

A Report On

**“Assessment of Pollution of Drains Carrying
Sewage /Industrial Effluent Joining River Ganga
and its Tributaries (Kali-East/Ramganga)
between Haridwar (Down) to Kanpur (Down)”**



**Segment-B, Phase -I
(Haridwar to Kanpur)**
(In the matter of M.C Mehta Vs. Union of India)

**Submitted to:
Hon’ble National Green Tribunal (NGT)
(November, 2016)**

-BY-

Uttar Pradesh Jal Nigam,
Uttar Pradesh Pollution Control Board,
National Mission for Clean Ganga, MoWR, RD & GR
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**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 **APPLICANT**
VS
UNION OF INDIA & ORS. **RESPONDENT(S)**

AND

SOCIETY FOR PROTECTION OF ENVIRONMENT **APPLICANT**
& BIODIVERSITY & ANR.
VS
UNION OF INDIA & ORS. **RESPONDENT (S)**

**Compliance Statement to the Hon'ble National Green Tribunal (NGT) order
dated 19th October, 2016
Regarding**

**"Assessment of pollution of drains carrying sewage /industrial effluent joining
River Ganga and its Tributaries (Kali- East/Ramganga) between Haridwar
Downstream to Kanpur Downstream (Segment B, Phase - I)**

Submitted by

Uttar Pradesh Jal Nigam

Uttar Pradesh Pollution Control Board

**National Mission for Clean Ganga
(Ministry of Water Resources, River
Development & Ganga Rejuvenation)**

**Central Pollution Control Board
(Ministry of Environment, Forest & Climate
Change)**

Contents

1.	Introduction:	1
2.	The Earlier Report:.....	1
3.	Order of Hon'ble Tribunal:	1
4.	Process of Re-assessment:.....	2
5.	Procedures and Methods for Flow measurement, Sampling and Analysis of Samples	2
6.	Findings:	2
7.	Drains joining River Ganga:	3
7.1	Ganga:.....	3
7.2	Ramganga:	4
7.3	Kali-east:	5
7.4	River Pandu:.....	5
8.	Observations:	6
9.	Suggestions (proposed):	6
	Annexures	7
I.	Summary Statement of Drains	7
II.	List of Drains (Old/New) Joining River Ganga, Kali-East, Ramganga and Pandu. (Haridwar D/S to Kanpur D/S).....	9
III.	Data Sheet of Drains Joining River Ganga.	11
IV.	Data Sheet of Drains Joining River Ram Ganga.	109
V.	Data Sheet of Drains Joining River Kali East.	129
VI.	Data Sheet of Drains Joining River Pandu.	173
10.	Comments of the Institutions	191

1. Introduction:

The main causes attributed to the Pollution of River Ganga are due to disposal of industrial and domestic sewage effluent joining to it directly by drains or indirectly through tributaries. The storm water drains designed to flood-out the storm water during rainy season, are now being used for disposal of sewage and trade effluents which ultimately joins River Ganga.

These drains exert pollution load into River Ganga in terms of Biochemical Oxygen demand (BOD) and Faecal Coliform Bacteria. There are possibilities that the drains may dispose toxic pollutants like metals and pesticide which they may receive from catchment area.

Therefore, Assessment of Pollution of the drains is essential and in this context CPCB which has presented data on drains before the Hon'ble Tribunal and was further directed on 19.11.2016 for fresh survey and analysis by a committee.

2. The Earlier Report:

The CPCB has placed a report on the drains joining River Ganga which was reviewed by the Hon'ble Tribunal in the hearing held during 19th to 25th October, 2016. CPCB has reported that based its survey, there were 30 drains joining River Ganga Directly. However, in the report the three drains of Farrukhabad were missed inadvertently, so accordingly to CPCB, the total drains seen physically were 33. Further, according to UP Jal Nigam number of drains were informed to be more

3. Order of Hon'ble Tribunal:

The Hon'ble National Green Tribunal (NGT) in the Orders dated 19th October, 2016 directed that the Member Secretary, CPCB, Chief Engineer of U.P. Jal Nigam, Senior most Chief Environmental Officer of U.P. Pollution Control Board and representative from the Ministry of Water Resources shall personally visit the area falling in Segment 'B' of Phase-I in terms of our Judgement and as afforested. They will identify how many drains join river Ganga or its tributaries and make observations in relation to quantum and quality of effluent that is going to river Ganga or its main

tributaries through them. Let this report be submitted before the next date of hearing.

4. Process of Re-assessment:

In compliance to the Hon'ble Tribunal, CPCB immediately coordinated with Uttar Pradesh Pollution Control Board (UPPCB), the U.P Jal Nigam and National Mission for Clean Ganga (NMCG) and deputed the inspection teams to physically inspect each drains joining River Ganga and its main tributaries, Kali-East and Ramganga. The Member Secretary, CPCB has also crosschecked the drains and the River Kali-East and Ganga. These locations include i.e. Kadrabad Drain (Kali-East) Chhoiya Drain (Kali-East), Fuldehra (Ganga), Ganga (Brij Ghat, Poonth) and Kali East at Hapur.

During the re-assessments of drains, identified drains have been segregated into the following classes;

- A. Drains carrying only storm water/irrigation water
- B. Drains carrying sewage/industrial effluents of mixed effluents
- C. The drains which are trapped/dry

5. Procedures and Methods for Flow measurement, Sampling and Analysis of Samples

The Central Pollution Control Board (CPCB) collected samples from the drains and followed the Standard Method (American Public Health Association and approved protocols under National Accreditation Board for Laboratories). The samples were preserved for Heavy Metals and Pesticides prior to their instrumental analysis. The Ball float method was adopted for flow measurement and accordingly, the flow of each drains have been expressed in Million Litre per Day (MLD).

6. Findings:

Based on the re-assessment of drains and as per the directions of the Hon'ble Tribunal, the following are the findings/observation and the conclusion (with suggestions).

7. Drains joining River Ganga:

As per the recently carried out survey (During 25th October- 4th November, 2016) the details of each drains along with sample analysis results and the pictures are given in **Annexure –III to VI.**

7.1 Ganga:

There are 33 drains seen physically by the Inspection Teams. Out of 33 drains, 4 drains were found to be trapped and 2 were dry. The details of drains joining river Ganga during the present survey is as under:

List of the drains discharging into River Ganga directly

Sl. No.	Catchment area	Name of New Drain	Trapped (T) /Dry(D)	Stagnant(ST)/ Flow (F)	Pollution Sources
1.	Sukratal	Banganga River	X	Flow	Domestic
2.	Bijnor	Hemraj Drain	X	Flow	Domestic
3.		Malan River	X	Flow	Mixed
4.		Chhoiya Drain	X	Flow	Mixed
5.	Gajrola and Babrala	Bagad River	X	Stagnant	Industrial
6.	Garh	Garh Drain	X	Flow	Domestic
7.		Fuldehra Drain	X	Flow	Mixed
8.	Badaun	Sot River	X	Flow	Domestic
9.	Anupsahar	Anupsahar STP Drain-1	X	Flow	Domestic
10.		Anupsahar STP Drain-2	X	Flow	Domestic
11.	Farrukkabad	Dhinapur drain	X	Flow	Mixed
12.		Bhairoghat drain	X	Flow	Mixed
13.		Bargadiya Ghat drain	X	Flow	Domestic
14.		Hathikhana Nala	X	Flow (Partially trapped)	Domestic
15.	Kanpur	Permiya Nala	X	Flow	Domestic
16.		Ranighat drain	X	Flow	Domestic
17.		Sisamau Nala	X	Flow	Mixed
18.		Tefco Nala	Trapped	X	Domestic
19.		Parmath drain	X	Flow (Could not be measured) – Underground	Domestic
20.		Muir drain	X	Flow	Domestic
21.		Police drain*	Dry	X	Domestic
22.		Jail drain*	Dry	X	Domestic
23.		Golaghat Nala	X	Flow	Domestic
24.		Bhagwatdas Nala	X	Flow	Domestic
25.		Satti Chaura	X	Flow	Domestic
26.		Dabka Nalla-1	Trapped	X	Domestic
27.		Dabka Nalla-2	Trapped	X	Domestic
28.		Dabka Nalla-3	Trapped	X	Domestic
29.		Shetla Bazar	X	Flow	Mixed
30.		Budhiyaghat Drain	X	Flow	Mixed

31.		Wazidpur Nalla	X	Flow	Mixed
32.	Unnao	City Jail Drain	X	Flow	Mixed
33.		Loni Drain	X	Flow	Mixed
Total			4T & 2D	26F & 01 ST	21 (DM), 01 (In), 11 (Mix)

*Irrigation Canal, Shekhpur at Jajmau carried effluent of CETP and STP which is used for irrigation.

7.2 Ramganga:

The joint teams have inspected 6 drains discharging effluents into River Ramganga.

The details of drains joining river Ramganga as presented earlier and during the present survey is an under:

Drains Discharged into Ramganga					
Sl. No.	Catchment area	Name of Old Drain	Name of New Drain	Trapped /Dry	Stagnant/ Flow
1.	Dhampur and Bijnor	Nohra Drain	Nohra Drain	X	Flow
2.	Afzalgarh	Dwarika Sugar mill Darin	X	Discharge into Rachna River,* tributaries of Ramganga, UPPCB informed to be dry before meeting with River Rachna	
3.	Rampur	Rampur Drain	Rampur Drain	X	Flow (through River Kosi)
4.	Moradabad	Moradabad drain	Moradabad drain	X	Flow
5.	Bareilly – Aligarh to Kannauj	X	Nakatiya Nala	X	Flow
6.		X	Chawri Nala	X	Flow
7.		X	Deveranaiya Nala	X	Flow
Total		04	06		

*Since, sub-tributaries were not considered, Rachna River was not inspected

7.3 Kali-east:

The joint teams have inspected 14 drains joining river Kali-east out of which, 2 drains found to be dry.

The details of drains joining river Kali-east as presented earlier and during the present survey is an under:

Drains Discharged into Kali East					
Sl.No.	Catchment area	Name of Old Drain	Name of New Drain	Trapped /Dry	Standing/Flow
1.	Meerut	AbuNallah-1	AbuNallah-1	X	Flow
2.		AbuNallah-2	AbuNallah-2	Dry	X
3.		Slaughter House Drain /Odean Nallah	Slaughter House Drain /Odean Nallah	X	Flow
4.	Mawana and Meerut	Chhoiya Drain	Chhoiya Drain	X	Flow
5.	Hapur	Hapur Drain	Hapur Drain	X	Flow
6.		X	Hapur Drain-1	X	Flow
7.	Modinagar and Meerut	Kadarabad Drain	Kadarabad Drain	X	Flow
8.	Gulaothi	Gulaothi Drain	Gulaothi Drain	X	Flow
9.	Bulandshahar	Bulandshahar Drain1	Bulandshahar Drain1	X	Flow
10.		Bulandshahar Drain2	Bulandshahar Drain2	X	Flow
11.		X	Aadil Nagar Nala	X	Flow
12.		X	Neem Nala	Dry	X
13.	Amapur	X	Kasganj drain	X	Flow
14.	Kannauj		Patta Nala	X	Flow
Total		09	14	2 (D)	12 (F)

7.4 River Pandu:

Five drains discharging into River Pandu in the Kanpur region have also been inspected by the joint teams. The details are as follows;

Drains Discharged into Pandu River					
Sl.No .	Catchment area	Name of Old Drain	Name of New Drain	Trapped /Dry	Stagnant /Flow
1.	Kanpur	X	Panki Nala	X	Flow
2.		X	ICI Nala	X	Flow
3.		X	Ganda Nala	X	Flow
4.		X	COD Nala	X	Flow
5.		X	Halwa Khand Nala	Diverted to COD drain, however overflow goes to Pandu	Flow
Total		00	05	-	5 (F)

8. Observations:

- a. It has been observed there are 33 drains joining River Ganga between Haridwar to Kanpur down (Unnao) directly, 4 drains are trapped 2 are found to be dried or being used for irrigation.
- b. There are 14 drains joins of River Kali-East directly out of 2 drain found to be dry.
- c. There are 6 number of drains joining River Ramganga.
- d. It has been observed that River Ganga was receiving 3515 MLD of waste water directly. Accordingly flow measured at the moment of time.
- e. Except 4 drains (Banganga, Hemraj, Garh and Bargariya Ghat) all the other drains joining directly into River Ganga indicates presents of pesticides.
- f. Four Drains of Kanpur carrying high concentration of Chromium ranging from 2 mg/l to 84 mg/l.
- g. Arsenic was found above permissible limits of drinking water in one drain (Garh), Cadmium in one drain (Wazidpur Nalla), Lead was also found in five drains.

9. Suggestions (proposed):

- a. All the drains should have flow measuring system before they join River Ganga
- b. The custodians of the drains should clean the drains regularly and filthy material should be disposed off properly.
- c. Effluent characteristics should be monitored on monthly basis.
- d. An intermediate method should be adopted for treating sewage and industrial effluents flowing in the drains.
- e. Wherever possible and as per the availability of land, sewage treatment plant should be set up and the treated effluents should meet to the norms ($BOD < 10 \text{ mg/l}$ and Faecal Coliform Bacteria $< 230 \text{ MPN}$).
- f. Treated effluent as far as possible and approachable can be used for industrial and non-potable purpose.
- g. Treated water can also be used for sprinkling on dusty roads and for growing grass to suppress dust emissions.
- h. Treated sewage effluents (free form metals and pesticides) can be used for aquaculture (Fish culture).

Annexures

I. Summary Statement of Drains

(Drains in Segment -B Phase-I, Haridwar D/S to Kanpur D/S)

Pollution Sources	River			
	Ganga	Ramganga	Kali East	Pandu River
Domestic	21	01	05	02
Effluent	01	00	00	00
Mixed	11	05	09	03
No. of drains	33	06	14	05
Total			58	

**II. List of Drains (Old/New) Joining River Ganga, Kali-East,
Ramganga and Pandu. (Haridwar D/S to Kanpur D/S)**

Drains Discharging into River Ganga						
Sl. No.	Catchment area	Name of Old Drain	Name of New Drain	Trapped /Dry	Standing/Flow	Flow (MLD)
1.	Sukratal	Banganga River	1. Banganga River	X	Flow	2347
2.	Bijnor	Hemraj Drain	2. Hemraj Drain	X	Flow	91
3.		Bijnor Sewage Drain	X	Discharge into Hemraj Drain		
4.		Malan River	3. Malan River	X	Flow	100
5.		Chhoiya Drain	4. Chhoiya Drain	X	Flow	276
6.	Gajrola and Babrala	Bagad River	5. Bagad River	X	Standing	-
7.	Garh	Garh Drain	6. Garh Drain	X	Flow	13
8.		Fuldehra Drain	7. Fuldehra Drain	X	Flow	14
9.	Badaun	Badaun Sewage Drain	X	Discharge into Sot River		
10.		Sot River	8. Sot River	X	Flow	60
11.	Anupsahar	Anupsahar STP Drain-1	9. Anupsahar STP Drain-1	X	Flow	1
12.		Anupsahar STP Drain-2	10. Anupsahar STP Drain-2	X	Flow	1
13.	Farrukhababad	Bhairoghat drain	11. Bhairoghat drain	X	Flow	34
14.		Dhinapur drain	12. Dhinapur drain	X	Flow	2
15.		X	13. Hathikhana Nala	X	Flow	27
16.		Bargadiya Ghat drain	14. Bargadiya Ghat drain	X	Flow	4
17.	Bareilly - Aligarh to Kannauj	Deveranaiya Nala	X	Discharge into Ramganga		
18.		Chawri Nala	X	Discharge into Ramganga		
19.		Nakatiya Nala	X	Discharge into Ramganga		
20.		Kasganj drain	X	Discharge into Kali East		
21.		Patta Nala	X	Discharge into Kali East		
22.		Cherat drain	X	Discharge into Yamuna		
23.		Aligarh drain	X	Discharge into Yamuna		
24.	Kanpur	Permiya Nala	15. Permiya Nala	X	Flow	151
25.		X	16. Ranighat drain	X	Flow	1
26.		Sisamau Nala	17. Sisamau Nala	X	Flow	200
27.		X	18. Tefco Nala	Trapped	X	-
28.		X	19. Parmath drain	X	Flow (Could not be measured) - Underground ...	-
29.		X	20. Muir drain	X	Flow	13.
30.		X	21. Police drain	Dry	X	-
31.		X	22. Jail drain	Dry	X	-
32.		Golaghat Nala	23. Golaghat Nala	X	Flow	1
33.		Bhagwatdas Nala	24. Bhagwatdas Nala	X	Flow	17
34.		Satti Chaura	25. Satti Chaura	X	Flow	2
35.		Dabka Nalla-1	26. Dabka Nalla-1	Trapped	X	-
36.		Dabka Nalla-2	27. Dabka Nalla-2	Trapped	X	-
37.		Dabka Nalla-3	28. Dabka Nalla-3	Trapped	X	-
38.		Shetla Bazar	29. Shetla Bazar	X	Flow	24
39.		X	30. Budhiyaghata Drain	X	Flow	10
40.		Wazidpur Nalla	31. Wazidpur Nalla	X	Flow	18
41.		X	Panki Nala	Discharge into Pandu		
42.		X	ICI Nala	Discharge into Pandu		
43.		X	Ganda Nala	Discharge into Pandu		
44.		X	COD Nala	Discharge into Pandu		
45.		X	Halwa Khand Nala	Discharge into Pandu		
46.	Unnao	City Jail Drain	32. City Jail Drain	X	Flow	86
47.		Loni Drain	33. Loni Drain	X	Flow	22
Total		33	33			3515

Drains Discharged into River Ramganga						
Sl. No.	Catchment area	Name of Old Drain	Name of New Drain	Trapped /Dry	Standing/Flow	Flow (MLD)
1.	Dhampur and Bijnor	Nohra Drain	1. Nohra Drain	X	Flow	15
2.	Afzalgarh	Dwarika Sugar mill Darin	X	Discharge Rachna River tributaries of Ramganga		-
3.	Rampur	Rampur Drain	2. Rampur Drain	X	Flow	34
4.	Moradabad	Moradabad drain	3. Moradabad drain	X	Flow	57
5.	Bareilly -Aligarh to Kannauj	X	4. Deveranaiya Nala	X	Flow	398
6.		X	5. Chawri Nala	X	Flow	19
7.		X	6. Nakatiya Nala	X	Flow	170
Total		04	06			693

Drains Discharged into River Kali East						
Sl.No.	Catchment area	Name of Old Drain	Name of New Drain	Trapped /Dry	Standing /Flow	Flow (MLD)
15.	Meerut	AbuNallah-1	1. AbuNallah-1	X	Flow	60
16.		AbuNallah-2	2. AbuNallah-2	X	Flow	244
17.		Slaughter House Drain /Odean Nallah	3. Slaughter House Drain /Odean Nallah	X	Flow	175
18.	Mawana and Meerut	Chhoiya Drain	4. Chhoiya Drain	X	Flow	X
19.	Hapur	Hapur Drain	5. Hapur Drain	X	Flow	28
20.		X	6. Hapur Drain-1	X	Flow	5
21.	Modinagar and Meerut	Kadarabad Drain	7. Kadarabad Drain	X	Flow	49
22.	Gulaothi	Gulaothi Drain	8. Gulaothi Drain	X	Flow	7
23.	Bulandshahar	Bulandshahar Drain1	9. Bulandshahar Drain1	X	Flow	147
24.		Bulandshahar Drain2	10. Bulandshahar Drain2	X	Flow	165
25.		X	11. Aadil Nagar Nala	X	Flow	199
26.		X	12. Neem Nala	Dry	X	X
27.	Amapur	X	13. Kasganj drain	X	Flow	9
28.	Kannauj	X	14. Patta Nala	X	Flow	11
Total		09	14			1099

Drains Discharged into Pandu River						
Sl.No.	Catchment area	Name of Old Drain	Name of New Drain	Trapped /Dry	Standing/ Flow	Flow (MLD)
6.	Kanpur	X	1. Panki Nala	X	Flow	114
7.		X	2. ICI Nala	X	Flow	19
8.		X	3. Ganda Nala	X	Flow	211
9.		X	4. COD Nala	X	Flow	121
10.		X	5. Halwa Khand Nala	Diverted to COD drain, however overflow goes to Pandu		62
Total		00	05			527

III. Data Sheet of Drains Joining River Ganga.

**DRAIN MONITORING FORMAT
(Ganga)**

Date & Time of sampling: 26.10.2016, 10:30 AM onwards

1.	Name of the Drain	:	Banganga
2.	Meeting Ganga	:	Left bank
3.	Name of the Regional Office of SPCB	:	Muzaffarnagar
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (Please indicate type of sector)	:	NA
6.	Traceable length of drain (in Km) before meeting Ganga (through google earth/map)	:	Approx. 40-50 km
7.	Catchment area	:	Sukratal
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 29°25'26.07"N
		Longitude	: 78° 1'5.05"E
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 5-7km
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 29°29'29.3"N
		Longitude	: 77°59'24.2"E
10.	Landmarks / Address of the Location		Sukratal Bridge, confluence point between Solani and Banganga river
11.	Flow if in MLD, if zero indicate whether dry or stagnant	:	2346.53
12.	Observations	:	Banganga comes from Laksar, Haridwar, Uttarakhand.
13.	Name of all monitoring officers along with Designation		Dr. Pankaj Kumar, Scientist 'D', CPCB Dr. M. Jiban Singh, Research Associate, CPCB Sh. Neeraj Gahlawat, Project Office, NMCG Sh. A.K. Tewari, Regional Officer, Bijnor/ Muzaffarnagar, UPPCB Sh. Rajiv Tyagi, Executive Engineer, UPJN Sh. R. K. Singh, AE, UPJN

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	----
2.	pH	:	7.97
3.	BOD (mg/l)	:	07
4.	COD (mg/l)	:	15
5.	TSS (mg/l)	:	12
6.	TDS (mg/l)	:	280
7.	Cl ⁻ (mg/l)	:	23
8.	NH ₃ -N (mg/l)	:	09
9.	NO ₃ ⁻ (mg/l)	:	1.96
10.	DO (mg/l)*	:	----
11.	TC (MPN/ 100 ml) #	:	16x10 ²
12.	FC (MPN/ 100 ml) #	:	450

*For Fresh water carrying drains/ rivers

#for sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	0.01
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	BDL
5.	Iron (Fe) mg/l	:	1.32
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.14
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	----
10.	Zinc (Zn) mg/l	:	0.01
11.	Antimony (Sb) mg/l	:	----
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)		:
2.	Monochrotophos	:	--
3.	Dimethoate ($\mu\text{g/l}$)	:	BDL
4.	Methyl Parathion ($\mu\text{g/l}$)	:	BDL
5.	Malathion ($\mu\text{g/l}$)	:	BDL
6.	Chloropyriphos ($\mu\text{g/l}$)	:	BDL
7.	Methyl Parathion	:	BDL
8.	Ethion ($\mu\text{g/l}$)	:	BDL
	Pesticide Analysis Report (OCPs)		:
9.	α -HCH	:	BDL
10.	β - HCH	:	BDL
11.	γ -HCH	:	BDL
12.	δ -HCH	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**



