



केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
Speed Post/e-mail पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE GOVT. OF INDIA

F.No.B-190189/WQM-II/CPCB/2016-17

Dated 12.09.2019

To,

The Regional Director,
Northern Regional Directorate,
PICUP Bhawan, Vibhuti Khand, Gomti Nagar,
Lucknow, Uttar Pradesh - 226 010

Subject: Joint Monitoring of drains and tributaries from Gangotri to Bay of Bengal during Post-monsoon, 2019

Sir,

Post-Monsoon, 2019 monitoring of drains discharging into River Ganga and its 23 tributaries from Gangotri to Bay of Bengal is scheduled from September 23rd – December 15th, 2019.

A list of drains and 23 tributaries to be monitored is enclosed. Seventy-four (74) identified drains & 14 tributaries and 87 identified drains & 6 tributaries are to be monitored from CPCB, Regional Directorate, Lucknow and Kolkata, respectively.

Monitoring schedule may kindly be finalised and informed to CPCB, Head Office. Monitoring shall be completed by December 15, 2019 and monitoring reports shall be provided to Head Office by 15.01.2020 positively.

Encl:

1. List of the drains
2. List of Tributaries
3. Drain reporting format

Yours faithfully,

Aug 2019
(Dr. A. K. Vidyarthi)
Divisional Head, WQM-II &
Additional Director, CPCB

List of Identified Drains and Priority Drains to be monitored from RD, Lucknow during Post-Monsoon, 2019 (Discharged into main stem of River Ganga & its Tributaries (Ramganga, Kali East & Pandu)

Uttar Pradesh, Phase-I, Segment-B (Haridwar D/S to Kanpur D/S to Unnao)

No. of Identified Drains	Town/ Catchment	No. of Priority Drains Pre-Monsoon, 2019	Pollution Sources	Present Status
1.	Farrukhabad	1. Bhairoghat drain/Tokaghata Nala	Mixed	Ganga Right
2.	Farrukhabad	2. Dhinapur drain	Mixed	Ganga Right
3.	Farrukhabad	3. Hathikhana Nala-Fatehgarh	Domestic	Ganga Right
4.	Farrukhabad	4. Bargadiya Ghat drain	Domestic	Ganga Right
5.	Farrukhabad	5. Cantt Nalla	Domestic	Ganga Right
6.	Kanpur	6. Permiya Nala	Domestic	Ganga Right
7.	Kanpur	7. Ranighat drain	Domestic	Ganga Right
8.	Kanpur	8. Sisamau Nala	Mixed	Ganga Right
9.	Kanpur	TEFCO Nala - Non Priority	Domestic	Parmath Drain
10.	Kanpur	9. Parmath drain	Domestic	Ganga Right
11.	Kanpur	10. Muir drain	Domestic	Ganga Right
12.	Kanpur	Police Line drain - Non Priority	Domestic	Muir Drain
13.	Kanpur	11. Jail drain	Domestic	Ganga Right
14.	Kanpur	12. Golaghat Nala	Domestic	Ganga Right
15.	Kanpur	13. Bhagwatdas Nala/Guptarghat Nala	Domestic	Ganga Right
16.	Kanpur	14. Satti Chaura	Domestic	Ganga Right
17.	Kanpur	15. Dabka Nalla-1	Mixed	Ganga Right
18.	Kanpur	16. Dabka Nalla-2	Mixed	Ganga Right
19.	Kanpur	17. Dabka Nalla-3	Mixed	Ganga Right
20.	Kanpur	18. Shetla Bazar	Mixed	Ganga Right
21.	Kanpur	Budhiyaghata Drain - Non Priority	Mixed	Wazipur Drain
22.	Kanpur	19. Wazidpur Nalla	Mixed	Ganga Right
23.	Kanpur	20. Airforce Nala	Domestic	Ganga Right
24.	Unnao	21. City Jail/Dakary Drain	Mixed	Ganga Left
25.	Unnao	22. Loni Drain	Mixed	Ganga Left
25 ID	3T	22 PD	10M, 12D	

Uttar Pradesh, Phase-II, (Unnao D/S to UP Border)

No. of Identified Drains	Town/ Catchment	No. of Priority Drains Pre-Monsoon, 2019	Pollution Sources	If discharged into Drain/River
26.	Prayagraj	Seepage is Ahiyari/ NTPC - Non Priority	Mixed	NTCP Drain
27.	Prayagraj	1. Ahiyari/ NTPC drain	Mixed	Ganga Left
28.	Prayagraj	2. Rasulabad Drain-1	Domestic	Ganga Right
29.	Prayagraj	3. Rasulabad Drain-2	Domestic	Ganga Right
30.	Prayagraj	4. Rasulabad Drain-3	Domestic	Ganga Right
31.	Prayagraj	5. Rasulabad Drain-4	Domestic	Ganga Right
32.	Prayagraj	6. Sadananda Ashram Drain	Domestic	Ganga Right
33.	Prayagraj	7. Nehru Drain	Domestic	Ganga Right
34.	Prayagraj	8. Kodar Drain	Domestic	Ganga Right
35.	Prayagraj	9. Pongaghata Drain	Domestic	Ganga Right
36.	Prayagraj	10. Solari Drain	Domestic	Ganga Right
37.	Prayagraj	11. Mavaiya Drain	Mixed	Ganga Right
38.	Prayagraj	12. Chuhara Mandir Drain-1	Domestic	Ganga Right
39.	Prayagraj	13. Chuhara Mandir Drain-2	Domestic	Ganga Right
40.	Prayagraj	Arail Drain - Non Priority	Domestic	Yamuna
41.	Prayagraj	Sasurkhaderi Drain - Non Priority	Domestic	Yamuna
42.	Prayagraj	Mehndauri Drain - Non Priority	Domestic	Rasulabad-4
43.	Prayagraj	Jhusi Drain-- Non Priority	Domestic	Mansaita
44.	Prayagraj	Chhatnag Drain - Non Priority	Domestic	Mansaita
45.	Prayagraj	14. Mannaiya/Muglaha Drain	Mixed	Ganga Right
46.	Prayagraj	Muglaha Drain - Non Priority	Domestic	Mannaiya
47.	Bhadoli	Chauri Drain - Non Priority	Mixed	Moorva
48.	Bhadoli	Barbaspur Drain - Non Priority	Domestic	Moorva
49.	Mirzapur	15. Ghore Saheed Drain	Domestic	Ganga Right
50.	Mirzapur	16. Khandwa Drain	Domestic	Ganga Right
51.	Lohandi	Lohandi Drain - Non Priority	Mixed	Ojala River
52.	Mirzapur	17. Chorwa Drain	Domestic	Ganga Right
53.	Chunar	18. Chunai Tikaur Drain	Domestic	Ganga Right
54.	Varanasi	19. Nagwa/ Asi Drain	Domestic	Ganga Left
55.	Varanasi	20. Ramnagar Drain	Mixed	Ganga Right

56.	Varanasi	21. Varuna Drain	Mixed	Ganga Left
57.	Varanasi	22. Shivala Drain	Domestic	Ganga Left
58.	Varanasi	23. Khirkiya/ Rajghat Nala	Domestic	Ganga Left
59.	Varanasi	Asi Drain - Non Priority	Domestic	Nagwa Drain
60.	Chandauli	Ghuraha Drain - Non Priority	Mixed	Ramnagar Drain
61.	Chandauli	24. Mugal Sari/ Local/ Ganda Nala	Domestic	Ganga Right
62.	Ghazipur	25. Industrial Drain	Mixed	Ganga Right
37 ID	6 T	25 PD	6M,19D	

Ramganga River, Uttar Pradesh, Phase-I, Segment-B (Haridwar D/S to Kanpur D/S to Unnao)

No. of Identified Drains	Town/ Catchment	No. of Priority Drains Pre-Monsoon, 2019	Pollution Sources	If discharged into Drain/River
63.	Bareilly	1. Devraniya Drain	Mixed	RG Left
64.	Bareilly	2. Chawari/Chaubari Drain	Domestic	RG Left
65.	Bareilly	3. Nakatiya Drain	Mixed	RG Left
3 ID	1 T	3 PD	2M, 1D	

Kali East River, Uttar Pradesh, Phase-I, Segment-B (Haridwar D/S to Kanpur D/S to Unnao)

No. of Identified Drains	Town/ Catchment	No. of Priority Drains Pre-Monsoon, 2019	Pollution Sources	If discharged into Drain/River
66.	Kannauj	1. Patta Nala	Mixed	KE Right
67.	Kannauj	2. Adanga Nalla	Domestic	KE Right
68.	Kannauj	3. Tammi Nalla	Domestic	KE Right
3 ID	1 T	3 PD	1M, 2D	

Pandu River, Uttar Pradesh, Phase-I, Segment-B (Haridwar D/S to Kanpur D/S to Unnao)

No. of Identified Drains	Town/ Catchment	No. of Priority Drains Pre-Monsoon, 2019	Pollution Sources	If discharged into Drain/River
69.	Kanpur	1. Panki Thermal Power Plant, Drain	Mixed	Pandu Left
70.	Kanpur	2. ICI Drain-I	Mixed	Pandu Left
71.	Kanpur	3. Ganda Nalla	Domestic	Pandu Left
72.	Kanpur	4. COD Nalla	Mixed	Pandu Left
73.	Kanpur	5. Halwa Khanda Nalla	Domestic	Pandu Right
74.	Kanpur	6. Ratanpur Nalla	Mixed	Pandu Right
6 ID	1 T	6 PD	4M, 2D	

Note

1. Drains having flow/not/any status which are **not discharges** directly into main stem of River Ganga and its tributaries (Banganga, Ramganga, East Kali & Pandu) were considered as **non-priority** drains in 2019 (highlighted).
2. **However, any drains which having flow/not/any status which discharges directly into main stem of River Ganga and some exceptional drains were considered as priority drains in Pre-monsoon, 2019.**

List of Tributaries of Ganga receiving effluent from GPIS in their catchment area

