

# **Pollution Inventory of River Tamsa From Ayodhya To Ballia**

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## **Abstract-**

Tamsa River is a tributary of river Ganga flowing through several districts of Uttar Pradesh namely- Ayodhya, Ambedkar Nagar, Azamgarh, Mau and Ballia where it joins River Ganga at Salahabad village of Ballia district. Polluted Stretch of Tamsa River originates near village Lakhnipur in tehsil Rudauli and flows through Ayodhya district to Darban Lake in Tanda tehsil in Ambedkarnagar. As per Water Quality Monitoring Data of River Tamsa for the year 2017-18, water quality in the identified polluted stretch of river (i.e. Ayodhya to Ballia) falls in the Class-D as per water quality criteria of Central Pollution Control Board. River Water is fit for propagation of Wild Life and Fisheries. This paper will focus on the pollution of Tamsa River from Ayodhya to Ballia.

**Keywords-** Tamsa, pollution, Ayodhya, Ballia, Mau, water quality etc.

Tamsa River has mythological importance as it is described in Valmiki Ramayana as a seasonal rivulet. According to Ramayana, it originates near village Lakhnipur in tehsil Rudauli and flows through Ayodhya district to Darban Lake in Tanda tehsil in Ambedkarnagar. This river flows left to Ganga and Gomti, the two important river of Ganga basins. Further it flows through Azamgarh district, via a tributary called Majauli which flows bordering the north-eastern boundary of Sultanpur district. Toms River enters in the Azamgarh district near Ahiraula in the west

and flows through the entire length, leaves the district near Chorhar in the east. Ultimately meets Ganga River at Ballia district via traversing through Mau district.



*Fig: 1 Tamsa River at Mau Distract*

Total stretch of River Tamsa under consideration is approx. 577 KM During this length it treverseses through Districts namely Ayodhya, Ambedkar Nagar, Azamgarh, Mau and Ballia.

### **POLLUTED STRETCH OF TAMSARIVER FROM AYODHYA TO BALLIA**

There are 86 (Left Bank: 36 and Right Bank: 50) villages located on the banks of this polluted stretch of river. The total population of these villages is 1, 59,886 as per the census of 2011. Taking Decadal growth into consideration, the estimated population in 2019 would be around 1,82,874 and estimated generation of sewage would reach approx. 20 MLD.

There are 07 water polluting industries located in the catchment of the concerned stretch of Tamsa River. Appendix-3. These industries have effluent treatment plants and their treated effluent is discharged through 03 drains, of which all drains are mixed drains where treated industrial effluent is mixed with the sewage.

### **POLLUTION INVENTORY**

In the polluted stretch under question of river Tamsa, total discharge of 171.26 MLD is estimated in the form of sewage and industrial effluent through 26 drains directly or partially discharging into the river.

As per desk inventory, about 168.29 MLD of sewage and 2.97 MLD of industrial effluent are currently being discharged into the river Tamsa. Treated Industrial effluent coming from 07 industries which is approx. 2.97 MLD, is being discharged into river Tamsa in the polluted river stretch. The treatment of sewage is a major area of concern as total estimated sewage discharge of 168.29 MLD of sewage is untreated. The estimates of industrial effluent are based upon the consented discharge quantified from the units but actual industrial effluent may be more than the estimates owing to over discharge by consented industries and discharge from illegal units operating in non-conforming areas [1].