Sampling point

Confluence point

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 26.10.2016 & 1:30 Pm onwards

1.	Name of the Drain	:	Hemraj Drain
2.	Meeting Ganga	:	Left bank
3.	Name of the Regional Office of SPCB	:	Bijnor
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (Please indicate type of sector)	:	NA
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 5-8 km
7.	Catchment area	:	Bijnor
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 29°22'25.67"N
		Longitude	: 78° 2'28.87"E
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 5 km
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 29°22'28.4"N
		Longitude	: 78°05'08.2"E
10.	Landmarks / Address of the Location		Near Hemraj Village
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	91.260
12.	Observations	:	Hemraj Drain actually over flow of Ganga River after travelling 10-12 km it again confluence with Ganga river. Bijnor Sewage drain meets this drain.
13.	Name of all monitoring officers along with Designation	:	Dr. Pankaj Kumar, Scientist 'D', CPCB Dr. M. Jiban Singh, Research Associate, CPCB Sh. Neeraj Gahlawat, Project Office, NMCG Sh. A.K. Tewari, Regional Officer, Bijnor/ Muzaffarnagar, UPPCB Sh. Rajiv Tyagi, Executive Engineer, UPJN Sh. R. K. Singh, AE, UPJN

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	---
2.	pH	:	7.82
3.	BOD (mg/l)	:	5
4.	COD (mg/l)	:	24
5.	TSS (mg/l)	:	2.0
6.	TDS (mg/l)	:	204
7.	Cl ⁻ (mg/l)	:	12
8.	NH ₃ -N (mg/l)	:	07
9.	NO ₃ ⁻ (mg/l)	:	BDL
10.	DO (mg/l)*	:	---
11.	TC (MPN/ 100 ml) #	:	92x10 ⁴
12.	FC (MPN/ 100 ml) #	:	47x10 ³

*For Fresh water carrying drains/ rivers

#for sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	0.02
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	0.01
5.	Iron (Fe) mg/l	:	1.32
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.10
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	---
10.	Zinc (Zn) mg/l	:	0.02
11.	Antimony (Sb) mg/l	:	---
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT
(Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)		:
2.	Monochrotophos	:	BDL
3.	Dimethoate ($\mu\text{g/l}$)	:	BDL
4.	Methyl Parathion ($\mu\text{g/l}$)	:	BDL
5.	Malathion ($\mu\text{g/l}$)	:	BDL
6.	Chloropyriphos ($\mu\text{g/l}$)	:	BDL
7.	Methyl Parathion	:	BDL
8.	Ethion ($\mu\text{g/l}$)	:	BDL
	Pesticide Analysis Report (OCPs)		:
9.	α -HCH	:	BDL
10.	β - HCH	:	BDL
11.	γ -HCH	:	BDL
12.	δ -HCH	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**



Sampling point

Due to eutrofication confluence point not detected

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 26.10.2016 & 12 Noon onwards

1.	Name of the Drain	:	Malan River
2.	Meeting Ganga at -	:	Left bank
3.	Name of the Regional Office of SPCB	:	Bijnor
4.	Source of pollution load:	:	Mixed
5.	If Industrial /Mixed (Please indicate type of sector)	:	Sugar, Distillery, Pulp & paper
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 140-150 km
7.	Catchment area	:	Bijnor
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 29°26'53.30"N
		Longitude	: 78° 3'52.61"E
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 100 m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 29°26'53.1"N
		Longitude	: 78°03'59.1"E
10.	Landmarks / Address of the Location		Near Hemraj Village
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	100.00
12.	Observations	:	Malan River originated from Kotdwar (Uttarakhand) and travelled about 140-150 km and then meet in the Ganga River. It carries domestic waste of Najibabad town, Nagar Palika Parshad Kiratpur, Bijor and Nagar Panchayat Mandawar.
13.	Name of all monitoring officers along with Designation	:	Dr. Pankaj Kumar, Scientist 'D', CPCB Dr. M. Jiban Singh, Research Associate, CPCB Sh. Neeraj Gahlawat, Project Office, NMCG Sh. A.K. Tewari, Regional Officer, Bijnor/ Muzaffarnagar, UPPCB Sh. Rajiv Tyagi, Executive Engineer, UPJN Sh. R. K. Singh, AE, UPJN

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	---
2.	pH	:	8.3
3.	BOD (mg/l)	:	5
4.	COD (mg/l)	:	34
5.	TSS (mg/l)	:	88
6.	TDS (mg/l)	:	224
7.	Cl ⁻ (mg/l)	:	47
8.	NH ₃ -N (mg/l)	:	7
9.	NO ₃ ⁻ (mg/l)	:	0.27
10.	DO (mg/l)*	:	---
11.	TC (MPN/ 100 ml) #	:	790
12.	FC (MPN/ 100 ml) #	:	490

*For Fresh water carrying drains/ rivers

#for sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	BDL
5.	Iron (Fe) mg/l	:	2.40
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.29
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	---
10.	Zinc (Zn) mg/l	:	0.01
11.	Antimony (Sb) mg/l	:	---
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	BDL
3.	Dimethoate ($\mu\text{g/l}$)	:	BDL
4.	Methyl Parathion ($\mu\text{g/l}$)	:	BDL
5.	Malathion ($\mu\text{g/l}$)	:	BDL
6.	Chloropyriphos ($\mu\text{g/l}$)	:	BDL
7.	Methyl Parathion	:	BDL
8.	Ethion ($\mu\text{g/l}$)	:	BDL
	Pesticide Analysis Report (OCPs)	:	
9.	α -HCH	:	BDL
10.	β - HCH	:	BDL
11.	γ -HCH	:	BDL
12.	δ -HCH	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	0.05
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Sampling point

Confluence point with Ganga River

DRAIN MONITORING FORM
(Ganga)

Date & Time of sampling: 26.10.2016 (13.00hrs)

1.	Name of the Drain		:	Chhoiya Drain
2.	Meeting Ganga/Ramganga/Kali-east at -		:	meets Ganga at left bank
3.	Name of the Regional Office of SPCB		:	SPCB, Bijnor
4.	Source of pollution load:		:	(Domestic/Industrial/Mixed)- Mixed
5.	If Industrial /Mixed (Please indicate type of sector)		:	Mixed (domestic and industrial, mainly distillery and paper industries)
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)		:	-----
7.	Catchment area		:	Bijnor
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:	29°05'49.6"N
		Longitude	:	078°05'49.6"E
	Distance from confluence point (may the find out over google earth/map), KM		:	Sample taken near confluence point (at nearly 50 meter before confluence)
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	:	29005' 49.6" N
		Longitude	:	078005'49.6"E
10.	Landmarks / Address of the Location		:	Near Rasulpur bhawan village, Datiyata Road, Khanpur
11.	Flow (if in MLD) if zero indicate whether dry or stagnant		:	Due to back flow of river, flow could not be measured (As per previous Inspection report, dated 04.10.2016, the flow was 275.616 MLD)
12.	Observations		:	<ul style="list-style-type: none"> ❖ There was high back flow of river into the drain. ❖ The water was visibly found slightly black. ❖ Reaching confluence point was found very difficult.
13.	Urgent action required, if any		:	---
14.	Name of all monitoring officers along with Designation		:	<ol style="list-style-type: none"> 1. Shri Rajeev Srivastava, ASO, SPCB-Bijnor 2. Shri Brahmanand, A.E., U.P. Jal Nigam 3. Shri Amit , Research Officer, NMCG 4. Dr Brajesh Shrivastava, Sc 'C', CPCB 5. Ms. Anshul Kumari, R.A., CPCB

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	--
2.	pH	:	7.73
3.	BOD (mg/l)	:	7
4.	COD (mg/l)	:	56
5.	TSS (mg/l)	:	33
6.	TDS (mg/l)	:	416
7.	Cl ⁻ (mg/l)	:	35
8.	NH ₃ -N (mg/l)	:	18
9.	NO ₃ ⁻ (mg/l)	:	-
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	16x10 ³
12.	FC (MPN/ 100 ml) #	:	35x10 ²

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	0.02
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	BDL
5.	Iron (Fe) mg/l	:	2.2
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.32
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.02
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -HCH	:
10.	β - HCH	:
11.	γ - HCH	:
12.	δ -BHC	:
13.	Total BHC (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α -Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β -Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)	
	
View of confluence point	View of sampling point

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 02.11.2016 (13.00hrs)

1.	Name of the Drain		:	Bagad River (drain)
2.	Meeting Ganga/Ramganga/Kali-east at -		:	Does not meet Ganga, remains dry after nearly 20 Km from Gajraula.
3.	Name of the Regional Office of SPCB		:	Bijnor
4.	Source of pollution load:		:	Industrial
5.	If Industrial /Mixed (Please indicate type of sector)		:	Industrial (Silica, Pharma and Paper industries etc.)
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)		:	Does not meet Ganga as it remains dry after nearly 15 KM from Gajraula
7.	Catchment area		:	Gajraula
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	:	28° 48' 23.90"N 078°12'59.8"E
		Longitude	:	
10.	Landmarks / Address of the Location		:	Near Jubilant industry in Gajraula, sampling point near to highway over bridge
11.	Flow in MLD, if zero indicate whether dry or stagnant		:	flow could not be measured due to stagnant water
12.	Observations		:	The water in the drain was found carrying industrial effluents. As per the information provided by the State officials, it originates near Dadiyal in Amroha district and after travelling to nearly 20 KM from Gajraula, it becomes dry.
13.	Urgent action required, if any		:	----
14.	Name of all monitoring officers along with Designation		:	<ol style="list-style-type: none"> 1. Dr Brajesh Srivastava, Sc 'C', CPCB 2. Ms. Anshul Kumari, R.A., CPCB 3. Shri Rajeev Srivastava, A.S.O., Bijnor 4. Shri D. K. Jain, E.E., U.P. Jal Nigam 5. Shri Amit, Research Officer, NMCG

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	--
2.	pH	:	7.74
3.	BOD (mg/l)	:	282
4.	COD (mg/l)	:	606
5.	TSS (mg/l)	:	479
6.	TDS (mg/l)	:	7948
7.	Cl ⁻ (mg/l)	:	116
8.	NH ₃ -N (mg/l)	:	12
9.	NO ₃ ⁻ (mg/l)	:	-
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	35x10 ⁵
12.	FC (MPN/ 100 ml) #	:	11x10 ⁵

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	0.02
4.	Copper (Cu) mg/l	:	0.03
5.	Iron (Fe) mg/l	:	3.85
6.	Lead (Pb) mg/l	:	0.02
7.	Manganese (Mn) mg/l	:	0.32
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.17
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	0.02

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -HCH	:
10.	β - HCH	:
11.	γ - HCH	:
12.	δ -BHC	:
13.	Total BHC (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α -Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β -Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



View of Bagad river (drain)



View of sampling point

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 27.10.2016, 11:20 am

1.	Name of the Drain	:	Garh Drain
2.	Meeting Ganga at	:	Right bank – Ganga
3.	Name of the Regional Office of SPCB	:	Ghaziabad
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (Please indicate type of sector)	:	NA
6.	Traceable length of drain (in Km) before meeting Ganga (through google earth/map)	:	20 KM (approx.)
7.	Catchment area	:	Garh
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 78.13648
		Longitude	: 28.766984
	Distance from confluence point (may the find out over google earth/map), KM		20m (approx.)
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 78.13648
		Longitude	: 28.766984
10.	Landmarks / Address of the Location		Near Brijghat, Garhmukteshwar, UP
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	13.13
12.	Observations	:	<ul style="list-style-type: none"> 1. Turbid. 2. Ichornia growth found. 3. Solid wastes were found floating with drain.
13.	Name of all monitoring officers along with Designation		<ul style="list-style-type: none"> 1. Ms. Garima Dublish, Research Associate, CPCB 2. Dr. Sananda Sinha, Research Associate, CPCB 3. Sh. Ajay Sharma, Attendant, CPCB 4. Sh. Shravan Kr. Kota, Research Officer, NMCG 5. Sh. Ashutosh Yadav, Jal Nigam, UP 6. sh. Sushil Kumar, SA, Ghaziabad RO, UP

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	NA
13.	pH	:	7.58
14.	BOD (mg/l)	:	4
15.	COD (mg/l)	:	25
16.	TSS (mg/l)	:	31
17.	TDS (mg/l)	:	376
18.	Cl ⁻ (mg/l)	:	28
19.	NH ₃ -N (mg/l)	:	4
20.	NO ₃ ⁻ (mg/l)	:	0.89
21.	DO (mg/l)*	:	3.80
22.	TC (MPN/ 100 ml) #	:	92x10 ³
23.	FC (MPN/ 100 ml) #	:	35x10 ³

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	01
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	BDL
5.	Iron (Fe) mg/l	:	1.15
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.15
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	NA
10.	Zinc (Zn) mg/l	:	BDL
11.	Antimony (Sb) mg/l	:	NA
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -BHC	:
10.	β -BHC	:
11.	γ -BHC	:
12.	δ -BHC	:
13.	Total BHC (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α -Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β -Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 27.10.2016, 3.30 pm

1.	Name of the Drain	:	Phuldera Drain
2.	Meeting Ganga/Ramganga/Kali-east at -	:	Right bank
3.	Name of the Regional Office of SPCB	:	Ghaziabad
4.	Source of pollution load:	:	Mixed
5.	If Industrial /Mixed (Please indicate type of sector)	:	<ul style="list-style-type: none"> • Distillery • Sugar • Food & Dairy
6.	Traceable length of drain (in Km) of drain before meeting River Ganga (through google earth/map)	:	35 KM (approx.)
7.	Catchment area	:	Garh
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 78.17085
		Longitude	: 28.669779
	Distance from confluence point (may the find out over google earth/map), KM		17 KM (Approx.)
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 78.125984
		Longitude	: 28.690947
10.	Landmarks / Address of the Location		Near Bahadurgarh vill. After confluence of drain into Siyana escape
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	13.70
12.	Observations	:	<ol style="list-style-type: none"> 1. Turbid. 2. Ichornia growth found. 3. Solid wastes were found floating with drain.
13.	Urgent action required, if any	:	Solid wastes floating with the drain should be stopped immediately.
14.	Name of all monitoring officers along with Designation		7. Ms. Garima Dublish, RA, CPCB 8. Dr. Sananda Sinha, RA, CPCB 9. Sh. Ajay Sharma, Attendant, CPCB 10. Sh. Shravan Kr. Kota, Research Officer, NMCG 11. Sh. Ashutosh Yadav, Jal Nigam, UP Sh. Gupta, Ghaziabad RO, UP

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	N/A
2.	pH	:	7.25
3.	BOD (mg/l)	:	42
4.	COD (mg/l)	:	96
5.	TSS (mg/l)	:	51
6.	TDS (mg/l)	:	268
7.	Cl ⁻ (mg/l)	:	27
8.	NH ₃ -N (mg/l)	:	7
9.	NO ₃ ⁻ (mg/l)	:	1
10.	DO (mg/l)*	:	NIL
11.	TC (MPN/ 100 ml) #	:	16x10 ⁸
12.	FC (MPN/ 100 ml) #	:	11x10 ⁷

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	BDL
5.	Iron (Fe) mg/l	:	0.98
6.	Lead (Pb) mg/l	:	0.06
7.	Manganese (Mn) mg/l	:	0.24
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	N/A
10.	Zinc (Zn) mg/l	:	0.14
11.	Antimony (Sb) mg/l	:	N/A
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -BHC	:
10.	β -BHC	:
11.	γ -BHC	:
12.	δ -BHC	:
13.	Total BHC (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α -Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β -Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25.10.2016

1.	Name of the Drain		:	Sot River/ Drain
2.	Meeting Ganga		:	Left bank
3.	Name of the Regional Office of SPCB		:	Bulandshahar
4.	Source of pollution load:		:	Domestic
5.	If Industrial /Mixed (please indicate type of sector.)		:	NA
6.	Catchment area		:	Badaun
7	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:	28°01'43.65"N
		Longitude	:	79°06'39.76"E
	Distance from confluence point (may the find out over google earth/map), KM		:	Approx. 15 km
8	Co-ordinate of the sampling point (Decimal units)	Latitude	:	28°01'53.12"N
		Longitude	:	79°07'05.11"E
9	Landmarks / Address of the Location		:	Shekhupur Pul
10	Flow if in MLD (Approx)		:	Approx. 59.720
11	Observations		:	Its water used for irrigation during its course. It becomes dry after few kilometers from Badaun city before meeting to River Ganga. River bed is being used for agriculture hence confluence point was not explored
12	Name of all monitoring officers along with Designation		:	1. Dr. Prashant Singh Sc. D (CPCB) 2. Dr. Sarvesh Rai Sc. C (CPCB) 3. Mr. R. K. Gupta Ex. En. U.P. Jal Nigam 4. Mr. Avichal Singh A.E. UP Jal Nigam 5. Mr. Jitendra Sharma Lab Asst. UPPCB, Bulandshahar

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	Turbid
2.	pH	:	7.90
3.	BOD (mg/l)	:	48
4.	COD (mg/l)	:	114
5.	TSS (mg/l)	:	42
6.	TDS (mg/l)	:	588
7.	Cl ⁻ (mg/l)	:	101
8.	NH ₃ -N (mg/l)	:	34
9.	NO ₃ ⁻ (mg/l)	:	2.96
10.	DO (mg/l)*	:	
11.	TC (MPN/ 100 ml) #	:	35x10 ⁵
12.	FC (MPN/ 100 ml) #	:	24x10 ⁵

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	-
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	BDL
5.	Iron (Fe) mg/l	:	20.78
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.13
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.02
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
8.	α -HCH	:
9.	β -HCH	:
10.	γ -HCH	:
11.	δ -HCH	:
12.	Total HCH (ng/l)	:
13.	Aldrin (ng/l)	:
14.	Diedrin (ng/l)	:
15.	α -Endosulfan	:
16.	Total Endosulfan (ng/l)	:
17.	β -Endosulfan	:
18.	OP'DDT	:
19.	PP'DDT	:
20.	PP'DDE	:
21.	Total DDT (ng/l)	:

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)

Sampling Point 	River bed is being used for Agriculture 
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**DRAIN MONITORING FORMAT
(Ganga)**

Date & Time of sampling: 26-10-2016 at 15:10 hrs.

1.	Name of the Drain		:	Anupshahr STP Drain – 1
2.	Meeting Ganga -		:	Discharging to wetland near Ganga
3.	Name of the Regional Office of SPCB		:	Bulandshahar
4.	Source of pollution load:		:	Domestic
5.	If Industrial /Mixed (please indicate type of sector.)		:	NA
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)		:	Doesn't meet Ganga (meets an adjacent wetland having a tracable length of 100 m)
7.	Catchment area		:	Part of city of Anupshahar
8.	Co-ordinate of the confluence point (if not reachable indirect through google earth/map) (Decimal units)	Latitude	:	NA
		Longitude	:	NA
	Distance from confluence point (may be find out over google earth/map), KM		:	NA
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	:	28°22'10.9353"
		Longitude	:	78°15'46.4341"
10.	Landmarks / Address of the Location		:	STP Complex near Chamunda
11.	Flow (if in MLD) if zero indicate whether dry or stagnant		:	1.18
12.	Observations		:	The treated water was discharging in a wetland situated about a Kilometer away from River Ganga.
13.	Name of all monitoring officers along with Designation		:	<ul style="list-style-type: none"> 1. Dr. Sarvesh Rai, Sc. 'C', CPCB 2. Ms. Shaddha Lonarkar, RA-I, CPCB 3. Mr. Geetesh Chandra, ASO, RO, UPPCB, Bulandshahr 4. Mr. Viany Rawat, AEE, UP Jal Nigam 5. Mr. Jitendra Sharma, Lab. Assistant, RO, UPPCB, Bulandshahr

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	8.84
3.	BOD (mg/l)	:	26
4.	COD (mg/l)	:	114
5.	TSS (mg/l)	:	54
6.	TDS (mg/l)	:	704
7.	Cl ⁻ (mg/l)	:	80
8.	NH ₃ -N (mg/l)	:	16
9.	NO ₃ ⁻ (mg/l)	:	2.35
10.	DO (mg/l)*	:	NA
11.	TC (MPN/ 100 ml) #	:	3400
12.	FC (MPN/ 100 ml) #	:	2200

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	BDL
5.	Iron (Fe) mg/l	:	0.04
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.06
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	BDL
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT
(Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	-
3.	Dimethoate ($\mu\text{g/l}$)	:	BDL
4.	Methyl Parathion ($\mu\text{g/l}$)	:	BDL
5.	Malathion ($\mu\text{g/l}$)	:	BDL
6.	Chloropyriphos ($\mu\text{g/l}$)	:	BDL
7.	Methyl Parathion	:	BDL
8.	Ethion ($\mu\text{g/l}$)	:	BDL
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	BDL
10.	β -BHC	:	BDL
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	0.056
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	0.056

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**

	
Oulet of STP Drain 1 (Chamunda) (No confluence)	STP Drain 1 (Chamunda)

**DRAIN MONITORING FORMAT
(Ganga)**

Date & Time of sampling: 26-10-2016 at 16:00 hrs.

1.	Name of the Drain	:	Anupshahr STP Drain – 2
2.	Meeting Ganga at -	:	Right bank
3.	Name of the Regional Office of SPCB	:	Bulandshahar
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (please indicate type of sector.)	:	NA
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 0.025
7.	Catchment area	:	Part of city of Anupshahr
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 28°20'58.2207"
		Longitude	: 78°16'19.5027"
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 0.03
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 28°20'57.8658"
		Longitude	: 78°16'18.3871"
10.	Landmarks / Address of the Location		STP Complex near Sohan Tau Ka Matth
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	1.08
12.	Observations	:	Treated water was discharging directly into River Ganga. However, there was a forest land situated about 250 meter away from the STP, which may be irrigated by the treated water.
13.	Name of all monitoring officers along with Designation		6. Dr. Sarvesh Rai, Sc. 'C', CPCB 7. Ms. Shaddha Lonarkar, RA-I, CPCB 8. Mr. Geetesh Chandra, ASO, RO, UPPCB, Bulandshahr 9. Mr. Viany Rawat, AEE, UP Jal Nigam 10. Mr. Jitendra Sharma, Lab. Assistant, RO, UPPCB, Bulandshahr

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	8.94
3.	BOD (mg/l)	:	19
4.	COD (mg/l)	:	72
5.	TSS (mg/l)	:	36
6.	TDS (mg/l)	:	536
7.	Cl ⁻ (mg/l)	:	68
8.	NH ₃ -N (mg/l)	:	14
9.	NO ₃ ⁻ (mg/l)	:	2.34
10.	DO (mg/l)*	:	NA
11.	TC (MPN/ 100 ml) #	:	1100
12.	FC (MPN/ 100 ml) #	:	450

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	BDL
5.	Iron (Fe) mg/l	:	0.24
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.06
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	BDL
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT
(Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	-
3.	Dimethoate ($\mu\text{g/l}$)	:	BDL
4.	Methyl Parathion ($\mu\text{g/l}$)	:	BDL
5.	Malathion ($\mu\text{g/l}$)	:	BDL
6.	Chloropyriphos ($\mu\text{g/l}$)	:	BDL
7.	Methyl Parathion	:	BDL
8.	Ethion ($\mu\text{g/l}$)	:	BDL
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	BDL
10.	β -BHC	:	BDL
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	0.055
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	0.055

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**

	
Outlet STP Drain – 2 (Sohan Tau ka Matth) Confluence with Ganga	STP Drain – 2 (Sohan Tau ka Matth)

**DRAIN MONITORING FORMAT
(Ganga)**

Date & Time of sampling: Date & Time of sampling: 25 October, 2016 &
06:00PM

1.	Name of the Drain	:	Bhairavghat drain or Tokaghhat drain
2.	Meeting Ganga at -	:	Right Bank
3.	Name of the Regional Office of SPCB	:	RO UPPCB, Kanpur
4.	Source of pollution load:	:	Mixed
5.	If Industrial /Mixed (please indicate type of sector.)	:	Textiles Sector
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 6-7 Km
7.	Catchment area	:	Lal darwaja, salawat khan, Ganga nagar, Narkasa, Dhawari, Madaar wadi, Khatakpura, Khatrana, Lingiganj
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:
		Longitude	: 27°24'22.57"N 79°38'4.1"E
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 2.5 Km
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	:
		Longitude	: 27°23'51.54"N 79°37'32.63"E
10	Landmarks / Address of the Location		Near Bhairav temple at Bhairavghat
11	Flow (if in MLD) if zero indicate whether dry or stagnant	:	33.52 MLD
12	Observations	:	<p>1. During monitoring it was found that a minor drain Puckapul drain carries wastewater from Jatwara, naulkha, Bajariya, Koonchabhawana, Chilpura, Saghwara, Gudaddi, Khadyaaye, Chapatti, Bhaavtola, Mathiya devi, Nunbai and Palariya area and meets to Tokaghhat drain near Dharanagri.</p> <p>2. It meets to river Ganga near confluence of Dhirampur drain.</p>
13	Name of all monitoring officers along with Designation		<p>1. Dr. Rajnish Kumar Sharma, RA-I, CPCB ZO Lucknow</p> <p>2. Dr. Poonam Pandey, RA-I, CPCB ZO Lucknow</p>

- | | | |
|--|--|---|
| | | <ul style="list-style-type: none"> 3. Dr A. K. Mathur, AEE, UPPCB, Kanpur 4. Sh Ankit Kumar Mishra, JE, UPPCB, Kanpur 5. Sh. D.C. Dixit, Supervisor, UP Jal Nigam, Fatehgarh |
|--|--|---|

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results
1.	Colour	:
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)	:
10.	DO (mg/l)*	:
11.	TC (MPN/ 100 ml) #	:
12.	FC (MPN/ 100 ml) #	:

*For Fresh water carrying drains/ rivers

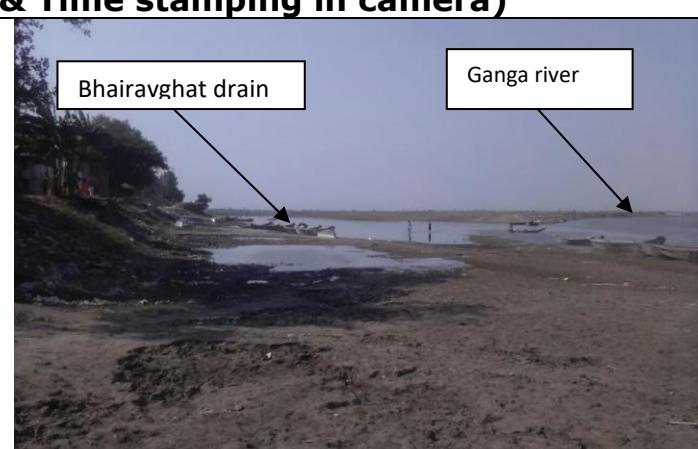
#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results
1.	Arsenic (As) mg/l	:
2.	Cadmium (Cd) mg/l	:
3.	Total Chromium (Cr) mg/l	:
4.	Copper (Cu) mg/l	:
5.	Iron (Fe) mg/l	:
6.	Lead (Pb) mg/l	:
7.	Manganese (Mn) mg/l	:
8.	Nickel (Ni) mg/l	:
9.	Mercury (Hg) mg/l	:
10.	Zinc (Zn) mg/l	:
11.	Antimony (Sb) mg/l	:
12.	Cobalt (Co) mg/l	:
13.	Selenium (Se) mg/l	:
14.	Vanadium (V) mg/l	:

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	0.08
10.	β -BHC	:	0.10
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	0.40
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)		
	 <p>Bhairavghat drain</p> <p>Ganga river</p>	Confluence point of Bhairavghat or Tokaghata drain at Dhimarpurwa village

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25 October, 2016 & 05:00PM

1.	Name of the Drain	:	Dhirampur drain or Dhinapur
2.	Meeting Ganga at -	:	Right Bank
3.	Name of the Regional Office of SPCB	:	RO UPPCB, Kanpur
4.	Source of pollution load:	:	Mixed (Industrial + domestic)
5.	If Industrial /Mixed (Please indicate type of sector)	:	Dairy
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 1-1.5 Km
7.	Catchment area	:	Parag dairy, Bahadurpur, Paanchaal ghat
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 27°24'22.57"N
		Longitude	: 79°38'4.1"E
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 0.5 km
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 27°13'51.4"
		Longitude	: 79°38'4.1"
10.	Landmarks / Address of the Location		Near Parag dairy
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	1.62 MLD
12.	Observations	:	<ul style="list-style-type: none"> 1. It is a minor drain. 2. It is Mixed drain which carries effluent of dairy and domestic sewage. 3. During sampling wastewater appears white in colour. Which indicates that wastewater contains dairy effluent.
13.	Name of all monitoring officers along with Designation		<ul style="list-style-type: none"> 6. Dr. Rajnish Kumar Sharma, RA-I, CPCB ZO Lucknow 7. Dr. Poonam Pandey, RA-I, CPCB ZO Lucknow 8. Dr A. K. Mathur, AEE, UPPCB, Kanpur 9. Sh Ankit Kumar Mishra, JE, UPPCB, Kanpur 10. Sh. D.C. Dixit, Supervisor, UP Jal Nigam, Fatehgarh

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.34
3.	BOD (mg/l)	:	35.4
4.	COD (mg/l)	:	136
5.	TSS (mg/l)	:	35.4
6.	TDS (mg/l)	:	865
7.	Cl ⁻ (mg/l)	:	144
8.	NH ₃ -N (mg/l)	:	38.1
9.	NO ₃ ⁻ (mg/l)	:	3.03
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	1400000
12.	FC (MPN/ 100 ml) #	:	700000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	0.04
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	0.62
6.	Lead (Pb) mg/l	:	0.04
7.	Manganese (Mn) mg/l	:	0.14
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.54
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	0.07
10.	β -BHC	:	0.13
11.	γ -BHC	:	0.09
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Confluence point of drain at Dhimarpur village near confluence point of Bhairavghat drain , Farrukhabad

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25 October, 2016 & 02:00PM

1.	Name of the Drain	:	Bargadiyaghagh drain
2.	Meeting Ganga at -	:	Right Bank
3.	Name of the Regional Office of SPCB	:	RO, UPPCB, Kanpur
4.	Source of pollution load:	:	Domestic Approx. 3.8MLD
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB	:	NA
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 1-1.5 Km
7.	Catchment area	:	Talaiya lane, Machli tola, Daal mandi, Rangsajan, Gaadikhana, Kasaratta, Vajaja sangat, Civil lines, Aanshik, Jagij colony
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude Longitude	: It becomes dried in the catchment area of River Ganga after 500 m from the sampling point & no effluent is being discharged into River Ganga.
	Distance from confluence point (may the find out over google earth/map), KM		Effluent is not being discharged into River Ganga.
9.	Co-ordinate of the sampling point (Decimal units)	Latitude Longitude	: 27°21'48.95"N 79°37'54.69" E
10.	Landmarks / Address of the Location		Near Bargad tree and Kali maa Temple
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	3.8MLD
12.	Observations	:	1. Drain is monitored near Bargadia ghat Temple, Fatehgarh and carries domestic wastewater from nearby areas. 2. It becomes dry after travelling approx 500 m.
13.	Name of all monitoring officers along with Designation		11. Dr. Rajnish Kumar Sharma, RA-I, CPCB ZO Lucknow 12. Dr. Poonam Pandey, RA-I, CPCB ZO Lucknow 13. Dr A. K. Mathur, AEE, UPPCB, Kanpur 14. Sh Ankit Kumar Mishra, JE, UPPCB, Kanpur 15. Sh. D.C. Dixit, Supervisor, UP Jal Nigam, Fatehgarh

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.41
3.	BOD (mg/l)	:	34.5
4.	COD (mg/l)	:	106
5.	TSS (mg/l)	:	35.2
6.	TDS (mg/l)	:	711
7.	Cl ⁻ (mg/l)	:	86.5
8.	NH ₃ -N (mg/l)	:	34.5
9.	NO ₃ ⁻ (mg/l)	:	2.23
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	2200000
12.	FC (MPN/ 100 ml) #	:	470000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	0.76
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.10
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.14
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	BDL
10.	β -BHC	:	BDL
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Sampling location of Bargadiyaghat drain

After travelling approx 500 m it becomes dry

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25 October, 2016 & 11:00AM

1.	Name of the Drain	:	Hathikhana Nala
2.	Meeting Ganga/Ramganga/Kali-east at -	:	Right Bank
3.	Name of the Regional Office of SPCB	:	RO, UPPCB, Kanpur
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (Please indicate type of sector)	:	NA
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 3-4 Km
7.	Catchment area		Granganj, Wakarganj, Civil lines, Nawadiya, Hathikhana, Nagladi, Pull mandi, J.N.V. road, Sainik colony, Railway colony, Bholepur, Lal kothi, Officers colony
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 27°21'48.95"N
		Longitude	: 79°37'54.69"E
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 1.5 km
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 27°21'21.55"N
		Longitude	: 79°37'21.13" E
10.	Landmarks / Address of the Location		Near MPS at village Hathikhana
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	Approx. 26.6 MLD
12.	Observations	:	<ul style="list-style-type: none"> • It is partially tapped by STP Fatehgarh 2.7 MLD. • It was seen during sampling a huge amount of wastewater is taken by farmers for irrigation purpose. • During sampling time it was found that MPS was not operational due to power failure.
13.	Name of all monitoring officers along with Designation		<ol style="list-style-type: none"> 1. Dr. Rajnish Kumar Sharma, RA-I, CPCB ZO Lucknow 2. Dr. Poonam Pandey, RA-I, CPCB ZO Lucknow 3. Dr A. K. Mathur, AEE, UPPCB, Kanpur 4. Sh Ankit Kumar Mishra, JE, UPPCB, Kanpur 5. Sh. D.C. Dixit, Supervisor, UP Jal Nigam, Fatehgarh

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.76
3.	BOD (mg/l)	:	23.0
4.	COD (mg/l)	:	98.5
5.	TSS (mg/l)	:	43.7
6.	TDS (mg/l)	:	704
7.	Cl ⁻ (mg/l)	:	94.5
8.	NH ₃ -N (mg/l)	:	30.7
9.	NO ₃ ⁻ (mg/l)	:	1.89
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	2400000
12.	FC (MPN/ 100 ml) #	:	2400000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	1.06
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.10
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.42
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT
(Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	0.05
10.	β -BHC	:	0.09
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**



Sampling location



Confluence point of hathikhana drain at Gariyakhare vill

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25-10-2016 at 5:30 pm

1.	Name of the Drain	:	Permiya Drain, Kanpur
2.	Meeting Ganga at -	:	Right bank
3.	Name of the Regional Office of SPCB	:	Kanpur SPCB
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 2.0 Km
7.	Catchment area	:	Visnupur, Mandana, HBTI, Makdikheda, Kalyanpur, Indria Nagar, Khewra vill., Jageswar vill., Jevravill., Machua vill., Ranighat vill
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: N 26° 30' 1.9614"
		Longitude	E 80° 19' 12.0966"
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 30 m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 26°30'05.3"
		Longitude	80°19' 04.5"
10.	Landmarks / Address of the Location		CSJM University , (Near Ranighat)
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	151.2 MLD
12.	Observations	:	Sewage from the Nawab ganj area directly meeting to Permiya drain which ultimately goes to R.Ganga. -
13.	Name of all monitoring officers along with Designation		1.Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 2.Sh. Rajesh Kumar, RA-1, CPCB ZO Lucknow 3.Sh. Shantu Sonkar, JEE, UPPCB, Kanpur 4. Sh. A.K. Trivedi, AEE, J.N. Kanpur

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters		Results
1.	Colour	:	-
2.	pH	:	7.16
3.	BOD (mg/l)	:	138
4.	COD (mg/l)	:	308
5.	TSS (mg/l)	:	196
6.	TDS (mg/l)	:	590
7.	Cl ⁻ (mg/l)	:	82.7
8.	NH ₃ -N (mg/l)	:	52.2
9.	NO ₃ ⁻ (mg/l)	:	2.73
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	16,00,00,000
12.	FC (MPN/ 100 ml) #	:	9,20,00,000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters		Results
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	1.42
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.14
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.14
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	Awaited
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	0.06
10.	β -BHC	:	0.65
11.	γ -BHC	:	0.05
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	0.07
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**



Fig- Sampling point of Permiya Drain



Fig- Confluence point of Permiya Drain & River Ganga

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25-10-2016 at 4:55 pm

1.	Name of the Drain	:	Ranighat Nalla, Kanpur
2.	Meeting Ganga at -	:	Right bank
3.	Name of the Regional Office of SPCB	:	Kanpur UPPCB
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 2.17 Km
7.	Catchment area	:	Kanpur City
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: N 26° 29' 36.4302"
		Longitude	E 80° 19' 44.0004"
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 25 m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: N 26° 29' 35.88"
		Longitude	E 80° 19' 43.392"
10.	Landmarks / Address of the Location		New Raw water Pumping station (Canal) Ranighat
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	1.39 MLD
12.	Observations	:	Nala is trapped and still sewage meeting to the River Ganga.
13.	Name of all monitoring officers along with Designation		1. 1.Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 2.Sh. Rajesh Kumar, RA-1, CPCB ZO Lucknow 3.Sh. Shantu Sonkar, JEE, UPPCB, Kanpur 4. Sh. A.K. Trivedi, AEE, J.N. Kanpur

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.37
3.	BOD (mg/l)	:	173
4.	COD (mg/l)	:	463
5.	TSS (mg/l)	:	354
6.	TDS (mg/l)	:	953
7.	Cl ⁻ (mg/l)	:	133
8.	NH ₃ -N (mg/l)	:	76.2
9.	NO ₃ ⁻ (mg/l)	:	2.02
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	160000000
12.	FC (MPN/ 100 ml) #	:	160000000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
15.	Arsenic (As) mg/l	:	BDL
16.	Cadmium (Cd) mg/l	:	BDL
17.	Total Chromium (Cr) mg/l	:	BDL
18.	Copper (Cu) mg/l	:	-
19.	Iron (Fe) mg/l	:	1.42
20.	Lead (Pb) mg/l	:	BDL
21.	Manganese (Mn) mg/l	:	0.14
22.	Nickel (Ni) mg/l	:	BDL
23.	Mercury (Hg) mg/l	:	-
24.	Zinc (Zn) mg/l	:	0.14
25.	Antimony (Sb) mg/l	:	-
26.	Cobalt (Co) mg/l	:	BDL
27.	Selenium (Se) mg/l	:	-
28.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	Awaited
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	0.08
10.	β -BHC	:	0.75
11.	γ -BHC	:	0.07
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	0.08
20.	PP'DDT	:	0.22
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**



Fig-Confluent point of Ranighat Drain with River Ganga

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 24.10.2016

1.	Name of Drain		:	Sisamau Nalla, Jajmau Kanpur						
2.	Confluence with Ganga			Right bank Ganga						
3.	Name of the Regional Office of SPCB			RO Kanpur UPPCB						
4.	Source of Pollution Load			Mixed (Mostly sewage)						
5.	If Industrial /Mixed (Please indicate type of sector)			Some quantity of untreated wastewater from slaughter houses at Fazalganj is discharged into the Sisamau drain						
6.	Traceable length of drain (in Km) before meeting Ganga (through Google earth/ map)			Around 7-8 Km						
7.	Catchment area			Kanpur City						
8.	Co-ordinate of the confluence point (if not reachable indirect though Google earth/ map) (Decimal units)	Latitude		26°29'29.26"N						
		Longitude		80°19'59.68"E						
	Distance from confluence point (may the find out over Google earth/map), Km			500 m						
9.	Co-ordinate of the sampling point (decimal units)	Latitude		26°29'23"N						
		Longitude		80°19'53.74"E						
10.	Landmarks/ Address of the location			Inside the power plant						
11.	Flow in MLD, if Zero indicate whether dry or stagnant			200 MLD						
12.	Observations	01.The Sisamau drain is mostly carrying city sewage but some quantity of wastewater from slaughter houses located at Fazalganj is also mixed into the drain. 02.The untreated sewage is discharged directly into the river Ganga without any treatment. 03.The quantity measured and as indicated at Sr No 12 is discharged directly into river Ganga without any treatment.								
13.	Name of all monitoring officers along with designation <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Rajendra D Patil, Sci C Zonal Office, CPCB Lucknow</td> <td style="padding: 5px;">A K Mathur, AEE Regional Office, UPPCB Kanpur</td> </tr> <tr> <td style="padding: 5px;">Rajesh Kumar, RA Zonal Office, CPCB Lucknow</td> <td style="padding: 5px;">Shnu Sonkar, Sci. Assistant Regional Office, UPPCB Kanpur</td> </tr> <tr> <td style="padding: 5px;">A K Trivedi, Project Engineer Jal Nigam Kanpur</td> <td style="padding: 5px;"></td> </tr> </table>				Rajendra D Patil, Sci C Zonal Office, CPCB Lucknow	A K Mathur, AEE Regional Office, UPPCB Kanpur	Rajesh Kumar, RA Zonal Office, CPCB Lucknow	Shnu Sonkar, Sci. Assistant Regional Office, UPPCB Kanpur	A K Trivedi, Project Engineer Jal Nigam Kanpur	
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Rajesh Kumar, RA Zonal Office, CPCB Lucknow	Shnu Sonkar, Sci. Assistant Regional Office, UPPCB Kanpur									
A K Trivedi, Project Engineer Jal Nigam Kanpur										

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.05
3.	BOD (mg/l)	:	83
4.	COD (mg/l)	:	251
5.	TSS (mg/l)	:	187
6.	TDS (mg/l)	:	604
7.	Cl ⁻ (mg/l)	:	109
8.	NH ₃ -N (mg/l)	:	36.1
9.	NO ₃ ⁻ (mg/l)	:	2.71
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	-
12.	FC (MPN/ 100 ml) #	:	-

*For Fresh water carrying drains/ rivers

#for sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	0.06
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	3.32
6.	Lead (Pb) mg/l	:	0.02
7.	Manganese (Mn) mg/l	:	0.20
8.	Nickel (Ni) mg/l	:	0.06
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.50
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)		:
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)		:
9.	α -HCH	:	BDL
10.	β - HCH	:	0.19
11.	γ -HCH	:	BDL
12.	δ -HCH	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	0.08
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions- Sampling & Confluence point (Add date & Time stamping in camera)

 Google Earth image of Sisamau Drain	 Sisamau drain at Confluence point
Google Earth image of Sisamau Drain	Sisamau drain at Confluence point

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25.10.2016 at 2:00 pm

1.	Name of the Drain		:	Tefco Nala, Kanpur
2.	Meeting Ganga at -		:	Right bank
3.	Name of the Regional Office of SPCB		:	Kanpur UPPCB
4.	Source of pollution load:		:	Domestic
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB		:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)		:	Approx. 0.4 Km
7.	Catchment area		:	Kanpur City, Ananadeshwar Mandir
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:	N 26° 29' 14.1498"
		Longitude	:	E 80° 20' 40.2504"
9.	Co-ordinate of the sampling point (Decimal units)	Latitude Longitude	:	Approx. 15m
10.	Landmarks / Address of the Location		:	Behind Parmath Mandir
11.	Flow (if in MLD) if zero indicate whether dry or stagnant		:	Occasional flow due to SPS bypass.
12.	Observations		:	Tefco drain is now trapped.
13.	Name of all monitoring officers along with Designation		:	1.Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 2.Sh. Rajesh Kumar, RA-1, CPCB ZO Lucknow 3.Sh. Shantu Sonkar, JEE, UPPCB, Kanpur 4. Sh. A.K. Trivedi, AEE, J.N. Kanpur

DRAIN MONITORING FORMAT
 (General parameters)
(Dry – no sample was collected)

Sl. No.	Parameters	Results
1.	Colour	:
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)	:
10.	DO (mg/l)*	:
11.	TC (MPN/ 100 ml) #	:
12.	FC (MPN/ 100 ml) #	:

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results
1.	Arsenic (As) mg/l	:
2.	Cadmium (Cd) mg/l	:
3.	Total Chromium (Cr) mg/l	:
4.	Copper (Cu) mg/l	:
5.	Iron (Fe) mg/l	:
6.	Lead (Pb) mg/l	:
7.	Manganese (Mn) mg/l	:
8.	Nickel (Ni) mg/l	:
9.	Mercury (Hg) mg/l	:
10.	Zinc (Zn) mg/l	:
11.	Antimony (Sb) mg/l	:
12.	Cobalt (Co) mg/l	:
13.	Selenium (Se) mg/l	:
14.	Vanadium (V) mg/l	:

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	Awaited
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	
10.	β -BHC	:	
11.	γ -BHC	:	
12.	δ -BHC	:	
13.	Total BHC (ng/l)	:	
14.	Aldrin (ng/l)	:	
15.	Diedrin (ng/l)	:	
16.	α -Endosulfan	:	
17.	Total Endosulfan (ng/l)	:	
18.	β -Endosulfan	:	
19.	OP'DDT	:	
20.	PP'DDT	:	
21.	PP'DDE	:	
22.	Total DDT (ng/l)	:	

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Fig- Tefco Drain



Fig- Confluent point of Tefco Drain &River Ganga

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25-10-2016 at 2:25 pm

1.	Name of the Drain	:	Parmath Drain, Kanpur
2.	Meeting Ganga at -	:	Right bank
3.	Name of the Regional Office of SPCB	:	Kanpur SPCB
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 2.18 Km.
7.	Catchment area	:	Kanpur City
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: N 26° 29' 13.635"
		Longitude	E 80° 20' 41.046"
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 20 m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: -
		Longitude	
10.	Landmarks / Address of the Location		Before Parmath Mandir
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	
12.	Observations	:	Measurement of flow not possible because underground sewage direct falling in River Ganga.
13.	Name of all monitoring officers along with Designation		1. Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 2. Sh. Rajesh Kumar, RA-1, CPCB ZO Lucknow 3. Sh. Shanu Sonkar, JEE, UPPCB, Kanpur 4. Sh. A.K. Trivedi, AEE, J.N. Kanpur

DRAIN MONITORING FORMAT
 (General parameters)

(Dry – no sample was collected)

Sl. No.	Parameters	Results
1.	Colour	:
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)	:
10.	DO (mg/l)*	:
11.	TC (MPN/ 100 ml)##	:
12.	FC (MPN/ 100 ml)##	:

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results
1.	Arsenic (As) mg/l	:
2.	Cadmium (Cd) mg/l	:
3.	Total Chromium (Cr) mg/l	:
4.	Copper (Cu) mg/l	:
5.	Iron (Fe) mg/l	:
6.	Lead (Pb) mg/l	:
7.	Manganese (Mn) mg/l	:
8.	Nickel (Ni) mg/l	:
9.	Mercury (Hg) mg/l	:
10.	Zinc (Zn) mg/l	:
11.	Antimony (Sb) mg/l	:
12.	Cobalt (Co) mg/l	:
13.	Selenium (Se) mg/l	:
14.	Vanadium (V) mg/l	:

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -BHC	:
10.	β -BHC	:
11.	γ -BHC	:
12.	δ -BHC	:
13.	Total BHC (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α -Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β -Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Fig – Sampling point of Parmath Drain



Fig -Confluence point of Parmath Drain & River Ganga

**DRAIN MONITORING FORMAT
(Ganga)**

Date & Time of sampling: 25.10.2016 Time 1:30 PM

1.	Name of the Drain	:	Muir Mill Nala, Kanpur
2.	Meeting Ganga at -	:	Right bank
3.	Name of the Regional Office of SPCB	:	Kanpur SPCB
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 2Km.
7.	Catchment area	:	Kanpur City, Green Park
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	N 26° 29' 4.1784"
		Longitude	E 80° 21' 0.9432"
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 35 m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	N 26° 28' 56.4132"
		Longitude	E 80° 21' 2.7282"
10.	Landmarks / Address of the Location	:	Behind Green Park Stadium
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	12.96 MLD
12.	Observations	:	
13.	Name of all monitoring officers along with Designation	:	<ul style="list-style-type: none"> 1. Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 2. Sh. Rajesh Kumar, RA-1, CPCB ZO 3.Lucknow 3. Sh. Shanu Sonkar, JEE, UPPCB, Kanpur 4. Sh. A.K. Trivedi, AEE, J.N. Kanpur

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters		Results
1.	Colour	:	-
2.	pH	:	7.38
3.	BOD (mg/l)	:	85.3
4.	COD (mg/l)	:	210
5.	TSS (mg/l)	:	421
6.	TDS (mg/l)	:	774
7.	Cl ⁻ (mg/l)	:	160
8.	NH ₃ -N (mg/l)	:	40.9
9.	NO ₃ ⁻ (mg/l)	:	2.01
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	160000000
12.	FC (MPN/ 100 ml) #	:	160000000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters		Results
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	2.34
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.16
8.	Nickel (Ni) mg/l	:	0.02
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.28
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	0.05
10.	β -BHC	:	0.49
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)

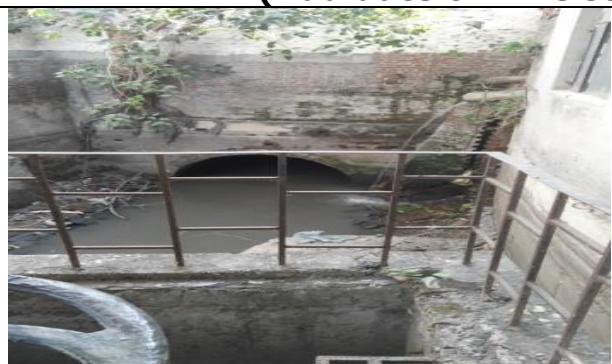


Fig-Sampling point of Muir Mill Drain



Fig-Confluence point of Muir mill Drain with River Ganga

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25-10-2016 at 1:50 pm

1.	Name of the Drain	:	Police line Nala, Kanpur
2.	Meeting Ganga at -	:	Right bank
3.	Name of the Regional Office of SPCB	:	Kanpur SPCB
4.	Source of pollution load:	:	Domestic (Dry)
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 0.12 Km
7.	Catchment area	:	Police line Colony, Kanpur City
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: N 26° 28' 44.8068"
		Longitude	: E 80° 21' 32.925"
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 15 m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: -
		Longitude	
10.	Landmarks / Address of the Location		Near Central Jail Road
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	Dry
12.	Observations	:	During monitoring no sewage was found.
13.	Name of all monitoring officers along with Designation		1.Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 2.Sh. Rajesh Kumar, RA-1, CPCB ZO Lucknow 3.Sh. Shantu Sonkar, JEE, UPPCB, Kanpur 4. Sh. A.K. Trivedi, AEE, J.N. Kanpur

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	Awaited
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)	:	
10.	DO (mg/l)*	:	
11.	TC (MPN/ 100 ml) #	:	
12.	FC (MPN/ 100 ml) #	:	

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	Awaited
2.	Cadmium (Cd) mg/l	:	
3.	Total Chromium (Cr) mg/l	:	
4.	Copper (Cu) mg/l	:	
5.	Iron (Fe) mg/l	:	
6.	Lead (Pb) mg/l	:	
7.	Manganese (Mn) mg/l	:	
8.	Nickel (Ni) mg/l	:	
9.	Mercury (Hg) mg/l	:	
10.	Zinc (Zn) mg/l	:	
11.	Antimony (Sb) mg/l	:	
12.	Cobalt (Co) mg/l	:	
13.	Selenium (Se) mg/l	:	
14.	Vanadium (V) mg/l	:	

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	Awaited
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	
10.	β -BHC	:	
11.	γ -BHC	:	
12.	δ -BHC	:	
13.	Total BHC (ng/l)	:	
14.	Aldrin (ng/l)	:	
15.	Diedrin (ng/l)	:	
16.	α -Endosulfan	:	
17.	Total Endosulfan (ng/l)	:	
18.	β -Endosulfan	:	
19.	OP'DDT	:	
20.	PP'DDT	:	
21.	PP'DDE	:	
22.	Total DDT (ng/l)	:	

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Fig-Sampling point of Police Line Drain (**Dry**)



Fig- Confluent point of Police Drain & River Ganga.

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25.10.16 at 1:45pm

1.	Name of the Drain	:	Jail Drain, Kanpur
2.	Meeting Ganga at -	:	Right bank
3.	Name of the Regional Office of SPCB	:	Kanpur SPCB
4.	Source of pollution load:	:	Domestic (Dry)
5.	If Industrial /Mixed (Please indicate type of sector)	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	0.80 Km
7.	Catchment area	:	Jail Road, Kanpur City
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: N 26° 28' 44.583"
		Longitude	E 80° 21' 33.609"
	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	:	Central Jail Road
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	Dry
12.	Observations	:	-
13.	Name of all monitoring officers along with Designation		1 Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 2.Sh. Rajesh Kumar, RA-1, CPCB ZO Lucknow 3. Sh. Shanu Sonkar, JEE, UPPCB, Kanpur 4. Sh. A.K. Trivedi AEE, J.N. Kanpur

DRAIN MONITORING FORMAT

(General parameters)

(Dry – no sample was collected)

Sl. No.	Parameters	Results	
1.	Colour	:	
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)	:	
10.	DO (mg/l)*	:	
11.	TC (MPN/ 100 ml)##	:	
12.	FC (MPN/ 100 ml)##	:	

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT

(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	
2.	Cadmium (Cd) mg/l	:	
3.	Total Chromium (Cr) mg/l	:	
4.	Copper (Cu) mg/l	:	
5.	Iron (Fe) mg/l	:	
6.	Lead (Pb) mg/l	:	
7.	Manganese (Mn) mg/l	:	
8.	Nickel (Ni) mg/l	:	
9.	Mercury (Hg) mg/l	:	
10.	Zinc (Zn) mg/l	:	
11.	Antimony (Sb) mg/l	:	
12.	Cobalt (Co) mg/l	:	
13.	Selenium (Se) mg/l	:	
14.	Vanadium (V) mg/l	:	

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -BHC	:
10.	β -BHC	:
11.	γ -BHC	:
12.	δ -BHC	:
13.	Total BHC (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α -Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β -Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**



Fig- Sampling point of Jail Drain



Fig-Confluence point of Jail Drain & River Ganga

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25.10.2016 & 1:15 pm

1.	Name of the Drain	:	Gola ghat nala, Kanpur
2.	Meeting Ganga at -	:	Right bank -Ganga
3.	Name of the Regional Office of SPCB	:	RO, UPPCB, Kanpur
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (Please indicate type of sector)	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 0.5 Km
7.	Catchment area	:	Mal Road, Cantt , Kanpur City.
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: N 26° 28' 17.4246"
		Longitude	: E 80° 22' 11.1966"
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 25 m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: N 25°24'34.2"
		Longitude	: E 80°23' 47.6"
10.	Landmarks / Address of the Location		Tannery/Cantt (Near Gola ghat cantt. road)
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	1.44 MLD
12.	Observations	:	Golaghat is a minor drain. -
13.	Name of all monitoring officers along with Designation		<ul style="list-style-type: none"> 1. Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 2. Sh. Rajesh Kumar, RA-1, CPCB Z O Lucknow 3. Sh. Shantu Sonkar, JEE, RO, UPPCB, Kanpur 4. Sh. A.K. Trivedi, AEE, Jal Nigam, Kanpur

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters		Results
1.	Colour	:	-
2.	pH	:	7.34
3.	BOD (mg/l)	:	143
4.	COD (mg/l)	:	289
5.	TSS (mg/l)	:	234
6.	TDS (mg/l)	:	937
7.	Cl ⁻ (mg/l)	:	152
8.	NH ₃ -N (mg/l)	:	42.9
9.	NO ₃ ⁻ (mg/l)	:	0.876
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	92000000
12.	FC (MPN/ 100 ml) #	:	92000000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters		Results
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	0.02
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	1.22
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.16
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.52
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	Result awaited
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	0.05
10.	β -BHC	:	0.07
11.	γ -BHC	:	0.06
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Fig- Sampling point of Gola Ghat Drain



Fig- Confluence point of Gola ghat Drain & river Ganga

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25.10.2016 & 12:25 pm

1.	Name of the Drain	:	Bhagwat das ghat Drain, Kanpur
2.	Meeting Ganga at	:	Right bank
3.	Name of the Regional Office of SPCB	:	RO, UPPCB, Kanpur
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 1.3 Km
7.	Catchment area	:	Civil line area, Bhagwatdas ghat, mall road
8.	Co-ordinate of the confluence point (if not reachable indirect through google earth/map) (Decimal units)	Latitude	: N 26° 28' 28.506"
		Longitude	E 80° 21' 56.6958"
	Distance from confluence point (may be find out over google earth/map), KM		Approx. 50m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: N 26° 28'27.8"
		Longitude	E 80°21' 54.1"
10.	Landmarks / Address of the Location		Tannery/Cantt (Near Bhagwat das ghat cantt. road)
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	17.28 MLD
12.	Observations	:	Bhagwat das ghat drain direct falling into R. Ganga.
13.	Name of all monitoring officers along with Designation		5. Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 6. Sh. Rajesh Kumar, RA-1, CPCB Z O Lucknow 7. Sh. Shantu Sonkar, JEE, RO, UPPCB, Kanpur 8. Sh. A.K. Trivedi, AEE, Jal Nigam, Kanpur

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.24
3.	BOD (mg/l)	:	95
4.	COD (mg/l)	:	261
5.	TSS (mg/l)	:	147
6.	TDS (mg/l)	:	722
7.	Cl ⁻ (mg/l)	:	139
8.	NH ₃ -N (mg/l)	:	48.7
9.	NO ₃ ⁻ (mg/l)	:	2.17
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	92000000
12.	FC (MPN/ 100 ml) #	:	92000000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	0.68
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.10
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.24
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	Awaited
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	0.05
10.	β -BHC	:	0.29
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	0.14
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Fig- Sampling point of Bhagwat das Drain



Fig- Confluence point of Bhagwat das drain & River Ganga

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 25.10.2016 at 12:55 pm

1.	Name of the Drain		:	Sattichaura ghat Drain, Kanpur
2.	Meeting Ganga at -		:	Right bank
3.	Name of the Regional Office of SPCB		:	Kanpur UPPCB
4.	Source of pollution load:		:	Dmestic
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB		:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)		:	Approx. 0.7 Km
7.	Catchment area			Tannery/Cantt.
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude		N 26° 27' 34.8474"
		Longitude		E 80° 22' 50.0478"
	Distance from confluence point (may the find out over google earth/map), KM			Approx. 20 m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	:	N 26° 27'34.2"
		Longitude		E 80°22' 47.4"
10.	Landmarks / Address of the Location			Near Sattichaura ghat, cantt. road
11.	Flow (if in MLD) if zero indicate whether dry or stagnant		:	1.54 MLD
12.	Observations		:	Sattichaura ghat drain is a minor drain.-
13.	Name of all monitoring officers along with Designation			1.Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 2.Sh. Rajesh Kumar, RA-1, CPCB ZO Lucknow 3.Sh. Shanu Sonkar, JEE, UPPCB, Kanpur 4. Sh. A.K. Trivedi, AEE, J.N. Kanpur

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.42
3.	BOD (mg/l)	:	56.8
4.	COD (mg/l)	:	130
5.	TSS (mg/l)	:	107
6.	TDS (mg/l)	:	518
7.	Cl ⁻ (mg/l)	:	73.2
8.	NH ₃ -N (mg/l)	:	26.7
9.	NO ₃ ⁻ (mg/l)	:	2.15
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	22000000
12.	FC (MPN/ 100 ml) #	:	13000000
13.			

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	0.82
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.18
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.12
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	Awaited
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	BDL
10.	β -BHC	:	0.10
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Fig- Sampling point of Sattichaura ghat Drain



Fig- Confluence point of sattichaura Drain & River Ganga

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 24.10.2016

01	Name of Drain		:	Dabka Nalla Drain (1, 2, 3) , Jajmau Kanpur
03	Confluence with R. Ganga			Right Bank
04	Name of the Regional Office of SPCB			RO Kanpur UPPCB
05	Source of Pollution Load			Mostly sewage
06	If Industrial /Mixed (Please indicate type of sector)			Kanpur city sewage
07	Traceable length (in Km) before meeting Ganga (through Google earth/ map)			Approx. 01 - 02 Km
08	Catchment area			Kanpur City
09	Co-ordinate of the confluence point (if not reachable indirect through Google earth/ map) (Decimal units)	Latitude		26°25'51"N
		Longitude		80°23'40"E
	Distance from confluence point (may the find out over Google earth/map), Km			NA
10	Co-ordinate of the sampling point (decimal units)	Latitude		26°25'51"N
		Longitude		80°23'40"E
11	Landmarks/ Address of the location			At confluence point
12	Flow (if in MLD) if Zero indicate whether dry or stagnant			Zero, Drain was tapped and back water of river Ganga was flowing into the drain at confluence point.
13	Characteristics	Colour		Not applicable as zero wastewater flow was found at the monitoring point.
		pH		
		BOD (mg/l)		
		COD (mg/l)		
		TSS		
		TDS		
		PO4 ³⁻		
		Cl ⁻		
		NH ₃ -N		
		NO ₃ ⁻		
14	For Fresh water carrying drains/rivers	DO		
15	For sewage,	TC		

	mixed Drains & River	(MPN/100ml)		
		FC (MPN/100ml)		
16	Photographs with captions- Sampling & Confluence point (Add date & Time stamping in camera)			



Google Earth image of Buriyaghath Drain



River water backflow into Dabka Drain at Confluence point

17	Observations	<p>01.The Dabka drain is generally carrying domestic sewage of Kanpur city.</p> <p>02.The drain was tapped and the wastewater was taken to STPs for treatment.</p> <p>03. At the time of visit river water was back flowing into the Dabka drain at Confluence point.</p>	
18	Urgent action required, if any	NA	
19	Name of all monitoring officers along with designation		
	Rajendra D Patil, Sci C Zonal Office, CPCB Lucknow	A K Mathur, AEE Regional Office, UPPCB Kanpur	
	Rajesh Kumar, RA Zonal Office, CPCB Lucknow	Shnu Sonkar, Sci. Assistant Regional Office, UPPCB Kanpur	
	A K Trivedi, Project Engineer Jal Nigam Kanpur		

DRAIN MONITORING FORMAT
(Ganga)

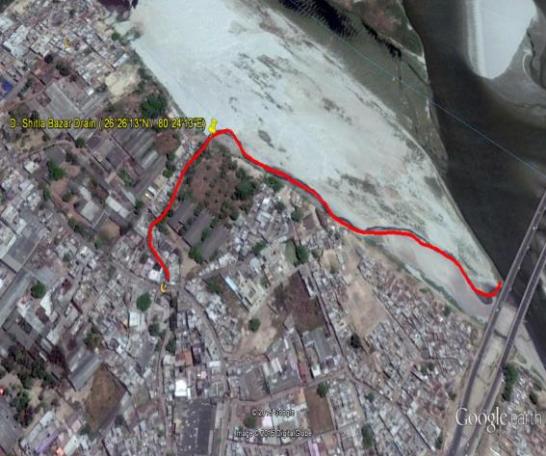
Date & Time of sampling: 24.10.2016

1.	Name of Drain		:	Sheetlabazar Drain, Jajmau Kanpur
2.	Confluence with R. Ganga		:	Right bank
3.	Name of the Regional Office of SPCB		:	RO Kanpur UPPCB
4.	Source of Pollution Load		:	Mixed (Sewage + Tannery Wastewater)
5.	IF Industrial/ Mixed (Name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB		:	Around 400 tannery units located in Jajmau cluster.
6.	Traceable length (in Km) before meeting Ganga (through Google earth/ map)		:	Around 01 Km
7.	Catchment area		:	Jamau industrial cluster
8.	Co-ordinate of the confluence point (if not reachable indirect though Google earth/ map) (Decimal units)	Latitude	:	26°26'13"N
		Longitude	:	80°24'13"E
9.	Co-ordinate of the sampling point (decimal units)	Latitude	:	26°26'13"N
		Longitude	:	80°24'13"E
10.	Landmarks/ Address of the location		:	Confined path made by wastewater into the river Ganga.
11.	Flow (if in MLD) if Zero indicate whether dry or stagnant		:	0.27 m ³ /sec = 23.63MLD
12.	Characteristics	Colour	:	Black
		pH	:	8.09
		TSS	:	887
		TDS	:	6065
		Cl ⁻	:	35.5
		SO ₄ ²⁻	:	1198
		S	:	36.9
		P	:	8.95
		Nitrate as N	:	22.6
		Nitrite as N	:	BDL
		Am Nitrogen	:	232
		O & G	:	12.6
		BOD (mg/l)	:	35.5533
		COD (mg/l)	:	1649

13.	Heavy Metal	Arsenic (As) mg/l		BDL
		Cadmium (Cd) mg/l		BDL
		Total Chromium (Cr) mg/l		11.04
		Copper (Cu) mg/l		-
		Iron (Fe) mg/l		0.88
		Lead (Pb) mg/l		BDL
		Manganese (Mn) mg/l		0.22
		Nickel (Ni) mg/l		BDL
		Mercury (Hg) mg/l		
		Zinc (Zn) mg/l		0.28
		Antimony (Sb) mg/l		
		Cobalt (Co) mg/l		BDL
		Selenium (Se) mg/l		
		Vanadium (V) mg/l		
14.	DO (For Fresh water carrying drains/rivers)			NA
15.	For sewage, mixed Drains & River	TC (MPN/100ml)		1.7×10^7
		FC (MPN/100ml)		1.3×10^7

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	Awaited
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	BDL
10.	β -BHC	:	7.03
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

16.	Photographs with captions- Sampling & Confluence point (Add date & Time stamping in camera)	 
17.	Google Earth image of Sheetlabaazar Drain	Sheetlabaazar drain at monitoring and Confluence point

17	<p>Observations</p> <p>04. The Sheetlabazar drain is carrying tannery effluent along with inseparable sewage.</p> <p>05. Out of total effluent generated in the area some of effluent is pumped to CETP Jajmau, Kanpur through Sheetlabazar pumping station and surplus is discharged in to river Ganga through Sheetlabazar drain without any treatment.</p> <p>06. The quantity measured and as indicated at Sr No 12 is discharged directly into river Ganga without any treatment.</p>										
18	Urgent action required, if any	Treatment of wastewater before directly discharging into river Ganga without any treatment.									
19	Name of all monitoring officers along with designation <table border="1" data-bbox="290 635 886 961"> <tr> <td data-bbox="290 635 854 736">Rajendra D Patil, Sci C Zonal Office, CPCB Lucknow</td><td data-bbox="854 635 886 736"></td><td data-bbox="886 635 1541 736">A K Mathur, AEE Regional Office, UPPCB Kanpur</td></tr> <tr> <td data-bbox="290 736 854 837">Rajesh Kumar, RA Zonal Office, CPCB Lucknow</td><td data-bbox="854 736 886 837"></td><td data-bbox="886 736 1541 837">Shnu Sonkar, Sci. Assistant Regional Office, UPPCB Kanpur</td></tr> <tr> <td data-bbox="290 837 854 961">A K Trivedi, Project Engineer Jal Nigam Kanpur</td><td data-bbox="854 837 886 961"></td><td data-bbox="886 837 1541 961"></td></tr> </table>		Rajendra D Patil, Sci C Zonal Office, CPCB Lucknow		A K Mathur, AEE Regional Office, UPPCB Kanpur	Rajesh Kumar, RA Zonal Office, CPCB Lucknow		Shnu Sonkar, Sci. Assistant Regional Office, UPPCB Kanpur	A K Trivedi, Project Engineer Jal Nigam Kanpur		
Rajendra D Patil, Sci C Zonal Office, CPCB Lucknow		A K Mathur, AEE Regional Office, UPPCB Kanpur									
Rajesh Kumar, RA Zonal Office, CPCB Lucknow		Shnu Sonkar, Sci. Assistant Regional Office, UPPCB Kanpur									
A K Trivedi, Project Engineer Jal Nigam Kanpur											

**DRAIN MONITORING FORMAT
(Ganga)**

Date & Time of sampling: 24.10.2016

01	Name of Drain		:	Buriyaghat Drain, Jajmau Kanpur
03	Confluence with R. Ganga			Right bank
04	Name of the Regional Office of SPCB			RO Kanpur UPPCB
05	Source of Pollution Load			Mixed (Sewage + Tannery Wastewater)
06	IF Industrial/ Mixed (Name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB			Around 400 tannery units located in Jajmau cluster.
07	Traceable length (in Km) before meeting Ganga (through Google earth/ map)			Approx. 01 Km
08	Catchment area			Jamau industrial cluster
09	Co-ordinate of the confluence point (if not reachable indirect though Google earth/ map) (Decimal units)	Latitude		26°25'51"N
		Longitude		80°24'42"E
	Distance from confluence point (may the find out over Google earth/map), Km			Approx. 20 m
10	Co-ordinate of the sampling point (decimal units)	Latitude		26°25'51"N
		Longitude		80°24'42"E
11	Landmarks/ Address of the location			Discharge after Buriyaghat Pumping station
12	Flow (if in MLD) if Zero indicate whether dry or stagnant			0.12 m ³ /sec = 10.15 MLD
13	Characteristics	Colour		Black
		pH		8.14
		TSS		741
		TDS		10049
		Cl ⁻		62.2
		SO ₄ ²⁻		2024
		S		41.7
		P		5.48
		Nitrate as N		80.6
		Nitrite as N		BDL
		Am Nitrogen		229
		O & G		10.8
		BOD (mg/l)		523
		COD (mg/l)		1621
14	Heavy Metal	Arsenic (As) mg/l		BDL

	Cadmium (Cd) mg/l	BDL
	Total Chromium (Cr) mg/l	13
	Copper (Cu) mg/l	-
	Iron (Fe) mg/l	0.54
	Lead (Pb) mg/l	BDL
	Manganese (Mn) mg/l	0.10
	Nickel (Ni) mg/l	0.04
	Mercury (Hg) mg/l	-
	Zinc (Zn) mg/l	0.10
	Antimony (Sb) mg/l	-
	Cobalt (Co) mg/l	BDL
	Selenium (Se) mg/l	-
	Vanadium (V) mg/l	-
15	For Fresh water carrying drains/rivers	DO
16	For sewage, mixed Drains & River	TC (MPN/100ml)
		<1.8
		FC (MPN/100ml)
		<1.8

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	: Awaited
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -BHC	: BDL
10.	β -BHC	: 5.34
11.	γ -BHC	: BDL
12.	δ -BHC	: BDL
13.	Total BHC (ng/l)	: BDL
14.	Aldrin (ng/l)	: BDL
15.	Diedrin (ng/l)	: BDL
16.	α -Endosulfan	: BDL
17.	Total Endosulfan (ng/l)	: BDL
18.	β -Endosulfan	: BDL

19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

1	Photographs with captions- Sampling & Confluence point (Add date & Time stamping in camera)		
	 		
	Google Earth image of Buriyaghath Drain	Buriyaghath drain at monitoring and Confluence point	
2	<p>Observations</p> <p>01. The Buriyaghath drain is carrying tannery effluent along with inseparable sewage.</p> <p>02. The effluent of Buriyaghath drain is normally tapped and pumped into the Wazidpur drain. However, on the time of visit the pumping station was under maintenance and the effluent receiving was overflowing into the river Ganga without any treatment.</p> <p>03. The quantity measured and as indicated at Sr No 12 is discharged directly into river Ganga without any treatment.</p>		
3	Urgent action required, if any		Treatment of wastewater before directly discharging into river Ganga without any treatment.
4	Name of all monitoring officers along with designation		
	Rajendra D Patil, Sci C Zonal Office, CPCB Lucknow	A K Mathur, AEE Regional Office, UPPCB Kar	
	Rajesh Kumar, RA Zonal Office, CPCB Lucknow	Shnu Sonkar, Sci. Assistant Regional Office, UPPCB Kar	
	A K Trivedi, Project Engineer Jal Nigam Kanpur		

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 24.10.2016

1.	Name of Drain		:	Wazidpur, Jajmau Kanpur
2.	Confluence with R. Ganga		:	Right bank
3.	Name of the Regional Office of SPCB		:	RO Kanpur UPPCB
4.	Source of Pollution Load		:	Mostly sewage
5.	IF Industrial/ Mixed (Sectors of Industry)		:	Mixed (Sewage + Tannery Wastewater)
6.	Traceable length (in Km) before meeting Ganga (through Google earth/ map)		:	Around 400 tannery units located in Jajmau cluster.
7.	Catchment area		:	Around 01 Km
8.	Co-ordinate of the confluence point (if not reachable indirect though Google earth/ map) (Decimal units)	Latitude	:	26°25'24"N
		Longitude	:	80°25'8.87"E
	Distance from confluence point (may the find out over Google earth/map), Km		:	Approx. 500 m
9.	Co-ordinate of the sampling point (decimal units)	Latitude	:	26°25'15.95"N
		Longitude	:	80°24'59.02"E
10.	Landmarks/ Address of the location		:	Discharge after Wazidpur pumping station.
11.	Flow (if in MLD) if Zero indicate whether dry or stagnant		:	0.21 m ³ /sec = 17.93 MLD
12.	Characteristics of general parameter	Colour	:	Black
		pH	:	8.05
		TSS	:	1911
		TDS	:	11360
		Cl ⁻	:	36.4
		SO ₄ ²⁻	:	2017
		S	:	53.3
		P	:	4.45
		Nitrate as N	:	67.1
		Nitrite as N	:	BDL
		Am Nitrogen	:	206
		O & G	:	7.41
13.	Heavy Metal	BOD (mg/l)	:	870
		COD (mg/l)	:	2796
		Arsenic (As) mg/l	:	BDL
		Cadmium (Cd) mg/l	:	0.02
		Total Chromium (Cr) mg/l	:	84.56
		Copper (Cu) mg/l	:	-

	Iron (Fe) mg/l		2.16
	Lead (Pb) mg/l		0.02
	Manganese (Mn) mg/l		0.26
	Nickel (Ni) mg/l		0.06
	Mercury (Hg) mg/l		-
	Zinc (Zn) mg/l		0.32
	Antimony (Sb) mg/l		-
	Cobalt (Co) mg/l		BDL
	Selenium (Se) mg/l		-
	Vanadium (V) mg/l		-
14.	DO (For Fresh water carrying drains/rivers)		NA
15.	For sewage, mixed Drains & River	TC (MPN/100ml)	1.7 X 10 ⁶
		FC (MPN/100ml)	7.9 X 10 ⁵

**DRAIN MONITORING FORMAT
(Pesticide)**

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	Awaited
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate (µg/l)	:	
4.	Methyl Parathion (µg/l)	:	
5.	Malathion (µg/l)	:	
6.	Chloropyriphos (µg/l)	:	
7.	Methyl Parathion	:	
8.	Ethion (µg/l)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α-BHC	:	BDL
10.	β-BHC	:	3.19
11.	γ-BHC	:	BDL
12.	δ-BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α-Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β-Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

1.	Photographs with captions- Sampling & Confluence point (Add date & Time stamping in camera)	
		
	Wazidpur drain at monitoring point	
2	<p>Observations</p> <p>07.The wazidpur drain is carrying tannery effluent along with inseparable sewage.</p> <p>08.Out of the total effluent generated in the area around 4-5 MLD effluent is pumped to CETP Jajmau, Kanpur and surplus is discharged through Wazidpur drain without any treatment into river Ganga.</p> <p>09. The quantity measured and as indicated at Sr No 12 is discharged directly into river Ganga without any treatment.</p>	
3	Name of all monitoring officers along with designation	
	Rajendra D Patil, Sci C Zonal Office, CPCB Lucknow	A K Mathur, AEE Regional Office, UPPCB Kanpur
	Rajesh Kumar, RA Zonal Office, CPCB Lucknow	Shnu Sonkar, Sci. Assistant Regional Office, UPPCB Kanpur
	A K Trivedi, Project Engineer Jal Nigam Kanpur	

**DRAIN MONITORING FORMAT
(Ganga)**

Date & Time of sampling: 24-25 October, 2016 at 12:00 pm

1.	Name of the Drain	:	City Jail Drain	
2.	Meeting Ganga -	:	Confluence with R. Ganga at Left Bank	
3.	Name of the Regional Office of SPCB	:	UPPCB, Unnao	
4.	Source of pollution load:	:	Mixed	
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB	:	Tannery, Textile, Chemical, Edible Oil Steel Industry, Slaughter House, Tannery Dog Chew, Leather Board	
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	30 Km. approx.	
7.	Catchment area	:	Industrial Area Akrampur-Magarwara& Leather Technology Park Banthar, CETP Banthar	
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:	26°20.503'
		Longitude	:	080°32.077'
	Distance from confluence point (may the find out over google earth/map), KM		22 Km. approx.	
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	:	26°26.068'
		Longitude	:	080°24.196'
10	Landmarks / Address of the Location		VSGOI at NH 25 (Unnao Bypass)/ Azad Marg (Ata village)	
11	Flow (if in MLD) if zero indicate whether dry or stagnant	:	85.82 MLD	
12	Observations	:	Sample collected at Unnao was almost dark Black/ Brown. After travelling of drain (aprox. 20-25 Km), it was observed that the water quality of the same drain has been improved and become almost clear at the point of confluence with R. Ganga (Majhra).	

13	Name of all monitoring officers along with Designation	1- Dr. Sanjay Kumar Singh, Research Associate, CPCB 2- Dr. Vijya Singh, Research Associate, CPCB 3- Sh. Kshitesh Patel , Scientific Assistant, UPPCB 4- Sh. Vishal Maurya, Lab Assistant, UPPCB 5- Er. Amit Kumar Sonkar, Project Manager Construction Unit, U.P. Jal Nigam, Lucknow 6- Er. Nikhil Prasad AE U.P. Jal Nigam, Lucknow
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DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.38
3.	BOD (mg/l)	:	109
4.	COD (mg/l)	:	441
5.	TSS (mg/l)	:	277
6.	TDS (mg/l)	:	5266
7.	Cl ⁻ (mg/l)	:	1906
8.	Sulphate	:	1260
9.	Sulphide	:	16.3
10.	Oil & Grease	:	12.4
11.	NH ₃ -N (mg/l)	:	-
12.	NO ₃ ⁻ (mg/l)	:	-
13.	DO (mg/l)*	:	-
14.	TC (MPN/ 100 ml) #	:	790000
15.	FC (MPN/ 100 ml) #	:	490000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters		Results	Awaited
1.	Arsenic (As) mg/l	:	BDL	
2.	Cadmium (Cd) mg/l	:	BDL	
3.	Total Chromium (Cr) mg/l	:	2.24	
4.	Copper (Cu) mg/l	:	-	
5.	Iron (Fe) mg/l	:	1.48	
6.	Lead (Pb) mg/l	:	BDL	
7.	Manganese (Mn) mg/l	:	0.52	
8.	Nickel (Ni) mg/l	:	0.02	
9.	Mercury (Hg) mg/l	:	-	
10.	Zinc (Zn) mg/l	:	3.02	
11.	Antimony (Sb) mg/l	:	-	
12.	Cobalt (Co) mg/l	:	BDL	
13.	Selenium (Se) mg/l	:	-	
14.	Vanadium (V) mg/l	:	-	

DRAIN MONITORING FORMAT
 (Pesticide)

Sl. No.	Parameters		Results	Awaited
1.	Water temperature (°C)	:		
	Pesticide Analysis Report (OPPs)	:		
2.	Monochrotophos	:		
3.	Dimethoate (µg/l)	:		
4.	Methyl Parathion (µg/l)	:		
5.	Malathion (µg/l)	:		
6.	Chloropyriphos (µg/l)	:		
7.	Methyl Parathion	:		
8.	Ethion (µg/l)	:		
	Pesticide Analysis Report (OCPs)	:		
9.	α-BHC	:	BDL	
10.	β-BHC	:	0.53	
11.	γ-BHC	:	BDL	
12.	δ-BHC	:	BDL	
13.	Total BHC (ng/l)	:	BDL	
14.	Aldrin (ng/l)	:	BDL	
15.	Diedrin (ng/l)	:	BDL	
16.	α-Endosulfan	:	BDL	
17.	Total Endosulfan (ng/l)	:	BDL	
18.	β-Endosulfan	:	BDL	
19.	OP'DDT	:	BDL	
20.	PP'DDT	:	BDL	
21.	PP'DDE	:	BDL	
22.	Total DDT (ng/l)	:	BDL	

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**



Fig- Sampling location of City Jail Drain at Azad Marg, Ata, Unnao



Fig- Confluence of City Jail Drain& R. Ganga at village Majhra during **Post Monsoon**

DRAIN MONITORING FORMAT
(Ganga)

Date & Time of sampling: 24-25 October, 2016 at 2:00 pm

1.	Name of the Drain		:	Loni Drain
2.	Meeting Ganga -		:	Confluence with R. Ganga at Left Bank
3.	Name of the Regional Office of SPCB		:	Unnao UPPCB
4.	Source of pollution load:		:	Mixed
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB		:	SlaughterHouse Dyeing Industry Tannery SlaughterHouse Meat Processing Unit (Self Closed) Fat unit (Self Closed) Dog Chew
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)		:	150 Km. approx.
7.	Catchment area		:	Industrial Area Site-1, Site-2, Unnao City
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:	26°0'4.475'
		Longitude	:	080°59.210'
	Distance from confluence point (may the find out over google earth/map), KM		:	95 Km. approx.
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	:	26°29.431' 080°32.901'
10.	Landmarks / Address of the Location		:	A small bridge over Loni drain, when we travel towards Jamuka from Korari Kalan village.
11.	Flow (if in MLD) if zero indicate whether dry or stagnant		:	21.67 MLD
12.	Observations		:	It is known as Loni River in Raebareli district and the water was clean before confluence to R. Ganga at Bhiti village.
13.	Urgent action required, if any		:	-
14.	Name of all monitoring officers along with Designation		:	7- Dr. Sanjay Kumar Singh, Research Associate, CPCB 8- Dr. Vijya Singh, Research Associate, CPCB 9- Sh. Kshitesh Patel , Scientific Assistant, UPPCB 10- Sh. Vishal Maurya, Lab Assistant, UPPCB 11- Er. Amit Kumar Sonkar, Project Manager Construction Unit, U.P. Jal Nigam, Lucknow 12- Er. Nikhil Prasad AE U.P. Jal Nigam, Lucknow

DRAIN MONITORING FORMAT

(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.4
3.	BOD (mg/l)	:	736
4.	COD (mg/l)	:	1439
5.	TSS (mg/l)	:	5274
6.	TDS (mg/l)	:	4466
7.	Cl ⁻ (mg/l)	:	25.8
8.	Sulphate		258
9.	Sulphide		11
10.	Oil & Grease		10.4
11.	NH ₃ -N (mg/l)	:	-
12.	NO ₃ ⁻ (mg/l)	:	-
13.	DO (mg/l)*	:	-
14.	TC (MPN/ 100 ml)##	:	3300000
15.	FC (MPN/ 100 ml)##	:	3300000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT

(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results Awaited	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	0.2
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	0.58
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.20
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	1.24
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results Awaited	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate (µg/l)	:	
4.	Methyl Parathion (µg/l)	:	
5.	Malathion (µg/l)	:	
6.	Chloropyriphos (µg/l)	:	
7.	Methyl Parathion	:	
8.	Ethion (µg/l)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α-BHC	:	BDL
10.	β-BHC	:	0.64
11.	γ-BHC	:	BDL
12.	δ-BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α-Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β-Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)

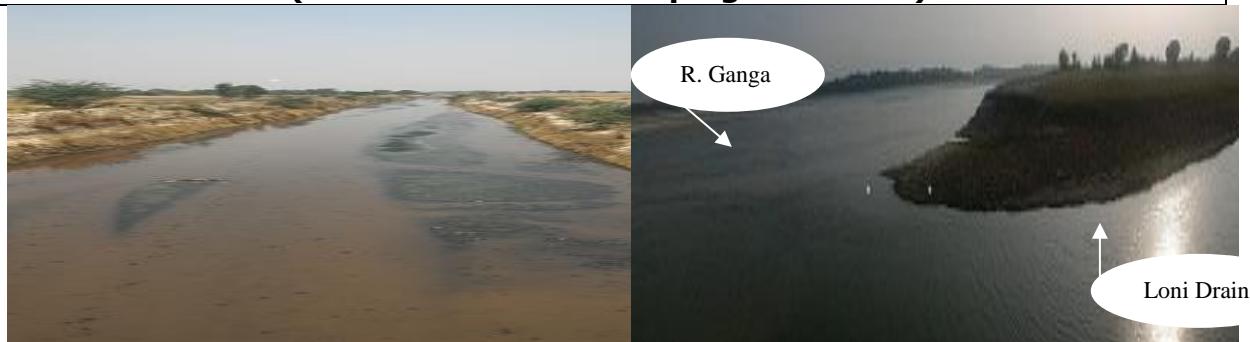


Fig. Loni Drain at Sampling Point near Korari Kala

Fig. Confluence of R. Ganga & Loni Drain at Bhti village, Raebareli during Post Monsoon (October)

IV. Data Sheet of Drains Joining River Ram Ganga.

**DRAIN MONITORING FORMAT
(Ramganga)**

Date & Time of sampling: 02.11.2016 (17.00hrs)

14.	Name of the Drain	:	Nohra drain (Nasia drain)
15.	Meeting Ganga/Ramganga/Kali-east at -	:	Drain meets Ramganga at left bank
16.	Name of the Regional Office of SPCB	:	SPCB, Bijnor
17.	Source of pollution load:	:	(Domestic/Industrial/Mixed)- Mixed
18.	If Industrial /Mixed	:	Mixed (but carries mostly domestic waste)
19.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	-
20.	Catchment area	:	Dhampur and Bijnor
21.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 29°07'13.4"N
		Longitude	: 078°40'0.81"E
	Distance from confluence point (may the find out over google earth/map), KM		3 Km (approx.)
22.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 29°06'15.5" N
		Longitude	: 078°38'52.4" E
23.	Landmarks / Address of the Location		Confluence point near Fazlabad and Rahimabad villages in chajlaut block in Moradabad District.
24.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	14.52
25.	Observations	:	Since flow measurement and sampling was not possible at confluence point, it was done at nearly 3 Km away from the confluence point. Reaching confluence point was difficult. Confluence point falls under Moradabad district. However, drain flows mainly through Bijnor region carrying pollution from Bijnor region. Hence, it was requested by AEE, UPPCB, Moradabad to monitor the same by Bijnor SPCB officials.
26.	Urgent action required, if any	:	----
27.	Name of all monitoring officers along with Designation		1. Dr Brajesh Shrivastava, Sc 'C', CPCB 2.Ms. Anshul Kumari, R.A., CPCB 3. Shri Vijay, AEE , UPPCB, Moradabad 4. Shri Rajeev Shrivastava A.S.O UPPCB Bijnor 5. Shri Anjani, UPPCB 6.Shri Vimal Kumar Rajpoot, S. A., UPPCB 7. Shri Bhramhanand A.E., U.P. Jal Nigam. 8.Shri Amit, Research Officer, NMCG

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
13.	Colour	:	--
14.	pH	:	7.67
15.	BOD (mg/l)	:	3
16.	COD (mg/l)	:	19
17.	TSS (mg/l)	:	14
18.	TDS (mg/l)	:	180
19.	Cl ⁻ (mg/l)	:	23
20.	NH ₃ -N (mg/l)	:	NT
21.	NO ₃ ⁻ (mg/l)	:	0.55
22.	DO (mg/l)*	:	---
23.	TC (MPN/ 100 ml) #	:	13x10 ³
24.	FC (MPN/ 100 ml) #	:	33x10 ²

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT

Sl. No.	Parameters	Results	
15.	Arsenic (As) mg/l	:	0.01
16.	Cadmium (Cd) mg/l	:	BDL
17.	Total Chromium (Cr) mg/l	:	BDL
18.	Copper (Cu) mg/l	:	BDL
19.	Iron (Fe) mg/l	:	0.81
20.	Lead (Pb) mg/l	:	BDL
21.	Manganese (Mn) mg/l	:	0.3
22.	Nickel (Ni) mg/l	:	BDL
23.	Mercury (Hg) mg/l	:	-
24.	Zinc (Zn) mg/l	:	BDL
25.	Antimony (Sb) mg/l	:	-
26.	Cobalt (Co) mg/l	:	BDL
27.	Selenium (Se) mg/l	:	BDL
28.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
23.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
1.	Monochrotophos	:	-
2.	Dimethoate ($\mu\text{g/l}$)	:	BDL
3.	Methyl Parathion ($\mu\text{g/l}$)	:	BDL
4.	Malathion ($\mu\text{g/l}$)	:	BDL
5.	Chloropyriphos ($\mu\text{g/l}$)	:	BDL
6.	Methyl Parathion	:	-
7.	Ethion ($\mu\text{g/l}$)	:	BDL
	Pesticide Analysis Report (OCPs)	:	
1.	α -HCH	:	BDL
2.	β -HCH	:	BDL
3.	γ -HCH	:	BDL
4.	δ -BHC	:	
5.	Total BHC (ng/l)	:	
6.	Aldrin (ng/l)	:	BDL
7.	Diedrin (ng/l)	:	BDL
8.	α -Endosulfan	:	BDL
9.	Total Endosulfan (ng/l)	:	
10.	β -Endosulfan	:	BDL
11.	OP'DDT	:	BDL
12.	PP'DDT	:	BDL
13.	PP'DDE	:	
14.	Total DDT (ng/l)	:	BDL

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**



View of confluence point

View of sampling point

**DRAIN MONITORING FORMAT
(Ramganga)**

Date & Time of sampling: 04.11.2016 (14.00hrs)

1.	Name of the Drain		:	Rampur Drain
2.	Meeting Ganga/Ramganga/Kali-east at -		:	It meets Kosi first at left bank as seen during the visit, then confluences finally in Ramganga
3.	Name of the Regional Office of SPCB		:	SPCB, Moradabad
4.	Source of pollution load:		:	(Domestic/Industrial/Mixed)- Mixed (mostly domestic)
5.	If Industrial /Mixed		:	Mixed (carries mainly domestic waste)
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)		:	From origin (i.e. Rampur drain) to confluence point (i.e. meeting at Kosi river), the distance is nearly 30 Km as per available information
7.	Catchment area		:	Rampur
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:	28°38'56.6"N
		Longitude	:	079°01'06.9"E
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	:	28°38'56.6"N 079°01'06.9"E
10.	Landmarks / Address of the Location		:	---
11.	Flow (if in MLD) if zero indicate whether dry or stagnant		:	34.31
12.	Observations		:	As informed by the officials from the State, due to change of river course, it now meets Kosi river. From there-onwards, the final discharge is in Ramganaga
13.	Urgent action required, if any		:	----
14.	Name of all monitoring officers along with Designation		:	1. Dr Brajesh Shrivastava, Sc 'C', CPCB 2. Shri Ajay Kumar, MTS, CPCB 4. Shri Vimal Kumar Rajpoot, S. A., UPPCB 5. Shri U. C. Shukla, A.E., U.P. Jal Nigam. 6. Shri Praveen Kuttu, Project Manager, U.P. Jal Nigam 7. Shri Neeraj Gahlawat, Project Officer, NMCG

DRAIN MONITORING FORMAT

(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.51
3.	BOD (mg/l)	:	58
4.	COD (mg/l)	:	201
5.	TSS (mg/l)	:	43
6.	TDS (mg/l)	:	876
7.	Cl ⁻ (mg/l)	:	169
8.	NH ₃ -N (mg/l)	:	34
9.	NO ₃ ⁻ (mg/l)	:	7.97
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	16x10 ⁵
12.	FC (MPN/ 100 ml) #	:	92x10 ⁴

