## BEFORE THE NATIONAL GREEN TRIBUNAL AT NEW DELHI

## ORIGINAL APPLICATION NO. 200 OF 2014

IN THE MATTER OF:

M.C. MEHTA

...APPLICANT

**VERSUS** 

UNION OF INDIA & ORS.

... RESPONDENTS

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**NEW DELHI** 

DATED: 24.10.2016

(PRADEEP MISRA & DALEEP DHYANI)
Counsel for U.P. Pollution Control Board.
138, New Lawyers' Chamber,

### BEFORE THE NATIONAL GREEN TRIBUNAL AT NEW DELHI

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# ADDITIONAL SUBMISSIONS ON BEHALF OF U.P. POLLUTION CONTROL BOARD.

1. Whether ZLD can be applied across the Board in respect of all the industries.

It is submitted that ZLD cannot be applied to all the industries in this Segment. There are five categories of industries i.e. Distillery, Tannery, Sugar, Pulp & Paper and Textile wherein it was proposed to apply ZLD. However, Government of India after considering the suggestions/objections of the industries has not applied ZLD to all aforesaid categories of industries.

#### 1. DISTILLERIES

In respect of distilleries it has been provided that they have to become Zero Liquid Discharge. The spent wash after concentration through RO and MEE is used for bio-composting or incinerated through slop boiler. Thus all the distilleries in this segment have become Zero Liquid Discharge as no discharge outside their premises is permitted.

#### 2. SUGAR

In respect of sugar industries MoEF and CC has issued a final notification dated 14.01.2016 laying down norms in respect of

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sugar industries wherein it has been provided that the sugar industries will discharge their treated effluent on land (i.e. for irrigation purposes). Only the limit of final discharge i.e. 200 litres per ton of can crushed has been provided. A copy of the notification is enclosed as **Annexure-1**.

#### 3. TEXTILE

In respect of Textile industries MoEF and CC has issued a final notification dated 10.10.2016 laying down norms in respect of textile industries wherein ZLD has not been insisted upon. It has been provided that CPCB or SPCBs/PCCs with the approval of CPCB may mandate ZLD in large scale units in environmentally sensitive/critical areas. Thus, ZLD is to be applied on case to case basis and not across all the textile units, however the standard for colour has been prescribed as 150 which appears to be on higher side as the color of water with these standards will be brown. However, the State Boards can specify more stringent standards depending upon the quality of recipient system. Thus, UPPCB can make stringent standard as far as colour is concerned. A copy of the notification is enclosed as Annexure-2.

#### 4. PULP & PAPER

In respect of Pulp & Paper, no final notification has been issued and as per the charter the Pulp & Paper units which are using agro base as raw material has to treat black liquor. In Agro based Pulp and Paper units, Zero Liquid Discharge of Black liquor is being strictly enforced with Chemical Recovery Plants (CRP) wherein the black liquor is concentrated in evaporators and the concentrated balck liquor is incinerated to convert it into end product Soda Ash.

Zero Liquid Discharge of Black Liquor in Agro based Pulp and Paper units is being successfully implemented.

#### 5. **TANNERIES**

In respect of Tanneries, MoEF & CC has issued draft notification dated 10.10.2016 inviting comments of the stakeholders with respect to the standards mentioned therein. In the said notification also ZLD is not applied in respect of all the tanneries. However, it has been provided that CPCB or SPCBs/PCCs with the approval of CPCB may mandate ZLD in large scale units in environmentally sensitive/critical areas. It is further submitted that the limits of fixed dissolved solids (FDS) as 2100 and it is difficult to achieve the said standards/limit. A copy of draft notification is enclosed as <a href="mailto:Annexure-3">Annexure-3</a>.

## 2. NOTIFICATION DATED 07.10.2016

Ministry of water resources, river development and Rejuvenation has issued a notification dated 07.10.2016 called as River Ganga Rejuvenation, Protection And Management Authorities Order, 2016 which came into effect from the date of its publication in the official gazette i.e. 07.10.2016. Clause 5 of the said notification provides that every State Government shall endeavor uninterrupted flow of water are maintained at all the times in river Ganga, however, no minimum ecological flow has been mentioned. In Clause 6 it has been provided that no person shall directly or indirectly discharge any treated or untreated sewage or sewage sludge into river Ganga or its tributaries or its banks. Similarly, no person shall discharge directly or indirectly any treated or untreated trade effluent and industries waste, biomedical waste or any hazardous substance into river Ganga or its tributaries or on their banks.

It is submitted that as per the notification no discharge is possible either of treated trade effluent or sewage into river Ganga or any of its tributaries.

Under Section 24 of The Environment (Protection) Act, 1986 any order issued under the EP has overriding effect on other laws. The said Section reads as follows:

"24. Effect of other laws.-(1) Subject to the provisions of sub section (2), the provisions of this Act and the rules or orders made therein shall have effect notwithstanding anything inconsistent therewith contained in any enactment other than this Act.

(2) Where any act or omission constitutes an offence punishable under this Act and also under any other Act then the offender found guilty of such offence shall be liable to be punished under other Act and not under this Act."

Thus, no consent for discharge of any trade effluent can be granted to any industry as River Ganga Rejuvenation, Protection and Management Authorities Order, 2016 will have overriding effect on Water and Air Act. A true copy of the said notification is being enclosed herewith and marked as **Annexure-4**.

- 3. That out of 1072 SPIs the Board has refused consent to 10 units out of which showcause notice has been issued against 4 units, direction/notification has been issued 5 units and legal action is proposed against one unit. Out of 2208 Red category industries, 1616 are in operation and consent has been refused to 85 units. Notices have been issued to them. Out 2290 Orange category of industries 1732 are operational and consent has been refused to 293 units against whom notices have been issued.
- 4. That there are 400 tanneries at Jajmau and 2 at other places in Kanpur. Thus total 402 tanneries are at Kanpur. Out of which 97 industries are having their own chromium recovery unit. State Govt. has taken a decision to install a new CETP of 25 MLD for treating 20MLD waste of tanneries and 5 MLD domestic weste from Jajamau area with 10% dilution by sewage.

Similarly at Unnao there are 45 Tanneries out which 41 tanneries are having their own chromium recovery unit. Out of these 45 units 23 are

at Banthar, which have their own CRU and 14 units which are at UPSIDC Industrial Area-II have CRU. There are 4 other tanneries at Unnao, which are having CRU. The remaining 4 units are not using Chrome Tanning Process.

Besides this, there are 4 other tanneries, 1 at Muzzafarnagar having its own CRU and 3 in District Meerut, which are lying closed from last many years.

It is therefore submitted that all these tanneries which are having their own chromium recovery unit be directed to operate their Chromium Recovery Unit and their final discharge either into CETP or otherwise must conform to the norms fixed by the Board.

- 5. The total discharge in this segment by 1072 SPIs is 220.52 MLD containing a BOD load of 8.13 tons per day. The total sewage load in this segment is 1382.36 MLD which contains the BOD load of 151.42 tons per day.
- 6. Water quality of river Ganga is monitored by the Board at 11 points under National Water Monitoring Programme and at 3 points by the Board at its own resources. Similarly the monitoring of river Ram Ganga is done at one point under National Water Monitoring Programme and at five stations by the Board at its own resources. Similarly water quality of river Kali (East) is done at one location under National Water Monitoring Programme and at nine stations by the resources of the Board. The Board at the points of its monitoring stations have monitored only general parameters and not the heavy metals. However, at the monitoring stations under National Water Monitoring Programme heavy metals are also analyzed. The water quality reports are annexed as **Annexure-5**.

Dated 24/10/2016

(PRADEEP MISRA)
Counsel for U.P. Pollution Control Board.

# Amorone J.

रजिस्ट्री सं॰ डी॰ एल॰-33004/99

REGD. NO. D. L.-33004/99



असाधारण

#### **EXTRAORDINARY**

भाग II—खण्ड 3—उप-खण्ड (i) PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित

#### PUBLISHED BY AUTHORITY

सं. 31] No. 31] नई दिल्ली, शुक्रवार, जनवरी 15, 2016/पौष 25, 1937

NEW DELHI, FRIDAY, JANUARY 15, 2016/ PAUSA 25, 1937

#### पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय अधिसूचना

नई दिल्ली, 14 जनवरी, 2016

सा.का.नि. 35(अ).—केंद्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) ही धारा 6 और धारा 25 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए पर्यावरण (संरक्षण) नियम, 1986 का और संशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात् :-

1. लघु शीर्षक और प्रवर्तन.- (1) इन नियमों का संक्षिप्त नाम पर्यावरण (संरक्षण) संशोधन नियम, 2016 है। (2) ये उनके राजपत्र में प्रकाशन दी तानीख वो प्रवृत्त होंगे।

2. पर्यावरण (संरक्षण) नियम, 1986 ी अनुसूची 1 में,-

(क) क्रम सं. 4 और उससे संबंधित प्रविष्टियों के स्थान पर निम्नलिखित क्रम सं. और प्रविष्टियां रखी जाएंगी, अर्थात् :-

क्रम सं.	उद्दोग	मापदंड	मानक
(1)	(2)	(3)	(4)
"4.	चीनी उद्दोग	बहि:स्राव	सभी सांद्रण मूल्य सिवाय पीएच के मिलीग्राम प्रति लीटर में है
		पीएच	5.5 – 8.5
		कुल निलंबित टोस पदार्थ (रीएसएस), मिलीग्राम प्रति लीटर	100 (भूमि पर निपटान के लिए) 30 (भू-पृष्ठ जल पर निपटान के लिए)
		जैव आक्सीजन मांग, दीओदी, [27° सेंतीग्रेट पर तीन दिन], मिलीग्राम प्रति लीटर	100 (भूमि पर निपटान के लिए) 30 (भू-पृष्ठ जल पर निपटान के लिए)

214 GI/2016

(1)

[PART II—SEC. 3(i)]

·		
	तेल एवं ग्रीज़, मिलीग्राम प्रति	10
	लीटर	
	कुल भंग ठोस पदार्थ (टीडीएस), मिलीग्राम प्रति लीटर	2100
	अंतिम अपशिष्ट्र जल बहि:स्राव सीमा	200 लीटर प्रति टन पेराई किए हुए गन्ने के लिए
	(पेराई किए हुए गन्ने के प्रति टन के	लिए अंतिम उपचारित अपशिष्ट बहि:स्नाव 100 लीटर
	तक निर्वंधित है और छिड़काव ताला	व ओवरफ्लो से अपशिष्ट जल या शीतलन टावर ब्लो
		100 लीटर प्रति टन तक निर्वंधित है तथा इकाई से
	एकल आउटलेट बिन्दु अनुज्ञात है)	
	उत्सर्जन	
	स्टेक से विविक्त पदार्थ उत्सर्जन प्रति	सामान्य क्यूबिक मीटर 150 मिलीग्राम से कम होगा।

4(1) चीनी उद्योगों में उपचारित बहि:स्राव सिंचाई प्रोटोकाल और अपशिष्ट जल संरक्षण या अपशिष्ट जल प्रबंधन

#### (i) विभिन्न मृदा टेक्सचरों के लिए लदाई दरें

क्रम सं.	मृदा टेक्सचर	m³/Ha/Day में लदाई दर
1.	रेतीली	225 से 280
2.	रेतीली दुमट	170 से 225
3.	दुमट	110 से 170
4.	क्ले दुमट	55 से 110
5.	क्ले	35 से 55