Sl. No.	Tributaries of Ganga	Monitoring by	No. of confluences/ Sampling Locations
1.	Banganga	HQ, Delhi	03
2.	Shukhi Nadhi	HQ, Delhi	
3.	Song	HQ, Delhi	
4.	Varuna	RD, Lucknow	14
5.	Esan River	RD, Lucknow	
6.	Garrah	RD, Lucknow	
7.	Ghaghara	RD, Lucknow	
8.	Gomti	RD, Lucknow	
9.	Kali East	RD, Lucknow	
10.	Naad River	RD, Lucknow	
11.	Narayani	RD, Lucknow	
12.	Pandu	RD, Lucknow	
13.	Ramganga	RD, Lucknow	
14.	Samdha Tal	RD, Lucknow	
15.	Shukhi Nadhi	RD, Lucknow	
16.	Son	RD, Lucknow	
17.	Tamsa	RD, Lucknow	
18.	Burhi Gandak	RD, Kolkata	06
19.	Damodar	RD, Kolkata	
20.	Gandak	RD, Kolkata	
21.	Sone	RD, Kolkata	
22.	Mahananda	RD, Kolkata	
23.	Punpun	RD, Kolkata	
Total			23

Note:

1. Suitable sampling location should be fixed on the tributaries just before confluence with Ganga, making sure no effect of any other point sources of pollution and no back flow from Ganga.

DRAIN MONITORING FORMAT
(All Fields are Compulsory)

Date & Time of sampling:

1.	Name of the Drain (as per list enclosed, if new please mention)		:			
2.	Meeting Ganga/Ramganga/Kali-east/Others at Left/Right		:	(Name of River – Left/ Right)		
3.	Name of the Regional Office of SPCB		:			
4.	Source of Pollution load (Domestic/ Mixed/ Industrial)		:			
5.	If Industrial /Mixed (name of the units – sector – effluent generation) details may be obtained from the concert regional officers of SPCB		:			
6.	Traceable length (in Km) before meeting Ganga and its tributaries (through google earth/map)		:			
7.	Catchment areas (mention include the town of origin and confluence with river)		:			
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:			
		Longitude				
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	:			
		Longitude				
10.	Landmarks / Address of the Location		:			
11.	Flow (MLD) if zero indicate whether dry/ stagnant/ closed/ tapped/ covered by solid waste/ eutrophication/ unmeasurable due to less flow		:		Length = Width = Depth =	Time = Factor =
12.	Observations		:			
13.	Urgent action required, if any		:			
14.	Name of all monitoring officers along with Designation		:			
15.	Photos		:			

ANALYSIS RESULT

GENERAL PARAMETERS		
Sl. No.	Parameters	Results
1.	Colour (Hazen)	:
2.	pH	:
3.	BOD (mg/l)	:
4.	COD (mg/l)	:
5.	TSS (mg/l)	:
6.	TDS (mg/l)	:
7.	Cl ⁻ (mg/l)	:
8.	NH ₃ -N (mg/l)	:
9.	NO ₃ ⁻ (mg/l)	:
BIOLOGICAL PARAMETERS		
10.	TC (MPN/ 100 ml)	:
11.	FC (MPN/ 100 ml)	:
TRACE METAL/ HEAVY METAL		
12.	Arsenic (As) mg/l	:
13.	Cadmium (Cd) mg/l	:
14.	Total Chromium (Cr) mg/l	:
15.	Copper (Cu) mg/l	:
16.	Iron (Fe) mg/l	:
17.	Lead (Pb) mg/l	:
18.	Manganese (Mn) mg/l	:
19.	Nickel (Ni) mg/l	:
20.	Mercury (Hg) mg/l	:
21.	Zinc (Zn) mg/l	:
22.	Antimony (Sb) mg/l	:
23.	Cobalt (Co) mg/l	:
24.	Selenium (Se) mg/l	:
25.	Vanadium (V) mg/l	:
PESTICIDE		
26.	Water temperature (°C)	:
Pesticide Analysis Report (OPPs)		
27.	Dimethoate ($\mu\text{g/l}$)	:
28.	Methyl Parathion ($\mu\text{g/l}$)	:
29.	Malathion ($\mu\text{g/l}$)	:
30.	Chloropyriphos ($\mu\text{g/l}$)	:
31.	Ethion ($\mu\text{g/l}$)	:
Pesticide Analysis Report (OCPs)		
32.	α -HCH ($\mu\text{g/l}$)	:
33.	β -HCH ($\mu\text{g/l}$)	:
34.	γ -HCH ($\mu\text{g/l}$)	:
35.	δ -HCH ($\mu\text{g/l}$)	:
36.	Aldrin ($\mu\text{g/l}$)	:
37.	Diedrin ($\mu\text{g/l}$)	:
38.	α -Endosulfan ($\mu\text{g/l}$)	:
39.	β -Endosulfan ($\mu\text{g/l}$)	:
40.	OP'DDT ($\mu\text{g/l}$)	:
41.	PP'DDT ($\mu\text{g/l}$)	:
42.	PP'DDE ($\mu\text{g/l}$)	: