

The action plan for Rejuvenation of Simrar river
Katni (M.P.)

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1. H. National Green Tribunal central Zonal Bench New Delhi.
NGT Case No. 673/2018 : Hon'ble National Green Tribunal Central Zonal Bench New Delhi, in the matter of original application no. 673/2018 (News Item Published in the "Hindu" authored by Shri Jacob Koshy titled" More river stretches are now critically polluted: CPCB") passed an order on 20/09/2018. The para 48, 49 and 50.3 of this order are relevant to comply. The para 48 states that "it is absolutely necessary that Action Plans are prepared to restore the polluted river stretches to the prescribed standards". Para 49 states that "Model Action Plan for Hindon River, already provided by CPCB, may also be taken into account"

In para 50 (i, ii, iii) Hon'ble National Green Tribunal has issued following directions:-

2. All States and Union Territories are directed to prepare action plans within two months for bringing all the polluted river stretches to be fit at least for bathing purposes (i.e BOD < 3 mg/L and FC < 500 MPN /100 ml) within six months from the date of finalization of the action plans.
3. The action plans may be prepared by four-member Committee comprising, Director, and Environment. Director, Urban Development. Director, Industries. Member Secretary, State Pollution Control Board of concerned state. This Committee will also be the monitoring Committee for execution of the action plan. The Committee may be called "River Rejuvenation Committee" (RRC). The RRC will function under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory.
4. The action plan will include components like identification of polluting sources including functioning/ status of STPs/ETPs/CETP and solid waste

management and processing facilities, quantification and characterization of solid waste, trade and sewage generated in the catchment area of polluted river stretch. The action plan will address issues relating to; ground water extraction, adopting good irrigation practices, protection and management of Flood Plain Zones (FPZ), rain water harvesting, ground water charging maintaining minimum environmental flow of river and plantation on both sides of the river. Setting up of biodiversity parks on flood plains by removing encroachment shall also be considered as an important component for river rejuvenation. The action plan should focus on proper interception and diversion of sewage carrying drains to the Sewage Treatment Plant (STP) and emphasis should be on utilization of treated sewage so as to minimize extraction of ground or surface water. The action plan should have speedy, definite or specific timelines for execution of steps. Provision may be made to pool the resources, utilizing funds from State budgets, local bodies, State Pollution Control Board/ Committee and out of Central Schemes

1. Simrar River & Pollution Status .

Simrar river is tributary of Katni River. Its originated from tharka tank . It flows Tharka Tank to chhaperwah Village to Bilgawa, NKJ Katni , Baba Ghat Katni, Mai Ghat and Finally joints into Katni River near Rahul bagh . Simrar river is also known as Mai river. Its travelling distance from tharka tank to katni river is 20.0 K.M. Approx. NKJ Nalla & sum part of City nalla near Rahul bagh Khirahni a joints into Simrar river . Simrar river up stream is a NWMP sampling point of CPCB project. Its also intake well of ordinance factory katni (23.836674, 80.402173). NKJ Nalla Mixed into near Baba Ghat & Rahul bagh nalla , joints into Simrar river near city. finally Simrar river Joints into Katni river .

2. Various River /nallas Joining into River Simrar.

It is to be mentioned here that there is Simrar river flowing in the city area & others 02 no. are tributary Nallas Mixed into Katni river. The details of these River / Nallas are as follows .

1. Simrar River Katni :- It originates from tharka tank in finally joints into Katni river. Total length of the river is Approx.20 KM. while it is only about 2.5 K.M.is the Katni city. The Simrar river Down stream does not has its original water NKJ Nalla & Rahul Bagh nalla mixed is to this River .
2. Rahul Bagh nalla & NKJ nalla are joint to Simrar river near Katni city.

Map showing location River & Nallas:

1. Nalla .
2. River.

Water quality goal:

It is an important aspect for revival of river Simrar in context of its utility as it is Non- perennial river. Also the industrial/sewage effluents generated from the catchment of Simrar river which ultimately joining and contributing to the pollution load into river simrar should be treated to meet the effluent discharge standards stipulated under schedule – of the Environment (protection) rules 1986 and to reuse the treated waste water for cooling / horticulture and other uses and maintain zero discharge at outlet.

Comparative suggested criteria for bathing in river Simrar is given is the following table.

Table 1 Suggested criteria for outdoor bathing.

S. no.	Parameter	Class 'B' Water Quality Criteria for bathing (To be achieved)	Class E water Quality criteria for irrigation
1.	pH	6.5 to 5.5	6.0 to 8.5

2.	Dissolved Oxygen (DO)	5.0 mg/lite	-
3.	BOD	<3.0 mg/Lite	-
4.	Total conform organism MPN/100	<500	-

3.The Basis of proposed action plan for Rejuvenation of River Simrar:-

River Simrar being intermittent River .The action plan for monitoring water quality will be different from that of the perennial river. Presently the Simrar river is carrying mostly domestic waste water generated in the municipal limit of katni . Also various Nallah (02 Nos) which carry the sewage meet to River Simrar at different location .Therefore the action plan for prevention and control of pollution of river Simrar has been drafted based on the direction given by this Hon'ble National green Tribunal.

3. **Field Servey**

The field recon survey is carried out to the see the pollution level and current status of River Simrar. The physical survey is conducted from katni city up to the confluence of Katni river and Simrar river at down stream of katni city . During the field survey the following observation were made .

1. The length of Simrar river from its origin to confluence of Katni river near Rahul Bag is about 20 Km.
2. The following important Nallah/Rives are meeting with the Simrar river within Katni municipal corporation limits.

Table 2. Out falls meeting Simrar river within Katni Nagar Nigam. limits .