| Summary of Drains |                |               |                |            |       |                  |          |                  |            |                        |                        |           |        |                                    |
|-------------------|----------------|---------------|----------------|------------|-------|------------------|----------|------------------|------------|------------------------|------------------------|-----------|--------|------------------------------------|
| S No.             | District/ City | No. of Drains | Type of Drains |            |       | Status of Drains |          |                  | Industries |                        | Sewage Discharge (MLD) |           |        | Total Discharge in the River (MLD) |
|                   |                |               | Domestic       | Industrial | Mixed | Tapped           | Untapped | Partially Tapped | Number     | Treated Effluent (MLD) | Treated                | Untreated | Total  |                                    |
| 1                 | Ayodhya        | 04            | 02             | 0          | 02    | -                | 04       | -                | 3          | 1.4                    | 0                      | 6.2       | 6.2    | 7.6                                |
| 2                 | Ambedkar Nagar | 11            | 10             | 0          | 01    | -                | 11       | -                | 1          | 1.0                    | 0                      | 52.09     | 52.09  | 53.09                              |
| 3                 | Azamgarh       | 10            | 10             | 0          | -     | -                | 10       | -                | 1          | 0.35                   | 0                      | 50        | 50     | 50.35                              |
| 4                 | Mau            | 1             | 1              | 0          | -     | -                | 1        | -                | 2          | 0.22                   | 0                      | 60        | 60     | 60.22                              |
| Total             |                | 26            | 23             | 0          | 03    | -                | 26       | -                | 7          | 2.97                   | 0                      | 168.29    | 168.29 | 171.26                             |



Fig : 3.1, GIS Map of Tamsa River Polluted Stretch with Drains

## A. Pachlo Drain (Barabanki/Ayodhya)

### a. Origin

Pachlo drain originates from Pachlo jheel Vill- Pachlo, District Barabanki, Uttar Pradesh. It joins Tamsa River at village-Bikawal, District-Ayodhya. Coordinates of its meeting point in River Tamsa are Latitude: 26 deg \* 44' 7" prime prime N & Longitude: 81° 43' 54" prime prime E. The drain carries sewage and industrial effluent of 01 Industry ( M / s . Raujagaon Chini Mill, Raujagaon, Ayodhya) in the catchment of drain Pachlo. The treated effluent approx. 0.8 MLD from these industries and sewage (Nagar Palika Parishad- Rudauli) approx. 4.6 MLD. Is discharged in Pachlo drain.

### b. Length covered

Length covered Total Distance of Pachlo drain from its origin to village-Pachlo meeting point to Tamsa is approx.: 1.11 kms.

### c. Details of industries & discharge of their effluent into the drain

Details of industries & discharge of their effluent into the drain Pachlo carries natural water, domestic waste water of Nagar Palika Parishad- Rudauli as well as effluent of 01 Industries in the catchment of Pachlo drain Parameters Results.

7.8.2022



| Parameters       | Results  |  |
|------------------|----------|------------------------------------------------------------------------------------|
| pH               | 7.83     |                                                                                    |
| BOD (mg/l)       | 24.0     |                                                                                    |
| COD (mg/l)       | 184.0    |                                                                                    |
| TSS (mg/l)       | 103      |                                                                                    |
| Date of Sampling | 7.8.2022 |                                                                                    |

Nadaha Drain originates from vill- Khanpur Masaudha and traverses to Itaura, Sukhapur to vill Anjana it joins river Tamsa District Ayodhya, Uttar Pradesh. Nadaha drain Coordinates of its meeting point in river Tamsa are Latitude: 26°39'23.634"N & Longitude: 82°12'37.7"E. The drain carries sewage and industrial effluent of 02 Industry (M/s. K.M. Sugar Mill Ltd. (Sugar and Distillery Unit), Motinagar, Ayodhya) in the catchment of drain Nadaha The treated effluent approx. 0.64 MLD from these industries and sewage is discharged in Nadaha drain.

#### **b. Length covered**

Covered Distance of Nadaha Drain from Khanpur Masaudha to meeting point to river Tamsa (Vill- Anjana) is approx. 6.4 km.

