-processing in cement kilns etc. It is estimated that total cost of processing and treatment of municipal solid waste for a city of population of 1 lakh and generating approximately 50 tons/day of municipal solid waste is Rs. 15.5 Crores which includes capital cost (one time) and Operational and Management cost for one year. Expenditure for subsequent years would

be only 3.5 Crores/annum. For arriving per day waste generation, CPCB has referred to a survey conducted by Environment Protection Training Research Institute (EPTRI) which 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.

303. Sample calculation of environmental compensation to be levied for improper management of municipal solid waste has been provided in table 3.6 which read as under:

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

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

<b>recommended by the Committee (Lacs Rs./Day)</b>				
<b>Final EC (O&amp;M Component) in Lacs. Rs./Day</b>	10.00	5.00	1.00	1.00
<b>Calculated Environmental Externality (Lacs Rs. Per Day)</b>	2.58	0.18	0.03	0.02
<b>Minimum and Maximum value of Environmental Externality recommended by the Committee (Lacs Rs. per day)</b>	Max. 0.80	Min. 0.25 Max. 0.35	Min. 0.01 Max. 0.05	Min. 0.01 Max. 0.05
<b>Final Environmental Externality (Lacs Rs. per day)</b>	0.80	0.25	0.03	0.02

304. Chapter IV deals with determination/computation of environmental compensation in case of “illegal extraction of ground water” and for this purpose report has referred to Tribunal’s order dated 03.01.2019 passed in **OA No. 327/2018, Shailesh Singh vs. Central Ground Water Board & Ors.** The relevant extract of the order quoted in para 4.1 of the report is as under:

*“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.”*

305. Here, broadly, determination of environmental compensation refers to two major aspects i.e. illegal extraction of water as one aspect and illegal use of ground water as second aspect. For determination of environmental compensation for illegal extraction of ground water, formula suggested by Committee is:

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

*Where water Consumption is in m<sup>3</sup>/day and ECR<sub>GW</sub> in Rs./m<sup>3</sup>*

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  $EC_{GW}$ .”

306. Depending on the category of the area for the purpose of ground water i.e., safe, semi-critical, critical and over-exploited and also the purpose for which ground water is used, determination of environmental compensation for illegal use of ground water, has been suggested differently for different purpose/use i.e., for drinking and domestic use; for packaged drinking water units/for mining infrastructure and dewatering projects and for industrial units. Hence all these aspects are separately given in paragraph 4.6.1, 4.6.2, 4.6.3 and 4.6.4 as under:

**“4.6.1 ECRGW 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
<b>Minimum <math>EC_{GW}</math>=Rs 10,000/- (for households) and Rs. 50,000 (for institutional activity, commercial complexes, townships etc.)</b>					

**4.6.2 ECRGW 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
<b>Minimum <math>EC_{GW}</math>=Rs 1,00,000/-</b>					

**4.6.3 ECRGW 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 ( $ECR_{GW}$ ) 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 ECRGW 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 $EC_{GW}$ =Rs 1,00,000/-					

307. It is also recommended that minimum environmental compensation for illegal extraction of ground water would be Rs. 10,000/- if it is for domestic purposes, but in other matters, it would be Rs. 50,000/-.

308. These recommendations by CPCB have not been given in the form of a binding statutory provision. Even otherwise, we find that these are only broad suggestions, ignore several relevant aspects which have to be considered while determining environment compensation in a given case and, therefore, there cannot be taken as readymade application to all situations for determining of environment compensation. Moreover, on some aspects there is no suggestion, but it is deferred.

309. We also find that some crucial relevant aspects requiring application of 'Polluters Pay', have not been considered in the above suggestions. CPCB has failed to consider that the purpose of determination/computation/assessment of environmental compensation and levy thereof, involve various factors like (i) cost of damage to

environment, (ii) cost needed for restoration/remediation of damage caused to environment, (iii) element of deterrent/provincial, (iv) liability arising for violation of statutory mandatory law relating to environment namely requirement of consent, EC and NOC etc. It is not mere cost of item or subject but computation of something which situation has arisen by an act of PPs due to violation of environmental law causing damage to environment. The loss and its remedy involve complex of components.

310. Nature is precious. The elements of nature like air, water, light and soil in materialistic manner may not be priced appropriately and adequately. Most of the time, whenever price is determined, it may be extremely low or highly exorbitant meaning thereby disproportionate. Still, since some of the assets of nature are marketable, on that basis price may be determined but when such elements are damaged or degraded, restoration thereof, in effect is priceless. Many a times, it may be almost impracticable and improbable to recover and remediate damaged environment to its position as it was. Moreover, its cost might be very high. It also cannot be doubted that once there is a pollution or damage to environment, it would affect adversely not only the environment but also inhabitants and all biological organisms. Damage is there, only degree may differ whether to the environment or to the inhabitants and other organisms. To find out simultaneously degree of damage and to ascertain the same in many cases may not be possible or practicable. For example, a polluted air causes respiratory diseases but the people do not get infected and starts reflection of the disease immediately but it takes some time. The time taken in reflection of injury on the person or body also differs from person to person depending upon his immunity and other health conditions. In some cases, damage to environment i.e., air pollution may be fatal to a person who already has respiratory problem. For some a minor

inconvenience, minor injury to others, and some may not suffer to the extent of showing symptoms of any diseases at all. When we talk of environmental compensation for causing degradation to environment and for its restoration or remediation, it is not a formal or casual or symbolic amount which is required to be levied upon the violator. It is substantive and adequate amount which must be levied for restoration of environment. CPCB in determining values of fixed quotients and rupees etc., has been very lenient as if only symbolically violator is to be held liable and it must pay a petty amount.

311. Statutory Regulators must realize that the amount is needed for remediation and restoration of damaged environment; enough to be deterrent, to provide adequate compensation where inhabitants are affected adversely and where violator has proceeded in violation of Environmental Laws relating to consents, clearances, permissions etc., to penalize him for such violation to prove to be a deterrent to him and others. Unfortunately, the above guidelines laid down by CPCB have not considered all these aspects and it appears that the same have been prepared in a very casual and formal manner.

312. In respect of computation of compensation for illegal extraction of ground water, CPCB has referred to Tribunal's order in ***Court on its own motion vs. State of Karnataka (supra)*** directing it to lay down guidelines to deal with the scale of compensation but has failed to consider that Tribunal has also observed that its scale may have slabs depending on extent of pollution caused, economic viability etc. and deterrent effect.

313. Statutory Regulators have also failed to consider that environmental compensation is not a kind of fee which may result in profiteering to violators and after adjusting a nominal amount of environmental

compensation, a violator may find it profitable to continue with such violations. The objective of environmental compensation is that not only the loss and damage already caused, is made to recover and restore but also in future, the said violator may not repeat the kind of violation already committed and others also have a fear of not doing the same else similar liability may be enforced upon them. Unless amount of compensation is more than maximum permissible profit arising from violation, the purpose of environmental compensation would always stand defeated.

314. Loss caused to surroundings of the environment, may also include *flora-fauna* and human beings. It is in this backdrop that in various matters when the issues were considered by Courts and Tribunal and found necessary to impose environmental compensation upon Proponent/Violator of environmental laws, they have followed different mechanisms. Sometimes, Committee's reports confirming violations have been referred but for quantum of compensation, directions have been issued in different ways. In some cases, CPCB guidelines have been applied while in many other, project cost has been made basis.

315. CPCB Guidelines have taken care of industries and municipal bodies. Its application in all cases irrespective of other relevant consideration may prove to be disastrous. Individuals, charitable, social or religious bodies, public sector and government establishments etc., may, in given circumstances justify a different approach. Further, there may be cases attracting aggravating factors or mitigating factors, for example in national emergency some activity got performed violating environmental norms or a proponent is resilient to any advice to adhere law to protect environment and so on. In fact, quantum of EC should have nexus with State's efforts for protection and preservation of environment and control of pollution. Compensation regime must be a deterrent to violators and

incentivize eco-friendly proponents. No one should get profited by violating environmental laws and community should also not suffer for violation of environmental norms by defaulting proponents. There is no reason, if beside the aspects noticed above, the computation process also incorporates the elements of inflation, quality of life, and economic prosperity.

316. In the context of “violation of disposal of Bio-Medical Waste” and “Non-compliance of Bio-Medical Waste Management Rules, 2016” and determination of environmental compensation for such violations, Tribunal in **OA No. 710/2017, Shailesh Singh vs. Sheela Hospital & Trauma Centre, Shahjahanpur & Others** and other connected matters, vide order dated 15.07.2019, accepted report of CPCB, and said:

*“10. The compensation regime suggested by the CPCB may be adopted. It will be open to the State PCBs/PCCs to adopt a higher scale of compensation, having regard to the problems faced in such States/UTs.*

*11. It is made clear that if even after two months the States/UTs are found to be non-compliant, the compensation will be liable to be recovered from the said States/UTs at the rate of Rs. 1 Crore per month till the non-compliance continues.”*

317. The above recommendations i.e., in para 10, Tribunal said *“compensation regime suggested by the CPCB may be adopted. It will be open to the State PCBs/PCCs to adopt a higher scale of compensation, having regard to the problems faced in such States/UTs”*. It further says that if State Governments and UTs still remain non-complying for two months, compensation will be recovered at the rate of Rs. 1 crore per month till non-compliance continues.

318. In respect of solid waste, sewage effluent, ground water extraction etc., Tribunal in **OA No. 593/2017, Paryavaran Suraksha Samiti and another vs. Union of India and others**, vide order dated 28.08.2019 has said in para 16, that as regards environmental compensation regime fixed

vide CPCB guidelines for industrial units, GRAP, solid waste, sewage and ground water is accepted as an interim measure. Tribunal further observed that recovery of compensation on 'Polluter Pays' principle is a part of enforcement strategy but not a substitute for compliance. It directed all States/UTs to enforce compensation regime latest w.e.f. 01.04.2020 and made it clear that it is not condoning any past violations. Tribunal directed to enforce recovery of compensation from 01.04.2020 from the defaulting local bodies failing which the concerned States/UTs themselves must pay the requisite amount of compensation.

319. In the matter of illegal mining causing damage to environment, methodology for determining environmental compensation was examined in **OA No. 360/2015, National Green Tribunal Bar Association vs. Virender Singh (State of Gujarat)** and other connected matters decided on 26.02.2021. Here a report was submitted by CPCB on 30.01.2020, placing on record recommendations made by Committee comprising:

- i.) Dr Purnamita Dasgupta, Professor, IEG, Delhi,
- ii.) Dr K.S. Kavi Kumar, Professor, MSE, Chennai,
- iii.) Dr. Yogesh Dubey, Associate Professor, IIFM, Bhopal,
- iv.) Shri Sundeep, Director, MoEF&CC, Delhi and
- v.) Shri A. Sudhakar, Additional Director, CPCB, Delhi

320. Report was considered by Tribunal vide order dated 17.08.2020. Report said:

- “8. *The Committee considered two approaches:*
- (I) Approach 1: Direct Compensation based on the market value of extraction, adjusted for ecological damages.**
  - (II) Approach 2: Computing a Simplified NPV for ecological damages.**
9. *In the first approach, the criteria adopted is:*
- *Exceedance Factor (EF).*
  - *Risk Factor (RF).*
  - *Deterrence Factor (DF).*

10. Approach 1 is demonstrated by Table 1 as follows:

<b>Table No. 01: Approach 1</b>				
<i>Permitted Quantity (in MT or m<sup>3</sup>)</i>	<i>Total Extraction (in MT or m<sup>3</sup>)</i>	<i>Excess Extraction (in MT or m<sup>3</sup>)</i>	<i>Exceedance in Extraction:</i>	<i>Compensation Charge (in Rs.)</i>
X	Y	Z=Y-X	Z/X	D* (1+RF+DF) Where D=Z x Market Value of the material per MT-or-m <sup>3</sup>
				DF = 0.3 if Z/X = 0.11 to 0.40 DF = 0.6 if Z/X = 0.41 to 0.70 DF = 1 if Z/X >= 0.71
				RF = 0.25, 0.50, 0.75, 1.00 (as per table 2)

11. Approach 2 is demonstrated by following formula:

“Total Benefits (B)=Market Value of illegal extraction: D(refer Table 1)

Total Ecological Costs (C) = Market Value adjusted for risk factor: D \* RF (refer Table 1).”

12. Final recommendation is as follows:

“Thus, it is recommended that the annual net present value (NPV) of the amount arrived at after taking the difference between the costs and the benefits through the use of the above approach, maybe calculated for a period of 5 years at a discount rate of 5% for mining which is in a severe ecological damage risk zone. **The rationale for levying this NPV is based on expert opinion that reversal and/or restoration of the ecological damages is usually not possible within a short period of time and rarely is it feasible to achieve 100% restoration, even if the sand deposition in the river basin is restored through flooding in subsequent years.** The negative externalities of the mining activity are therefore to be accounted for in this manner. Ideally, the worth of all such damages, including costs of those which can be restored should be charged. **However, till data on site-specific assessments becomes available, this approach may be adopted in the interim.** In situations where the risk categorization charged. However, till data on site-specific assessments becomes available, this approach may be adopted in the interim. In situations where the risk categorisation is unavailable or pending calculation, the following Discount Rates may be considered:

<i>Severity</i>	<i>Mild</i>	<i>Moderate</i>	<i>Significant</i>	<i>Severe</i>
<i>Risk Level</i>	1	2	3	4
<i>Risk Factor</i>	0.25	0.50	0.75	1.0
<i>Discount Rate</i>	8%	7%	6%	5%

Here, in both the approaches, element of illegality committed by PP in carrying on mining was not considered at all. For example, if EC and/or consent is not obtained. Similarly cost of remediation/restoration was also not taken into consideration.

321. Counsel for applicant gave certain suggestions, which are mentioned in para 13 of order dated 17.08.2020. Tribunal directed Committee to re-examine the matter. Thereafter, further report was submitted on 12.10.2020 wherein earlier report was reiterated. Tribunal in para 12 of judgment dated 26.02.2021 said “**we propose to accept approach-2 in the report**”. Further in para 25, Tribunal said:

*“25. In the light of discussion in para 12 above, having regard to the totality of the situation, we accept the report of the CPCB and direct that the scale of compensation calculated with reference to approach II be adopted by all the States/UTs. **Though compensation assessment for damage to the environment is a dynamic concept, depending on variables, floor level formula can be worked out to avoid arbitrariness inherent in unguided discretion. CPCB may issue an appropriate statutory direction for the facility of monitoring and compliance to the Environment Secretaries of all the States/UTs who may forthwith evolve an appropriate mechanism for assessment and recovery of compensation in all Districts of the State. The recovered compensation may be kept in a separate account and utilized for restoration of environment by preparing an appropriate action plan under the directions of the Environment Secretary with the assistance of such individual/ institutions as may be considered necessary.**”*

322. Though Tribunal said that determination of environment compensation is a dynamic concept and depends on variables, and also directed CPCB to issue statutory directions to all States/UT so that they may evolve appropriate mechanism for assessment, but nothing has been done in this regard till date. Some States have found it convenient to follow CPCB guidelines. State of Tamil Nadu vide order dated 03.01.2020 and State of Haryana vide order dated 29.04.2019 have adopted CPCB Guidelines.

323. In some case compensation has been awarded by Tribunal on lump sum basis without referring to any methodology. For example: (i) In **Ajay Kumar Negi vs Union of India, OA No. 183/2013**, Rs. 5 cr. was imposed. (ii) In **Naim Shariff vs M/s Das Offshore Application no. 15(THC) of 2016**, Rs. 25 cr. was imposed (iii) In **Hazira Macchimar Samiti vs. Union of India**, Rs. 25 cr. was imposed.

324. In **Goa Foundation vs. Union of India & Others (2014)6SCC590**, Supreme Court relied on **Samaj Parivartana Samudaya & Others vs. State of Karnataka & Others (2013)8SCC209** and held that **ten per cent of the sale price** of iron ore during e-auction should be taken as compensation. To arrive at the above view, Court observed that this was an appropriate compensation given that mining could not completely stopped due to its contribution towards employment and revenue generation for the State. Further, Court directed to create a special purpose vehicle, i.e., “Goan Iron Ore Permanent Fund” for depositing above directed compensation and utilization of above fund for remediation of damage to environment.

325. In **Goel Ganga Developers vs Union of India and Others, (2018)18SCC257**, Tribunal imposed 195 cr. compensation since project was executed without EC. Supreme Court reduced it to **100 cr. or 10% of project cost whichever is higher**. Supreme Court also upheld Rs.5 cr. imposed by Tribunal vide order dated 27.09.2016. Thus, total amount exceeded even 10% of project cost.