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT

(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	BDL
5.	Iron (Fe) mg/l	:	0.66
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.25
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.05
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
1.	Monochrotophos	:	-
2.	Dimethoate (µg/l)	:	BDL
3.	Methyl Parathion (µg/l)	:	BDL
4.	Malathion (µg/l)	:	BDL
5.	Chloropyriphos (µg/l)	:	BDL
6.	Methyl Parathion	:	--
7.	Ethion (µg/l)	:	BDL
	Pesticide Analysis Report (OCPs)	:	
1.	α-HCH	:	BDL
2.	β-HCH	:	0.075
3.	γ-HCH	:	BDL
4.	δ-HCH	:	-
5.	Total BHC (ng/l)	:	-
6.	Aldrin (ng/l)	:	BDL
7.	Diedrin (ng/l)	:	BDL
8.	α-Endosulfan	:	BDL
9.	Total Endosulfan (ng/l)	:	-
10.	β-Endosulfan	:	BDL
11.	OP'DDT	:	BDL
12.	PP'DDT	:	BDL
13.	PP'DDE	:	BDL
14.	Total DDT (ng/l)	:	-

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



View of confluence point



View of sampling point

**DRAIN MONITORING FORMAT
(Ramganga)**

Date & Time of sampling: 02.11.2016 (13.00hrs)

1.	Name of the Drain	:	Moradabad drain (Karula drain)
2.	Meeting Ganga/Ramganga/Kali-east at -	:	The drain meets Ramganga at left bank
3.	Name of the Regional Office of SPCB	:	SPCB, Moradabad
4.	Source of pollution load:	:	(Domestic/Industrial/Mixed)- Mixed
5.	If Industrial /Mixed	:	Mixed (but carrying mostly domestic)
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	-----
7.	Catchment area	:	Moradabad
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 28°46'19.7"N
		Longitude	: 078°49.0'01.6"E
	Distance from confluence point (may the find out over google earth/map), KM		
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 28°52'51.6" N
		Longitude	: 078°45'07.6" E
10.	Landmarks / Address of the Location		Khadakpur baje village
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	57.12
12.	Observations	:	As reported by UPPCB officials, there are 26 drains falling into Ramganga directly. However, it was found out that these are very small drains. Further inspection may be carried out to see the status.
13.	Urgent action required, if any	:	-----
14.	Name of all monitoring officers along with Designation		1. Dr Brajesh Shrivastava, Sc 'C', CPCB 2.Ms. Anshul Kumari, R.A., CPCB 3. Shri Vijay AEE , UPPCB, Moradabad 4.Shri Vimal Kumar Rajpoot, S. A., UPPCB 5. Shri Anil Kansal, A.E., U.P. Jal Nigam. 6.Shri Praveen Kumar J.E U.P. Jal Nigam 7.Shri Amit, Research Officer, NMCG

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	--
2.	pH	:	7.34
3.	BOD (mg/l)	:	44
4.	COD (mg/l)	:	128
5.	TSS (mg/l)	:	67
6.	TDS (mg/l)	:	548
7.	Cl ⁻ (mg/l)	:	123
8.	NH ₃ -N (mg/l)	:	38
9.	NO ₃ ⁻ (mg/l)	:	2.76
10.	DO (mg/l)*	:	---
11.	TC (MPN/ 100 ml) #	:	35x10 ⁸
12.	FC (MPN/ 100 ml) #	:	24x10 ⁷

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	0.02
4.	Copper (Cu) mg/l	:	0.04
5.	Iron (Fe) mg/l	:	2.41
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.41
8.	Nickel (Ni) mg/l	:	0.07
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.11
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	-
3.	Dimethoate (µg/l)	:	1.94
4.	Methyl Parathion (µg/l)	:	BDL
5.	Malathion (µg/l)	:	BDL
6.	Chloropyriphos (µg/l)	:	BDL
7.	Methyl Parathion	:	-
8.	Ethion (µg/l)	:	BDL
	Pesticide Analysis Report (OCPs)	:	
1.	α-HCH	:	BDL
2.	β- HCH	:	0.483
3.	γ- HCH	:	BDL
4.	δ-BHC	:	-
5.	Total BHC (ng/l)	:	-
6.	Aldrin (ng/l)	:	BDL
7.	Diedrin (ng/l)	:	BDL
8.	α-Endosulfan	:	BDL
9.	Total Endosulfan (ng/l)	:	-
10.	β-Endosulfan	:	BDL
11.	OP'DDT	:	BDL
12.	PP'DDT	:	0.053
13.	PP'DDE	:	BDL
14.	Total DDT (ng/l)	:	-

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



View of confluence point



View of sampling point

DRAIN MONITORING FORMAT (Ramganga)

Date & Time of sampling: 02.11.2016&1:00pm

1.	Name of Drain		:	Nakatiya Drain
2.	Confluence with R. Ramganga		:	Left bank
3.	Name of the Regional Office of SPCB		:	Regional Office, UPPCB, Bareily
4.	Source of Pollution Load		:	Mixed
5.	If Industrial/ Mixed (Name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB		:	Sector Paper Slaughter House
6.	Traceable length (in Km) before meeting Ganga (through Google earth/ map)		:	100 KM
7.	Catchment area		:	Mahanagar, HaruNagla, Rohilkhand University, DhaureraMaffi, Air Force Campus, Sun Rise Colony, Super City Colony, Ashish Royal Park, Sindhu Nagar, Sadar Colony, Tulsi Nagar, Bhartaul, Haziya Nagar
8.	Co-ordinate of the confluence point (if not reachable indirect though Google earth/ map) (Decimal units)	Latitude	:	E 079°29.081'
		Longitude	:	N 28°08.166'
	Distance from confluence point (may the find out over Google earth/map), KM		:	25 KM
9.	Co-ordinate of the sampling point (decimal units)	Latitude	:	E 079°26.176'
		Longitude	:	N 28°15.026'
10.	Landmarks/ Address of the location		:	ManpurChikatia, Bareily
11.	Flow (if in MLD) if Zero indicate whether dry or stagnant		:	170 MLD
12.	Charact eristics	Colour	:	-
		pH	:	7.24
		BOD (mg/l)	:	24.2
		COD (mg/l)	:	56.6
		TSS	:	27.6
		TDS	:	440
		PO4 ³⁻	:	1.58
		Cl ⁻	:	46.4

		NH ₃ -N	:	15.4	
		NO ₃ -	:	0.4	
13.	Heavy Metals	Arsenic (As) mg/l	:	-	
		Cadmium (Cd) mg/l	:	BDL	
		Total Chromium (Cr) mg/l	:	BDL	
		Copper (Cu) mg/l	:	0.002	
		Iron (Fe) mg/l	:	-	
		Lead (Pb) mg/l	:	-	
		Manganese (Mn) mg/l	:	0.21	
		Nickel (Ni) mg/l	:	-	
		Mercury (Hg) mg/l	:	-	
		Zinc (Zn) mg/l	:	0.080	
		Antimony (Sb) mg/l	:	-	
		Cobalt (Co) mg/l	:	BDL	
		Selenium (Se) mg/l	:	-	
		Vanadium (V) mg/l	:	-	
14.	DO (For Fresh water carrying drains/rivers)		:	--	
15.	For sewage, mixed Drains & River	TC (MPN/100ml)	:	17,000,00	
		FC (MPN/100ml)		17,000,00	
16.	Photographs with captions- Sampling & Confluence point (Add date & Time stamping in camera)				
	Nakatiya drain meeting R. Ramganga on its left bank at Khallpur (AhirGautia) Village.				

			
<p>Sampling location of Nakatiya drain at Manpur Chikatia Village.</p>			
15.	Observations	:	The drain touches the Bareily city on its Eastern boundry and meets R. Ramganga on its left bank approx. 25 KM away from Bareily cityKhallpur (AhirGautia) Village.
17.	Name of all monitoring officers along with designation	:	<ol style="list-style-type: none"> 1. Sh. Ram Balak Singh, Scientist C, CPCB, ZO(N) 2. Dr. Sanjay Kumar Singh, RA-I, CPCB, ZO(N) 3. Dr. Anant Dubey, ASO, UPPCB, RO, Bareily 4. Sh. Mohit Rai, AE, UP Jal Nigam, Bareily

DRAIN MONITORING FORMAT
(Ramganga)

Date & Time of sampling: 02.11.2016 & 3:00pm

1.	Name of Drain		:	Chawari (Chaubari) Drain
3.	Confluence with R. Ramganga		:	Left bank
4.	Name of the Regional Office of SPCB		:	Regional Office, UPPCB, Bareilly
5.	Source of Pollution Load		:	Domestic
6.	If Industrial/ Mixed (Name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB		:	N.A
7.	Traceable length (in Km) before meeting Ganga (through Google earth/ map)		:	Approx. 20 KM
8.	Catchment area		:	Subhash Nagar, Kargaina, Kareilly, Veer Bhatti
9.	Co-ordinate of the confluence point (if not reachable indirect though Google earth/ map) (Decimal units)	Latitude	:	E 079°25.851'
		Longitude	:	N 28°12.310'
	Distance from confluence point (may the find out over Google earth/map), KM		:	Approx. 15 KM
10.	Co-ordinate of the sampling point (decimal units)	Latitude	:	N 28°17.690'
		Longitude	:	E 079°23.562'
11.	Landmarks/ Address of the location		:	Near Chaubari Village, on Bareily-Budaun Road
12.	Flow (if in MLD) if Zero indicate whether dry or stagnant		:	18.82
13.	Characteristics	Colour	:	-
		pH	:	7.31
		BOD (mg/l)	:	25.8
		COD (mg/l)	:	72.5
		TSS	:	17.3
		TDS	:	710
		PO4 ³⁻	:	2.94
		Cl-	:	43.7
		NH3-N	:	21
		NO3-	:	0.2

14	Heavy Metals	Arsenic (As) mg/l		-	
		Cadmium (Cd) mg/l		BDL	
		Total Chromium (Cr) mg/l		BDL	
		Copper (Cu) mg/l		BDL	
		Iron (Fe) mg/l		-	
		Lead (Pb) mg/l		-	
		Manganese (Mn) mg/l		0.252	
		Nickel (Ni) mg/l		-	
		Mercury (Hg) mg/l		-	
		Zinc (Zn) mg/l		0.054	
		Antimony (Sb) mg/l		-	
		Cobalt (Co) mg/l		0.030	
		Selenium (Se) mg/l		-	
		Vanadium (V) mg/l		-	
	DO (For Fresh water carrying drains/rivers)	:	-		
	For sewage, mixed Drains & River	TC (MPN/100ml)	:	490000	
		FC (MPN/100ml)		490000	
15.	Photographs with captions- Sampling & Confluence point (Add date & Time stamping in camera)				
					
	Chawari (Chaubari) drain meeting R. Ramganga on its left bank at Gomidpur Village.				



Sampling location of Chawari (Chaubari) drain at Chaubari Village.

16.	Observations	:	The drain originates from the Southern part of Bareily city and meets R. Ramganga on its left bank approx. 15 KM away from Bareily city at Gomidpur Village.
17.	Name of all monitoring officers along with designation	:	<ul style="list-style-type: none">5. Sh. Ram Balak Singh, Scientist C, CPCB, ZO(N)6. Dr. Sanjay Kumar Singh, RA-I, CPCB, ZO(N)7. Dr. Anant Dubey, ASO, UPPCB, RO, Bareily8. Sh. Mohit Rai, AE, UP Jal Nigam, Bareily

DRAIN MONITORING FORMAT (Ramganga)

Date & Time of sampling: 01.11.2016 & 4:00 pm

1.	Name of Drain	:	Devraniya Drain
3.	Confluence with R. Ramganga	:	Left bank
4.	Name of the Regional Office of SPCB	:	Regional Office, UPPCB, Bareily
5.	Source of Pollution Load	:	Mixed
6.	If Industrial/ Mixed (Name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB	:	Sector Chemical Agro based
7.	Traceable length (in Km) before meeting Ganga (through Google earth/ map)	:	Approx. 130 KM
8.	Catchment area	:	Durga Nagar, City railway Colony, Katghar, Beharipur, Gulab Nagar, Alamgiriganj, Gangapur, Shrinath Puram, Shiv Vihar Colony, Asha Vihar Colony, Shastri Nagar, Gandhi Puram, Karmchary Nagar, Greater Akash Colony, BDA Colony, Ram Nagar, Raza Nagar, AnandVihar, Shikarpur, Chowki Ashraf, Maula Nagar, Civil Lines, Englishganj, ChepiTola, Bakarganj
9.	Co-ordinate of the confluence point (if not reachable indirect though Google earth/ map) (Decimal units)	Latitude Longitude	: E 079°22.260' N 28°19.739'
	Distance from confluence point (may the find out over Google earth/map), KM	:	Approx. 5 KM
10.	Co-ordinate of the sampling point (decimal units)	Latitude Longitude	: E 079°22.702' N 28°20.975'
11.	Landmarks/ Address of the location	:	Sarai Talfi Village, Bareily
12.	Flow (if in MLD) if Zero indicate whether dry or stagnant	:	398 MLD
13.	Characteristics	Colour pH BOD (mg/l) COD (mg/l) TSS TDS PO4 ³⁻	- 6.99 40.2 169 104 393 1.13

		Cl ⁻	:	28.2
		NH ₃ -N	:	8.38
		NO ₃ ⁻	:	0.6
14	Heavy Metals	Arsenic (As) mg/l		-
		Cadmium (Cd) mg/l		BDL
		Total Chromium (Cr) mg/l		0.034
		Copper (Cu) mg/l		0.008
		Iron (Fe) mg/l		
		Lead (Pb) mg/l		
		Manganese (Mn) mg/l		0.086
		Nickel (Ni) mg/l		-
		Mercury (Hg) mg/l		-
		Zinc (Zn) mg/l		0.058
		Antimony (Sb) mg/l		-
		Cobalt (Co) mg/l		BDL
		Selenium (Se) mg/l		-
		Vanadium (V) mg/l		-
	For Fresh water carrying drains/rivers	DO	:	-
	For sewage, mixed Drains & River	TC (MPN/100ml)	:	2,20,00,000
		FC (MPN/100ml)		1,70,00,000

15 .	Photographs with captions- Sampling & Confluence point (Add date & Time stamping in camera)
	 <p>Devraniya drain meeting R. Ramganga on its left bank at Virya Narainpur Village.</p>



Sampling location of Devraniya drain at Sarai Talfi Village.

16	Observations .	:	The drain touches the Bareily city on its Western boundary and meets R. Ramganga on its left bank approx. 05 KM away from Bareily city at ViryaNarainpur Village.
17	Name of all monitoring officers along with designation .	:	9. Sh. Ram Balak Singh, Scientist C, CPCB, ZO(N) 10. Dr. Sanjay Kumar Singh, RA-I, CPCB, ZO(N) 11. Dr. Anant Dubey, ASO, UPPCB, RO, Bareily 12. Sh. Mohit Rai, AE, UP Jal Nigam, Bareily

V. Data Sheet of Drains Joining River Kali East.

DRAIN MONITORING FORMAT
(Kali East)

Date & Time of sampling: 03-11-2016 at 14:50 hrs.

1.	Name of the Drain	:	Abunallah 1 (Kaily Drain)
2.	Meeting Ganga/Ramganga/Kali-east at -	:	Kali East at Right bank
3.	Name of the Regional Office of SPCB	:	Meerut/UPPCB
4.	Source of pollution load:	:	Mixed
5.	If Industrial /Mixed	:	Sector - Textile
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	-
7.	Catchment area	:	Pallvapuram, Sakauti, Cantonment area, Ganganagar areas of Meerut City.
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 28°57'47.8001 N
		Longitude	: 77°45'51.3061 E
	Distance from confluence point (may the find out over google earth/map), KM		1km
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 28°58'3.7577 N
		Longitude	: 77°44'55.9625 E
10.	Landmarks / Address of the Location		Opposite Ashoka Handloom, Meerut Bypass, Meerut
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	59.92
12.	Observations	:	Solid waste dumping has been observed on the side of the drain nearby the MSW dumping site on a 2-3 km stretch.
13.	Name of all monitoring officers along with Designation		1. Dr. Sarvesh Rai, Sc. 'C', CPCB 2. Ms. Garima Dublish, RA-I, CPCB 3. Mr. Munna Singh, Ex En, UP Jal Nigam 4. Mr. Ankit Singh, AEE, RO, UPPCB Meerut 5. Mr. Shravan Kota, Research Officer, NMCG

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.7
3.	BOD (mg/l)	:	55
4.	COD (mg/l)	:	163
5.	TSS (mg/l)	:	83
6.	TDS (mg/l)	:	732
7.	Cl ⁻ (mg/l)	:	146
8.	NH ₃ -N (mg/l)	:	55
9.	NO ₃ ⁻ (mg/l)	:	3.06
10.	DO (mg/l)*	:	NA
11.	TC (MPN/ 100 ml) #	:	17x10 ⁶
12.	FC (MPN/ 100 ml) #	:	70x10 ⁵

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	0.01
5.	Iron (Fe) mg/l	:	2.1
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.15
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	NA
10.	Zinc (Zn) mg/l	:	0.11
11.	Antimony (Sb) mg/l	:	NA
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT
(Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate (µg/l)	:	
4.	Methyl Parathion (µg/l)	:	
5.	Malathion (µg/l)	:	
6.	Chloropyriphos (µg/l)	:	
7.	Methyl Parathion	:	
8.	Ethion (µg/l)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α-BHC	:	BDL
10.	β-BHC	:	0.13
11.	γ-BHC	:	BDL
12.	δ-BHC	:	BDL
13.	Total BHC (ng/l)	:	0.13
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α-Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β-Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**

	
Sampling Point of Abu Nalla-1	Confluence point of Abu Nalla-1 Drain & Kali East River

DRAIN MONITORING FORMA
(Kali East)

Date & Time of sampling: 03-11-2016 at 13:12 hrs.

1.	Name of the Drain	:	Abu Nalla -2 (Main Abu Nalla)
2.	Meeting Kali East at -	:	Kali East at Right bank
3.	Name of the Regional Office of SPCB	:	Meerut/UPPCB
4.	Source of pollution load:	:	Mixed
5.	If Industrial /Mixed (Sector)	:	Brewery
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	
7.	Catchment area	:	Meerut City
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 28°54'58.3291" N
		Longitude	: 77°44'38.2469" E
	Distance from confluence point (may the find out over google earth/map), KM		1 km
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 28°56'19.56" N
		Longitude	: 77°45'12.94" E
10.	Landmarks / Address of the Location		On outer ring road near upcoming 72 mld STP, Meerut
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	243.64
12.	Observations	:	Confluence point was traced at a distance of about 1.5 km through shrubs and hick vegetation area.
13.	Name of all monitoring officers along with Designation		1. Dr. Sarvesh Rai, Sc. 'C', CPCB 2. Ms. Garima Dubliss, RA-I, CPCB 3. Mr. Munna Singh, Ex En, UP Jal Nigam 4. Mr. Ankit Singh, AEE, RO, UPPCB Meerut 5. Mr. Shravan Kota, Research Officer, NMCG

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters		Results
1.	Colour	:	-
2.	pH	:	7.4
3.	BOD (mg/l)	:	51
4.	COD (mg/l)	:	332
5.	TSS (mg/l)	:	192
6.	TDS (mg/l)	:	624
7.	Cl ⁻ (mg/l)	:	75
8.	NH ₃ -N (mg/l)	:	26
9.	NO ₃ ⁻ (mg/l)	:	4.7
10.	DO (mg/l)*	:	NA
11.	TC (MPN/ 100 ml) #	:	70x10 ⁶
12.	FC (MPN/ 100 ml) #	:	46x10 ⁶

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters		Results
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	0.03
5.	Iron (Fe) mg/l	:	1.8
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.17
8.	Nickel (Ni) mg/l	:	0.02
9.	Mercury (Hg) mg/l	:	NA
10.	Zinc (Zn) mg/l	:	0.15
11.	Antimony (Sb) mg/l	:	NA
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -BHC	: BDL
10.	β -BHC	: 0.052
11.	γ -BHC	: BDL
12.	δ -BHC	: BDL
13.	Total BHC (ng/l)	: 0.369
14.	Aldrin (ng/l)	: BDL
15.	Diedrin (ng/l)	: BDL
16.	α -Endosulfan	: BDL
17.	Total Endosulfan (ng/l)	: BDL
18.	β -Endosulfan	: BDL
19.	OP'DDT	: 0.177
20.	PP'DDT	: BDL
21.	PP'DDE	: BDL
22.	Total DDT (ng/l)	: 0.177

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)	
	
Confluence point of Abu Nalla-2 Drain and Kali East River	Water withdrawn for irrigation from Abu Nalla-2

DRAIN MONITORING FORMA
(Kali East)

Date & Time of sampling: 03-11-2016 at 12:00 hrs.

1.	Name of the Drain	:	Odean Nallah (Slaughter House Drain)
2.	Meeting Kali Eeast at -	:	Kali East at Right bank
3.	Name of the Regional Office of SPCB	:	Meerut/UPPCB
4.	Source of pollution load:	:	Mixed
5.	If Industrial /Mixed	:	Illegal Slaughtering
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	-
7.	Catchment area	:	Meerut city
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 28°55'35.35" N
		Longitude	: 77°45'23.00" E
	Distance from confluence point (may the find out over google earth/map), KM		1.5 km
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 28°55'56.8861" N
		Longitude	: 77°44'59.4781" E
10.	Landmarks / Address of the Location		
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	174.95
12.	Observations	:	Adjacent farmlands are being irrigated by the drain water.
13.	Name of all monitoring officers along with Designation		1. Dr. Sarvesh Rai, Sc. 'C', CPCB 2. Ms. Garima Dublish, RA-I, CPCB 3. Mr. Munna Singh, Ex En, UP Jal Nigam 4. Mr. Ankit Singh, AEE, RO, UPPCB Meerut 5. Mr. Shravan Kota, Research Officer, NMCG

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.3
3.	BOD (mg/l)	:	182
4.	COD (mg/l)	:	763
5.	TSS (mg/l)	:	565
6.	TDS (mg/l)	:	864
7.	Cl ⁻ (mg/l)	:	178
8.	NH ₃ -N (mg/l)	:	47
9.	NO ₃ ⁻ (mg/l)	:	10.29
10.	DO (mg/l)*	:	NA
11.	TC (MPN/ 100 ml) #	:	35x10 ⁶
12.	FC (MPN/ 100 ml) #	:	24x10 ⁵

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	0.05
3.	Total Chromium (Cr) mg/l	:	0.1
4.	Copper (Cu) mg/l	:	0.11
5.	Iron (Fe) mg/l	:	5
6.	Lead (Pb) mg/l	:	0.03
7.	Manganese (Mn) mg/l	:	0.36
8.	Nickel (Ni) mg/l	:	0.07
9.	Mercury (Hg) mg/l	:	NA
10.	Zinc (Zn) mg/l	:	0.41
11.	Antimony (Sb) mg/l	:	NA
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT
(Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -BHC	: BDL
10.	β -BHC	: 0.894
11.	γ -BHC	: BDL
12.	δ -BHC	: BDL
13.	Total BHC (ng/l)	: 0.894
14.	Aldrin (ng/l)	: BDL
15.	Diedrin (ng/l)	: BDL
16.	α -Endosulfan	: BDL
17.	Total Endosulfan (ng/l)	: BDL
18.	β -Endosulfan	: BDL
19.	OP'DDT	: 0.261
20.	PP'DDT	: BDL
21.	PP'DDE	: BDL
22.	Total DDT (ng/l)	: 0.261

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)	
	
Sampling point of Odean Drain	Confluence point of Odean Drain & Kali East River

DRAIN MONITORING FORM
(Kali-East)

Date & Time of sampling: 04.11.2016 (20.00hrs)

1.	Name of the Drain		:	Chhoiya Drain
2.	Meeting Ganga/Ramganga/Kali-east at -		:	Drain meets Kali-east at left bank
3.	Name of the Regional Office of SPCB		:	SPCB, Ghaziabad
4.	Source of pollution load:		:	(Domestic/Industrial/Mixed)- Mixed
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB		:	Mixed
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)		:	-
7.	Catchment area		:	Merrut and Mawana
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		:	Approx. 8 km
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	:	28°38'56.6"N
		Longitude	:	079°01'06.9"E
10.	Landmarks / Address of the Location		:	Bachrauta village, near Babugarh cant. In Ghaziabad district
11.	Flow (if in MLD) if zero indicate whether dry or stagnant		:	Could not be measured
12.	Observations		:	Due to darkness (8 PM) and non-feasibility of the site, flow could not be measured.
13.	Urgent action required, if any		:	---
14.	Name of all monitoring officers along with Designation		:	1.Dr. Brajesh Shrivastava 2. Shri Neeraj Gahlawat, P.O., NMCG 3. Shri Ajay Sharma, MTS, CPCB

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.92
3.	BOD (mg/l)	:	18
4.	COD (mg/l)	:	124
5.	TSS (mg/l)	:	39
6.	TDS (mg/l)	:	908
7.	Cl ⁻ (mg/l)	:	119
8.	NH ₃ -N (mg/l)	:	14
9.	NO ₃ ⁻ (mg/l)	:	5.84
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	79x10 ²
12.	FC (MPN/ 100 ml) #	:	49x10 ²

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	BDL
5.	Iron (Fe) mg/l	:	1.2
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.21
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.05
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT
(Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
8.	α -HCH	:
9.	β -HCH	:
10.	γ -HCH	:
11.	δ -BHC	:
12.	Total BHC (ng/l)	:
13.	Aldrin (ng/l)	:
14.	Diedrin (ng/l)	:
15.	α -Endosulfan	:
16.	Total Endosulfan (ng/l)	:
17.	β -Endosulfan	:
18.	OP'DDT	:
19.	PP'DDT	:
20.	PP'DDE	:
21.	Total DDT (ng/l)	:

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)
Photographs are not clear due to darkness (It was around 8 PM when the visit was conducted)

DRAIN MONITORING FORMAT
(Kali-East)

Date & Time of sampling: 02.11.2016, 1:30pm

1.	Name of the Drain		:	Hapur Drain
2.	Meeting Ganga/Ramganga/Kali-east at -		:	Right bank
3.	Name of the Regional Office of SPCB		:	Ghaziabad
4.	Source of pollution load:		:	Mixed
5.	If Industrial /Mixed (Please indicate type of sector)		:	<ul style="list-style-type: none"> • Textile • Dyeing • Others
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)		:	15 KM (approx.)
7.	Catchment area		:	Hapur
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:	28.6381
		Longitude	:	77.81475
	Distance from confluence point (may the find out over google earth/map), KM		:	6 Km (approx.)
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	:	77.785
		Longitude	:	28.684
10.	Landmarks / Address of the Location		:	Near Road Bridge, Akhroli Vill., Gulauti Road
11.	Flow (if in MLD) if zero indicate whether dry or stagnant		:	28.11
12.	Observations		:	4. Turbid. 5. Ichornia growth found. 6. Solid wastes were found floating with drain.
13.	Urgent action required, if any		:	Solid wastes floating with the drain should be stopped immediately.
14.	Name of all monitoring officers along with Designation		:	1. Sh. C.B. Chaurasia, Sc E, CPCB 2. Dr. Sananda Sinha, RA, CPCB 3. Mrs. Shraddha Lonarkar, RA, CPCB 4. Mr. NeerajGahlaut, Project Officer, NMCG 5. Mr. Mahendra Singh, AE, UPJN 6. Mr. Rajkumar Sharma, J.E, UPJN 7. Mr. Dhruv, LA, UPPCB, Ghaziabad

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	NA
2.	pH	:	7.52
3.	BOD (mg/l)	:	140
4.	COD (mg/l)	:	300
5.	TSS (mg/l)	:	230
6.	TDS (mg/l)	:	976
7.	Cl ⁻ (mg/l)	:	260
8.	NH ₃ -N (mg/l)	:	38
9.	NO ₃ ⁻ (mg/l)	:	3.91
10.	DO (mg/l)*	:	NIL
11.	TC (MPN/ 100 ml) #	:	17x10 ⁵
12.	FC (MPN/ 100 ml) #	:	17x10 ⁵

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	0.01
4.	Copper (Cu) mg/l	:	0.04
5.	Iron (Fe) mg/l	:	2.94
6.	Lead (Pb) mg/l	:	0.02
7.	Manganese (Mn) mg/l	:	0.24
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	NA
10.	Zinc (Zn) mg/l	:	0.10
11.	Antimony (Sb) mg/l	:	NA
12.	Cobalt (Co) mg/l	:	BLD
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -BHC	:
10.	β -BHC	:
11.	γ -BHC	:
12.	δ -BHC	:
13.	Total BHC (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α -Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β -Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)	
	
Drain View	Sampling Location

*confluence was non approachable due to heavy growth of grasses

DRAIN MONITORING FORMAT
(Kali -East)

Date & Time of sampling: 02.11.2016, 11:20 am

1.	Name of the Drain	:	Hapur Drain-1
2.	Meeting Kali-east at -	:	Right bank – Kali-East
3.	Name of the Regional Office of SPCB	:	Ghaziabad
4.	Source of pollution load:	:	Mixed
5.	If Industrial /Mixed (Please indicate type of sector)	:	<ul style="list-style-type: none"> • Textile • Dyeing • Others
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	4 KM (approx.)
7.	Catchment area	:	Hapur
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 77.830
		Longitude	: 28.726
	Distance from confluence point (may the find out over google earth/map), KM		100 meter before the confluence
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 77.830
		Longitude	: 28.726
10.	Landmarks / Address of the Location		At road bridge near PWD Office Babugarh vill. , Hapur
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	4.60
12.	Observations	:	7. Turbid. 8. Ichornia growth found. 9. Solid wastes were found floating with drain.
13.	Urgent action required, if any	:	Solid wastes floating with the drain should be stopped immediately.
14.	Name of all monitoring officers along with Designation		1.Sh. C.B. Chaurasia, Sc. E, CPCB 2.Dr. Sananda Sinha, RA, CPCB 3.Mrs. Shraddha Lonarkar, RA, CPCB 4.Mr. Neeraj Gahlaut, Project Officer, NMCG 5. Mr. Mahendra Singh, AE, UPJN 6. Mr. Rajkumar Sharma, J.E, UPJN 7. Mr. Dhruv, LA, UPPCB, Ghaziabad

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	NA
2.	pH	:	7.78
3.	BOD (mg/l)	:	41
4.	COD (mg/l)	:	114
5.	TSS (mg/l)	:	41
6.	TDS (mg/l)	:	784
7.	Cl ⁻ (mg/l)	:	192
8.	NH ₃ -N (mg/l)	:	43
9.	NO ₃ ⁻ (mg/l)	:	3.85
10.	DO (mg/l)*	:	NIL
11.	TC (MPN/ 100 ml) #	:	13x10 ⁸
12.	FC (MPN/ 100 ml) #	:	79x10 ⁷

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	0.02
4.	Copper (Cu) mg/l	:	BDL
5.	Iron (Fe) mg/l	:	0.66
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.31
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	NA
10.	Zinc (Zn) mg/l	:	0.02
11.	Antimony (Sb) mg/l	:	NA
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT
(Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -BHC	:
10.	β -BHC	:
11.	γ -BHC	:
12.	δ -BHC	:
13.	Total BHC (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α -Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β -Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Sampling location	Confluence with Kali -east
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DRAIN MONITORING FORMAT
(Kali -East)

Date & Time of sampling: 20.10.2016, 1:00 PM

1.	Name of the Drain	:	Kadarabad Drain	
2.	Meeting Kali-east at -	:	Right bank - Kali-East	
3.	Name of the Regional Office of SPCB	:	Ghaziabad	
4.	Source of pollution load:	:	Mixed	
5.	If Industrial /Mixed (Please indicate type of sector)	:	Dyeing & Textile	
6.	Traceable length of drain (in Km) before meeting Ganga (through google earth/map)	:	Approx. 35 km	
7.	Catchment area	:	Modinagar and Meerut	
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:	28.63105
		Longitude	:	77.8124
	Distance from confluence point (may the find out over google earth/map), KM		1 km before confluence with river Kali-East	
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	:	28.6353
		Longitude	:	77.80482
10.	Landmarks / Address of the Location		After D/s of village Hirdaypur	
11.	Flow in MLD, if zero indicate whether dry or stagnant	:	48.56 MLD	
12.	Observations	:		
13.	Name of all monitoring officers along with Designation		1. Sh. C.B. Chourasia, Sc 'E', NGRBA Cell, CPCB 2. Dr. Hema Patel, NGRBA Cell, RA-I NGRBA Cell, CPCB 3. Sh. Sushil Kumar, SA, RO Ghaziabad, UPPCB 4. Sh. Dhruv, Lab Assistant, RO, Ghaziabad, UPPCB	

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	
2.	pH	:	8.08
3.	BOD (mg/l)	:	73
4.	COD (mg/l)	:	154
5.	TSS (mg/l)	:	40
6.	TDS (mg/l)	:	964
7.	Cl ⁻ (mg/l)	:	148
8.	NH ₃ -N (mg/l)	:	18
9.	NO ₃ ⁻ (mg/l)	:	3.58
10.	DO (mg/l)*	:	NA
11.	TC (MPN/ 100 ml) #	:	49x10 ⁵
12.	FC (MPN/ 100 ml) #	:	33x10 ⁵

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	0.02
5.	Iron (Fe) mg/l	:	0.55
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.27
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.03
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

**DRAIN MONITORING FORMAT
(Pesticide)**

(Sample not collected)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate (µg/l)	:
4.	Methyl Parathion (µg/l)	:
5.	Malathion (µg/l)	:
6.	Chloropyriphos (µg/l)	:
7.	Methyl Parathion	:
8.	Ethion (µg/l)	:
	Pesticide Analysis Report (OCPs)	:
9.	α-BHC	:
10.	β-BHC	:
11.	γ-BHC	:
12.	δ-BHC	:
13.	Total BHC (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α-Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β-Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**



Sampling point of Kadarabad drain



Kadarabad drain before meeting with river Kali-East, confluence point was not approachable

DRAIN MONITORING FORMAT
(Kali East)

Date & Time of sampling: 02.11.2016, 4:30 pm

1.	Name of the Drain	:	Gulaothi Drain
2.	Meeting Ganga/Ramganga/Kali-east at -	:	Right bank
3.	Name of the Regional Office of SPCB	:	Bulandshahar
4.	Source of pollution load:	:	Mixed
5.	If Industrial /Mixed (Please indicate type of sector)	:	Textile, Food & Dairy, Others
6.	Traceable length (in Km) of drain before meeting Ganga (through google earth/map)	:	5 KM (approx.)
7.	Catchment area	:	Gulaothi
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 77.819E
		Longitude	: 28.599N
	Distance from confluence point (may the find out over google earth/map), KM		: 100 M (approx.)
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 77.814
		Longitude	: 28.597
10.	Landmarks / Address of the Location	:	Near Saidpur village, Gulaothi, UP
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	6.89
12.	Observations	:	10.Turbid. 11.Ichornia growth found. 12.Solid wastes were found floating with drain.
13.	Name of all monitoring officers along with Designation	:	<ul style="list-style-type: none"> 1. Sh. C.B. Chaurasia, Sc. E, CPCB 2. Dr. Sananda Sinha, RA, CPCB 3. Mrs. Shraddha Lonarkar, RA, CPCB 4. Mr. Neeraj Gahlaut, Project Officer, NMCG 5. Mr. K.M. Yadav, E.E, UPJN, GZB. Mr. Sudhir Kumar, AE, UPJN, GZB. 6. Mr. Dhruv, LA, UPPCB, Ghaziabad

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	NA
2.	pH	:	7.51
3.	BOD (mg/l)	:	139
4.	COD (mg/l)	:	282
5.	TSS (mg/l)	:	196
6.	TDS (mg/l)	:	860
7.	Cl ⁻ (mg/l)	:	130
8.	NH ₃ -N (mg/l)	:	38
9.	NO ₃ ⁻ (mg/l)	:	3.64
10.	DO (mg/l)*	:	NIL
11.	TC (MPN/ 100 ml) #	:	22X10 ⁶
12.	FC (MPN/ 100 ml) #	:	22X10 ⁶

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	0.02
5.	Iron (Fe) mg/l	:	2.33
6.	Lead (Pb) mg/l	:	0.02
7.	Manganese (Mn) mg/l	:	0.22
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	NA
10.	Zinc (Zn) mg/l	:	0.09
11.	Antimony (Sb) mg/l	:	NA
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -BHC	:
10.	β -BHC	:
11.	γ -BHC	:
12.	δ -BHC	:
13.	Total BHC (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α -Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β -Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Sampling point, confluence point
was not reachable



Inspection team

DRAIN MONITORING FORMAT
(Kali-east)

Date & Time of sampling: 04.11.2016 (11am)

1.	Name of the Drain	:	Bulandshahr -I
2.	Meeting River Kali-east at -	:	Left bank at Kali-east
3.	Name of the Regional Office of SPCB	:	Bulandshahr
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (Please indicated industrial sector)	:	N.A
6.	Traceable length of drain (in Km) before meeting Kali-east (through google earth/map)	:	Approx.3 km
7.	Catchment area	:	Bulandshahr
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 28.392528
		Longitude	: 77.863803
	Distance from confluence point (may the find out over google earth/map), KM		500 meter
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 28.392942
		Longitude	: 77.860909
10.	Landmarks / Address of the Location	:	Mohankutir , Bulandshahr, UP
11.	Flow in MLD, if zero indicate whether dry or stagnant	:	146.79
12.	Observations	:	<ul style="list-style-type: none"> 1. Colour of water the drain is blackish 2. Drain at left bank of kali-east. 3. 2/3 part of the drain made of concrete part.
13.	Name of all monitoring officers along with Designation	:	1.Dr Pankaj Kumar Sci"D", CPCB 2. Dr Manoj Kumar, R.A-I, CPCB 3. Sh. Amit Kumar, PO , NMCG 4. Sh. Gitesh Chandra, ASO, UPPCB 5. Sh Maninder Singh, AE, UPJN

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters		Results
1.	Colour	:	-
2.	pH	:	7.56
3.	BOD (mg/l)	:	103
4.	COD (mg/l)	:	222
5.	TSS (mg/l)	:	231
6.	TDS (mg/l)	:	782
7.	Cl ⁻ (mg/l)	:	67
8.	NH ₃ -N (mg/l)	:	38
9.	NO ₃ ⁻ (mg/l)	:	-
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	-
12.	FC (MPN/ 100 ml) #	:	-

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters		Results
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	0.06
5.	Iron (Fe) mg/l	:	4.58
6.	Lead (Pb) mg/l	:	0.03
7.	Manganese (Mn) mg/l	:	0.27
8.	Nickel (Ni) mg/l	:	0.13
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.19
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	0.01

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -HCH	:	BDL
10.	β - HCH	:	0.05
11.	γ -HCH	:	BDL
12.	δ -HCH	:	
13.	Total BHC (ng/l)	:	
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	
18.	β -Endosulfan	:	
19.	OP'DDT	:	0.062
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)	
	
Sample collecting point in drain	Confluence point in Kali -east

DRAIN MONITORING FORMAT
(Kali-east)

Date & Time of sampling: 04.11.2016(2.45pm)

1.	Name of the Drain	:	Bulandshahr -II
2.	Meeting Kali-east at -	:	Left bank at Kali-east
3.	Name of the Regional Office of SPCB	:	Bulandshahr
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (Please indicated industrial sector)	:	N.A
6.	Traceable length of drain (in Km) before meeting Kali-east (through google earth/map)	:	Approx.4-5 km
7.	Catchment area	:	Bulandshahr
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 28.417947
		Longitude	: 77.855664
	Distance from confluence point (may the find out over google earth/map), KM		300 meter
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 28.417007
		Longitude	: 77.85364
10.	Landmarks / Address of the Location		Chandwadi devipura near women police station, Bulandshahr, UP
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	165.14
12.	Observations	:	4. Colour of water the drain is greyis
13.	Name of all monitoring officers along with Designation		1. Dr Pankaj Kumar Sci"D", CPCB 2. Dr Manoj Kumar, R.A-I, CPCB 3. Sh. Amit Kumar, PO , NMCG 4. Sh. Gitesh Chandra, ASO, UPPCB 5. Sh Maninder Singh, AE, UPJN

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.56
3.	BOD (mg/l)	:	70
4.	COD (mg/l)	:	159
5.	TSS (mg/l)	:	81
6.	TDS (mg/l)	:	676
7.	Cl ⁻ (mg/l)	:	61
8.	NH ₃ -N (mg/l)	:	32
9.	NO ₃ ⁻ (mg/l)	:	-
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	-
12.	FC (MPN/ 100 ml) #	:	-

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	0.04
4.	Copper (Cu) mg/l	:	0.12
5.	Iron (Fe) mg/l	:	10.08
6.	Lead (Pb) mg/l	:	0.04
7.	Manganese (Mn) mg/l	:	0.33
8.	Nickel (Ni) mg/l	:	0.06
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.26
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	0.02

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -HCH	:	BDL
10.	β - HCH	:	0.182
11.	γ -HCH	:	0.259
12.	δ -HCH	:	-
13.	Total BHC (ng/l)	:	-
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	-
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	0.174
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	-

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)

	
Sample collecting point in drain	Confluence point in Kali east

DRAIN MONITORING FORMAT
(Kali East)

Date & Time of sampling: 04.11.2016 (12:15 pm)

1.	Name of the Drain	:	Aadil Nalla
2.	Meeting Kali-east at -	:	Left bank at Kali-east
3.	Name of the Regional Office of SPCB	:	Bulandshahr
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (Please indicated industrial sector)	:	N.A
6.	Traceable length of drain (in Km) before meeting Kali-east (through google earth/map)	:	Approx.4 km
7.	Catchment area	:	Bulandshahr
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: 28.396283
		Longitude	: 77.862681
	Distance from confluence point (may the find out over google earth/map), KM		50 meter
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: 28.396283
		Longitude	: 77.862344
10.	Landmarks / Address of the Location	:	Aadil Nagar Bulandshahr, UP
11.	Flow in MLD, if zero indicate whether dry or stagnant	:	199.24
12.	Observations	:	1. Drain made of concrete material 2. Water depth in the drain is approx. 3-4 feet.
13.	Name of all monitoring officers along with Designation	:	1. Dr Pankaj Kumar Sci "D", CPCB 2. Dr Manoj Kumar, R.A-I, CPCB 3. Sh. Amit Kumar, PO , NMCG 4. Sh. Gitesh Chandra, ASO, UPPCB 5. Sh Maninder Singh, AE, UPJN

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.51
3.	BOD (mg/l)	:	97
4.	COD (mg/l)	:	213
5.	TSS (mg/l)	:	219
6.	TDS (mg/l)	:	708
7.	Cl ⁻ (mg/l)	:	73
8.	NH ₃ -N (mg/l)	:	36
9.	NO ₃ ⁻ (mg/l)	:	-
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	-
12.	FC (MPN/ 100 ml) #	:	-

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	BDI
5.	Iron (Fe) mg/l	:	0.84
6.	Lead (Pb) mg/l	:	0.01
7.	Manganese (Mn) mg/l	:	0.08
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.09
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	BDL
14.	Vanadium (V) mg/l	:	BDL

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -HCH	:	BDL
10.	β - HCH	:	0.162
11.	γ -HCH	:	BDL
12.	δ -HCH	:	
13.	Total BHC (ng/l)	:	
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	0.079
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)

	
Sample collecting point in drain	Confluence point in Kali-east

DRAIN MONITORING FORMAT
(Kali East)

Date & Time of sampling: 08.11.2016

1	Name of the Drain		:	Neem Nullah (Jahagirabad Drain -1 & 2 and Dibai drain- 1, 2 & 3)
2	Meeting River Kali		:	Left bank
3	Name of the Regional Office of SPCB		:	Buland Shahar & Aligarh
4	Source of pollution load:		:	Domestic
5	If Industrial /Mixed (Please indicate type of sector)		:	NA
7	Catchment area		Buland Shahar, Aligarh & Kasganj	
8	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:	27°48'29.92"N
		Longitude	:	78°32'27.12"E
	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 if in MLD (Approx)		:	Dry
12	Observations		:	Jahagirabad drain 1 & 2 mixes with Neem nullah and moves towards Dibai town where Dibai Drain 1, 2 & 3 mixes in it and further move towards Gangiri, Kasganj. At Malahpur village towards Ramghat Road it has some water but up to reaching River Kali it becomes fully dry. All these five drains namely Jahangirabad drain 1&2 and Dibai drain 1,2 &3 finally goes to Neem nullah and becomes dry before reaching to River Kali. It should be consider as one major drain may be include in list.
15	Name of all monitoring officers along with Designation		<ol style="list-style-type: none"> 1. Dr. Prashant Singh Sc. D (CPCB) 2. Dr. Sarvesh Rai Sc. C (CPCB) 3. Dr. Hema Patel R.A. CPCB 4. Ms Garima Dublish RA CPCB 5. Er. Kalika Singh RO Aligarh UPPCB 6. Er. K.M. Gupta Ex.En. U.P. Jal Nigam 7. Er. Sudhir Kumar A.E. UP Jal Nigam 8. Mr. Vijay Kumar Yadav A.E. NMCG 9. Shravan Kota, Research Officer NMCG 	

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	
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)	:	
10.	DO (mg/l)*	:	
11.	TC (MPN/ 100 ml) #	:	
12.	FC (MPN/ 100 ml) #	:	

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	
2.	Cadmium (Cd) mg/l	:	
3.	Total Chromium (Cr) mg/l	:	
4.	Copper (Cu) mg/l	:	
5.	Iron (Fe) mg/l	:	
6.	Lead (Pb) mg/l	:	
7.	Manganese (Mn) mg/l	:	
8.	Nickel (Ni) mg/l	:	
9.	Mercury (Hg) mg/l	:	
10.	Zinc (Zn) mg/l	:	
11.	Antimony (Sb) mg/l	:	
12.	Cobalt (Co) mg/l	:	
13.	Selenium (Se) mg/l	:	
14.	Vanadium (V) mg/l	:	

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -HCH	:
10.	β -HCH	:
11.	γ -HCH	:
12.	δ -HCH	:
13.	Total HCH (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α -Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β -Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)

Confluence Point



Confluence Point



DRAIN MONITORING FORMAT
(Kali East)

Date & Time of sampling: 02.11.2016 & 2 .57 p.m.

