

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI  
ORIGINAL APPLICATION NO. 585 OF 2022**

**IN THE MATTER OF:****SAMYAK JAIN & ORS.****...APPLICANT(S)****VERSUS****STATE OF MADHYA PRADESH****...RESPONDENT(S)****INDEX**

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BEFORE THE NATIONAL GREEN TRIBUNAL, PRINCIPAL BENCH AT  
NEW DELHI

ORIGINAL APPLICATION No. 585/2022 (PB)

Applicant: - Samayak Jain & Ors.

V/s

Respondents: - Government of MP and Ors.

Reply on Behalf of MPPCB

That the answering respondent is Regulatory Body constituted under section 4 of Water (Prevention & Control of Pollution) Act 1974 and also full filling the responsibility bestowed under section 5 of Air (Prevention & Control of Pollution) Act 1981.

Dindori is a Nagar Parishad in district of Dindori, Madhya Pradesh. From point of view of smooth administration, the Dindori Nagar Parishad is divided into 15 wards. The Dindori Nagar Panchayat has population of 21,323 of which 10,864 are males while 10,459 are females as per report released by latest Census India 2011. About 4,907 houses are situated under territorial jurisdiction of Nagar Parishad Dindori to which it supplies basic amenities like water and sewerage. It is also authorized to build roads within Nagar Panchayat Parishad limits and impose taxes coming under its jurisdiction.

The Narmada River, also called the Reva is the 5th longest river and overall longest west-flowing River in India. It is also the largest flowing river in the state of Madhya Pradesh. The Narmada River rises from the Amarkantak Plateau in Anuppur District Madhya Pradesh and flows westwards over a length of

1,312 km before draining through the Gulf of Khambhat into the Arabian Sea, 30 km west of Bharuch city of Gujarat. It flows 1,077 km through the states of Madhya Pradesh and 74 km in Maharashtra and also make the border between Maharashtra and Gujarat, and also travel about 161 Km in Gujrat state. Dindori Nagar Parishad is a small town situated along River Narmada in Dindori District of M.P. Dindori is a tribal district, mainly Gond, Baiga & Kol tribes resides along the river Narmada, which are critical for the conservation of River, Hill, Land & Forest. Waste water is discharged into river Narmada broadly and mainly through 5 Nalla's (Sanbara Nalla, Shamshanghat Nalla, Ward No. 7-8 Nalla, Ward No.3 Nalla & Awadhiya Nalla).

**Reply on merit with respect to point wise paragraph/submissions made by petitioner.**

1. M.P Pollution Control Board is Regulatory Body constituted under section 4 of Water (Prevention & Control of Pollution) Act 1974 and also full filling the responsibility bestowed under section 5 of Air (Prevention & Control of Pollution) Act 1981.

In compliance of Hon'ble NGT order in OA 606/2018 dated 14/12/2020, proposal for levying Environmental Compensation on Nagar Parishad Dindori is submitted to MPPCB Head Office, Bhopal. Details of which are as per table below:-

Sr. No.	Period	Environmental Compensation Amount (Rs.)	Letter no. & date
1	01/04/20 to 31/07/2020	68 Lakhs	2426, 13/08/2020
2	01/07/20 to 31/12/2020	102 Lakhs	139, 08/01/2021
3	01/01/21 to 30/06/2021	102 Lakhs	2513, 22/07/2021
4	01/07/2021 to 31/12/2021	162 Lakhs	4956, 04/02/2022
5	01/01/22 to 30/06/2022	162 Lakhs	2362, 30/09/2022

It is also pertinent to mention that, Chief Secretary of Government of Madhya Pradesh appeared before the Hon'ble NGT in OA 606/2018 and filed the reply on behalf of Government of Madhya Pradesh. Hon'ble NGT in OA 606/2018 order dated 10.11.2022 has not levied compensation upon the state of MP but has instructed that the State will be bound by this allocation of funds and must make meaningful progress in the matter in next six months. Copy of relevant pages of Hon'ble NGT order dated 10.11.2022 is enclosed as Annexure 1.

2. Nagar Parishad Dindori is responsible urban administration agency for development of infrastructure for supply of water to the inhabitants of the ULB and management of sewage and solid waste generated due to various domestic, commercial & religious activities of residents. letter's are issued to the ULB Dindori from time to time by MPPCB for proper management of sewage and solid waste generated within municipal area.
3. As per Plastic Waste Management Rules 2016, duty of prohibition on sale, storage and use of banned plastic material is entrusted to related local body where as prohibition of manufacturing of banned plastic is entrusted on MPPCB. In Dindori, no industry/unit engaged in

manufacturing of banned plastic item is functional in Dindori district and nearby Shahdol division also.