Sr./River /Nallah /Wards covered out falls:-

S.No.	River /Nallas	Wards Covered	Out falls
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1	Simrar River.	20,21	06
2	Near Bajrang Mandir .	10	02
3	Near Rahul bag Nallah	15	04

3. There are in total- Main 12 Various sewer out falls meeting into Simrar River directly or through other channels in from of River or Nallah which discharge the sewage in to the River Simrar.

Pollution load in Simrar River other than sewage waste water :-

In the jurisdiction of RO Katni the no. of air polluting unit are more as compare to no. of water pollution units .Only very few units are water polluting and they have well established function ETP/STP and have zero discharge condition laid down in water consent issued in MPPCB for them.It means there is no effluent of any unit is mixing with the water of Simrar River.

4. At present the local farmers along the Simrar River downstream are using the water from the Simrar river for farming since it has high nutrient value it is good for irrigation /farming but on the other side it carries millions of e-coli bacteria with it and hence it is not safe for drinking and irrigation purpose .

3.2 Water characteristic of Simrar River

Table :- Water Quality of Simrar River (month March 2019)

Sr No.	River /Nallah	River in which drain join	ph.	BOD	COD	TDS
1.	Simrar River	Katni River	8.31	2.0	24	242

Proposed Short Term and Long Term Action Plan for Rejuvenation of River Simrar

SI No.	Action plan for rejuvenation of river Simrar	Organization/Agency Responsible for Execution of the Action Plan	Time Target (For Preparation of Scheme)	Present Status
I.	Industrial Pollution Control			
	(a) Inventorisation of the industries in the catchment area of River Simrar covering assessment on aspects relating to Status of Consents under Water & Air Acts and Authorization Effluent Generation. ETP capacities and final mode of effluent discharges	Regional Office M.P.Pollution Control Board Katni	Nil	There is no industries in the catchment area of River Simrar
	(b) Actions against the Identified industries in operation without Consents under Water & Air Acts/Authorisation under the H & OW (M & TM) Rules 2016 as amended.	Regional Office M.P.Pollution Control Board Katni	Nil	Nil
	(c) Action against the industries not installed ETPs or ETPs exist but not operating or ETP outlet or treated effluent is not complying to the effluent discharge standards or norms.	Regional Office M.P.Pollution Control Board Katni	Nil	All are complying
	(d) Action against the red category industries for installation of OCEMS and not transferring data in CPCB and MPPCB	Regional Office M.P.Pollution Control Board Katni	Nil	M/s A.C.C Ltd. Kymore Katni complying this

	(e) Small scale/tiny and service providing units located in urban or semi-urban limits like Dairies. Auto Service Stations to have a minimum provision of O & G traps.	Regional Office M.P.Pollution Control Board Katni	Nil	Nil
	(f) Prohibition of Burning of any kind of waste including agro-residues	Regional Office M.P.Pollution Control Board Katni	Nil	Nil
II	Sewage Treatment & Disposal Plan			
1.	Protection of water quality of Simrar River			
	(a) Laying of sewerage network in the colonies at upstream of Simrar River	Municipal Corporation Katni	18 months	Work in progress
	(b) Trapping of sewage source of Simrar River	Municipal Corporation Katni	18 months	
	(c) Construction of STP – 7.50MLD , near madhav nagar (Zone I) Katni	Municipal Corporation Katni	18 months	
	(d) Plantation in the area	Forest Dept.Katni	18 months	Project work is under process
2.	Completion of Conveyance System for City Sewage			
	(a) For Primary Sewerage: The work related to primary sewer line is under process.	Municipal Corporation Katni	18 months	Scheme is under implementation
	(b) For Secondary Sewerage : The work related to Secondary sewer line is under process.	Municipal Corporation Katni	18 months	
	(c) Sewerage Network to Connect Secondary Sewer Lines falling in Simrar River to Primary Sewerage System	Municipal Corporation Katni	18 months	
3	Interception & Diversion of Sewage with STP in river Simrar			
	(a) Laying of Sewer lines in the area (Zone I: 45 m. width and 85 m.	Municipal Corporation Katni	18 months	

	long)			
	(a) STP near Madhav Nagar Zone I- 7.5 MLD	Municipal Corporation Katni	18 months	
III.	Ground water quality			
	(a) Sealing of contaminated hand pumps and found to be unfit for drinking purpose by the public	Municipal Corporation /Local Bodies/Collector/PHE Department	Within 6 months	
	(b) Supply of potable water to the affected communities in the identified critical blocks	Municipal Corporation /Local Bodies/Collector/PHE Department	Within 6 months	
	(c) Carrying assessment of ground water survey for quality and to identify over exploited and critical blocks.	M.P Ground Water Department	Within 6 months	
	(d) To Conduct periodic surprise inspection of the industry to rule out any forceful injection of industrial effluents into groundwater resources	MPPCB and M.P. Ground Water Department	Within 6 months	
	(e) All the industry should be directed to obtain NOC from the CGWB and action against the units in Operation without obtaining of NOC from CGWA	CGWB/CGWA and M.P. Ground Water Department	Within 6 months	
	(f) To ensure rain water harvesting by the industrial commercial and other institutions and groundwater recharging with only clean water be encouraged by CGWB/CGWA	CGWB/M. P. Ground Water Department/T&CP/Municipality/Local Bodies	Within 6 months	
IV	E-Flow and Irrigation Practices			
	(a) Measurement of flow of Simrar River	M.P. Irrigation Dept./Nagar Nigam/Local Bodies	Regularly	
	(b) To conserve water and good irrigation practices to be	M.P. State Irrigation and Agriculture	Regularly	

	adopted by the farmers by organizing mass awareness programmes and through media in vernacular language	Department		
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