#### (ii) अपशिष्ट जल संरक्षण और प्रदूषण नियंत्रण प्रबंधन

- 1. अधिक साधित्र जल के पुन: चक्रण के लिए उपयोगिताओं या अनुषंगी इकाईयों के प्रसंस्करण के लिए शीतलन प्रबंधन और पालिसिंग टैंकों की स्थापना हो।
- 2. अपशिष्ट जल उपचार संयंत्र का पेराई ऋतु आरंभ होने से एक मास पूर्व स्थिरीकरण किया जाएगा और यह पेराई ऋतु के पश्चात् एक मास तक प्रचालन करना जारी रखेगा।
- 3. सिंचाई के लिए कोई मांग नहीं अविध के दौरान उपचारित अपिशष्ट जल को केवल 15 दिन की धारण क्षमता वाले रिसाव रोधी लाइन तालाब में भंडारित किया जाएगा।
- 4. बहावमापी को सभी जल ऐब्स्ट्रैक्शन बिन्दुओं पर प्रतिस्थापित किया जाएगा और ताजे जल के उपयोग को न्यूनतम किया जाएगा।
- 5. समुचित वायु प्रदूषण नियंत्रण युक्तियों को विविक्त पदार्थ उत्सर्जन मानक को पूरा करने के लिए स्थापित किया जाएगा।"।

[फा.सं. क्यू-15017/31/2007-सीपीडब्ल्यू] डा. राशिद हसन, सलाहकार टिप्पण: मूल नियम भारत के राजपत्र, असाधारण, भाग II, खंड 3, उप-खंड (i) में का.आ.सं0 844(अ), तारीख 19 नवंबर, 1986 द्वारा प्रकाशित किए गए थे और तत्पश्चात उनमें निम्नलिखित अधिसूचनाओं के द्वारा संशोधन किए गए:

का.आ. सं. 433(अ), तारीख 18 अप्रैल, 1987; सा.का.नि. सं. 176(अ), तारीख 2 अप्रैल, 1996; सा.का.नि. सं. 97(अ), तारीख 18 फरवरी, 2009; सा.का.नि. सं. 149(अ), तारीख 4 मार्च, 2009; सा.का.नि. सं. 543(अ), तारीख 22 जुलाई, 2009; सा.का.नि. सं. 739(अ), तारीख 9 सितंबर, 2010; सा.का.नि. सं. 809(अ), तारीख 4 अक्तूबर, 2010; सा.का.नि. सं. 215(अ), तारीख 15 मार्च, 2011; सा.का.नि. सं. 221(अ), तारीख 18 मार्च, 2011; सा.का.नि. सं. 354(अ), तारीख 2 मई, 2011; सा.का.नि. सं. 424(अ), तारीख 1 जून, 2011; सा.का.नि. सं. 446(अ), तारीख 13 जून, 2011; सा.का.नि. सं. 152(अ), तारीख 16 मार्च, 2012; सा.का.नि. सं. 266(अ), तारीख 30 मार्च, 2012; सा.का.नि. सं. 277(अ), तारीख 31 मार्च, 2012; सा.का.नि. सं. 820(अ), तारीख 9 नवंबर, 2012; सा.का.नि. सं. 176(अ), तारीख 18 मार्च, 2013; सा.का.नि. सं. 535(अ), तारीख 7 अगस्त, 2013; सा.का.नि. सं. 771(अ), तारीख 11 दिसंबर, 2013; सा.का.नि. सं. 2(अ), तारीख 2 जनवरी, 2014; सा.का.नि. सं. 325(अ), तारीख 7 मई, 2014; सा.का.नि. सं. 612(अ), तारीख 25 अगस्त, 2014; सा.का.नि. सं. 789(अ), तारीख 11 नवंबर, 2014; का.आ. सं. 3305(अ), तारीख 7 दिसंबर, 2015 और अंत में अधिसूचना का.आ. सं. 4(अ), तारीख 1 जनवरी, 2016 द्वारा संशोधन किए गए थे।

# MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE NOTIFICATION

New Delhi, the 14th January, 2016

G.S.R. 35(E).—In exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:-

- 1. Short title and Commencement.- (1) These rules may be called the Environment (Protection) Amendment Rules, 2016.
  - (2) They shall come into force on the date of their publication in the Official Gazette.
- 2. In Schedule-I to the Environment (Protection) Rules, 1986, for serial number 4 and the entries relating thereto, the following serial number and entries shall be substituted, namely:-

S.No.	Industry	Parameters	Standards
(1)	(2)	(3)	(4)
<b>"4.</b>	SUGAR INDUSTRY	EFFLUENTS	All concentration values are in milligramme per litre except for pH
		pH	5.5 - 8.5
		Total Suspended Solids (TSS), milligramme per	100 (for disposal on land)
		litre	30 (for disposal in surface waters)
		Biological Oxgyen Demand,	100 (for disposal on land)

BOD[3 days at 27°C], milligramme per litre	30 (for disposal in surface waters)
Oil & Grease , milligramme per litre	10
Total Dissolved Solids (TDS), milligramme per litre	2100
Final wastewater discharge limit	200 litre per tonne of cane crushed
crushed and Waste water from	ge restricted to 100 litre per tonne of cane in spray pond overflow or cooling tower to 100 litre per tonne of cane crushed and thit is allowed.)
EMISSIONS	
 The particulate matter emiss milligramme per normal cub	sions from the stack shall be less than 150 ic metre

4(1) Treated effluent Irrigation protocol and waste water conservation or waste water management in Sugar industries

(i) Loading rates for different soil textures

S.N	Soil Texture	Loading rate in m³/Ha/Day	
1	Sandy	225 to 280	~~~
2	Sandy loam	170 to 225	
3	Loam	110 to 170	
4	Clay loam	55 to 110	
5	Clay	35 to 55	

(ii) Waste water conservation and pollution control management

- 1. Establishment of cooling arrangement and polishing tank for recycling the excess condensate water to process or utilities or allied units.
- 2. Effluent Treatment Plant to be stabilized one month prior to the start of the crushing season and continue to operate one month after the crushing season.
- During no demand period for irrigation, the treated effluent to be stored in a seepage proof lined pond having 15 days holding capacity only.
- 4. Flow meter to be installed in all water abstraction points and usage of fresh water to be minimized.
- 5. Suitable Air pollution control devices to be installed to meet the particulate matter emission standard.".

[F.No. Q-15017/31/2007- CPW] DR. RASHID HASAN, Advisor

Note: - The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i) *vide* number S.O. 844(E), dated the 19<sup>th</sup> November, 1986 and subsequently amended *vide* the following notifications, namely:-

S. O. 433 (E), dated the 18<sup>th</sup> April 1987; G.S.R. 176(E), dated the 2<sup>nd</sup> April, 1996; G.S.R. 97 (E), dated the 18<sup>th</sup> February, 2009; G.S.R. 149 (E), dated the 4<sup>th</sup> March, 2009; G.S.R. 543(E), dated the 22<sup>nd</sup> July, 2009; G.S.R. 739 (E), dated the 9<sup>th</sup> September, 2010; G.S.R. 809(E), dated the 4<sup>th</sup> October, 2010, G.S.R. 215 (E), dated the 15<sup>th</sup> March, 2011; G.S.R. 221(E), dated the 18<sup>th</sup> March, 2011; G.S.R. 354 (E), dated the 2<sup>nd</sup> May, 2011; G.S.R. 424 (E), dated the 1<sup>st</sup> June, 2011; G.S.R. 446 (E), dated the 13<sup>th</sup> June, 2011; G.S.R. 152 (E), dated the 16<sup>th</sup> March, 2012; G.S.R. 266(E), dated the 30<sup>th</sup> March, 2012; G.S.R. 277 (E), dated the 31<sup>st</sup> March, 2012; G.S.R. 820(E), dated the 9<sup>th</sup> November, 2012; G.S.R. 176 (E), dated the 18<sup>th</sup> March, 2013; G.S.R. 535(E), dated the 7<sup>th</sup> August, 2013; G.S.R. 771(E), dated the 11<sup>th</sup> December, 2013;

G.S.R. 2(E), dated the 2<sup>nd</sup> January, 2014; G.S.R. 229 (E), dated the 28<sup>th</sup> March, 2014; G.S.R. 232(E), dated the 31<sup>st</sup> March, 2014; G.S.R. 325(E), dated the 07<sup>th</sup> May, 2014, G.S.R. 612, (E), dated the 25<sup>th</sup> August 2014; G.S.R. 789(E), dated the 11<sup>th</sup> November, 2014; S.O. 3305(E), dated the 7<sup>th</sup> December, 2015 and lastly amended *vide* notification S.O. 4(E), dated the 1<sup>st</sup> January, 2016.

Anrabuel

रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D. L.-33004/99



#### असाधारण

#### **EXTRAORDINARY**

भाग II—खण्ड 3—उप-खण्ड (i) PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित

#### PUBLISHED BY AUTHORITY

सं. 719]

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No. 719]

NEW DELHI, MONDAY, OCTOBER 10, 2016/ASVINA 18, 1938

#### पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

#### अधिसूचना

नई दिल्ली, 10 अक्तूबर, 2016

सा.का.नि. 978(अ).—केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 6 और धारा 25 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए पर्यावरण (संरक्षण) नियम, 1986 का और संशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात् :--

- 1. (1) इन नियमों का संक्षिप्त नाम पर्यावरण (संरक्षण) पाँचवाँ संशोधन नियम, 2016 है।
- (2) ये उनके राजपत्र में प्रकाशन की तारीख से प्रवृत्त होंगे।
- 2. पर्यावरण (संरक्षण) नियम, 1986 की अनुसूची 1 में,--
  - (क) क्रम सं. 6 और उससे संबंधित प्रविष्टियों के स्थान पर निम्नलिखित क्रम सं. और प्रविष्टियां रखी जाएंगी, अर्थात् :--

#### कपड़ा उद्योग से बहिस्रावों के निस्सारण के लिए मानक

क्रम सं.	उद्योग	पैरामीटर	मानक (निपटान की सभी विधियों को लागू <sup>*</sup> )
1	2	3	4
"6	सभी एकीकृत कपड़ा इकाइयां, सूती / ऊनी /	उपचारित बहिस्राव	पीएच, अरंजक और एसएआर के सिवाय मिलीग्राम/लीटर में अधिकतम अनुज्ञेय मान
	कारपेट / पालिस्टर	पीएच	6.5 से 8.5

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क्रम सं.	उद्योग	पैरामीटर	मानक
			(निपटान की सभी विधियों को लागू <sup>*</sup> )
	इकाइयां, इकाइयां	निलंबित ठोस	100
	जिनमें मुद्रण/ रंगाई / विरंजन प्रक्रियाएं हैं या	रंजक, पीसीयू (प्लेटिनम कोबाल्ट	150
	विनिर्माण और	यूनिट)	
	परिधान इकाइयां	जैव-रसायन ऑक्सीजन मांग [2र्7º सेंटीग्रेड पर 3 दिन] (बीओडी₃)	30
		तेल और ग्रीस	10
		रासायनिक ऑक्सीजन मांग (सीओडी)	250
		कुल क्रोमियम (Cr के रूप में)	2.0
		सल्फाइड (S के रूप में)	2.0
		फेनोलिक यौगिक (C₅H₅OH के रूप में)	1.0
		कुल भंग ठोस पदार्थ अकार्बनिक (टीडीएस)	2100 **
		सोडियम अवशोषण अनुपात (एसएआर)	26 **
	<u> </u>	अमोनिकल नाइट्रोजन (N के रूप में)	50

#### टिप्पण :

- 1. \* निदयों और झीलों में सीधे निपटान की दशा में, केंद्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) या राज्य प्रदूषण नियंत्रण बोर्ड/ प्रदूषण नियंत्रण समितियां (एसपीसीबी / पीसीसी), प्राप्त करने वाले जल स्रोत की क्वालिटी के आधार पर अधिक कठोर मानक निर्दिष्ट कर सकेंगी।
- 2. \*\*टीडीएस और एसएआर के मानक समुद्र में समुचित समुद्री आउट फाल के माध्यम से निपटान की दशा में लागू नहीं होंगे।
- 3. उपचारित बहिस्नावों का परिवेशीय वातावरण में बहिस्नाव केवल औद्योगिक प्रक्रियाओं / सिंचाई में पुन: इस्तेमाल के विकल्पों के समाप्त हो जाने पर, ताजे जल के उपयोग को न्यूनतम करने के लिए, अनुज्ञात किया जाएगा।
- 4. सामान्य बिहस्राव उपचार संयंत्र (सीईटीपी) के साथ उपाबद्ध सभी कपड़ा इकाई को पर्यावरण (संरक्षण) नियम, 1986 की अनुसूची – 1 में क्रम सं. 55 पर यथा विनिर्दिष्ट इनलेट और उपचारित बिहस्राव क्वालिटी मानकों को हासिल करेगी और वह संयुक्त रूप से और पृथक् रूप से अनुपालना का सुनिश्चय करने के लिए उत्तरदायी होगी।
- 5. सूक्ष्म, लघु और मध्यम उपक्रम विकास अधिनियम, 2006 के अनुसार एकल सूक्ष्म, लघु और मध्यम उपक्रम पूर्वोकत मानकों को पूरा करेंगे।
- 6. एकल बड़े पैमाने की इकाइयां पूर्वोक्त विनिर्दिष्ट मानकों को पूरा करेंगी ; तथापि, सीपीसीबी या एसपीसीबी / पीसीसी सीपीसीबी के अनुमोदन से, पारिस्थितिकी रूप से संवेदनशील / महत्वपूर्ण क्षेत्रों में शून्य तरल बहिस्राव (ZLD) का आदेश दे सकेंगे।
- 7. उपचारित बहिस्राव के संबंध में टीडीएस मानक 2100 मिलीग्राम प्रति लीटर होंगे ; तथापि, उन मामलों में जहां इनटेक जल में टीडीएस 1100 मिलीग्राम प्रति लीटर से अधिक हैं, प्रति लीटर 1000 मिलीग्राम प्रति लीटर तक के अधिकतम

अभिदाय को अनुज्ञात किया जाएगा, किंतु उपचारित बहिस्राव में अधिकतम टीडीएस मानक 3100 मिलीग्राम प्रति लीटर से अधिक नहीं होंगे ।"।

(ख) क्रम सं. 7 और क्रम सं. 92 तथा उनसे संबंधित प्रविष्टियों का लोप किया जाएगा ;

[फा. सं. क्यू-15017/30/2004-सीपीडब्ल्यू]

डा. राशिद हसन, सलाहकार

टिप्पण : मूल नियम भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (i) में का.आ. 844(अ) तारीख 19 नवंबर, 1986 द्वारा प्रकाशित किए गए थे और निम्नलिखित अधिसूचनाओं द्वारा उनका संशोधन किया गया है, अर्थात् :--

का.आ. 433(अ), तारीख 18 अप्रैल 1987; सा.का.नि. 176(अ), तारीख 2 अप्रैल, 1996; सा.का.नि. 97(अ), तारीख 18 फरवरी, 2009; सा.का.नि. 149(अ), तारीख 4 मार्च, 2009; सा.का.नि. 543(अ), तारीख 22 जुलाई, 2009; सा.का.नि. 739(अ), तारीख 9 सितम्बर, 2010; सा.का.नि. 809(अ), तारीख 4 अक्टूबर, 2010; सा.का.नि. 215(अ), तारीख 15 मार्च, 2011; सा.का.नि. 221(अ), तारीख 18 मार्च, 2011; सा.का.नि. 354(अ), तारीख 2 मई, 2011; सा.का.नि. 424(अ), तारीख 1 जून, 2011; सा.का.नि. 446(अ), तारीख 13 जून, 2011; सा.का.नि. 152(अ), तारीख 16 मार्च, 2012; सा.का.नि. 266(अ), तारीख 30 मार्च, 2012; और सा.का.नि. 277(अ), तारीख 31 मार्च, 2012; और सा.का.नि. 820(अ), तारीख 9 नवंबर, 2012; सा.का.नि. 176(अ), तारीख 18 मार्च, 2013; सा.का.नि. 535(अ), तारीख 7 अगस्त, 2013; सा.का.नि. 771(अ), तारीख 11 दिसंबर, 2013; सा.का.नि. 2(अ), तारीख 2 जनवरी, 2014; सा.का.नि. 229(अ), तारीख 28 मार्च, 2014; सा.का.नि. 232(अ), तारीख 31 मार्च, 2014; सा.का.नि. 325(अ), तारीख 07 मई, 2014; सा.का.नि. 612(अ), तारीख 25 अगस्त 2014; सा.का.नि. 789(अ), तारीख 11 नवंबर 2014; का.आ. 3305(अ), तारीख 7 दिसंबर, 2015; का.आ. 4(अ), तारीख 1 जनवरी 2016; सा.का.नि. 35(अ), तारीख 14 जनवरी 2016; सा.का.नि. 281(अ), तारीख 7 मार्च, 2016; सा.का.नि. 496(अ), तारीख 09 मई, 2016 और अंतिम संशोधन अधिसूचना सं. सा.का.नि. 497 (अ), तारीख 10 मई, 2016 द्वारा किया गया।

# MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE NOTIFICATION

New Delhi, the 10th October, 2016

G.S.R. 978(E).—In exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:-

- (1) These rules may be called the Environment (Protection) Fifth Amendment Rules, 2016.
  - (2) They shall come into force on the date of their publication in the Official Gazette.
- 2. In the Environment (Protection) Rules, 1986, in Schedule-I.-
  - (a) for serial number 6 and the entries relating thereto, the following serial number and entries shall be substituted, namely:-

### STANDARDS FOR DISCHARGE OF EFFLUENTS FROM TEXTILE INDUSTRY

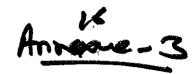
S.	Industry	Parameter	Standard
No.			(applicable for all modes of disposal*)
1	2	3	4
"6	All Integrated textile units, units of Cotton / Woollen / Carpets / Polyester, Units having Printing / Dyeing /	TREATED EFFLUENTS	Maximum concentration values in mg/l except for pH, colour, and SAR
		pН	6.5 to 8.5
	Bleaching process or	Suspended Solids	100
	manufacturing and Garment units.	Cofour, P.C.U (Platinum Cobalt Units)	150
. :		Bio-Chemical Oxygen Demand [3days at 27°C] (BOD <sub>3</sub> )	30
		Oil and Grease	10
		Chemical Oxygen Demand (COD)	250
l		Total Chromium as (Cr)	2.0
.		Sulphide (as S)	2.0
		Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	1.0
		Total Dissolved Solids , Inorganic (TDS)	2100**
		Sodium Absorption Ratio (SAR)	26**
		Ammonical Nitrogen (as N)	50

#### NOTES:

- \*In case of direct disposal into rivers and lakes, the Central Pollution Control Board (CPCB) or State Pollution
  Control Boards / Pollution Control Committees (SPCBs / PCCs) may specify more stringent standards
  depending upon the quality of the recipient system.
- 2. \*\*Standards for TDS and SAR shall not be applicable in case of marine disposal through proper marine outfall.
- 3. The treated effluent shall be allowed to be discharged in the ambient environment only after exhausting options for reuse in industrial process / irrigation in order to minimise freshwater usage.
- 4. Any textile unit attached with the Common Effluent Treatment Plant (CETP) shall achieve the inlet and treated effluent quality standards as specified in serial number 55 of Schedule-I to the Environment (Protection) Rules, 1986 and shall also be jointly and severally responsible for ensuring compliance.
- 5. The standalone Micro, Small and Medium Enterprises (MSMEs) as per the MSME Development Act, 2006 shall meet the values specified above.
- 6. The standalone large scale units shall meet the values specified above; however, CPCB or SPCBs / PCCs with the approval of CPCB, may mandate Zero Liquid Discharge in Large scale units in environmentally sensitive / critical areas.
- 7. The TDS value with respect to treated effluent shall be 2100 milligramme per litre; however, in case where TDS in intake water is above 1100 milligramme per litre, a maximum contribution up to 1000 milligramme per litre shall be permitted provided the maximum value of 3100 milligramme per litre is not exceeded in the treated effluent."
- (b) serial numbers 7 and 92 and the entries relating thereto, shall be omitted;

[F. No. Q-15017/30/2004-CPW]] DR. RASHID HASAN, Adviser Note: The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i), vide number S.O. 844 (E), dated the 19th November, 1986 and subsequently amended vide the following notifications,

S.O. 433 (E), dated the 18th April 1987; G.S.R. 176(E), dated the 2nd April, 1996; G.S.R. 97 (E), dated the 18th February, 2009; G.S.R. 149 (E), dated the 4th March, 2009; G.S.R. 543(E), dated the 22nd July, 2009; G.S.R. 739 (E), dated the 9th September, 2010; G.S.R. 809(E), dated, the 4th October, 2010, G.S.R. 215 (E), dated the 15th March, 2011; G.S.R. 221(E), dated the 18th March, 2011; G.S.R. 354 (E), dated the 2nd May, 2011; G.S.R. 424 (E), dated the 1st June, 2011; G.S.R. 446 (E), dated the 13th June, 2011; G.S.R. 152 (E), dated the 16th March, 2012; G.S.R. 266(E), dated the 30th March, 2012; and G.S.R. 277 (E), dated the 31st March, 2012; and G.S.R. 820(E), dated the 9th November, 2012; G.S.R. 176 (E), dated the 18th March, 2013; G.S.R. 535(E), dated the 7th August, 2013; G.S.R. 771(E), dated the 11th December, 2013; G.S.R. 2(E), dated the 2<sup>nd</sup> January, 2014; G.S.R. 229 (E), dated the 28<sup>th</sup> March, 2014; G.S.R. 232(E), dated the 31<sup>st</sup> March, 2014; G.S.R. 325(E), dated the 07th May, 2014, G.S.R. 612, (E), dated the 25th August 2014; G.S.R. 789(E), dated the 11th November 2014; S.O. 3305(E), dated the 7th December, 2015; S.O.4(E), dated the 1st January 2016; G.S.R. 35(E), dated the 14th January 2016; G.S.R. 281 (E), dated the 7th March, 2016; G.S.R. 496(E), dated 09th May, 2016 and lastly amended vide notification G.S.R.497(E), dated 10th May, 2016.



#### DRAFT/10th October, 2016

The following draft notification, which the Central Government proposes to issue under the Environment (Protection) Act, 1986 (29 of 1986), is hereby published for the information of public likely to be affected thereby; and the notice is hereby given that the said draft notification shall be taken into consideration on or after the expiry of a period of thirty days from the date on which this draft has been made available to public through this website. The comments may be sent to Member Secretary, CPCB and Mr. Dinesh Runiwal, JD (CP) at adaba.cpcb@nic.in and d.runiwal@gov.in

# [To be published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i)] GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE NOTIFICATION

New Delhi, the ....., 2016

G.S.R.— In exercise of the powers conferred by Sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:-

- 1. (1) These rules may be called the Environment (Protection)--- Amendment Rules, 2016
  - (2) They shall come into force on the date of their publication in the Official Gazette.
- 2. In the Environment (Protection) Rules, 1986, in Schedule-I,
  - a) the serial number 16 and the entries relating thereto shall be omitted, and
  - b) for serial number 57 and the entries relating thereto, the following serial number serial number and entries shall be substituted, namely:-

## STANDARDS FOR DISCHARGE OF EFFLUENTS FROM TANNERY INDUSTRY

S. No.	Industry	Parameter	Standards
			(applicable for all modes of disposal*)
1	2	3	4
57	Tanneries	Treated Effluent	Max. permissible values
			(in mg/l, except for pH)
		pH	6 to 9
	,	Biochemical Oxygen Demand	
		(BOD₃ at 27 °C)	30
	·	Chemical Oxygen Demand (COD)	250
		Total Suspended Solids (TSS)	100
		Fixed Dissolved Solids (FDS)	2100**
		Total Chromium	2
		Sulphides (as S)	2
		Ammonical-Nitrogen (as N)	50
ţ		Total Kjeldahl Nitrogen (TKN)	50
:	· .	Notes:	

	• •
1. *In case of direct disposal into rivers and lakes, the CP	OCB or SPCB / PCC
may specify more stringent standards depending upo recipient system.	n the quality of the
2. **Standards for FDS shall not be applicable in case through proper marine outfall.	of marine disposal
3. The treated effluent shall be allowed to be discharge	ged in the ambient
environment only after exhausting options for reuse in irrigation in order to minimise freshwater usage.	industrial process /
4. Any tannery unit attached with the CETPs shall act treated effluent quality standards as per notification	nieve the inlet and
January 2016 of Environment (Protection) Rules, 1986	and shall also be
jointly and severally responsible for ensuring compliance.	e.
<ul><li>5. The standalone MSMEs shall meet prescribed discharg</li><li>6. The standalone large scale units shall meet prescribed</li></ul>	e norms.
however, CPCB or SPCB / PCC with the approval of CF	discharge norms;
ZLD in Large scale units in environmentally sensitive / c	ritical areas
7. The TDS limit with respect to treated effluent shall be	2100 milligramme
per litre; however, in case where TDS in intake war	ter is above 1100
milligramme per litre, a maximum contribution up to 100	00 milligramme per
litre shall be permitted provided the maximum limit of	3100 milligramme
per litre is not exceeded in the treated effluent.	
8. In case of discharge of treated effluent on land for irriga	tion, the impact on
soil and groundwater quality shall be monitored twice	a year (pre- and
post- monsoon) by the tannery unit. The mixing ratio wit	th sewage shall be
 prescribed by SPCB for combined discharge of effluent	and sewage.
Wastewater generation (per tonne of hide processed):	
-Raw-to-Wet Blue process	18 m³/ton
-Wet Blue-to-Finished process	10 m³/ton
 -Raw-to- Finished process	28 m³/ton

[F. NO. Q-15017/30/2004-CPW]

(Dr. Rashid Hasan) Adviser

**Note:-** The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3,Sub-section (i), *vide* number S.O. 844 (E), dated the 19<sup>th</sup> November, 1986 and subsequently amended *vide* the following notifications, namely:-

S.O. 433 (E), dated the 18<sup>th</sup> April 1987; G.S.R. 176(E), dated the 2<sup>nd</sup> April, 1996; G.S.R. 97 (E), dated the 18<sup>th</sup> February, 2009; G.S.R. 149 (E), dated the 4<sup>th</sup> March , 2009; G.S.R. 543(E), dated the 22<sup>nd</sup> July,2009; G.S.R. 739 (E), dated the 9<sup>th</sup> September, 2010; G.S.R. 809(E), dated, the 4<sup>th</sup> October, 2010, G.S.R. 215 (E), dated the 15<sup>th</sup> March, 2011; G.S.R. 221(E), dated the 18<sup>th</sup> March, 2011; G.S.R. 354 (E), dated the 2<sup>nd</sup> May, 2011; G.S.R. 424 (E), dated the 1<sup>st</sup> June, 2011; G.S.R. 446 (E), dated the 13<sup>th</sup> June, 2011; G.S.R. 152 (E), dated the 16<sup>th</sup> March,



2012; G.S.R. 266(E), dated the 30<sup>th</sup> March, 2012; and G.S.R. 277 (E), dated the 31<sup>st</sup> March, 2012; and G.S.R. 820(E), dated the 9<sup>th</sup> November, 2012; G.S.R. 176 (E), dated the 18<sup>th</sup> March, 2013; G.S.R. 535(E), dated the 7<sup>th</sup> August, 2013; G.S.R. 771(E), dated the 11<sup>th</sup> December, 2013; G.S.R. 2(E), dated the 2<sup>nd</sup> January, 2014; G.S.R. 229 (E), dated the 28<sup>th</sup> March, 2014; G.S.R. 232(E), dated the 31<sup>st</sup> March, 2014; G.S.R. 325(E), dated the 07<sup>th</sup> May, 2014, G.S.R. 612, (E), dated the 25<sup>th</sup> August 2014; G.S.R. 789(E), dated the 11<sup>th</sup> November 2014; S.O. 3305(E), dated the 7<sup>th</sup> December, 2015; S.O.4(E), dated the 1<sup>st</sup> January 2016; G.S.R. 35(E), dated the 14<sup>th</sup> January 2016; G.S.R. 281 (E), dated the 7<sup>th</sup> March, 2016; G.S.R. 496(E), dated 09<sup>th</sup> May, 2016 and lastly amended vide notification G.S.R.497(E), dated 10<sup>th</sup> May, 2016.

REGD. NO. D. L.-33004/99

रजिस्ट्री सं॰ डी॰ एल॰-33004/99

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#### असाधारण EXTRAORDINARY

भाग II—खण्ड 3—उप्र-खण्ड (ii) PART II—Section 3—Sub-section (ii)

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NEW DELHI, FRIDAY, OCTOBER 7, 2016/ASVINA 15, 1938

#### जल संसाधन, नदी विकास और गंगा संरक्षण मंत्रालय

#### अधिसूचना

नई दिल्ली, 7 अक्तूबर, 2016

का.आ. 3187(अ).—गंगा नदी में पर्यावरणीय प्रदूषण की रोकथाम, नियंत्रण एवं उपशमन और जल का सतत पर्याप्त प्रवाह सुनिश्चित करने के उपाय करने तथा इससे संबंधित अथवा प्रासंगिक मामलों हेतु केन्द्र, राज्य और जिला स्तर पर प्राधिकरणों का गठन करना जरूरी है, जिससे गंगा नदी का पुनरुद्धार करके इसे इसकी प्राकृतिक एवं मूल स्थिति में लाया जा सके।

जहां, गंगा नदी भौगोलिक, ऐतिहासिक, सामाजिक-सांस्कृतिक एवं आर्थिक कारणों से अद्वितीय महत्व की है जो इसे राष्ट्रीय नदी का दर्जा देता है;

और जहां, गंगा नदी तेजी से हो रहे शहरीकरण एवं औद्योगिकीकरण के कारण सीवेज, औद्योगिक बहिस्राव एवं अन्य प्रदूषकों के बढ़ने के कारण गंभीर स्थिति में है;

और जहां, प्रतिस्पर्धी मांग को पूरा करने की आवश्यकता को ध्यान में रखते हुए जनसंख्या, शहरीकरण, औद्योगिकीकरण, अवसंरचना विकास में वृद्धि के कारण सिंचाई, पेयजल आपूर्ति, औद्योगिक उपयोग एवं जल विद्युत के लिए गंगा नदी के जल की मांग बढ़ रही है;

और जहां, अविलंब निम्नलिखित कार्रवाई किए जाने की आवश्यकता है-----

- (ए) व्यापक आयोजना एवं प्रबंधन के लिए इस अंतर्राज्यीय एवं अंतर्क्षेत्रीय समन्वय को प्रोत्साहित करने के लिए नदी बेसिन दृष्टिकोण अपनाकर गंगा नदी में प्रदूषण में प्रभावी कमी तथा नदी का संरक्षण सुनिश्चित करना;
- (बी) नदी की पूरी लंबाई के क्षेत्र में सतत प्रवाह सुनिश्चित करने के उद्देश्य से गंगा नदी में पारिस्थितिकीय प्रवाह बनाए रखनी जिससे इसकी पारिस्थितिकीय समग्रता को पुनः स्थापित किया जा सके और यह स्वयं अपना पुनरूद्धार करने में सक्षम हो सके;

- (सी) गंगा नदी के आस-पास के क्षेत्रों में प्रतिबंध लगाना जहां उद्योग, प्रचालन अथवा प्रक्रियांए अथवा उद्योगों का वर्ग, प्रचालन अथवा प्रक्रियांए नहीं की जाएंगी अथवा कुछ सुरक्षा उपायों के साथ की जाएंगी;
- (डी) किसी भवन, संग्रंत्र, उपकरणों, मशीनों, निर्माण अथवा अन्य प्रक्रियाओं, सामग्री अथवा पदार्थों के निरीक्षण का प्रावधान करना और ऐसे प्राधिकरणों, अधिकारियों तथा व्यक्तियों को गंगा नदी में पर्यावरणीय प्रदूषण की रोकथाम, नियंत्रण एवं कमी लाने के लिए कदम उठाने के निर्देश देना जैसा कि यह आवश्यक समझे।
- (ई) गंगा नदी में पर्यावरणीय प्रदूषण की समस्या से संबंधित अन्वेषण एवं अनुसंधान करना एवं प्रायोजित करना और पर्यावरणीय प्रदूषण फैलाने वाली संभावित निर्माण प्रक्रियाओं, सामग्री तथा पदार्थों की जांच करना;
- (एफ) गंगा नदी में पर्यावरणीय प्रदूषण से संबंधित मामलों के संदर्भ में सूचना एकत्रित एवं प्रसारित करना और पर्यावरणीय प्रदूषण की रोकथाम, नियंत्रण एवं कमी लाने के संबंध में मैनुअल, कोड अथवा गाइड तैयार करना;

और जहां, गंगा के पुनरुद्धार के लिए समान रूप से उत्तरदायी होने के कारण संबंधित राज्य सरकारों को राज्य स्तर पर नदी संरक्षण क्रियाकलापों का समन्वय एवं कार्यान्वयन करना होगा और उनके राज्य में गंगा नदी के व्यापक प्रबंधन के लिए कदम उठाने होंगे;

और जहां, गंगा नदीं में प्रदूषण को समाप्त करने और सरक्षण, सुरक्षा और प्रबंधन के लिए इस आदेश के अंतर्गत केंद्र सरकार और राज्य सरकारों तथा प्राधिकरणों के सामूहिक प्रयासों को सुदृढ़ करने के लिए आयोजना, वित्त पोषण, निगरानी और समन्वय की आवश्यकता होगी।

अब, इसलिए, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) (इसके बाद उक्त अधिनियम कहा गया है) की धारा 3 तथा 4, 5, 9,10, 11,19, 20 और 23 की उपधारा (2) तथा (3) के अनुच्छेद (i), (ii), (v), (vi), (vii), (viii), (ix), (x), (xii) तथा (xiii) के साथ उपधारा (1) द्वारा दी गई शक्तियों का प्रयोग करते हुए और पूर्ववर्ती पर्यावरण एवं वन मंत्रालय में भारत सरकार की 30 सितंबर 2009 की अधिसूचना संख्या का.आ. 1111(अ), 30 सितंबर 2009 की अधिसूचना संख्या का.आ. 2539(अ), 30 सितंबर 2009 की अधिसूचना संख्या का.आ. 2493(अ), 30 सितंबर 2009 की अधिसूचना संख्या का.आ. 2495(अ) और 8 फरवरी 2010 की का.आ. 287(अ) और जल संसाधन, नदी विकास और गंगा संरक्षण में 29 सितंबर 2014 की का.आ. संख्या 2539(अ) का अधिक्रमण करते हुए, ऐसे अधिक्रमण से पहले किए गए अथवा छोड़े गए कार्यों को छोड़कर, केन्द्र सरकार एतद्वारा-

- (i) ऐसी शक्तियों तथा कार्यों को करने के उद्देश्य से इस आदेश में उल्लिखित नामों से प्राधिकरण गठित करती है (उक्त अधिनियम की धारा 5 के तहत निर्देश जारी करने की शक्ति के साथ और इस आदेश में उल्लिखित मामलों के संदर्भ में उपाय करने के लिए);
- (ii) केन्द्र सरकार के पर्यवेक्षण एवं नियंत्रण और इस आदेश के प्रावधानों के शर्ताधीन इस आदेश में विनिर्दिष्ट प्राधिकारी अथवा प्राधिकारियों को निर्देश देती है कि वे इस आदेश में उल्लिखित शक्तियों का प्रयोग अथवा कार्यों का निष्पादन अथवा उपाय करेंगे जैसे कि इन प्राधिकारियों को उक्त अधिनियम द्वारा इन शक्तियों का प्रयोग करने, इन कार्यों का निष्पादन करने अथवा ऐसे उपाय करने का अधिकार दिया गया है;
- (iii) यह निर्देश देती है कि उक्त अधिनियम के किसी प्रावधान के तहत गंगा नदी और उससे जुड़े मामलों के संबंध में इसकी सभी शक्तियों एवं कार्यों (धारा 3 की उपधारा (3) के तहत किसी प्राधिकरण के गठन की शक्ति और उक्त अधिनियम की धारा 6 और 25 के तहत नियम बनाने को छोड़कर) का प्रयोग इस आदेश में विनिर्दिष्ट शर्तों एवं सीमाओं के शर्ताधीन इस आदेश द्वारा गठित प्राधिकरणों और इस आदेश में विनिर्दिष्ट अधिकारियों द्वारा भी किया जा सकेगा।
- 1. लघु शीर्षक एवं प्रारंभ- (1) इस आदेश को गंगा नदी (संरक्षण, सुरक्षा एवं प्रबंधन) प्राधिकरण आदेश, 2016 कहा जाए।
- (2) यह सरकारी राजपत्र में प्रकाशन की तारीख़ से लागू होगा।
- 2. आदेश को लागू करने का क्षेत्र- यह आदेश गंगा नदी में प्रदूषण की प्रभावी कमी तथा संरक्षण, सुरक्षा एवं प्रबंधन के उद्देश्य से गंगा नदी बेसिन वाले राज्यों अर्थात हिमाचल प्रदेश, उत्तराखंड, उत्तर प्रदेश, मध्य प्रदेश, छत्तीसगढ़, बिहार, झारखंड,

(ञ) वनों के प्रधान मुख्य संरक्षक, राज्य सरकार (नाम)
-सदस्य, पदेन
(ट) सरकार (नाम) द्वारा संबंधित क्षेत्रों से पांच विशेषज्ञों से अधिक
मनोनीत नहीं किए जाएंगे।-सदस्य

[फा. सं. स्था.-01/2016-17/111/एनएमसीजी]

संजय कुंडू, संयुक्त सचिव

# MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT, AND GANGA REJUVENATION NOTIFICATION

New Delhi, the 7th October, 2016

S.O. 3187(E).—Whereas it is necessary to constitute authorities at Central, State and District levels to take measures for prevention, control and abatement of environmental pollution in River Ganga and to ensure continuous adequate flow of water so as to rejuvenate the River Ganga to its natural and pristine condition and for matters connected therewith or incidental thereto;

And whereas the River Ganga is of unique importance ascribed to reasons that are geographical, historical, socio-cultural and economic giving it the status of a National River;

And whereas the River Ganga has been facing serious threat due to discharge of increasing quantities of sewage, trade effluents and other pollutants on account of rapid urbanisation and industrialisation;

And whereas, the demand for water of River Ganga is growing for irrigation, drinking water supplies, industrial use and hydro-power due to increase in population, urbanisation, industrialisation, infrastructural development and taking into account the need to meet competing demands;

And whereas there is an urgent need-

- (a) to ensure effective abatement of pollution and rejuvenation of the River Ganga by adopting a river basin approach to promote inter-State and inter-sectoral co-ordination for comprehensive planning and management;
- (b) to maintain ecological flows in the River Ganga with the aim of ensuring continuous flows throughout its length so as to restore its ecological integrity that enables it to self rejuvenate;
- (c) for imposing restrictions in areas abutting the River Ganga in what industries, or crations or processes shall not be carried out or shall be carried out subject to certain safeguards;
- (d) to make provision for inspection of any premises, plants, equipment, machineries, manufacturing or other processes, materials or substances and giving direction to the authorities, officers and persons as may be necessary to take steps, for prevention, control and abatement of environmental pollution in the River Ganga;
- (e) for carrying out and sponsoring investigations and research relating to problems of environmental pollution in the River Ganga and examination of such manufacturing processes, material and substance as are likely to cause environmental pollution;
- (f) for collection and dissemination of information in respect of matters relating to environmental pollution in the River Ganga and preparation of manual, codes or guide relating to the prevention, control and abatement of environmental pollution;

And whereas the State Governments concerned, being equally responsible for Ganga rejuvenation, are required to coordinate and implement the river conservation activities at the State level, and to take steps for comprehensive management of the River Ganga in their States; And whereas it is required to have planning, financing, monitoring and coordinating authorities for strengthening the collective efforts of the Central Government and the State Governments and authorities under this Order for effective abatement of pollution and rejuvenation, protection and management of the River Ganga;

Now, therefore, in exercise of the powers conferred by sub-section (1), read with clauses (i), (ii), (v), (vii), (viii), (ix), (x), (xii) and (xiii) of sub-section (2) and (3) of section 3 and sections 4,5,9,10,11, 19, 20 and 23 of the Environment (Protection) Act, 1986 (29 of 1986) (hereinafter referred to as the Act) and in supersession of the notifications of the Government of India in the erstwhile Ministry of Environment and Forests numbers S.O.1111(E), dated the 30<sup>th</sup> September, 2009, S.O. 2493 (E), dated the 30<sup>th</sup> September, 2009, S.O. 2494 (E), dated the 30<sup>th</sup> September 2009, S.O. 2495 (E), dated the 30<sup>th</sup> September 2009, S.O. 287 (E) dated the 8<sup>th</sup> February, 2010 and in the Ministry of Water Resources, River Development and Ganga Rejuvenation No. S.O. 2539 (E), dated the 29<sup>th</sup> September 2014, except as respects things done or omitted to be done before such supersession, the Central Government hereby-----

(i)constitutes the authorities by the names mentioned in this Order for the purpose of exercising and performing such of the powers and functions (including the power to issue directions under section 5 of the Act and for taking measures with respect to the matters as mentioned in this Order;

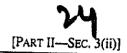
(ii))directs, subject to the supervision and control of the Central Government and the provisions of this Order, such authority or authorities as specified in this Order that shall exercise the powers or perform the functions or take the measures so mentioned in this Order as if such authorities had been empowered by the Act to exercise those powers, perform those functions, or take such measures;

(iii)directs that all its powers and functions (except the power to constitute any authority under sub-section (3) of section 3 and to make rules under the sections 6 and 25 of the Act) under any provision of the Act shall, in relation to River Ganga and matters connected therewith, be exercisable and discharged also by the authorities constituted by this Order and by the officers specified in this Order, subject to such conditions and limitations and to the extent as specified in this Order.

1.Short title and commencement. – (1) This Order may be called the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016.

- (2) It shall come into force on the date of its publication in the Official Gazette.
- 2. Applicability.- This Order shall apply to the States comprising River Ganga Basin, namely, Himanchal Pradesh, Uttarakhand, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Haryana, Rajasthan, West Bengal and the National Capital Territory of Delhi and such other States, having major tributaries of the River Ganga as the National Council for Rejuvenation, Protection and Management of River Ganga may decide for the purpose of effective abatement of pollution and rejuvenation, protection and management of the River Ganga.
- 3.Definitions .- (1) In this Order, unless the context otherwise requires, -
- (a) "Act" means the Environment (Protection) Act, 1986 (29 of 1986);
- (b)"Basin" means the entire catchment of a water body or water course including the soil, water, vegetation and other natural resources in the area and includes land, water, vegetation and other natural resources on a catchment basis;
- (c)"Buffer Area" means an area which extends beyond the flood plain of a stream;
- (d)"catchment" or ""catchment area "includes the entire land area whose runoff from rain, snow or ice drains into a water body or a water course, before the water course joins River Ganga or its tributaries or discharges water into River Ganga or its tributaries;
- (e) commercial fishing means large scale fishing for commercial purposes by nets, poisoning, or other modern fishing gear or methods in River Ganga or its tributaries;
- (f) Competent authority means "Central Government"
- (g)"deforestation" means removal or reduction of forest cover, especially when caused by anthropogenic activities or removal of trees and other vegetation of a forest excluding a planned clearance for scientific management of forest in particular in the catchment area of River Ganga;
- (h)"degraded forest" means a forest having loss or reduction of native forest cover or vegetation density in the catchment area abutting River Ganga or its tributaries;
- (i)"direction" shall mean direction issued under section 5 of the Act and the expression "direct" shall be construed accordingly;
- (j) "District Ganga Committee" means the District Ganga Protection Committee mentioned in paragraph 53;
- (k)"engineered diversion" means a structure or device constructed or installed to transfer the water of River Ganga or its tributaries into canals or other engineering structures;

- (l)"flood plain" means such area of River Ganga or its tributaries which comes under water on either side of it due to floods corresponding to its greatest flow or with a flood of frequency once in hundred years;
- (m)"Ghat" means sloping part at Bank of River Ganga or its tributaries with artificially constructed steps or sloping piece of land used for providing easy human access to water of River Ganga or its tributaries and includes usage of such parts for religious or other related purposes;
- (n)"local authority" includes Panchayati raj institutions, municipalities, a district board, cantonment board, town planning authority or Zila Parishad or any other body or authority, by whatever name called, for the time being invested by law, for rendering essential services or with the control and management of civic services, within a specified local area;
- (o)"National Mission for Clean Ganga" means the authority mentioned in paragraph 31.
- (p) "notification" means a notification published in the Official Gazette and the expression 'notifying' shall be construed accordingly;
- (q)"offensive matter" consists of solid waste which includes animal carcasses, kitchen or stable refuse, dung, dirt, putrid or putrefying substances and filth of any kind which is not included in the sewage;
- (r)"person" include ----
  - (i)an individual or group or association of individuals whether incorporated or not;
  - (ii)a company established under the Companies Act, 2013 (18 of 2013);
  - (iii)any corporation established by or under any Central or State Act;
  - (iv)a local authority;
  - (v) every juridical person not falling within any of the preceding sub-clauses;
- (s)"River Bed" means the dried portion of the area of River Ganga or its tributaries and includes the place where the River Ganga or its tributaries run its course when it fills with water and includes the land by the side of River Ganga or its tributaries which retains the water in its natural channel, when there is the greatest flow of water;
- (t) "River Bed Farming" includes seasonal agriculture or farming on the River Bed of River Ganga or its tributaries during low flows of water;
- (u)"River Ganga" means the entire length of six head-streams in the State of Uttarakhand namely, Rivers Alakananda, Dhauli Ganga, Nandakini, Pinder, Mandakini and Bhagirathi starting from their originating glaciers up to their respective confluences at Vishnu Prayag, Nand Prayag, Karn Prayag, Rudra Prayag, and Dev Prayag as also the main stem of the river thereafter up to Ganga Sagar including Prayag Raj and includes all its tributaries;
- (v) "rubbish" means ashes, broken brick, mortar, broken glass, dust or refuse of any kind and includes filth;
- (w) "sand mining" means large scale removal of river sand from the dried channel belt, flood plain or a part of River Ganga or its tributaries;
- (x) "sewage effluent" means effluent from any sewerage system or sewage disposal works and includes sewage from open drains:
- (y) "sewerage scheme" means any scheme which a local authority may introduce for removal of sewage by flushing with water through underground closed sewers;
- (z) "Schedule" means Schedule appended to this Order:
- (za) "specified District" means an area of every District abutting the River Ganga, being within a radius of fifteen kilometers of the Ganga River Bank or its tributaries in the States of Himachal Pradesh, Uttarakhand, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Haryana, Rajasthan, West Bengal and the National Capital Territory of Delhi and such other States, having major tributaries of the River Ganga as referred to in this Order;
- (zb) "State Ganga Committee" means the State Ganga Rejuvenation, Protection and Management Committee constituted under this Order for each of the States mentioned in paragraph 2.
- (zc) State Ganga River Conservation Authority means an authority earlier constituted in each State under the Act as follows, namely:-
  - (i) the Bihar State Ganga River Conservation Authority constituted by the notification of the Government of India in the Ministry of Environment and Forests number S.O287 (E), dated 8th February 2010;
  - (ii) the Jharkhand State Ganga River Conservation Authority constituted by the notification of the Government of India in the Ministry of Environment and Forests number S.O2495(E), dated 30<sup>th</sup> September 2009;



- (iii) the Uttarakhand State Ganga River Conservation Authority constituted by the notification of the Government of India in the Ministry of Environment and Forests number S.O 1111 (E), dated 30<sup>th</sup> September 2009;
- (iv) the Uttar Pradesh State Ganga River Conservation Authority constituted by the notification of the Government of India in the Ministry of Environment and Forests number S.O2493 (E), dated 30<sup>th</sup> September 2009; and
- (v) the West Bengal State Ganga River Conservation Authority constituted by the notification of the Government of India in the Ministry of Environment and Forests number S.O2494 (E), dated 30<sup>th</sup> September 2009.
- (zd) "stream" includes river, water course (whether flowing or for the time being dry), inland water (whether natural or artificial) and sub-terrain waters;
- (ze) "tributaries of River Ganga" means those rivers or streams which flow into River Ganga and includes Yamuna River, Son River, Mahananda River, Kosi River, Gandak River, Ghaghara River and Mahakali River and their tributaries or such other rivers which National Council for Rejuvenation Protection and Management of River Ganga may, by notification, specify for the purposes of this Order.
- 2. The words and expressions used herein and not defined but defined in the Environment (Protection) Act, 1986 (29 of 1986) shall have the meanings respectively assigned to them in the Act.
- 4. Principles to be followed for rejuvenation, protection and management of River Ganga. (1) The following principles shall be followed in taking measures for the rejuvenation, protection and management of River Ganga, namely:-
  - (i) the River Ganga shall be managed as a single system;
  - (ii) the restoration and maintenance of the chemical, physical, and biological quality of the waters of River Ganga shall be achieved in a time bound manner;
  - (iii) the River Ganga shall be managed in an ecologically sustainable manner;
  - (iv) the continuity of flow in the River Ganga shall be maintained without altering the natural seasonal variations;
  - (v) the longitudinal, lateral and vertical dimensions (connectivities) of River Ganga shall be incorporated into river management processes and practices;
  - (vi) the integral relationship between the surface flow and sub-surface water (ground water) shall be restored and maintained;
  - (vii) the lost natural vegetation in catchment area shall be regenerated and maintained;
  - (viii) the aquatic and riparian biodiversity in River Ganga Basin shall be regenerated and conserved;
  - (ix) the bank of River Ganga and its flood plain shall be construction free Zone to reduce pollution sources, pressures and to maintain its natural ground water recharge functions;
  - (x) the public participation in rejuvenation, protection and management, revision and enforcement of any regulation, standard, effluent limitation plan, or programme for rejuvenation, protection and management shallbe encouraged and made an integral part of processes and practices of

River Ganga rejuvenation, protection and management.

(2) National Mission for Clean Ganga may, having regard to the needs of the people of the country, advances in technology and socio economic conditions of the people and to preserve the rich heritage of national composite culture, specify additional principles in addition to the principles specified under sub-paragraph (1).

- **5.Ecological flow of water in River Ganga to be maintained.** (1) Every State Government, shall endeavor to ensure that uninterrupted flows of water are maintained at all times in River Ganga as required under clause (iv) of paragraph (4).
- (2) Every State Government shall also endeavor to maintain adequate flow of water in River Ganga in different seasons to enable River Ganga to sustain its ecological integrity and to achieve the goal, all concerned authorities shall take suitable actions in a time bound manner.
- (3) For the purposes of this paragraph, the average flow of water shall be determined by such Hydrology Observation Stations at such points of the River Ganga, as may be specified by the National Mission for Clean Ganga:

Provided that the average flow of water in River Ganga may, having regard to ecology, be determined by the National Mission for Clean Ganga for different points of River Ganga.

6. Prevention, control and abatement of environmental pollution in River Ganga and its tributaries.- (1) No person shall discharge, directly or indirectly, any untreated or treated sewage or sewage sludge into the River Ganga or its tributaries or its banks:

Provided that where a local authority does not have, on the date of commencement of this Order, sewerage scheme or infrastructure for collection, storage, transportation and disposal of sewage or sewage sludge or such infrastructure is not functional on the said date in an area abutting the River Ganga or its tributaries, every such local authority shall, within a period, specified by National Mission for Clean Ganga from the date of commencement of this Order, develop such infrastructure or make such infrastructure functional, as the case may be, for collection, storage, transportation and disposal of sewage in the territorial area of the local authority.

(2) No person shall discharge, directly or indirectly, any untreated or treated trade effluent and industrial waste, biomedical waste, or other hazardous substance into the River Ganga or its tributaries or on their banks:

Provided further that where an industry or industrial area management does not have, on the date of commencement of this Order, industrial effluent treatment scheme or infrastructure for collection, storage, transportation and disposal of trade effluents industrial waste, bio-medical waste, or other hazardous substance, etc. or such infrastructure is not functional on the said date in an area abutting the River Ganga or its tributaries, every such industry or industrial area management shall, within a period so specified by the National Mission for Clean Ganga from the date of commencement of this Order, develop such infrastructure or make such infrastructure functional, as the case may be, for collection, storage, transportation and disposal of trade effluent and industrial waste, bio-medical waste, or other hazardous substance in the jurisdiction of the industry or industrial area management.

(3) No person shall construct any structure, whether permanent or temporary for residential or commercial or industrial or any other purposes in the River Ganga, Bank of River Ganga or its tributaries or active flood plain area of River Ganga or its tributaries:

Provided that in exceptional circumstances like natural calamities or religious events at traditional locations, temporary structures can be raised after prior permission of the National Mission for Clean Ganga acting through the State Ganga Committee and the District Ganga Committee:

Provided further that in case any such construction has been completed, before the commencement of this Order, in the River Bank of River Ganga or its tributaries or active flood plain area of River Ganga or its tributaries, the National Mission for Clean Ganga shall review such constructions so as to examine as to whether such constructions are causing interruption in the continuous flow of water or pollution in River Ganga or its tributaries, and if that be so, it shall cause for removing them.

- (4) No person shall do any act or carry on any project or process or activity which, notwithstanding whether such act has been mentioned in this Order or not, has the effect of causing pollution in the River Ganga.
- (5) It shall be the duty of the National Mission for Clean Ganga, every Specified State Ganga Committee or specified District Ganga Protection Committee, local authority and all other authorities and persons to disseminate widely and bring to public notice, using various means, information captured in reports and the aforesaid measures in the local language in every village, town, city and other areas abutting River Ganga and its tributaries.
- 7. Emergency measures in case of pollution of River Ganga or its tributaries --- If any poisonous, noxious or polluting matter is present or has entered into the River Ganga due to any accident or other unforeseen act or event, and it is necessary or expedient to take immediate action, the National Mission for Clean Ganga shall take immediate action for carrying out such operations or direct for carrying out such operations by the specified State Ganga Committee or specified District Ganga Committee or local authority or any other authority or Board or Corporation, as it may consider necessary for all or any of the following purposes, namely;
- (a)the manner of removing the matter from River Ganga and disposing it off in such a manner as it may specify, as also, for carrying out such operations as is considered appropriate for mitigation or removal of any pollution caused by such matter:
- (b) issuing directions restraining or prohibiting any person concerned from discharging any poisonous, noxious or polluting matter in the River Ganga;
- (c) undertaking any additional work or functions as may be necessary to address such emergency.
- 8. Power to issue directions. The National Mission for Clean Ganga shall, in the exercise of its powers and performance or its functions under this Order, issue such directions in writing as it may consider necessary for abatement of pollution and rejuvenation, protection and management of the River Ganga to the concerned authority or local authority or other authorities or Board or Corporation or person and they shall be bound to comply with such directions.
- 9. Ganga safety audit.- Every District Ganga Committee shall cause the Ganga safety audit to be carried out by such Ganga Safety Auditors within such time frame and in accordance with such protocols as may be specified by the

National Mission for Clean Ganga for the area of the River Ganga abutting such district and forward the copy of the report of such safety audit along with remedial action taken thereon to the concerned State Ganga Committee and the National Mission for Clean Ganga, which shall take appropriate action thereon, if required.

- 10. Pollution in River Ganga and its tributaries to be monitored.—(1) The pollution in River Ganga and its tributaries shall be monitored by the National Mission for Clean Ganga on its own or by directions through various State and Central Government agencies by use of satellite imagery and other remote sensing technologies as well as physical stations, online monitoring and independent agencies at a periodicity to be specified by it.
- (2) Notwithstanding the provisions of sub-paragraph (1), the Central Government may assign the function of monitoring of pollution in River Ganga and its tributaries to any other agency or body or direct, having regard to advances in technology, to monitor the aforesaid pollution in River Ganga and its tributaries by adopting any other technique or method, as may be specified in the direction.
- 11. Constitution of National Council for Rejuvenation, Protection and Management of River Ganga. With effect from the date of commencement of this Order, there shall be constituted an authority by the name to be called the National Council for Rejuvenation, Protection and Management of River Ganga, (hereinafter in this Order called as the National Ganga Council) for the purposes of the Act and to exercise powers and discharge functions as specified in this Order and the Act.

12.Composition of National Ganga CouncilThe National Ganga Council shall consist of the following members, namely		
(a)Prime Minister	-Chairperson ,ex-officio	
(b) Union Minister for Water Resources, River Development and Ganga Rejuvenation	- Vice-Chairperson, ex-officio	
(c)Union Minister for Environment, Forests and Climate Change	- Member, ex-officio;	
(d)Union Minister for Finance	- Member, ex-officio;	
(e)Union Minister for Urban Development	- Member, ex-officio;	
(f) Union Minister for Power	- Member, ex-officio;	
(g)Union Minister for Science and Technology	- Member, ex-officio;	
(h)Union Minister for Rural Development	- Member, ex-officio;	
(i)Union Minister for Drinking Water and Sanitati	ion - Member, ex-officio;	
(j) Union Minister for Shipping	- Member, ex-officio;	
(k) Union Minister of State for Tourism	- Member, ex-officio;	
(I) Vice Chairman, NITI Aayog	- Member, ex-officio;	
(m)Chief Minister, Bihar	- Member, ex-officio;	
(n) Chief Minister, Jharkhand	- Member, ex-officio;	
(o) Chief Minister, Uttarakhand	- Member, ex-officio;	
(p) Chief Minister, Uttar Pradesh	- Member, ex-officio;	
(q) Chief Minister, West Bengal	- Member, ex-officio;	
(r) Secretary, Ministry of Water Resources, River Development and Ganga Rejuvenation	- Member, ex-officio;	
(s)Director General, National Mission for Clean Ganga	- Member Secretary, ex-officio.	

- (2) The National Ganga Council may co-opt one or more Chief Ministers from the States not represented in the National Ganga Council having major tributaries of River Ganga, which are likely to affect the water quality in the River Ganga, as Member.
- (3) The National Ganga Council may also co-opt one or more Union Ministers, if it considers necessary, as Member.
- (4) The National Ganga Council may consult experts and expert organisations or institutions in the field of river rejuvenation, river ecology and river management, hydrology, environmental engineering, social mobilisation and other relevant fields.
- (5) The Headquarter of the National Ganga Council shall be at New Delhi or at such other place as it may decide.

- (6) The National Ganga Council shall have its Secretariat in the National Mission for Clean Ganga.
- (7) The Central Government in the Ministry of Water Resources, River Development and Ganga Rejuvenation shall serve as the nodal Ministry.
- 13. Dissolution of National Ganga River Basin Authority --- (1) On and from the date of constitution of the National Ganga Council in paragraph 11, the National Ganga River Basin Authority constituted by Notification of the Ministry of Water Resources, River Development and Ganga Rejuvenation, number S.O 2539 (E), dated the 29<sup>th</sup> September 2014 shall stand dissolved.
- (2) All things done or omitted to be done or actions taken or any money spent or authorised to be spent by the National Ganga River Basin Authority before such dissolution shall be deemed to have been done or taken under the corresponding provisions of this Order.
- 14. Superintendence, direction and control of management of River Ganga to vest in National Ganga Council. The National Ganga Council shall, notwithstanding anything contained in this Order, be overall responsible for the superintendence, direction, development and control of River Ganga and the entire River Basin (including financial and administrative matters) for the protection, prevention, control and abatement of environmental pollution in River Ganga and its rejuvenation to its natural and pristine condition and to ensure continuous adequate flow of water in the River Ganga and for matters connected therewith.
- 15. Jurisdiction of National Ganga Council.- The jurisdiction of the National Ganga Council shall extend to the areas mentioned in paragraph 2.
- 16. Meetings of National Ganga Council.- (1) National Ganga Council may regulate its own procedure for transacting its business including its meetings.
- (2) The Chairperson of the National Ganga Council shall preside over its meetings and in his absence, its Vice-Chairperson shall, preside over the meetings of the National Ganga Council and conduct its business.
- (3) The Vice-Chairperson shall have the power to take decisions necessary for the National Ganga Council to achieve its objectives, in between the conduct of the two meetings of the Council subject to ratification in the next meeting.
- (4) The National Ganga Council shall meet at least once every year or more as it may deem necessary.
- 17. Constitution of Empowered Task Force on River Ganga as authority.- (1) With effect from the date of commencement of this Order, there shall be constituted an authority by the name to be called the Empowered Task Force on River Ganga for the purposes of the Act and to exercise powers and discharge functions as specified in this Order and the Act.

(2) The Empowered Task Force on River Ganga shall c	onsist of the following members, namely:-
(a)Union Minister for Water Resources, River Development and Ganga Rejuvenation	Chairperson, ex-officio;
(b) Union Minister of State for Water Resources, River Development and Ganga Rejuvenation	Vice-Chairperson, ex-officio;
(c)Secretary in the Ministry of Water Resources, River Development and Ganga Rejuvenation	Member, ex-officio
(d) Secretary in the Ministry of Finance	
(Department of Expenditure)	- Member: ex-officio;
(e) Chief Executive Officer, Niti Ayog	- Member, ex-officio;
(f) Chief Secretary, State of Uttrakhand	- Member, ex-officio;
(g) Chief Secretary, State of Uttar Pradesh	- Member, ex-officio;
(h)Chief Secretary, State of Bihar	- Member, ex-officio;
(i) Chief Secretary, State of Jharkhand	- Member, ex-officio;
(j) Chief Secretary, State of West Bengal	- Member, ex-officio;
(k) Director General, National Mission for Clean Gange	a - Member-Secretary

- (3) The Empowered Task Force on River Ganga may also co-opt one or more Secretary in the Union Ministries or the Chief Secretary of any other State concerned, if it considers necessary, as member
- (4) The Empowered Task Force on River Ganga shall meet at least once every three months or more as it may deem necessary.

- (5) The administrative and technical support to the Empowered Task Force on River Ganga shall be provided by the Central Government in the Ministry of Water Resources, River Development and Ganga Rejuvenation which shall be the nodal Ministry for the purposes of such administrative and technical support.
- 18. Functions and powers of Empowered Task Force on River Ganga. -
- (1) The Empowered Task Force on River Ganga shall co-ordinate and advise on matters relating to rejuvenation, protection and management of River Ganga and its tributaries.
- (2) In particular and without prejudice to the generality of the provisions of sub-paragraph (1), the functions and powers of the Empowered Task Force on River Ganga may include measures with respect to all or any of the following matters in rejuvenation, protection and management of River Ganga, namely:-
- (a) ensuring that the Ministries, Departments and State Governments concerned have -
  - (i) an action plan with specific activities, milestones, and timelines for achievement of the objective of rejuvenation and protection of River Ganga;
  - (ii) a mechanism for monitoring implementation of its action plans;
- (b) co-ordination amongst the Ministries and Departments and State Governments concerned for implementation of its action plans in a time bound manner;
- (c) to monitor the implementation process, address bottlenecks, suggest and take such decisions as may be necessary to ensure speedy implementation;
- (d) all projects under the ambit of Namami Gange including ongoing projects funded domestically and through external assistance;
- (e) discharge of such other functions or exercise of such powers as may be considered necessary for achievement of the objective of rejuvenation, protection and management of River Ganga or as may be assigned to it by the Central Government or specified by the National Ganga Council;
- 19. Approval for projects exceeding value of rupees one thousand crore.-
  - (1) The Empowered Task Force on River Ganga shall be responsible for the approval of every project exceeding a value of rupees one thousand crore, as amended from time to time.
  - (2) The Empowered Task Force on River Ganga may constitute a sub-committee of officials amongst its members for the purpose of sub-paragraph (1)
- 20. Constitution and Composition of Specified State Ganga Rejuvenation, Protection and Management Committees as authorities.— With effect from the date of commencement of this Order, these shall be constituted, in each State as specified in paragraph 2, an authority to be called the State Ganga Rejuvenation, Protection and Management Committee, which shall consist of a Chairperson and other members as specified in the Schedule to exercise powers and discharge functions as specified in this Order and the Act.
- 21. Meetings of State Ganga Committee. (1) Every State Ganga Committee may regulate its own procedure for transacting its business including its meetings.
- (2) Every State Ganga Committee shall convene its meetings at least once in every three months' time.
- (3) The Chairperson of the State Ganga Committee shall preside over its meetings and in his absence, the said Committee shall elect its Vice-Chairperson who shall, preside over the meetings of the State Ganga Committee and conduct its business.
- 22. Superintendence, direction and control over Committee.- The superintendence, direction and control of the District Ganga Committees shall, notwithstanding anything contained in this Order, vest in the State Ganga Committee, for the purposes of rejuvenation, protection, prevention, control and abatement of environmental pollution in River Ganga and its tributaries so as to rejuvenate the River Ganga to its natural and pristine condition and ensure continuous and adequate flow of water in River Ganga and for protection and management of River Ganga in the States concerned.
- 23. Decisions of State Ganga Committee to be binding. The decision taken at the meetings of the State Ganga Committee shall, notwithstanding anything contained in this Order, be binding upon every District Ganga Committee and every local authority or other authority or Board or person referred to in such decision and they shall comply with the decisions of the State Ganga Committee.
- 24. Powers, duties and functions of State Ganga Committees.— (1) Every State Ganga Committee shall, subject to the provisions of the Act and rules made or directions issued thereunder, have the power to take all such measures, including those in paragraphs 6, 7 and 8, as it deems necessary or expedient for effective abatement of pollution and conservation