Various Public awareness activities are also carried out by Regional Office, MPPCB, Shahdol in Dindori town from time to time to discourage the use of banned polythene, pamphlets and cotton carry bags are distributed among the public and shopkeepers. Polythene seizing activity is also carried out from time to time by Nagar Parishad Dindori in presence of MPPCB, Shahdol to discourage use of polythene. Details of Public awareness program organized by regional office Shahdol by distributing pamphlet, displaying posters, banners, & through public announcement in various public gatherings during religious, cultural & recreational activities like Murti visarjan, Public hearing are given below.

S. No.	Subject	Date
1	Public awareness program on Single Use Plastic through pamplet & poster during Murti Visarjan	19.09.2021 – 20.09.2021
2	Inspection & fine imposition	21.10.2022
3	Public Awareness Program during Diwali	28.10.2021 – 11.11.2021
4	Public awareness program on SUP through pamplet & poster during during Public Hearing in Baghrauli village	17.06.2022
5	Environment public awareness program	03.06.2022
6	Inspection & fine imposition	04.07.2022
7	Public awareness program to discourage Single Use Plastic through pamplet & poster during Murti Visarjan	31.08.2022
8	Public awareness program to discourage Single Use Plastic through pamplet & poster during Murti Visarjan	09.09.2022

Letter's issued by MPPCB to Nagar Parishad Dindori regarding action taken against activities related to use, storage and sale of banned plastic

items and raid/seizure done by them wrt ban of single use plastic are as follows:-

Sr. No.	Subject	Letter No.	Date
1	To follow NGT case no 81/2017 order of ban on Single Use Plastic having thickness <50micron	999	20.03.2020
2	To organize public awareness campaign regarding stopping the use of Single Use Plastic	1038	28.03.2020
3	Reg. Ban on using Single Use Plastic	2798	08.09.2020
4	Reg. compliance of Plastic Waste Management Rules 2016	3557	20.11.2020
5	Reg. compliance of Plastic Waste Management Rules 2016	4053	28.12.2020
6	Reg. submission of yearly Plastic Waste Generation Report	2082	16.06.2021
7	For providing information on the action taken by ULB on banning of SUP	2673	02.08.2021
8	Reg. ban on Single Use Plastic	5221	28.02.2022
9	To close farms/institution which are using/stocking single use plastic	170	11.04.2022
10	For informing about the decision taken in meeting on 04.04.2022 for eliminating SUP	216	11.04.2022
11	To provide yearly information of plastic waste generation	510	10.05.2022
12	To provide yearly information of plastic waste management in form 5	752	31.05.2022
13	Reg. registration on CPCB website for Grievance app related with single use plastic & extended producer responsibility	765	01.06.2022
14	To Provide yearly information of plastic waste management in form 5	1091	23.06.2022
15	Regarding ban on single use plastic	1448	11.07.2022
16	Regarding ban on single use plastic	1450	11.07.2022
17	For providing information on the action taken by ULB regarding ban of SUP	1538	19.07.2022

18	Reg. compliance of plastic waste management rules 2016	2315	26.09.2022
19	For organizing awareness program on ban of single use plastic	2713	20.10.2022
20	Regarding ban of single use plastic	2809	31.10.2022

4. Related to Forest Department, hence deserve no comments.
5. Related to Nagar Parishad Dindori & District Administration Dindori, hence deserve no comments.
6. Related to WRD, PHE Department of M.P Government, hence deserve no comments.
7. Matter of illegal mining come's under jurisdiction of mining department & police administration. Presently no sand mine having valid consent to operate is operating. Permission (CTO) for sand mining is not issued by MPPCB to any mine in Narmada river within Dindori district during last three years.
8. Related to Nagar Parishad Dindori, hence deserve no comments.
9. Related to Nagar Parishad Dindori, hence deserve no comments.
10. Monthly water sampling of River Narmada near Nagar Parishad Dindori is done by MPPCB, Shahdol. Water analysis report shows that the water quality parameters are usualy normal. Water quality analysis report of River Narmada at U/s & D/s of Dindori town for April 2021 to March 2022 is enclosed as Annexure 2. Water quality of river Narmada is found to be Normal as per the categorization laid down by CPCB. No consent is given by MPPCB Shahdol for establishment of water polluting industry along river Narmada in Dindori District. M.P Urban Development Company has also started construction of Sewage Treatment Plant of 3.8 MLD capacity



for treatment of waste water. As per Air Quality Index report issued by State Environment Surveillance Center, M.P Pollution Control Board, Bhopal for year 2019-20 & 2020-21, of District Dindori always stands within first five districts, which shows the very good air quality of Dindori district. Permanent display board for spreading public awareness regarding conservation of environment in general are also erected at various important public places within Dindori town. Some photographs of display board enclosed as Annexure 3.

**Steps taken by MPPCB, Shahdol to ensure control of pollution in Rive Narmada.**

❖ Letter's issued by MPPCB to Nagar Parishad Dindori regarding STP are as follows:-

Sr. No.	Subject	Letter No. & Date
1	Regarding consent under Water/air Acts and treatment of domestic waste water	1949, 28/10/2014
2	Regarding proper management of solid waste and to ban burning of waste	1415, 09/11/2016
3	Regarding discharge of untreated waste in Narmada River	518, 05/04/2018
4	Reg. compliance of Hon'ble NGT order in OA 593/2017 dated 28/08/2019	3624, 08/11/2019
5	Reg. installation of STP	2099, 22/07/2020
6	Show Cause Notice for imposition of penalty due to violations of the directions of Hon'ble NGT and the provisions of SWM Rules 2016.	297, 28/08/2020
7	Show Cause Notice for imposition of penalty due to violations of the directions of Hon'ble NGT and the provisions of SWM Rules 2016 U/s 5 of EPA 1986.	63, 01/03/2021
8	Regarding plantation	2796, 09/08/2021

9	Reg. completion of remaining construction work of STP	1110, 27/06/2022
10	Directions under 33 A of water (pollution & control of prevention) act 1974	3341, 07/09/2022
11	Directions under 33 A of water (pollution & control of prevention) act 1974	2205, 16/09/2022

❖ In compliance of Hon'ble NGT order in OA 606/2018 dated 14/12/2020, proposal for levying Environmental Compensation on Nagar Parishad Dindori is submitted to MPPCB Head Office, Bhopal. Details of which are as per table below:-

Sr. No.	Period	Environmental Compensation Amount (Rs.)	Letter no. & date
1	01/04/20 to 31/07/2020	68 Lakhs	2426, 13/08/2020
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3	01/01/21 to 30/06/2021	102 Lakhs	2513, 22/07/2021
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Real Time Water Quality Monitoring station is also established by MPPCB in this year 2022 in river Narmada near Dindori Town, through which water pollution level in Narmada river is being monitored instantly. This help's to keep regular vigil of Narmada river water quality during any religious programs, Fair etc. M/s Axis Nano Technologies Pvt. Ltd., Noida has supplied/installed RTWQMS in Dindori city on river Narmada costing

about Rs. 31.23 Lakhs. Details of water quality analysis report of Month September & October are attached as Annexure 4.

11. Related to Narmada Valley Development Authority, EPCO & SEIAA hence deserve no comments.
12. Related to Nagar Parishad Dindori, hence deserve no comments.
13. Related to Forest Department & Narmada Valley Development Authority, hence deserve no comments.
14. Related to Nagar Parishad Dindori & District Administration Dindori, hence deserve no comments.

Hence M.P. Pollution Control Board has already exercised power where ever required and have taken all necessary steps for safeguard of environment with regards to this matter, many points raised by the applicants in this petition are very general in nature and not specific to situation of pollution in Narmada river in Dindori. Some points are vague and superficial, hence it is humbly prayed to dismiss all points related with MPPCB in above petition.

Date:- **14.03.2023**

  
**Sanjeev Kumar Mehra**  
**(Officer Incharge)**  
**Regional Officer**  
**M.P Pollution Control Board**  
**Shahdol (M.P)**

**BEFORE THE NATIONAL GREEN TRIBUNAL**  
**Appeal/Original Application No. 585/2022**  
**PRINCIPAL BENCH, NEW DELHI**

Petitioner  
Versus

Samyak Jain

Respondents

Madhya Pradesh Government & Ors.

**AFFIDAVIT**

Name : Sanjeev Kumar Mehra  
Father's Name : Resham Singh Mehra  
Age : 54 Years  
Designation : Regional Officer,  
Address : MPPCB, Regional Office  
Gortara, Shahdol

I state on oath that:—

1. That, I am the designated officer to submit this reply and I am well acquainted with the facts of the case, and the reply has been drafted on my instructions and is based on the official record.
2. That, the reply on behalf of M.P Pollution Control Board is being filed with respect to the directions given by this Hon'ble Tribunal.
3. That, the documents annexed with the reply are true copies of which they purport to be.
4. That, I swear that this declaration is true, that it conceals nothing, and that no part of it is false.

Date: 14.03.2023

Deponent

Sanjeev Kumar Mehra  
Regional Officer  
M.P. Pollution Control Board  
Shahdol

**AFFIRMATION**

I solemnly affirm that this declaration is true, that it conceals nothing and that no part of it is false.

Place: Shahdol  
Date: 14.03.2023

Deponent

Sanjeev Kumar Mehra  
Regional Officer  
M.P. Pollution Control Board  
Shahdol

DEPONENT

शपथकर्ता/निष्पादनकर्ता

Serial No. 3142/2023  
Dated 14-MAR-2023  
SINGH RAJESH KUMAR  
NOTARY  
SHAHDOL



IDENTIFY BY ME  
NAME \_\_\_\_\_  
ADD. \_\_\_\_\_

Serial No. 3142/2023  
Dated 14-MAR-2023  
SINGH RAJESH KUMAR  
NOTARY  
SHAHDOL

SHAHDOL

Item No. 01

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

Original Application No. 606/2018

(In respect of State of Madhya Pradesh)

In re: **Compliance of Municipal Solid Waste Management Rules,  
2016 and other environmental issues**

(Arising out of directions of the Hon'ble Supreme Court  
in W.P. No. 888/1996 and W.P. No. 375/2012)

Date of hearing: 10.11.2022

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER  
HON'BLE PROF. A. SENTHIL VEL, EXPERT MEMBER**

Present: Shri Iqbal Singh Bains, Chief Secretary, Madhya Pradesh  
Shri Aniruddha Mukherjee, Ex. Principal Secretary, Environment  
Shri Gulshan Bamra, Principal Secretary, Environment  
Shri Bharat Yadav, Commissioner, Directorate of Urban Administration  
and Development  
Shri Gaurav Benal, Additional Commissioner, Directorate of Urban  
Administration and Development  
Shri Hans Kumar Jain, Chief Engineer, Directorate of Urban  
Administration and Development  
Shri S P Jha, Director, Environment  
Shri Neelesh Dubey, O.S.D., Urban Development and Housing

**ORDER**

**The Issue – Monitoring of compliance of waste in terms of orders of  
Hon'ble Supreme Court dated 02.09.2014 and 22.02.2017**

1. The issues of solid as well as liquid waste management are being  
monitored by this Tribunal as per orders of the Hon'ble Supreme Court

**Conclusion**

57. We hope in the light of interaction with the Chief Secretary, the State of Madhya Pradesh will take further measures in the matter by innovative approach and stringent monitoring, ensuring that gaps in solid and liquid waste generation and treatment are bridged at the earliest, shortening the proposed timelines, adopting alternative/interim measures to the extent and wherever found viable. Restoration plans need to be executed at the earliest simultaneously in all districts/cities/ towns/ villages in a time bound manner without further delay. Compliance be ensured by Chief Secretary.

58. As already observed, it will also be open to the State to plan raising of requisite funds from generators/contributors of waste or by any other legal means.

59. In our recent order dated 01.09.2022 in O.A No. 606/2018 (in respect of State of West Bengal), considering scale of compensation adopted in earlier cases including in OA No. 1002/2018, *Abhisht Kusum Gupta vs. State of Uttar Pradesh & Ors.*, compensation was determined @ Rs. 2 Crore per MLD for untreated liquid waste and in OA No. 286/2022 for unprocessed legacy waste compensation was fixed @ Rs. 300 per MT to be utilized for restoration measures, including preventing discharge of untreated sewage and solid waste treatment/processing facilities, as per appropriate mechanism for planning and execution that may be evolved, within three months. Operative part of the said order is reproduced below:-

**“Conclusion about quantum of compensation**

49. In the light of above and considering damage to the recipient environment, we hold that apart from ensuring compliance at the earliest, compensation has to be paid by the State for past violations. The amount of compensation is fixed @ Rs. 2 crore per MLD (at which rate compensation has been levied against Noida

and DJB in OA No. 1002/2018, *Abhisht Kusum Gupta vs. State of Uttar Pradesh & Ors*, referred to in para 48 above for detailed reasons mentioned therein). As noted earlier, **gap in generation and treatment in West Bengal, as per data furnished is 1490 MLD. Thus, under this head, liability of the State of West Bengal is to pay compensation of Rs. 2980 crores, rounded off to Rs. 3000 crore in view of continuing damage. For failure to process solid waste, unprocessed legacy waste being 1.20 crore MT, compensation is assessed @ Rs. 300 per MT (at which approximate rate compensation has been awarded in OA No. 286/2022 against Municipal Corporation, Ludhiana, for the reasons given therein). This works out to Rs. 366 crore but adding 134 crore for continuing addition of unprocessed waste @ 13469.19 TPD, the total amount is rounded off to Rs. 500 crore. Thus, final amount of compensation under the two heads (solid and liquid waste) is assessed at Rs. 3500 crores which may be deposited by the State of West Bengal in a separate ring-fenced account within two months, to be operated as per directions of the Chief Secretary and utilised for restoration measures, including preventing discharge of untreated sewage and solid waste treatment/processing facilities, as per appropriate mechanism for planning and execution that may be evolved, within three months. If violations continue, liability to pay additional compensation may have to be considered. Compliance will be the responsibility of the Chief Secretary."**

#### **Reasons for not levying compensation on State of MP**

60. The Chief Secretary Madhya Pradesh fairly accepts that there is gap of about 1500 MLD in sewage generation and treatment. In normal circumstances, the State would be liable to pay compensation of Rs. 3000 crore at the scale of compensation fixed in other States. However, it is pointed out that in Madhya Pradesh, already more than Rs. 9000 crores stands allocated on the subject. There are ongoing sewerage projects for 465 MLD for which amount of Rs 2366 crore stands ring-fenced. Further, amount of Rs 7388 crore stands ring-fenced for sewage treatment facilities which is approved by State cabinet under the AMRUT 2.0 and SBM 2.0 schemes. Out of the said amount, Rs 4657 crore is the State share while Rs 2731 crore is Government of India's share, in a phased manner. It is submitted that even if GoI fails to comply with its commitment of Rs. 2731 crore, the State of Madhya Pradesh would abide by its commitment of Rs

4657 crore for the treatment of wastewater in a scientific manner. Thus, the State has made provision for Rs. 9688 crores in a ring-fenced manner for wastewater treatment. In these circumstances, there does not appear to be a case for levy of compensation but the State will be bound by this stand and allocation of funds and must make meaningful progress in the matter in next six months.

**Assistance by State of MP to other States for executing work on Indore pattern**

61. In view of apparently successful waste management model at Indore, we have suggested to the Chief Secretary, MP to offer assistance in training and capacity building to other States and the Chief Secretary has fairly agreed to offer such help by addressing a communication to Chief Secretaries of all States/UTs on the subject. He has further stated that in the State of Madhya Pradesh, MP Urban Development Company has been registered under the Companies Act in the year 2014 which caters to the process of giving contracts for handling waste which pattern may be considered by other States/UTs, if found viable.

**Directions for further follow up**

62. Further, six monthly progress reports with verifiable progress may be filed by the Chief Secretary with a copy to the Registrar General of this Tribunal by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF. Copies thereof may be furnished to the NMCG, MoUD and CPCB and also be placed on the website of the State Government.

A copy of this order be forwarded for compliance to the Chief Secretary, Madhya Pradesh, Secretary, Ministry of Housing and Urban

Development, MoEF&CC, GoI, National Mission for Clean Ganga and CPCB by e-mail.

On report being filed with the Registrar General of this Tribunal, the same may be placed before the Bench, if found necessary.

If any grievance survives, it will be open to the aggrieved parties to take further remedies as per law.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Prof. A. Senthil Vel, EM

November 10, 2022  
Original Application No. 606/2018

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MADHYA PRADESH POLLUTION CONTROL BOARD, SHAHDOL  
 Natural Water Quality during Year - 2021-22

Natural Water Resource : Description of Sampling Station:

River Narmda at Dindori U/S Water Sample Intake Well Point Pumping Station

S.No.	Characteristic	Unit	1	2	3	4	5	6	7	8	9	10	11	12	Av.	Maxl.	Min.
			05.04.2021	04.05.2021	04.06.2021	02.07.2021	04.08.2021	05.09.2021	05.10.2021	05.11.2021	06.12.2021	05.01.2022	01.02.2022	04.03.2022			
1	Appearance		Clear	Clear	Clear	Sl Turbid	Sl Turbid	Sl Turbid	Clear	Clear	Clear	Clear	Clear	Clear	-	-	-
2	Temperature	oC	28.5	28.2	29.4	29.5	28	28.6	28.8	28	24	21	24.6	25.6	27.02	29.50	21.00
3	Turbidity	NTU	5	5	5.7	9.1	16.3	6.1	3.9	3.5	3.3	3.6	4.1	3.9	5.79	16.30	3.30
4	Colour	PCS	Colourless	Colourless	Colourless	Slight muddy	Sl muddy	Sl muddy	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	-	-	-
5	Odour	T. No	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	Odourless	-	-	-
6	pH	pH Unit	7.81	7.81	7.75	7.61	7.69	7.69	7.78	7.75	8.01	8.51	8.06	8.12	7.88	8.51	7.61
7	Sp. Conductivity	µMhos/cm	249.3	253.1	269.7	341.2	461	319.6	304.6	271.2	225	239	237.6	231.4	283.6	461.0	225.0
8	T. Solids	mg/l	211	215	219	248	271	221	202	191	191	219	195	179	213.5	271.0	179.0
9	D. Solids	mg/l	198	202	207	232	254	209	191	182	180	209	187	166	201.4	254.0	166.0
10	S. Solids	mg/l	13	13	12	16	17	12	11	9	11	10	8	13	12.08	17.00	8.00
11	Amn. Nitrogen	mg/l	0.012	0.011	0.013	0.01	0.013	0.03	0.024	0.012	0.012	0.01	0.013	0.014	0.01	0.03	0.01
12	Nitri. Nitrogen	mg/l	0.01	0.011	0.012	0.008	0.01	0.01	0.01	0.006	0.01	0.006	0.01	0.012	0.01	0.01	0.01
13	Nitrate Nitrogen	mg/l	0.38	0.38	0.32	0.28	0.18	0.16	0.34	0.24	0.18	0.2	0.16	0.2	0.25	0.38	0.16
14	Phosphate (PO <sub>4</sub> )	mg/l	0.004	0.004	ND	0.006	0.004	0.01	0.01	0.002	BDL	0.002	0.004	0.01	0.01	0.01	0.002
15	Chloride	mg/l	19.7	24.99	24.5	29.5	24.5	19.5	17.5	15.7	13.8	9.99	9.99	15.88	18.80	29.5	9.99
16	Sulphate (SO <sub>4</sub> )	mg/l	16	17	15	16	13	12	10.8	11	12	14	12	14	13.57	17.00	10.80
17	T. Alkalinity	mg/l	52	52	56	52	48	44	36	44	40	44	48	68	48.67	68.00	36.00
18	T. Hardness	mg/l	120	124	124	128	112	108	112	116	120	128	136	140	122.33	140.0	108.0
19	Calcium Hardnes	mg/l	72	68	72	72	68	60	60	68	72	76	76	76	70.00	76.00	60.00
20	Magnesium H.	mg/l	48	56	52	56	44	48	52	48	48	52	60	64	52.33	64.0	44.00
21	D. Oxygen	mg/l	7.8	7.7	8	7.8	7.6	7.8	7.9	8.1	8.3	8.2	8.5	8.2	7.99	8.50	7.60
22	B.O.D.	mg/l	1.3	1.5	1.1	1.8	1.9	1.7	1.3	1.2	1.5	1.4	1.5	1.6	1.48	1.90	1.10
23	C.O.D.	mg/l	2.4	2.5	2.6	7.2	2.5	2.4	9.2	10	9.6	10	10	9.6	6.50	10.00	2.40
24	Sodium	mg/l	13.06	13.26	12.64	11.21	10.94	10.01	9.4	8.64	9.26	10.21	11.32	12.41	11.03	13.26	8.64
25	Potassium	mg/l	2.18	2.28	3.02	2.68	2.09	2.11	1.68	1.87	2.01	2.46	1.78	1.97	2.18	3.02	1.68
26	T. Coliform	MPN/100ml	41	44	37	47	63	47	41	43	37	27	33	37	41.42	63.00	27.00
27	F. Coliform	MPN/100ml	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	#####	0.00	0.00
28	T.K.N.	mg/l	-	-	-	-	-	-	-	-	-	<1.8	<1.8	<1.8	#####	0.00	0.00
CATEGORY			A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