#### **C. Details of industries & discharge of their effluent into the drain**

| Parameters       | Results    |  |
|------------------|------------|--------------------------------------------------------------------------------------|
| pH               | 7.98       |                                                                                      |
| BOD (mg/l)       | 60.0       |                                                                                      |
| COD (mg/l)       | 196.0      |                                                                                      |
| TSS (mg/l)       | 108.0      |                                                                                      |
| Date of Sampling | 17.08.2022 |                                                                                      |

#### **C. Teliyagarh Drain**

##### **a. Origin**

Teliyagarh Drain originates from Nagar Panchayat Goshaiganj District Ayodhya Mohalla Teliyagarh. Coordinates of point of Teliyagarh Drain are Latitude: 26.57000N & Longitude: 82.377248 E. Teliyagarh Drain meets Tamsa River near Bhati Chauraha, Goshaiganj and Ayodhya. The drain carries sewage effluent of Nagar Panchayat Goshaiganj in the catchment of Teliyagarh drain. The untreated sewage effluent approx. 1.4 MLD is discharged in Teliyagarh drain.

##### **b. Length covered**

Distance covered by Teliyagarh drain is approx.: 0.36 km.

#### **C Details of effluent discharge & water quality of Teliyagarh Drain**

| Parameters       | Results    |
|------------------|------------|
| pH               | 7.12       |
| BOD (mg/l)       | 168.0      |
| COD (mg/l)       | 464.0      |
| TSS (mg/l)       | 468.0      |
| Date of Sampling | 30.08.2022 |



## D. Akbarpur Sugar Mill Drain

### a. Origin

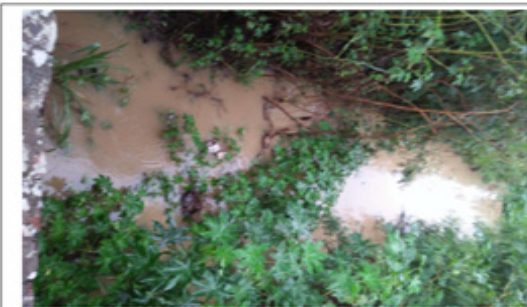
Akbarpur Chini Mill Drain originates in vill Chack Kodar to M/s Akbarpur Chini Mills Ltd. Mijhauda, Ambedkar nagar and adjoint river Tamsa. Coordinate of the end point of the Drain are Latitude: 26°28'30"N & Longitude: 82°24'49"E. The drain carries sewage and industrial effluent of 01 Industry (M/s. Akabarpur Chini Mill Ltd., Mijhauda, Ambedkarnagar) in the catchment of drain [2]. The treated effluent approx. 2.0 MLD from this industries and sewage is discharged in drain.

### b. Length covered

Distance covered by Drain is approx. 0.25 Km.

### c. Details of effluent discharge & water quality of Akbarpur Chini Mill Drain

| Parameters       | Results    |
|------------------|------------|
| pH               | 7.67       |
| BOD (mg/l)       | 14         |
| COD (mg/l)       | 68         |
| TSS (mg/l)       | 146        |
| Date of Sampling | 01/10/2022 |



## E. Shiv Mandir Saray Mandaj, Palhani Drain

Shiv Mandir Saray Mandaj, Palhani Drain carries 05 MLD untreated sewage from the residential areas of Palhani Azamgarh in the catchment of River Tamsa. The length of this drain is approx. 0.3 Km and its meets in River Tamsa at Latitude: 26.073869N & Longitude: 83.168932E.

### Details of effluent discharge & water quality of Shiv Mandir Saray Mandaj, Palhani Drain

| Parameters                 | Results    |
|----------------------------|------------|
| pH                         | 7.62       |
| BOD (mg/l)                 | 52.0       |
| COD (mg/l)                 | 398.0      |
| TSS (mg/l)                 | 322.0      |
| Total Coliform (MPN/100ml) | 2900000    |
| Date of Sampling           | 15.10.2022 |



## F. Jyoti Niketan School Drain

Jyoti Niketan School Drain carries 05 MLD untreated sewage from the residential areas of Azamgarh in the catchment of River Tamsa. The length of this drain is approx. 0.6 Km and its meets in River Tamsa at co-ordinates Latitude: 26.069854 N & Longitude: 83.17305 E.

### Details of effluent discharge & water quality of Jyoti Niketan School Drain

| Parameters                 | Results    |  |
|----------------------------|------------|------------------------------------------------------------------------------------|
| pH                         | 7.58       |                                                                                    |
| BOD (mg/l)                 | 64.0       |                                                                                    |
| COD (mg/l)                 | 422.0      |                                                                                    |
| TSS (mg/l)                 | 350.0      |                                                                                    |
| Total Coliform (MPN/100ml) | 3400000    |                                                                                    |
| Date of Sampling           | 30.10.2022 |                                                                                    |

## G. Kolghat Bajbahadur Drain

Kolghat Bajbahadur Drain carries 05 MLD untreated sewage from the residential areas of Azamgarh in the catchment of River Tamsa. The length of this drain is approx. 0.6 Km and its meets in River Tamsa at Latitude: 26.056655N & Longitude: 82.174319E.

### Details of effluent discharge & water quality of Kolghat Bajbahadur Drain

| Parameters                 | Results    |  |
|----------------------------|------------|--------------------------------------------------------------------------------------|
| pH                         | 7.65       |                                                                                      |
| BOD (mg/l)                 | 78.0       |                                                                                      |
| COD (mg/l)                 | 454.0      |                                                                                      |
| TSS (mg/l)                 | 372.0      |                                                                                      |
| Total Coliform (MPN/100ml) | 2700000    |                                                                                      |
| Date of Sampling           | 07.11.2022 |                                                                                      |

## H. Narauli U/S Drain

Narauli U/S Drain carries 04 MLD untreated sewage from the residential areas of Azamgarh in the catchment of River Tamsa. The length of this drain is approx. 0.55 Km and its meets in River Tamsa at Latitude: 26.049343N & Longitude: 83.177632E.

### Details of effluent discharge & water quality of Narauli U/S Drain

| Parameters                 | Results    |  |
|----------------------------|------------|--------------------------------------------------------------------------------------|
| pH                         | 7.75       |                                                                                      |
| BOD (mg/l)                 | 54.0       |                                                                                      |
| COD (mg/l)                 | 324.0      |                                                                                      |
| TSS (mg/l)                 | 346.0      |                                                                                      |
| Total Coliform (MPN/100ml) | 2700000    |                                                                                      |
| Date of Sampling           | 15.12.2022 |                                                                                      |



## I. Narauli D/S Drain

Narauli D/S Drain carries 04 MLD untreated sewage from the residential areas of Azamgarh in the catchment of River Tamsa. The length of this drain is approx. 0.73 Km and its meets in River Tamsa at Latitude: 26.049103N & Longitude: 83.178159E.

### Details of effluent discharge & water quality of Narauli D/S Drain

| Parameters                 | Results    |
|----------------------------|------------|
| pH                         | 7.64       |
| BOD (mg/l)                 | 46.0       |
| COD (mg/l)                 | 292.0      |
| TSS (mg/l)                 | 314.0      |
| Total Coliform (MPN/100ml) | 2100000    |
| Date of Sampling           | 25.01.2023 |



## J. Behind Bypass Raidopur Drain

Behind Bypass Raidopur Drain carries 06 MLD untreated sewage from the residential areas of Azamgarh in the catchment of River Tamsa. The length of this drain is approx. 0.73 Km and its meets in River Tamsa at Latitude: 26.054871N & Longitude: 83.190511E.

### Details of effluent discharge & water quality of Behind Bypass

| Parameters                 | Results    |
|----------------------------|------------|
| pH                         | 7.68       |
| BOD (mg/l)                 | 75.0       |
| COD (mg/l)                 | 438.0      |
| TSS (mg/l)                 | 382.0      |
| Total Coliform (MPN/100ml) | 2300000    |
| Date of Sampling           | 03.03.2023 |



## K. Near DAV College Drain

Near DAV College Drain carries 04 MLD untreated sewage from the residential areas of Azamgarh in the catchment of River Tamsa. The length of this drain is approx. 0.79 Km and its meets in River Tamsa at Latitude:

26.05934N & Longitude: 83.186315E.

### Details of effluent discharge & water quality of Near DAV College Drain

| Parameters                 | Results    |
|----------------------------|------------|
| pH                         | 7.54       |
| BOD (mg/l)                 | 92.0       |
| COD (mg/l)                 | 530.0      |
| TSS (mg/l)                 | 428.0      |
| Total Coliform (MPN/100ml) | 4600000    |
| Date of Sampling           | 17.03.2023 |



## L. Before Kadamghat Bridge Drain

Before Kadamghat Bridge Drain carries 04 MLD untreated sewage

from the residential areas of Azamgarh in the catchment of River Tamsa. The length of this drain is approx. 1.33 Km and its meets in River Tamsa at Latitude: 26.054871N & Longitude: 83.190511E.

### **Details of effluent discharge & water quality of Before Kadamghat Bridge Drain**

| Parameters                 | Results    |
|----------------------------|------------|
| pH                         | 7.65       |
| BOD (mg/l)                 | 96.0       |
| COD (mg/l)                 | 492.0      |
| TSS (mg/l)                 | 376.0      |
| Total Coliform (MPN/100ml) | 4300000    |
| Date of Sampling           | 29.03.2023 |



### **M. Dalalghat Jama Masjid Drain**

Dalalghat Jama Masjid Drain carries 06 MLD untreated sewage from the residential areas of Azamgarh in the catchment of River Tamsa. The length of this drain is approx. 0.77 Km and its meets in River Tamsa at Latitude: 26.069362N & Longitude: 83.188551E.

### **Details of effluent discharge & water quality of Dalalghat Jama Masjid Drain**

| Parameters                 | Results    |
|----------------------------|------------|
| pH                         | 7.62       |
| BOD (mg/l)                 | 82.0       |
| COD (mg/l)                 | 448.0      |
| TSS (mg/l)                 | 402.0      |
| Total Coliform (MPN/100ml) | 4900000    |
| Date of Sampling           | 05.05.2023 |



### **N. Dharmu Ka Nala**

Dharmu Ka Nala carries 07 MLD untreated sewage from the residential areas of Azamgarh in the catchment of River Tamsa. The length of this drain is approx. 1.38 Km and its meets in River Tamsa at Latitude: 26.07005N & Longitude: 83.195667E.

### **Details of effluent discharge & water quality of Dharmu Ka Nala**

| Parameters                 | Results    |
|----------------------------|------------|
| pH                         | 7.57       |
| BOD (mg/l)                 | 59.0       |
| COD (mg/l)                 | 398.0      |
| TSS (mg/l)                 | 385.0      |
| Total Coliform (MPN/100ml) | 4600000    |
| Date of Sampling           | 25.05.2023 |



### **O. Hatti Madari Drain**

Hatti Madari Drain carries untreated sewage from the residential areas of Mau in the catchment of River Tamsa. The length of this drain is approx. 1.7 Km and its meets in River Tamsa at Latitude: 25°57'1.22"N & Longitude: 83°3'53.3"E.



### Details of effluent discharge & water quality of Hatti Madari Drain

| Parameters                 | Results    |
|----------------------------|------------|
| pH                         | 7.82       |
| BOD (mg/l)                 | 97.2       |
| COD (mg/l)                 | 284.0      |
| TSS (mg/l)                 | 412.0      |
| Total Coliform (MPN/100ml) | 6300000    |
| Date of Sampling           | 07.07.2023 |



### P. Horticulture Drain

Horticulture Drain carries untreated sewage from the residential areas of Akbarpur in the catchment of River Tamsa. The length of this drain is approx. 0.2 Km and its meets in River Tamsa at Latitude: 26°25'29.80"N & Longitude: 82°31'30.39"Å.

#### Details of effluent discharge & water quality of Horticulture Drain

| Parameters       | Results    |
|------------------|------------|
| pH               | 7.93       |
| BOD (mg/l)       | 54.0       |
| COD (mg/l)       | 284.0      |
| TSS (mg/l)       | 96.0       |
| Date of Sampling | 03.08.2023 |



### Q. Chuna Bhatti Drain, Akbarpur

Chuna Bhatti Drain, Akbarpur carries untreated sewage from the residential areas of Akbarpur in the catchment of River Tamsa. The length of this drain is approx. 0.86 Km and its meets in River Tamsa at Latitude: 26°25'32.05"N & Longitude: 82°31'59.94 Å.

#### Details of effluent discharge & water quality of Chuna Bhatti Drain, Akbarpur

| Parameters       | Results    |
|------------------|------------|
| pH               | 7.68       |
| BOD (mg/l)       | 69.0       |
| COD (mg/l)       | 282.0      |
| TSS (mg/l)       | 104.0      |
| Date of Sampling | 16.08.2023 |



### R. Shivala Ghat Drain

Shivala Ghat Drain carries untreated sewage from the residential areas of Akbarpur in the catchment of River Tamsa. The length of this drain is approx. 0.93 Km and its meets in River Tamsa at Latitude: 26°25'7.56"N & Longitude: 82°32'37.56"Å.

#### Details of effluent discharge & water quality of Shivala Ghat Drain

| Parameters       | Results    |
|------------------|------------|
| pH               | 7.73       |
| BOD (mg/l)       | 82.0       |
| COD (mg/l)       | 272.0      |
| TSS (mg/l)       | 88.0       |
| Date of Sampling | 15.09.2023 |

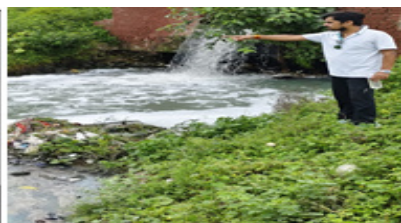


## S. Tamsa Bridge Drain

Tamsa Bridge Drain carries untreated sewage from the residential areas of Akbarpur in the catchment of River Tamsa. The length of this drain is approx. 0.45 Km and its meets in River Tamsa at Latitude: 26°25' 30.08' prime prime N & Longitude: 82° 31' 30.73' prime prime E.

**Details of effluent discharge & water quality of Tamsa Bridge Drain**

| Parameters       | Results    |
|------------------|------------|
| pH               | 7.51       |
| BOD (mg/l)       | 84.0       |
| COD (mg/l)       | 260.0      |
| TSS (mg/l)       | 74.0       |
| Date of Sampling | 06.10.2023 |

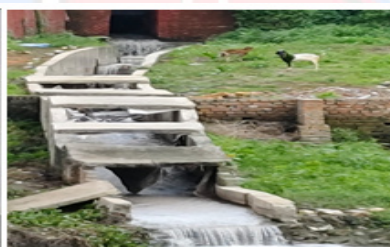


## T. Gadya Drain

Gadya Drain carries untreated sewage from the residential areas of Akbarpur in the catchment of River Tamsa. The length of this drain is approx. 1.1 Km and its meets in River Tamsa at Latitude: 26° 25' 5.41' prime prime N & Longitude: 82° prime prime 35' 3.47' prime prime E.

