



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,
Eastern Regional Directorate,
Southern Conclave, Block-502, 5th & 6th Floors,
#1582, Rajdanga Main Road, Kolkata 700107

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 schedule 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 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,

A. Vidyarthi
12/09/19
(Dr. A. K. Vidyarthi)
Divisional Head, WQM-II &
Additional Director, CPCB

List of Identified Drains and Priority Drains to be monitored by RD, Kolkata during Post-Monsoon, 2019 (Discharged into main stem of River Ganga).

Bihar, Phase-III (UP Border to Jharkhand)				
No. of Identified Drains	Town/ Catchment	No. of Priority Drains Pre-Monsoon, 2019	Pollution Sources	If discharged into Drain/River
1.	Buxer	1. Sidnath Drain	Domestic	Ganga Right
2.	Buxer	2. Nath Baba Drain	Domestic	Ganga Right
3.	Buxer	3. Tadka Drain	Domestic	Ganga Right
4.	Buxer	4. Sariupur Drain	Domestic	Ganga Right
5.	Buxer	5. Danapur Cantt Drain	Domestic	Ganga Right
6.	Patna	6. Digha Ghat Drain	Domestic	Ganga Right
7.	Patna	7. Kurzi Drain	Mixed	Ganga Right
8.	Patna	8. Rajapur Drain	Domestic	Ganga Right
9.	Patna	9. Bans Ghat Drain	Domestic	Ganga Right
10.	Patna	10. Collectriate Ghat Drain	Domestic	Ganga Right
11.	Patna	11. Mittan Ghat Drain	Domestic	Ganga Right
12.	Munger	12. ITC Drain	Domestic	Ganga Right
13.	Munger	13. Lal Darwaja drain	Domestic	Ganga Right
14.	Bhagalpur	Jamunia/Champa Drain – Non Priority	Domestic	Champa Nullah Right
15.	Bhagalpur	Adampur Drain – Non Priority	Domestic	Champa Nullah Right
16.	Bhagalpur	14. Sarkikal Drain	Domestic	Ganga Right
17.	Bhagalpur	15. Saklichand Drain	Domestic	Ganga Right
18.	Bhagalpur	16. Barari Ghat Drain	Domestic	Ganga Right
19.	Bhagalpur	Manik Sarkar Drain – Non Priority	Domestic	Champa Nullah
20.	Bhagalpur	17. DN Singh Drain	Domestic	Ganga Right
21.	Bhagalpur	18. Koyal Ghat Drain	Domestic	Ganga Right
22.	Kahalgaon	19. Kowa Drain	Mixed	Ganga Right
22 ID	5 T	19 PD	2M, 17D	

Jharkhand, Phase-III (UP Border to Jharkhand)

No. of Identified Drains	Town/ Catchment	No. of Priority Drains Pre-Monsoon, 2019	Pollution Sources	If discharged into Drain/River
23.	Sahebganj	1. Gopal Pull Nallah	Domestic	Ganga Right
24.	Sahebganj	2. Jharna Nallah	Domestic	Ganga Left
2 ID	1 T	2 PD	2D	

West Bengal, Phase-IV (Jharkhand Border to Bay of Bengal)

No. of Identified Drains	Town/ Catchment	No. of Priority Drains Pre-Monsoon, 2019	Pollution Sources	If discharged into Drain/River
25.	Jangipur	1. Jangipur Drain	Domestic	Ganga Left
26.	Kalyani	2. Majher Char Khal	Domestic	Ganga Left
27.	Halisahar	3. Halisahar Drain	Domestic	Ganga Left
28.	Garifa	4. Garifa Drain-South/Ramaghat-Open pucca drain	Domestic	Ganga Left
29.	Garifa	5. Garifa Drain-North	Mixed	Ganga Left
30.	Ramaghat	Ramaghat-Open pucca drain – Non Priority	Domestic	Garifa South Drain
31.	Naihati	6. Thanar Khal	Domestic	Ganga Left
32.	Naihati	Sasan ghat Drain – Non Priority	Domestic	Bhatpara Open Pucca Drain
33.	Hooghly	7. Dhopa Ghat Drain	Domestic	Ganga Right
34.	Hooghly	8. Imambara Khal	Domestic	Ganga Right
35.	Hooghly	9. BTPS Out fall Drain-I	Mixed	Ganga Right
36.	Hooghly	10. ITC Triveni Drain	Mixed	Ganga Right
37.	Hooghly	11. Chinsurah-Majir Rasta Drain	Domestic	Ganga Right
38.	Chinsurah	12. Chandni Ghat Drain	Domestic	Ganga Right
39.	Chandannagar	13. Chandannagar Drain	Domestic	Ganga Right
40.	Bhatpara	14. Bhatpara Drain	Mixed	Ganga Left
41.	Bhatpara	15. Bhatpara-Open pucca drain	Mixed	Ganga Left
42.	Baidyabati	16. Bidyabati Drain	Mixed	Ganga Right
43.	Baidyabati	Seraphouli Khal – Non Priority	Domestic	Ganga
44.	Ichapur	17. Debitala Pancha Khal	Domestic	Ganga Left
45.	Champdani	18. DVC Canal	Domestic	Ganga Right
46.	Serampore	19. Serampore/Bhagirathi Drain	Domestic	Ganga Right

47.	Serampore	20. Chatra Khal	Domestic	Ganga Right
48.	Barrackpore	21. Barrackpore Khal	Domestic	Ganga Left
49.	Barrackpore	22. Gandhighat Drain	Domestic	Ganga Left
50.	Barrackpore	23. Dhobi Ghat Drain	Domestic	Ganga Left
51.	Titagarh	24. Titagarh Drain	Mixed	Ganga Left
52.	Rishra	25. Hasting Ghat Drain	Domestic	Ganga Right
53.	Rishra & Konnagar	26. Bagh Khal	Domestic	Ganga Right
54.	Khardah	27. Khardah Khal	Domestic	Ganga Left
55.	Khardah	28. Balughat-Manirampur pucca drain	Domestic	Ganga Left
56.	Khardah	29. Champdany Ferry Ghat/ Paolghat Drain	Mixed	Ganga Right
57.	Kamarhati	Kashipur Khal/Cossipore – Non Priority	Domestic	Cossipore Khal
58.	Bally	30. Dewangazi Ghat Drain	Domestic	Ganga Right
59.	Bally	31. Bally Khal	Mixed	Ganga Right
60.	Belur	32. Jagatnath Ghat Drain-1	Domestic	Ganga Right
61.	Baranagar	33. Kamarhati Drain @ Jute Mill	Mixed	Ganga Left
62.	Baranagar	34. Kamarhati Drain @ PB Ghat	Domestic	Ganga Left
63.	Baranagar	Baranagar Khal – Non Priority	Domestic	Kuthighat Drain
64.	Baranagar	35. Kuthighat Drain/ Baranagar Khal	Domestic	Ganga Left
65.	Chitpur	36. Chitpur Ghat Khal/ Circular Canal	Domestic	Ganga Left
66.	Cossipore	37. Cossipore/ Kashipur Khal	Domestic	Ganga Left
67.	Shobhabazar/ Chorial	38. Muni Khali Khal	Domestic	Ganga Left
68.	Howrah	39. Pratapnagar-Rajbari Drain	Domestic	Ganga Left
69.	Howrah	40. Telkal Ghat Drain	Mixed	Ganga Right
70.	Howrah	41. Ramkrishna Ghat Drain	Mixed	Ganga Right
71.	Howrah	42. 101, Foreshore Road Drain	Mixed	Ganga Right
72.	Howrah	43. Sarasvati Khal	Domestic	Ganga Right
73.	Babughat	Circular Canal – Non Priority	Domestic	Disappeared
74.	Fort William	Fort William Drain – Non Priority	Domestic	Disappeared
75.	Kalighat	44. Tolly Nala	Domestic	Ganga Left
76.	Kalighat	45. Nimtala Khal	Domestic	Ganga Left
77.	Khidderpore	46. Dhankheti/ PB Ghat Khal	Mixed	Ganga Left
78.	Shibpur- Howrah	47. Shibpur Burningghat Drain	Domestic	Ganga Right
79.	Garden Reach	48. Bagher Khal	Domestic	Ganga Left
80.	Garden Reach	49. 130 Foreshore Road Drain	Domestic	Ganga Right
81.	Sankrail	50. Nazerganj Khal	Mixed	Ganga Right
82.	Sankrail	51. Singhi More Khal	Domestic	Ganga Right
83.	Sankrail	52. N.C. Pal Khal	Domestic	Ganga Right
84.	Sankrail/ Sarenga	53. Bazarpara-Garighat Drain/ Sharenga Khal	Mixed	Ganga Right
85.	Budge Budge	54. Akhra Food Ghat drain	Domestic	Ganga Left
86.	Jagatddal	55. Alliance Mill Drain	Domestic	Ganga Left
87.	Bandel	56. Rosbara Drain	Domestic	Ganga Right
63 ID	34 T	56 PD	16M, 40D	

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				
	Distance from confluence point (may the find out over google earth/map), KM		:			
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 ($\mu\text{g/l}$)	: