

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
ORIGINAL APPLICATION NO. 200/2014

IN THE MATTER OF

M.C. MEHTA
VS
UNION OF INDIA & ORS.

AND

ANIL KUMAR SINGHAL
UNION OF INDIA & ORS.

APPLICANT
RESPONDENT(S)

AND

SOCIETY FOR PROTECTION OF ENVIRONMENT
& BIODIVERSITY & ANR.

APPLICANT

VS

UNION OF INDIA & ORS.

RESPONDENT (S)

Compliance Statement on behalf of Ministry of Environment, Forest & Climate
Change and Central Pollution Control Board.

In compliance with the decisions taken at the Chamber meeting held on 8th July 2016 in the Hon'ble Tribunal with regard to Phase I, Segment B of River Ganga, MoEF&CC and CPCB submit the compliance statement.

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The information attached at Annexure-I is based as per the information from the Uttar Pradesh State Pollution Control Board. The information attached at Appendix I is as per the field survey carried out by CPCB in 2012-13.

It is prayed that the inspection of Solid Waste Management site at Haridwar could not be undertaken and with permission of the Hon'ble Tribunal the report will be submitted by 18.8.2016.

DELHI
August 03, 2016


(Suneel Dave)
Additional Director
Central Pollution Control Board


(Dinesh Runiwal)
Scientist-D
Ministry of Environment,
Forest & Climate Change

Encl. As Above

Through Panchjanya Batra Singh
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Through Raj Kumar
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New Delhi, 110017

Details of Industrial Pollution in Phase I, Segment B (As per UPPCB)

I. Grossly Polluting Industries (GPI) in U.P.(up to Kanpur) (As per UPPCB)

1.	Total GPI	746
	o Operational Units	565
	o Self-Closed	71
	o Closed by Board	110

All operational units have either installed their own ETP or is a member of CETP.

River wise break-up of operational Grossly Polluting Industries up to Kanpur is as follows

Name of River	No. of Operational Units	E.T.P. installed/ member of CETP	Discharge (MLD)
Ganga	447	447	128.77
Ram Ganga	38	38	31.29
Kali East	80	80	52.36
Total	565	565	212.42

II. Seriously Polluting Industries (SPI) (up to Kanpur)

2.	Total SPI	1072
	o Self-Closed	143
	o Closed by Board	189
	o Operational Units	740

All GPI units are covered in SPI list. All operational units have installed their own ETP or member of CETP.

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Details of Sewage generation in Phase I, Segment B (As per UPPCB)

Name of River	Sewage Generation (MLD)	Existing STPs (MLD)	STPs under construction (MLD)	STPs Proposed (MLD)
Ganga	497.35	377.26	139.50	249.35
Ram Ganga	210.40	29	58	352
Kali East	674.61	153	13	370
Total	1382.36	559.26	210.50	971.35

- At present 823.1 MLD Sewage is being discharge of without treatment directly into rivers. The gap will be fulfilled after construction of proposed STPs.

Note on status of Implementation of Zero Liquid Discharge (ZLD)

Zero Liquid Discharge refers to installation of facilities and systems to enable industrial effluent for recycling of permeate and converting solute (dissolved organic and inorganic compounds / salts) into residue in the solid form by adopting method of concentration and thermal evaporation. CPCB had issued directions under Section 18(1)(b) to UPPCB for seeking action plan from industries on implementation of ZLD in identified industrial sectors in March and April, 2015. CPCB has also proposed draft environmental standards for notification to MoEF&CC wherein ZLD related aspects have been included. The draft standards were uploaded by the Ministry on its website for inviting public comments and the notification has not yet been finalized.

Comparison of ZLD and Conventional treatment system

S. No		Zero Liquid Discharge (ZLD)	Conventional Treatment System
1	Discharge in ambient environment	<ul style="list-style-type: none"> No discharge. Upto 97% of water can be recovered for reuse in the process. Salt @ 4T/MLD can be recovered for reuse. 1.5-2 Tonne/MLD of mixed salt has to be stored or disposed at TSDF. 	<ul style="list-style-type: none"> The treated-effluent after meeting the discharge standards will be either discharged into surface water bodies or used for irrigation. Application of high TDS effluent will create solid sickness and ground water contamination
2	Capital Cost/MLD	₹18 Crore (approx.)	₹2.5 Crore (approx.)
3	Operational Expenditure/MLD	₹2.25 Lakh (approx.)	₹15,000 (approx.)
4	Advantages	<ol style="list-style-type: none"> Meets any of the stringent prescribed environmental standards. Conservation of water as resource. Up to 97% of water can be recovered for reuse in the process. Salt @ 4T/MLD can be recovered for reuse. Prevention of pollution of surface water bodies due to untreated/ partially treated effluent discharge. 	<ol style="list-style-type: none"> Convenient to operate and maintain. Low operational cost. Treated effluent can be used for irrigation purpose after compliance.
5	Disadvantages / Constraints	<ol style="list-style-type: none"> High CAPEX&OPEX [Very high evaporation costs (highly energy intensive 20-40 kWh/m³ resulting in high carbon footprints)]. Skilled manpower for operation and maintenance. Issues in RO reject management. Area requirement is more (Matter of concern for existing units). 	<ol style="list-style-type: none"> Textile/ Tannery effluent contains high TDS, may not meet proposed TDS standard. Textiles / Tanneries being water intensive sector, water conservation is not practiced. Color removal is an issue.

Note on On-line Continuous Effluent Monitoring System (OCEMS)

Online Monitoring

The Central Pollution Control Board (CPCB) on 5th February, 2014 directed the State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) to further direct 17 categories of highly polluting industries, GPs in five Ganga River basin States, CETPs, Common Bio-medical Waste Treatment Facilities (CBWTF) and Common Treatment, Storage and Disposal Facilities (TSDF) of hazardous waste to install real-time 24X7 online monitoring devices on or before 30.06.2015. The purpose of the direction was to create self-regulation and comply with the stipulated standards.

The online monitoring system covers 13 effluent parameters like pH, BOD, COD, TSS, Flow, Chromium, Ammoniacal Nitrogen, Fluoride, Phenol, Cyanide, Temperature, AOX and Arsenic and covers 8 emission parameters like PM, CO, Fluoride, NOx, SO₂, Cl₂, HCl and NH₃.

Periodic monitoring of CEMS is being carried out by the regulatory agencies so as to countercheck to avoid manipulations and ascertain for proper calibration.

Status of online monitoring system in Ganga basin as on 01.07.2016

Sl. No	Category	No of directions issued	No of units installed on line system	No of units in process of installation on line systems	Connectivity
1	Sugar	67	55	2	55
2	Pulp & paper	67	57	2	57
3	Distillery	35	27	1	23
4	Tannery 17 cat	27	18	1	
	Tannery	415	355	0	51
5	Food & Beverages	21	11	8	9
6	Slaughter House	12	5	0	4
7	Textile	63	5	23	5
8	Chemicals (Refinery, Petrochemical, fertiliser and pharmaceutical, pesticide)	28	21	1	21
9	Other	22	0	1	0
10	Others (TPP)	4	2	1	
11	Others (Cement)	3	0		
	TOTAL	764	556	40	225

Appendix -I

Drains in UP in Phase-I Segment -B

S. No.	Catchment area	Drain in Stretch (Haridwar to Narora)	Flow (MLD)	Organic Load Based on BOD (TPD)
1.	Sukratal	Banganga River(at confluence with river Ganga)	-	-
2.	Bijnor	Hemraj Drain	-	-
3.		Bijnor Sewage Drian	7.6	0.44
4.		Malan River (at confluence with river Ganga)	16.5	0.08
5.		Chhoiya Drain (at conf. with river Ganga)	124	16.12
Sub-Total			148.1	16.64
6.	Gajrola and Babrala	Bagad River	1.8	0.35
7.	Garh	Garh Drain	14	0.22
8.		Fuldehra Drain (at confluence with river Ganga)	32	3.49
Sub-Total			47.8	3.71
9.	Badaun	Badaun Sewage Drain	29.9	1.38
10.		Sot River	42	0.97
Sub-Total			71.9	2.34
11.	Anupshar	Anupsahar STP Drain-1	0.85	0.01
12.		Anupsahar STP Drain-2	1.75	0.05
Sub-Total			2.6	0.06
Upper Reach in UP			270.4	23.11

SL. No	Catchment region	Drain in S-III (Narora to kanpur)	Flow (MLD)	Organic Load Based on BOD (TPD)
1.	Bareilly – Aligarh to Kannauj	Nakatiya Nala	319.40	0.01
2.		Chawari Nala	52.00	0.00
3.		Deveranaiya Nala	192.53	0.06
4.		Patta Nala, Kannauj	14.06	0.00
5.		Kasganj drain at Amarpur Village,	47.21	0.00
6.		Cherat Drain near KrisNigyan, Kentra, Aligarh	32.38	0.05
Sub-Total			657.58	0.12
7.	Kanpur (III-A)	Dabka Nalla-1 (Kachhanala)	76.66	12.35
8.		Dabka Nalla-2 (Pakkanala)	6.01	7.58
9.		Dabka Nalla-3 (Pakkanala)	0.26	0.01
10.		Shetla Bazar(Kachhanala)	29.0	12.35
11.		WazidpurNalla	11.23	7.58
12.		SattiChaura	1.43	0.10
13.		Golaghat Nala	2.91	0.18
14.		Bhagwatdas Nala	10.9	0.76
15.		Sisamau Nala	141.33	11.92
16.		Permiya Nala	186	11.49
Sub-Total			465.73	64.32
17.	Unnao (III-A)	Loni Drain	41.9	4.86
18.		City Jail Drain	35.86	7.21
Sub-Total			77.76	12.07
Total			1201.07	76.51
Total in Phase -I Segment B			1471.4	99.62