**Details of effluent discharge & water quality of Gadya Drain**

| Parameters       | Results    |
|------------------|------------|
| pH               | 7.42       |
| BOD (mg/l)       | 114.0      |
| COD (mg/l)       | 328.0      |
| TSS (mg/l)       | 142.0      |
| Date of Sampling | 25.11.2023 |



## U. Drain Near Mehrotra Petrol Pump, Ambedkarnagar

Drain Near Mehrotra Petrol Pump, Ambedkarnagar carries untreated sewage from the residential areas of Akbarpur in the catchment of River Tamsa. The length of this drain is approx. 4.9 Km and its meets in River Tamsa at Latitude: 26° prime prime 25' 43.5' prime prime N & Longitude: 82° \* 32' 2.95' prime prime E

**Details of effluent discharge & water quality of Drain Near Mehrotra Petrol Pump, Ambedkarnagar**

| Parameters       | Results    |
|------------------|------------|
| pH               | 7.63       |
| BOD (mg/l)       | 56.0       |
| COD (mg/l)       | 282.0      |
| TSS (mg/l)       | 74.0       |
| Date of Sampling | 12.12.2023 |

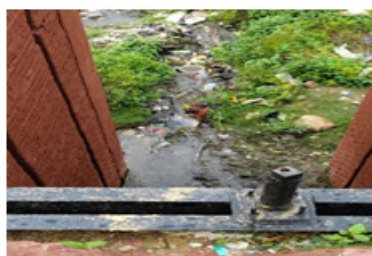


## V. Sherauwa Drain

Sherauwa Drain carries untreated sewage from the residential areas of Ambedkarnagar in the catchment of River Tamsa. The length of this drain is approx. 1.31 Km and its meets in River Tamsa at Latitude: 26° \* 18' 56.41' prime prime N & Longitude: 82 deg \* 44' 10.94' prime prime E [3].

### Details of effluent discharge & water quality of Sherauwa Drain

| Parameters       | Results    |
|------------------|------------|
| pH               | 7.89       |
| BOD (mg/l)       | 76.0       |
| COD (mg/l)       | 284.0      |
| TSS (mg/l)       | 118.0      |
| Date of Sampling | 03.01.2024 |

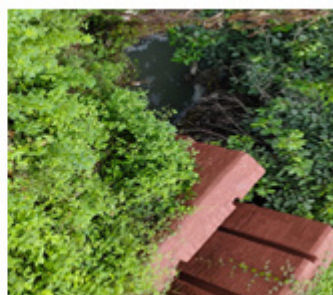


### W. Baba Shafreed Drain

Baba Shafreed Drain carries untreated sewage from the residential areas of Ambedkarnagar in the catchment of River Tamsa. The length of this drain is approx. 0.69 Km and its meets in River Tamsa at Latitude:  $26^{\circ} 18' 57.8''$  N & Longitude:  $82^{\circ} 44' 9.01''$  E.

### Details of effluent discharge & water quality of Baba Shafreed Drain

| Parameters       | Results    |
|------------------|------------|
| pH               | 7.73       |
| BOD (mg/l)       | 56.0       |
| COD (mg/l)       | 296.0      |
| TSS (mg/l)       | 154.0      |
| Date of Sampling | 23.01.2024 |



### X. Qazipura Drain

Qazipura Drain carries untreated sewage from the residential areas of Jalalpur, Ambedkarnagar in the catchment of River Tamsa. The length of this drain is approx. 0.72 Km and its meets in River Tamsa at Latitude:  $26^{\circ} 18' 56.78''$  N & Longitude:  $82^{\circ} 44' 25.01''$  E.

### Details of effluent discharge & water quality of Kazipura Drain

| Parameters       | Results    |
|------------------|------------|
| pH               | 7.58       |
| BOD (mg/l)       | 46.0       |
| COD (mg/l)       | 264.0      |
| TSS (mg/l)       | 112.0      |
| Date of Sampling | 03.03.2024 |



### Y. Ushmanpur Dhobighat Drain

Ushmanpur Dhobighat Drain carries untreated sewage from the residential areas of Jalalpur, Ambedkarnagar in the catchment of River Tamsa. The length of this drain is approx. 0.22 Km and its meets in River Tamsa at Latitude:  $26^{\circ} 18' 50.10''$  N & Longitude:  $82^{\circ} 44' 54.91''$  E.