Chemist

Jr. Scientist

Lab Incharge

MADHYA PRADESH POLLUTION CONTROL BOARD, SHARDAH  
Natural Water Quality during Year - 2021-22

17

River Narmda at Dindori D/S Water Sample Near Road Bridge Jogitikryaghat

Natural Water Resource : Description of Sampling Station:

S.No.	Characteristic	Unit	1	2	3	4	5	6	7	8	9	10	11	12	Av.	Maxd.	Minl.
			05.04.2021	04.05.2021	04.06.2021	02.07.2021	04.08.2021	05.09.2021	05.10.2021	05.11.2021	06.12.2021	06.01.2022	01.02.2022	04.03.2022			
1	Appearance		Clear	Clear	Clear	Sl. Turbid	Sl. Turbid	Sl. Turbid	Clear	Clear	Clear	Clear	Clear	Clear	-	-	-
2	Temperature	oC	28.5	28	29.5	29.6	28	28.6	28.8	28.2	24	21	24.6	25.6	27.03	29.60	21.00
3	Turbidity	NTU	6.1	6.1	7	9.4	17	6.3	4.1	3.8	4.1	4.3	5.1	4.8	6.51	17.00	3.80
4	Colour	PCS	Colourless	Colourless	Colourless	Slight muddy	Sl. muddy	Sl. muddy	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	-	-	-
5	Odour	T.No	Odourless	Odourless	Odourless	7.68	7.64	7.71	7.82	7.79	7.91	8.7	8.1	8.21	7.92	8.70	7.64
6	pH	pH Unit	7.86	7.86	7.78	356.1	473	325.4	310.2	297.1	231.5	242.6	264.3	256.1	301.4	473.0	231.5
7	Sp. Conductivity	µMhos/cm.	278.6	275.7	306.2	253	281	227	211	202	205	231	209	188	223.6	281.0	188.0
8	T. Solids	mg/1	221	228	227	236	262	214	199	192	193	220	200	173	210.3	262.0	173.0
9	D. Solids	mg/1	207	213	214	17	19	13	12	10	12	11	9	16	13.42	19.00	9.00
10	S. Solids	mg/1	14	15	13	0.013	0.015	0.04	0.032	0.018	0.014	0.013	0.013	0.11	0.02	0.11	0.01
11	Amm. Nitrogen	mg/1	0.016	0.016	0.015	0.012	0.012	0.02	0.02	0.014	0.028	0.26	0.22	0.28	0.01	0.02	0.01
12	Nitrite Nitrogen	mg/1	0.013	0.015	0.01	0.012	0.012	0.02	0.018	0.012	0.01	0.01	0.012	0.012	0.01	0.01	0.01
13	Nitrate Nitrogen	mg/1	0.4	0.42	0.48	0.4	0.34	0.2	0.42	0.3	0.012	0.01	0.01	0.012	0.012	0.012	0.012
14	Phosphate (PO <sub>4</sub> )	mg/1	0.01	0.012	0.012	0.01	0.012	0.02	0.018	0.012	0.01	0.01	0.012	0.012	0.012	0.012	0.012
15	Chloride	mg/1	29.5	29.99	34.4	34.4	29.5	24.5	23.4	21.6	15.7	11.49	12.49	17.86	23.74	34.40	11.49
16	Sulphate (SO <sub>4</sub> )	mg/1	18	20	17	20	14	13	12.4	13	14	15	16	15	15.62	20.00	12.40
17	T. Alkalinity	mg/1	56	56	60	56	52	48	40	48	44	48	52	72	52.67	72.00	40.00
18	T. Hardness	mg/1	128	130	132	136	120	112	120	124	128	140	144	156	130.8	156.0	60.00
19	Calcium Hardness	mg/1	76	80	68	76	68	60	64	72	72	80	80	84	73.33	84.00	50.00
20	Magnesium H.	mg/1	52	50	64	60	52	52	56	52	56	60	64	72	57.50	72.00	50.00
21	D. Oxygen	mg/1	7.9	7.8	7.8	7.7	7.5	7.7	8	7.9	8.1	8	8.6	8.4	7.95	8.60	7.50
22	B.O.D.	mg/1	2	1.9	1.9	2.3	2.1	1.9	1.8	1.7	1.9	1.8	20	20	19.2	13.13	2.30
23	C.O.D.	mg/1	7.2	7.2	7.8	7.2	7.5	4.8	11.2	11.2	9.21	10.25	11.41	12.01	13.42	12.03	20.00
24	Sodium	mg/1	13.48	13.54	14.01	13.01	11.64	2.87	2.26	2.02	2.32	2.48	2.84	2.06	2.46	2.56	3.48
25	Potassium	mg/1	2.39	2.51	3.48	3.01	94	70	47	50	47	50	47	50	55.25	94.00	47.00
26	T. Coliform	MPN/100ml	47	48	50	63	94	70	47	50	47	50	47	50	<1.8	3.10	4.00
27	F. Coliform	MPN/100ml	3.7	<1.8	4	3.7	3.6	1.8	1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	#DIV/0!	0.00
28	T.K.N.	mg/1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CATEGORY

Chemist

Jr. Scientist

Lab Incharge



A

Timestamp	DO(mg/l)	pH(pH)	TEMP.(C)	BOD(mg/l)	COLOR(Hazen-eq.)	COD(mg/l)	TSS(mg/l)
31-Aug-2022 00:00							
01-Sep-2022 00:00							
02-Sep-2022 00:00							
03-Sep-2022 00:00							
04-Sep-2022 00:00							
05-Sep-2022 00:00							
06-Sep-2022 00:00							
07-Sep-2022 00:00							
08-Sep-2022 00:00							
09-Sep-2022 00:00							
10-Sep-2022 00:00							
11-Sep-2022 00:00							
12-Sep-2022 00:00							
13-Sep-2022 00:00							
14-Sep-2022 00:00							
15-Sep-2022 00:00							
16-Sep-2022 00:00							
17-Sep-2022 00:00							
18-Sep-2022 00:00							
19-Sep-2022 00:00							
20-Sep-2022 00:00							
21-Sep-2022 00:00							
22-Sep-2022 00:00							
23-Sep-2022 00:00							
24-Sep-2022 00:00	8.2	7.37	24.72	1.94		16.12	5.13
25-Sep-2022 00:00	8.13	7.56	25.54	1.61		14	0
26-Sep-2022 00:00	7.97	8.21	26.53	1.57		13.75	0
27-Sep-2022 00:00	7.8	7.83	26.27	2.73	10	22.7	165.5
28-Sep-2022 00:00	2.14	4.63	27.45	1.64	14.95	13.5	14.92
29-Sep-2022 00:00	2.05	6.07	26.97	1.63	14.02	13.38	14.83
30-Sep-2022 00:00	2	6.16	27.2	1.66	15.45	13.44	14.84

02-Oct-2022 00:00	1.92	5.31	28.08	1.5	8.07	13.08	14.76
03-Oct-2022 00:00	2.15	3.81	28.15	1.5	7.4	13.05	14.76
04-Oct-2022 00:00	2.13	4.55	26.53	1.51	8	13.03	14.75
05-Oct-2022 00:00	2	4	26.08	1.61	12.28	13.06	14.76
06-Oct-2022 00:00	2.05	3.75	26.4	1.52	8.43	13.28	14.79
07-Oct-2022 00:00	1.96	4.43	26.22	1.61	12.98	13.07	14.76
08-Oct-2022 00:00	1.99	4.33	26.7	1.54	9.45	13.32	14.81
09-Oct-2022 00:00	2.22	2.44	28.6	1.66	15.15	13.14	14.78
10-Oct-2022 00:00	2.2	2.44	29.16	1.46	7	13.43	14.84
11-Oct-2022 00:00	2.06	2.5	23.91	1.78	22	13	14.77
12-Oct-2022 00:00						13.8	14.94
13-Oct-2022 00:00							
14-Oct-2022 00:00							
15-Oct-2022 00:00							
16-Oct-2022 00:00							
17-Oct-2022 00:00							
18-Oct-2022 00:00							
19-Oct-2022 00:00							
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26-Oct-2022 00:00							
27-Oct-2022 00:00							
28-Oct-2022 00:00							
29-Oct-2022 00:00							
30-Oct-2022 00:00							
31-Oct-2022 00:00							