1.	Name of the Drain		:	Kasgnaj Drain Kasganj(Amapur Bus stand – Amapur Road, Kasganj)
2.	Meeting Kali		:	Left bank
3.	Name of the Regional Office of SPCB		:	Regional Office, U.P. Pollution Control Board, Aligarh
4.	Source of pollution load:		:	Domestic
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB		:	NA
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)		:	Approx. 3-4 k.m.
7.	Catchment area		:	Amapur; Amapur Kasganj area
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:	27 ° 72' 96" N
		Longitude	:	78 °70' 86" E
	Distance from confluence point (may the find out over google earth/map), KM		:	500 m.
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	:	27 ° 47' 45" N
		Longitude	:	78 °39' 8" E
10.	Landmarks / Address of the Location		:	Amapur Road pulia, Kasganj (2 k.m distance from Amapur)
11.	Flow (if in MLD) if zero indicate whether dry or stagnant		:	09 MLD
12.	Observations		:	The drain is directly fall in river Kali without treatment at 500 m from sampling point near Amapur village in Kasganj and flow was measured 09 MLD.
13.	Name of all monitoring officers along with Designation		:	13. Dr. Ravi Prakash Mishra, RA-I, CPCB, ZO(N) Lucknow. 14. Mr.Arvind Kumar, SRF, CPCB, ZO(N)) Lucknow. 15. Dr. J P Singh, ASO, UPPCB, Aligarh 16. Er. Khalid Ahamad Project Manager Yamuna Pollution Control Unit, UP Jal Nigam, Agra. 17.Er.A K Singh , Junior Engineer , UP Jal Nigam, Agra.

DRNIN MONITORING FORMAT

(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	6.94
3.	BOD (mg/l)	:	123
4.	COD (mg/l)	:	286
5.	TSS (mg/l)	:	176
6.	TDS (mg/l)	:	750
7.	Cl ⁻ (mg/l)	:	104
8.	NH ₃ -N (mg/l)	:	42.3
9.	NO ₃ ⁻ (mg/l)	:	0.271
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	92000000
12.	FC (MPN/ 100 ml) #	:	54,000000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT

(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	-
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	0.008
5.	Iron (Fe) mg/l	:	-
6.	Lead (Pb) mg/l	:	-
7.	Manganese (Mn) mg/l	:	0.144
8.	Nickel (Ni) mg/l	:	-
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.112
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT
(Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -BHC	:
10.	β -BHC	:
11.	γ -BHC	:
12.	δ -BHC	:
13.	Total BHC (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α -Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β -Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

**Photographs with captions – Sampling & Confluence point
(Add date & Time stamping in camera)**



Sampling location of Kasganj drain at village Amarpur road&Date & Time :
02.11.2016& 3.05 p.m

DRAIN MONITORING FORMAT
(Kali-East)

Date & Time of sampling: 03.11.2016 & 3.45 p.m.

1.	Name of the Drain	:	Patta Nala			
2.	Meeting Kali River	:	Left bank -Kali-East			
3.	Name of the Regional Office of SPCB	:	R.O. U.P.P. C.B Kanpur Dehat			
4.	Source of pollution load:	:	(Domestic/Industrial/Mixed)			
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB	:	<table border="1" style="width: 100px; margin-bottom: 5px;"> <tr> <td>Sl. No.</td> <td>Name of Industry</td> <td>Sector</td> </tr> </table> <p>There is no industry of red or orange category industry draining into pata nala but small scale industries like Itra etc. are find</p>	Sl. No.	Name of Industry	Sector
Sl. No.	Name of Industry	Sector				
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	6 Km			
7.	Catchment area	:	Sewage nala from Makrandnagar kannauj city.			
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:			
		Longitude	27 °08 ' 18" N 79 °092 ' 74" E			
	Distance from confluence point (may the find out over google earth/map), KM		1.5			
9.	Co-ordinate of the sampling point (Decimal units)	Latitude Longitude	27 °03 ' 57" N 79 °055 ' 8" E			
10.	Landmarks / Address of the Location	:	Near Haji Sharif(Culvert near Hazi Sarif-Deedarganj road)			
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	At the time of sampling flow measured 6.5 MLD. (10.7 Average as per UP Jal Nigam Kannauj)			
12.	Observations	:	During inspection, flow was measured 6.5 MLD and waste water are falling in to R. Kali and ultimately meets to R. Ganga without treatment			
13.	Name of all monitoring officers along with Designation	:	<ul style="list-style-type: none"> 1. Dr. Ravi Prakash Mishra(RA-I, CPCB) 2. Mr.Arvin kumar (S.R.F. CPCB) 3. Er. U.C. Verma (A.E.E. UPPCB) 4. Er. Neeraj Gupta (Asst. Engg. UP Jal Nigam) 5. Er. Saurabh Shukla (Junior Engg. UP jal Nigam) 			

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters		Results
1.	Colour	:	-
2.	pH	:	7.15
3.	BOD (mg/l)	:	31.1
4.	COD (mg/l)	:	112
5.	TSS (mg/l)	:	81.2
6.	TDS (mg/l)	:	808
7.	Cl ⁻ (mg/l)	:	116
8.	NH ₃ -N (mg/l)	:	22.6
9.	NO ₃ ⁻ (mg/l)	:	0.449
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	5,40,00,000
12.	FC (MPN/ 100 ml) #	:	1,70,00,000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters		Results
1.	Arsenic (As) mg/l	:	-
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	0.042
5.	Iron (Fe) mg/l	:	-
6.	Lead (Pb) mg/l	:	-
7.	Manganese (Mn) mg/l	:	0.116
8.	Nickel (Ni) mg/l	:	-
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.152
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results
1.	Water temperature (°C)	:
	Pesticide Analysis Report (OPPs)	:
2.	Monochrotophos	:
3.	Dimethoate ($\mu\text{g/l}$)	:
4.	Methyl Parathion ($\mu\text{g/l}$)	:
5.	Malathion ($\mu\text{g/l}$)	:
6.	Chloropyriphos ($\mu\text{g/l}$)	:
7.	Methyl Parathion	:
8.	Ethion ($\mu\text{g/l}$)	:
	Pesticide Analysis Report (OCPs)	:
9.	α -BHC	:
10.	β -BHC	:
11.	γ -BHC	:
12.	δ -BHC	:
13.	Total BHC (ng/l)	:
14.	Aldrin (ng/l)	:
15.	Diedrin (ng/l)	:
16.	α -Endosulfan	:
17.	Total Endosulfan (ng/l)	:
18.	β -Endosulfan	:
19.	OP'DDT	:
20.	PP'DDT	:
21.	PP'DDE	:
22.	Total DDT (ng/l)	:

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)

Sampling location of Patta Nala at Kannauj



VI. Data Sheet of Drains Joining River Pandu.

DRAIN MONITORING FORMAT
(River Pandu)

Date & Time of sampling: October 26, 2016 at 11:45 am

1.	Name of the Drain	:	Panki Thermal Power Plant, Drain
2.	Meeting River Pandu at -	:	Left bank - Pandu
3.	Name of the Regional Office of SPCB	:	Kanpur UPPCB
4.	Source of pollution load:	:	Mixed
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 1.6 Km
7.	Catchment area	:	Kanpur City, New Transport Nagar, Thermal Power Plant
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: N 26° 26' 17.2536"
		Longitude	: E 80° 15' 9.5898"
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 50 m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: N 26°27'60.0"
		Longitude	: E 80° 13' 59.8"
10.	Landmarks / Address of the Location		New Transport Nagar, Panki, Jhansi Bypass
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	114.10 MLD
12.	Observations	:	1. Panki drain is pukka drain and flowing Thaemal power Plant, Y-block, KFCL area, Panki site I, Panki Industrial Area.
13.	Name of all monitoring officers along with Designation		<ol style="list-style-type: none"> 1. Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 2. Sh. Rajesh Kumar, RA-1, CPCB ZO Lucknow 3. Dr. R.P. Mishra, RA-1, CPCB ZO Lucknow 4. Sh. S.K. Awasthi, JEE, UPPCB, Kanpur 5. Sh. Raguvendra Pratap, AEE, J.N. Kanpur

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters		Results
1.	Colour	:	-
2.	pH	:	7.14
3.	BOD (mg/l)	:	14.0
4.	COD (mg/l)	:	41.0
5.	TSS (mg/l)	:	60.2
6.	TDS (mg/l)	:	384
7.	Cl ⁻ (mg/l)	:	61.0
8.	NH ₃ -N (mg/l)	:	16.9
9.	NO ₃ ⁻ (mg/l)	:	2.93
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	2200000
12.	FC (MPN/ 100 ml) #	:	1100000

*For Fresh water carrying drains/ rivers

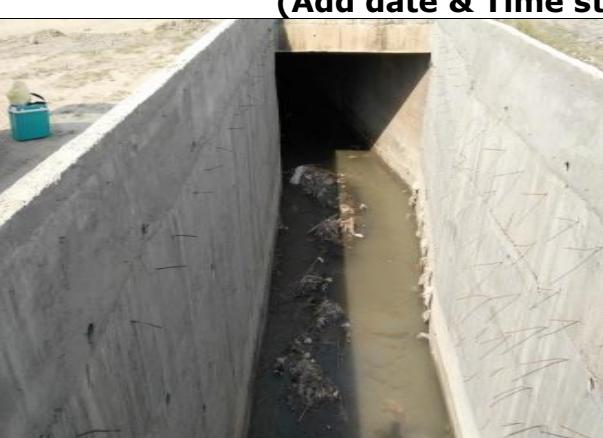
#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters		Results
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	0.62
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.06
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.20
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	Awaited
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	BDL
10.	β -BHC	:	0.10
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)	
	
Fig- Sampling point of Panki (TPP) Drain	Fig- Confluence point of Panki Drain with River Pandu

DRAIN MONITORING FORMAT
(River Pandu)

Date & Time of sampling: October 26, 2016 at 1:30 pm

1.	Name of the Drain	:	ICI Drain, Kanpur
2.	Meeting River Pandu at -	:	Left bank – Pandu
3.	Name of the Regional Office of SPCB	:	Kanpur UPPCB
4.	Source of pollution load:	:	Mixed
5.	If Industrial /Mixed (Please indicate type of sector)	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 1.0 Km
7.	Catchment area	:	Kanpur city
8.	Co-ordinate of the confluence point (if not reachable indirect through google earth/map) (Decimal units)	Latitude	: N 26° 26' 8.682"
		Longitude	: E 80° 15' 13.6038"
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 20 m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: N 26° 26' 12.6996"
		Longitude	: E 80° 15' 15.6024"
10.	Landmarks / Address of the Location		Near LML Industry, Panki Kanpur
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	19.44 MLD
12.	Observations	:	<p>1. ICI drain carries mixed Industrial effluent & domestic sewage direct falling into river Pandu which ultimately meets in river Ganga.</p> <p>2. At the time of inspection, its flow was measured to be 19.44 MLD.</p>
13.	Name of all monitoring officers along with Designation		<ol style="list-style-type: none"> Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow Sh. Rajesh Kumar, RA-1, CPCB ZO Lucknow Dr. R.P. Mishra, RA-1, CPCB ZO Lucknow Sh. S.K. Awasthi, JEE, UPPCB, Kanpur Sh. Raguvendra Pratap, AEE, J.N. Kanpur

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters		Results
1.	Colour	:	-
2.	pH	:	8.16
3.	BOD (mg/l)	:	42.9
4.	COD (mg/l)	:	141
5.	TSS (mg/l)	:	146
6.	TDS (mg/l)	:	3122
7.	Cl ⁻ (mg/l)	:	1496
8.	NH ₃ -N (mg/l)	:	193
9.	NO ₃ ⁻ (mg/l)	:	9.85
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	2400000
12.	FC (MPN/ 100 ml) #	:	790000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters		Results
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	0.06
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	2.60
6.	Lead (Pb) mg/l	:	0.22
7.	Manganese (Mn) mg/l	:	0.72
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	6.18
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	Awaited
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	BDL
10.	β -BHC	:	1.21
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	BDL
20.	PP'DDT	:	0.08
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Fig- Sampling point of ICI Drain



Fig- Confluence point of ICI Drain & River Pandu

DRAIN MONITORING FORMAT
(River Pandu)

Date & Time of sampling: 26.10.2016 & 12.30 pm

1.	Name of the Drain	:	Ganda Nalla, kanpur
2.	Meeting River Pandu at -	:	Left bank - Pandu
3.	Name of the Regional Office of SPCB	:	Kanpur UPPCB
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (Please indicate type of sector)	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 13.50 Km
7.	Catchment area	:	Industrial area Panki, Gujani village. Kanpur City
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: N 26° 25' 42.9954"
		Longitude	E 80° 16' 59.8548"
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 0.5 km
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: N 26 °26'46.3"
		Longitude	E 80°17'38.46"
10.	Landmarks / Address of the Location		Vijay Nagar, Barra -4
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	210.5 MLD
12.	Observations	:	<p>1. Ganda drain is a major drain this is directly meets into River Pandu which ultimately meeting in river Ganga at the time of inspection, its flow was measured 210.5 MLD.</p> <p>2. The Panki canal mixing in to the Ganda Drain at U.P.Kirana Girls School and gets diluted.</p>
13.	Name of all monitoring officers along with Designation		<ol style="list-style-type: none"> Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow Sh. Rajesh Kumar, RA-1, CPCB ZO Lucknow Dr. R.P. Mishra, RA-1, CPCB ZO Lucknow Sh. S.K. Awasthi, JEE, UPPCB, Kanpur Sh. Raguvendra Pratap, AEE, J.N. Kanpur

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters		Results
1.	Colour	:	-
2.	pH	:	7.17
3.	BOD (mg/l)	:	66.6
4.	COD (mg/l)	:	203
5.	TSS (mg/l)	:	105
6.	TDS (mg/l)	:	774
7.	Cl ⁻ (mg/l)	:	117
8.	NH ₃ -N (mg/l)	:	55.2
9.	NO ₃ ⁻ (mg/l)	:	2.87
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	5,40,00,000
12.	FC (MPN/ 100 ml) #	:	3,50,00,000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters		Results
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	0.04
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	1.64
6.	Lead (Pb) mg/l	:	0.02
7.	Manganese (Mn) mg/l	:	0.12
8.	Nickel (Ni) mg/l	:	0.02
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.40
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)		:
2.	Monochrotophos	:	Awaited
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)		:
9.	α -BHC	:	BDL
10.	β -BHC	:	2.00
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	0.06
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Fig- Sampling point of Ganda Drain



Fig-Confluence point of Ganda Drain & R. Pandu

DRAIN MONITORING FORMAT
(River Pandu)

Date & Time of sampling: 26.10.2016 & 5:0 pm

1.	Name of the Drain	:	COD Nalla, Panki, Kanpur
2.	Meeting River Pandu at -	:	Left bank - Pandu
3.	Name of the Regional Office of SPCB	:	RO UPPCB, Kanpur
4.	Source of pollution load:	:	Mixed
5.	If Industrial /Mixed (Please indicate type of sector)	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 6.2 Km
7.	Catchment area	:	Kanpur City
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	:
		Longitude	: E 80° 18' 27.1326"
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 20 m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	" N 26 °25'35.4"
		Longitude	E 80°20'96.4"
10.	Landmarks / Address of the Location		Neura Village
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	120.96 MLD
12.	Observations	:	<ul style="list-style-type: none"> 1. COD (Commercial Ordinance Depot) drain carries wastewater from COD, Yashodanagar, Babupurwa, Kidwainagar, Y block, defence Colony. 2. This drain meets to river Pandu which ultimately meets river Ganga. At the time of monitoring the drain was found tapped into STP (210 MLD)
13.	Name of all monitoring officers along with Designation		<ul style="list-style-type: none"> 6. Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 7. Sh. Rajesh Kumar, RA-1, CPCB ZO Lucknow 8. Dr. R.P. Mishra, RA-1, CPCB ZO Lucknow 9. Sh. S.K. Awasthi, JEE, UPPCB, Kanpur 10. Sh. Raguvendra Pratap, AEE, J.N. Kanpur

DRAIN MONITORING FORMAT
(General parameters)

Sl. No.	Parameters	Results	
1.	Colour	:	-
2.	pH	:	7.47
3.	BOD (mg/l)	:	54.6
4.	COD (mg/l)	:	145
5.	TSS (mg/l)	:	73.5
6.	TDS (mg/l)	:	787
7.	Cl ⁻ (mg/l)	:	105
8.	NH ₃ -N (mg/l)	:	48.9
9.	NO ₃ ⁻ (mg/l)	:	2.59
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	2200,000
12.	FC (MPN/ 100 ml) #	:	4,90,000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
(Trace Metal/ Heavy Metal)

Sl. No.	Parameters	Results	
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	0.04
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	0.84
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.14
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	0.22
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	
	Pesticide Analysis Report (OPPs)		:
2.	Monochrotophos	:	Awaited
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)		:
9.	α -BHC	:	0.05
10.	β -BHC	:	0.39
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	0.09
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Fig- sampling point of COD Nalla,
Panki



Fig-COD Nala Tapped into STP

DRAIN MONITORING FORMAT
(River Pandu)

Date & Time of sampling: 26-10-2016 at 4:00 pm

1.	Name of the Drain	:	Halwa Khanda Nalla, Kanpur
2.	Meeting River Pandu at -	:	Right bank- Pandu
3.	Name of the Regional Office of SPCB	:	Kanpur UPPCB
4.	Source of pollution load:	:	Domestic
5.	If Industrial /Mixed (name of the units & sector) and details may be obtained confirmed from the regional officers of SPCB	:	N.A
6.	Traceable length (in Km) before meeting Ganga (through google earth/map)	:	Approx. 6.7 Km
7.	Catchment area	:	Kanpur City
8.	Co-ordinate of the confluence point (if not reachable indirect though google earth/map) (Decimal units)	Latitude	: N 26° 24' 22.2474"
		Longitude	: E 80° 17' 21.141"
	Distance from confluence point (may the find out over google earth/map), KM		Approx. 5 m
9.	Co-ordinate of the sampling point (Decimal units)	Latitude	: N 26° 24' 27.9036"
		Longitude	: E 80° 17' 24.6948"
10.	Landmarks / Address of the Location	:	Jarauli.
11.	Flow (if in MLD) if zero indicate whether dry or stagnant	:	62.29 MLD
12.	Observations	:	<ul style="list-style-type: none"> 1. Halwa Khanda drain is diverted in to the COD drain. 2. At the time of inspection, it was noticed that the over flow of check-dam got its path towards R. Pandu, which ultimately meets R. Ganga. 3. At the time of inspection, its flow was measured to be 62.29 MLD.
13.	Name of all monitoring officers along with Designation	:	11.Sh. R.B. Singh, Sci. C, CPCB ZO Lucknow 12.Sh. Rajesh Kumar, RA-1, CPCB ZO Lucknow 13.Dr. R.P. Mishra, RA-1, CPCB ZO Lucknow 14.Sh. S.K. Awasthi, JEE, UPPCB, Kanpur 15.Sh. Raguvendra Pratap, AEE, J.N. Kanpur

DRAIN MONITORING FORMAT
 (General parameters)

Sl. No.	Parameters		Results
1.	Colour	:	-
2.	pH	:	7.23
3.	BOD (mg/l)	:	82.0
4.	COD (mg/l)	:	206
5.	TSS (mg/l)	:	88.9
6.	TDS (mg/l)	:	729
7.	Cl ⁻ (mg/l)	:	99.0
8.	NH ₃ -N (mg/l)	:	50.6
9.	NO ₃ ⁻ (mg/l)	:	2.0
10.	DO (mg/l)*	:	-
11.	TC (MPN/ 100 ml) #	:	1,70,00,000
12.	FC (MPN/ 100 ml) #	:	33,00,000

*For Fresh water carrying drains/ rivers

#For sewage, mixed Drains & River

DRAIN MONITORING FORMAT
 (Trace Metal/ Heavy Metal)

Sl. No.	Parameters		Results
1.	Arsenic (As) mg/l	:	BDL
2.	Cadmium (Cd) mg/l	:	BDL
3.	Total Chromium (Cr) mg/l	:	BDL
4.	Copper (Cu) mg/l	:	-
5.	Iron (Fe) mg/l	:	1.22
6.	Lead (Pb) mg/l	:	BDL
7.	Manganese (Mn) mg/l	:	0.18
8.	Nickel (Ni) mg/l	:	BDL
9.	Mercury (Hg) mg/l	:	-
10.	Zinc (Zn) mg/l	:	2.18
11.	Antimony (Sb) mg/l	:	-
12.	Cobalt (Co) mg/l	:	BDL
13.	Selenium (Se) mg/l	:	-
14.	Vanadium (V) mg/l	:	-

DRAIN MONITORING FORMAT (Pesticide)

Sl. No.	Parameters	Results	
1.	Water temperature (°C)	:	Awaited
	Pesticide Analysis Report (OPPs)	:	
2.	Monochrotophos	:	
3.	Dimethoate ($\mu\text{g/l}$)	:	
4.	Methyl Parathion ($\mu\text{g/l}$)	:	
5.	Malathion ($\mu\text{g/l}$)	:	
6.	Chloropyriphos ($\mu\text{g/l}$)	:	
7.	Methyl Parathion	:	
8.	Ethion ($\mu\text{g/l}$)	:	
	Pesticide Analysis Report (OCPs)	:	
9.	α -BHC	:	0.05
10.	β -BHC	:	0.56
11.	γ -BHC	:	BDL
12.	δ -BHC	:	BDL
13.	Total BHC (ng/l)	:	BDL
14.	Aldrin (ng/l)	:	BDL
15.	Diedrin (ng/l)	:	BDL
16.	α -Endosulfan	:	BDL
17.	Total Endosulfan (ng/l)	:	BDL
18.	β -Endosulfan	:	BDL
19.	OP'DDT	:	0.07
20.	PP'DDT	:	BDL
21.	PP'DDE	:	BDL
22.	Total DDT (ng/l)	:	BDL

Photographs with captions – Sampling & Confluence point (Add date & Time stamping in camera)



Fig- Sampling point of Halwa Khanda Drain



Fig- Near Confluence point of Halwa Khanda Drain & R. Pandu

10. Comments of the Institutions



Central Pollution Control Board
Parivesh Bhawan, East Arjun Nagar
Shahdara, Delhi - 110032