326. In **Mantri Techzone Private Limited vs. Forward Foundation & Others, (2019) 18 SCC 494**, Supreme Court affirmed imposition of environmental compensation by Tribunal, considering cost of the project, where there was violation regarding EC/consent and proponent proceeded

with construction activities violating provisions relating to EC/Consent. Tribunal determined environmental compensation at 5% and 3% of project cost of two builders. 5% of project cost was imposed where PP had raised illegal constructions while 3% was imposed where actual construction activity was not undertaken by PP and only preparatory steps were taken including excavation and deposition of huge earth by creating a hillock. Besides, Tribunal also directed for demolition and removal of debris from natural drain at the cost of PP.

327. In the present case, PP is a very big industry and in case compensation is determined on the basis on its annual turnover, even 5% thereof would be a huge amount. As per Annual Report 2020-2021 of PP, which is in public domain, revenue receipts in 2020-21 is 248.95 crores, while in 2019-20, it was 245.76 crores. When we consider in the light of the charges prescribed in Guidelines 2020, abstraction charges are Rs. 16 m<sup>3</sup>/day in over-exploited category of the area.

328. The extraction allowed was 1650m<sup>3</sup>/day. Extraction charges, as per **Guidelines 2020**, Rs. 16m<sup>3</sup>/day in over-exploited area, will make it about Rs. 26,400/- per day, (1650×16). It will come to Rs. 96,36,000/- per annum. Similar amount must be for restoration of ground water. Here we have balanced the interest in application of principle of sustainable development in as much as PP is an agro based industry and a large number of small milk producers in villages are beneficiaries. Total period of violation comes to more than 4 years. PP, therefore, shall pay environmental compensation, computed for 4 years i.e., Rs. 3,85,44,000/- within one month.

329. For other violation of environmental laws, we impose environmental compensation of Rs. One Crore.

330. CGWA having caused damage to environment and being responsible for allowing illegal extraction of ground water and failing to ensure recharge by the concerned PP, is liable to pay environmental compensation which, if determined as per the above appropriate norms, will be very high. It may thus be held accountable for such failure.

331. In view of above, we issue following directions:

- (a) PP i.e. M/s. Umang Dairies Ltd (R-5) shall pay Rs. 4,85,44,000/- as environmental compensation within one month with CPCB.
- (b) The amount of compensation shall be utilised for restoration of ground water, remediation of damage already caused to ground water, and remediation of damage to environment etc. For this purpose, we constitute a joint Committee comprising CPCB, CGWA, UPPCB, UPGWD and District Collector, Amroha. Committee shall prepare restoration plan within 3 months, execute the same in next 6 months and submit compliance report to Registrar General, NGT immediately after expiry of above period.
- (c) We also constitute a joint Committee of CPCB, CGWA and UPPCB to conduct survey in State of UP and prepare data of various categories drawing ground water for commercial purposes, study impact assessment, suggest ways and modes to reduce ground water extraction in OCS areas, and how ground water level can be improved. Committee may induct any other expert as it may find necessary. District Magistrate of concerned district where Committee would visit, shall also be a member of the Committee.
- (d) CGWA is directed to forthwith issue appropriate orders/directions, regulating ground water extraction in the light of observations made above and the orders passed by Supreme Court in ***M.C. Mehta vs. Union of India & Others (1997) (supra)*** and this Tribunal in

various cases referred to in this judgment and must take all precautions and care to ensure that in OCS areas, ground water should not be allowed to be extracted in such a manner that general people would have to face problem of water for drinking and domestic purposes.

- (e) The Statutory Regulators would also take other remedial and punitive measures as provided in law including prosecution.
- (f) Compliance reports by respective bodies/authorities and Committees shall be submitted after expiry of period given and where no period is given, after 6 months to Registrar General, NGT, PB. If any further directions is required, Registrar General shall place the matter before the Tribunal.

332. With above directions, application is disposed of.

333. A copy of the order be forwarded to Chief Secretary, State of Uttar Pradesh, CPCB, UPPCB, CGWA, UPGWD, MoEF&CC and Ministry of Jal Shakti by e-mail for compliance.

Adarsh Kumar Goel,  
Chairperson

Sudhir Agarwal,  
Judicial Member

Dr. Nagin Nanda,  
Expert Member

February 25, 2022  
Original Application No. 189/2021  
R & AVT