### Details of effluent discharge & water quality of Ushmanpur Dhobighat Drain



| Parameters       | Results    |
|------------------|------------|
| pH               | 8.6        |
| BOD (mg/l)       | 68.0       |
| COD (mg/l)       | 266.0      |
| TSS (mg/l)       | 92.0       |
| Date of Sampling | 17.03.2024 |



As mentioned above, total sewage discharged in the identified polluted stretch of River Tamsa is 168.29 MLD. Total 26 drains are discharging into River Tamsa within identified polluted stretch. Local bodies Rudauli, Gosainganj, Jalalpur, Azamgarh, Mohammadabad, Maunath bhanjan, Kurthi Jafarpur and Chitbargaon has not installed STP for the treatment of sewage generated from local bodies and village Panchyat. 168.29 MLD untreated sewage is being discharged into River within identified polluted stretch. Rudauli, Gosainganj, Jalalpur, Azamgarh, Mohammadabad, Maunath bhanjan, Kurthi jafarpur and Chitbargaon has not been submitted any DPR regarding installation of sewage treatment plant.

In Ayodhy, Ambedkarnagar, Azamagarh & Mau located in the catchment of the stretch of river Tamsa there are total 329 Health Care Facilities which generate approx 912 Kg/Day of Bio-Medical Waste. All the Health Care Facilities have valid agreements with Common Bio-Medical Waste Treatment Facility situated in Lucknow & Ghazipur for collection, transportation and disposal of Bio-Medical Waste. The segregation of Bio- Medical Waste and disposal in the CBWTFs as per the provisions of Bio- Medical Waste Management Rules, 2016 is a major area of concern. The mixing of Bio-Medical Waste with Municipal Solid Waste is also observed which also needs to be addressed. The details of Bio-Medical Waste generated in the Cities/Towns and details of Common Bio-Medical Waste Treatment Facilities are given below:

| Details of Bio-Medical Waste Treatment Facilities |                                                                                                                    |                                 |                                                                              |                              |                 |           |                               |                    |                                                                        |                                  |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------------------------------------------------------------------|------------------------------|-----------------|-----------|-------------------------------|--------------------|------------------------------------------------------------------------|----------------------------------|
| S.N.                                              | Name of the CBWTF operator connect No. & Address                                                                   | Total No. Of HCFs Being Covered | Covered District                                                             | Treatment facility available |                 |           | BMW Treatment capacity Kg/day | Number of Vehicles | Status of On Line Continuous Emission Monitoring System & Connectivity | Validity of issued Authorization |
|                                                   |                                                                                                                    |                                 |                                                                              | Incinerator                  | Auto Clave      | Shredder  |                               |                    |                                                                        |                                  |
| 1                                                 | 2                                                                                                                  | 3                               | 4                                                                            | 5                            | 6               | 7         | 8                             | 9                  | 10                                                                     | 11                               |
| 1                                                 | M/s Spectrum Waste Solutions Pvt. Ltd. Khasra No-597, Jawahar Nagar Mastemau, Sultanpur Road, Mohanlalganj Lucknow | 788                             | Lucknow, Sultanpur, Gonda, Bahraich, Balrampur, Amethi, Ayodhya, Lakhimpur   | 250 kg/hr                    | 200 kg/Shift    | 50 kg/hr  | 3400                          | 10 With GPS        | Installed & Connected                                                  | 20.02.2020                       |
| 2                                                 | M/S SiliconWelfare Society vil. Banka, Distt.Ghazipur                                                              | 130                             | Baliya, Ghazipur, Deoria, Azamgarh, Ambedkar Nagar, Varanasi, Mau, Chandauli | 100 kg/hr                    | 200 litre/shift | 150 kg/hr | 1600                          | 7 with GPS         | Installed & Connected                                                  | 31.12.2019                       |

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