- of the River Ganga and for implementing the decisions or directions of the National Ganga Council and National Mission for Clean Ganga.
- (2) The State Ganga Committee shall implement various programmes and projects of the National Ganga Council and National Mission for Clean Ganga.
- (3) In particular and without prejudice to the generality of the provisions of sub-paragraphs (1) and (2), such measures may include all or any of the following matters, namely:-
- (a) coordination and implementation of the conservation activities relating to River Ganga including augmentation of sewerage infrastructure, catchment area treatment, protection of flood plains, creating public awareness and such other measures at the State level and regulation of activities aimed at the prevention, control and abatement of pollution in the River Ganga to maintain its water quality, and to take such other measures relevant to river ecology and management in the State concerned;
- (b) implementation of the river basin management plan in the concerned State;
- (c) maintenance of minimum ecological flows in the River Ganga in the concerned State and actions thereon;
- (d) entry and inspection under section 10 and power to take sample under section 11 of the Act for the purpose of exercising and performing its functions under this Order.
- (4) The State Ganga Committee shall undertake all the emergency measures mentioned in paragraph 7.
- (5) The State Ganga Committee shall have the powers to issue directions under section 5 of the Act.
- (6) The powers and functions of the State Ganga Committee shall be without prejudice to any of the powers conferred upon the State Government under any Central or State Act, being not inconsistent with the provisions of the Act.
- 25. Monitoring execution of plans and programmes of District Ganga Committees.- Every State Ganga Committee shall monitor the execution of plans, programmes, and projects of all their District Ganga Protection Committees and those of other authorities and submit progress in respect thereof to the National Mission for Clean Ganga.
- 26. Preparation of consolidated reports of all District Ganga Committees and taking remedial measures in respect thereof.- (1) Every State Ganga Committee shall prepare a consolidated report of all District Ganga Protection Committees, local authorities or other authorities or Board or Corporation or person for every quarter indicating therein in respect of each specified District abutting River Ganga and its tributaries, ----
- (a) the status of the plans being executed and measures taken by them and any other activity relating to the health of River Ganga and its tributaries;
- (b) the quality of water in River Ganga and its tributaries in each specified District and remedial action in respect thereof;
- (c) any interruption of flow in the River Ganga in each specified District and reasons therefor;
- (d) remedial measures taken on the complaints made to the District Ganga Committee or local authorities or other authorities;
- (e) adverse report as reported by Ganga safety auditors in each specified District;
- (f) any other information relevant to the health of River Ganga and its tributaries.
- (2) The report referred to in sub-paragraph (1) shall be submitted within one month at the end of each year to the State Ganga Committee and National Mission for Clean Ganga along with remedial action thereof.
- 27. Conducting of Ganga safety audit and submission of such audit reports by State Ganga Committees.- (i) It shall be the duty of the State Ganga Committees to conduct or causes to be conducted, through the District Ganga Committees, the Ganga safety audit and submit report of the Ganga safety audit to the National Mission for Clean Ganga along with the remedial action taken thereon and also make available the same in public domain and exhibit the same at its website.
- (2) The Ganga safety audit shall include such particulars and be done at such intervals (save as otherwise provided in this Order) and in such manner as may be specified, by notification, by the National Mission for Clean Ganga.
- 28. State Ganga Committee to be nodal agency. The State Ganga Committee shall be the State-wide nodal agency in the State for the implementation of the provisions of this Order and for effective abatement of pollution and rejuvenation, protection and management of the River Ganga and its tributaries.
- 29. State Ganga Committees to be bound by direction of National Ganga Council and National Mission for Clean Ganga.- Every State Ganga Committee, without prejudice to the foregoing provisions of this Order, shall, in exercise of its powers or the performance of its functions under this Order, be bound by the decisions or such directions (including those relating to technical and administrative matters) as the National Ganga Council and the National Mission for Clean

Ganga may give in writing to it from time to time for abatement of pollution and rejuvenation, protection and management of the River Ganga.

- 30. Dissolution of State Ganga River Conservation Authorities and State Executive Committees.- (1) With effect from the date of constitution of the State Ganga Committees, the respective State Ganga River Conservation Authorities and the respective State Executive Committees constituted before the commencement of this Order shall stand dissolved.
- (2)All things done or omitted to be done or actions taken or any money spent or authorised to be spent by the authorities and committees under sub-paragraph (1) before such dissolution shall be deemed to have been done or taken under the corresponding provisions of this Order.
- 31. Constitution of National Mission for Clean Ganga as an authority.-(1) With effect from the date of commencement of this Order, the National Mission for Clean Ganga, a society registered under the Societies Registration Act, 1860 (21 of 1860), shall be an authority constituted under the Act, by the same name for the purposes of the Act and to exercise powers and discharge functions as specified under this Order and the Act and the rules made or directions issued thereunder.
- (2) The composition of the National Mission for Clean Ganga shall be as specified in paragraph 35.
- 32. Area of operation of National Mission for Clean Ganga.- The area of operation of the National Mission for Clean Ganga shall be the areas mentioned in paragraph 2.
- 33. National Mission for Clean Ganga to be nodal agency. The National Mission for Clean Ganga shall be the nodal agency for the nationwide implementation of the provisions of this Order and for effective abatement of pollution and rejuvenation, protection and management of the River Ganga and its tributaries.
- 34. National Mission for Clean Ganga to be an empowered organization. The National Mission for Clean Ganga shall be an empowered organisation with two tier management having administrative, appraisal and approval powers and duties, functions and powers as specified in this Order.
- 35. Composition of National Mission for Clean Ganga. The National Mission for Clean Ganga shall have a two-tier management structure and it shall comprise of the Governing Council and the Executive Committee.
  - (1) The Governing Council shall consist of the following members, namely:-

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(a)	Director General of National Mission for Clean Ganga	Chairman, ex-officio
(b)	Joint Secretary, Ministry of Water Resources, River Development and Ganga Rejuvenation	Member, ex-officio
(c)	Joint Secretary, Ministry of Urban Development	Member, ex-officio
(d)	Joint Secretary, Ministry of Environment, Forests and Climate Change	Member, ex-officio
(e)	Joint Secretary, Department of Expenditure	Member, ex-officio
(f)	Representative of NITI Aayog (not below Joint Secretary)	Member, ex-officio
(g)	Chairman, Central Pollution Control Board	Member, ex-officio
(h)	Principal Secretary, Urban Development, Government of Bihar	Member, ex-officio
(i)	Principal Secretary, Urban Development, Government of Jharkhand	Member, ex-officio
(j)	Principal Secretary, Urban Development, Government of Uttar Pradesh	Member, ex-officio
(k)	Principal Secretary, Peyjal, Government of Uttarakhand	Member, ex-officio
(1)	Principal Secretary, Urban Development, Government of West Bengal	Member, ex-officio
(m)	Executive Director(Deputy Director General), National Mission for Clean Ganga	Member, ex-officio
(n)	Executive Director (Technical), National Mission for Clean Ganga	Member, ex-officio
A		dana

(Q)	Executive Director (Finance), National Mission for Clean Ganga	Member, ex-officio
(p)	Executive Director (Projects), National Mission for Clean Ganga	Member, ex-officio
(q)	Executive Director(Administration), National Mission for Clean Ganga	Member- Secretary.

- The Executive Committee constituted out of the Governing Council, shall consist of the following members, (2) namely:-
  - (a) Director General, National Mission for Clean Ganga Chairperson, ex-officio;
  - (b) Joint Secretary, Department of Expenditure Member, ex-officio;
  - (c) Representative of NITI Aayog (not below Joint Secretary) Member, ex-officio;
  - (d) Principal Secretary of the State concerned

- Member, ex-officio;

(e) Executive Director (Deputy Director General)

National Mission for Clean Ganga

- Member, ex-officio;

(f) Executive Director (Finance)

National Mission for Clean Ganga

- Member, ex-officio;

(g) Executive Director (Technical) National Mission for Clean Ganga

- Member, ex-officio;

(h) Executive Director (Projects)

National Mission for Clean Ganga

- Member, ex-officio;

(i) Executive Director (Administration)

National Mission for Clean Ganga

- Member, ex-officio;

- The Director General, National Mission for Clean Ganga may, if he considers necessary, may associate with the (3) Executive Committee, any other member from the Governing Council.
- The Governing Council may constitute a sub-committee from out of its members and also by associating some technical experts for appraisal of the projects.
- The representative of the State concerned shall also be one of the members of sub-committee. (5)
- Half of the members of the Governing Council shall form the quorum. (6)
- (1) All approvals up to one thousand crores rupees shall be granted by the Executive Committee and it shall report to the Governing Council at least once in three months.
- (2) The Sub-Committee of the Governing Council shall appraise the project only after completion of Third Party Appraisal of the project by technical experts or consortium of recognized institutes or Indian Institutes of Technology, as the case may be.
  - (3) The Third Party Appraisal shall be for all projects irrespective of their value.
- 37. Appointment of Director General and Executive Directors of National Mission for Clean Ganga.
  - (1) Director General, National Mission for Clean Ganga shall be appointed by the Central Government who shall be equivalent to the rank of Additional Secretary or Secretary to the Government of India and his terms and conditions of services shall be determined by Central Government.
  - (2) The Executive Director (Finance) shall be appointed on deputation from any of the organised accounts services in the Central Government in the rank equivalent to Joint Secretary to Government of India in accordance with the recruitment rules of the said services.
  - (3) National Mission for Clean Ganga shall have at least one position for each of the Executive Directors in the rank of Joint Secretary to Government of India.
  - (4) One of the Executive Directors shall be designated as Deputy Director General of the National Mission for Clean Ganga and he shall be appointed by the Central Government.
  - (5) None of the nominated members of the Executive Committee shall be below the rank of Joint Secretary in Government of India.
- 38. Duty of National Mission for Clean Ganga.- It shall be the duty of the National Mission for Clean Ganga to -
- (i) follow the principles laid down in paragraph 4

- (ii) comply with the decisions and directions of the National Ganga Council and implement the Ganga Basin Management Plan approved by it;
- (iii) co-ordinate all activities for rejuvenation and protection of River Ganga in a time bound manner as directed by the National Ganga Council;
- (iv) do all other acts or abstain from doing certain act which may be necessary for rejuvenation and protection of River Ganga and its tributaries.
- 39. Functions of National Mission for Clean Ganga.- (1) Without prejudice to the provisions of this Order, the National Mission for Clean Ganga shall identify or cause to be identified -
  - (a) the specific threats to the River Ganga in areas in each village and town of such specified District abutting River Ganga and its tributaries, including sewerage and industrial waste, cremation and burial of corpses and disposal of animal carcasses, and threats from commercial, recreational and religious activities;
  - (b) the type of measures required to address such threat in each village and town of all districts abutting River Ganga and its tributaries;
  - (c) the specific areas where such remedial actions are required to be taken for rejuvenation and protection of River Ganga and its tributaries.
  - (d) the measures which may be necessary for reuse of treated water and enter in to Memorandum of Understanding in this regard with the Ministries of the Central Government like Railways, Power, Petroleum and Natural Gas etc., State Governments, autonomous bodies at the Central and State level, recognized Institutes and organizations which the National Mission for Clean Ganga may deem fit.
- (2) The National Mission for Clean Ganga shall make or cause to make the River Ganga Basin Management Plan along with cost, timelines and allocation of responsibilities, among other things, for rejuvenation and protection of River Ganga and its tributaries in each village and town of specified District abutting River Ganga and its tributaries and execute projects there for.
- (3) The National Mission for Clean Ganga shall ----
  - (a) cause to be determined the magnitude of ecological flows in the River Ganga and its tributaries required to be maintained at different points in different areas at all times with the aim of ensuring water quality and environmentally sustainable rejuvenation, protection and management of River Ganga and its tributaries and notifying the same and take or direct all such measures necessary to maintain adequate ecological flows;
  - (b) cause to be identified places where the environmental flow of water of River Ganga has been modified and take measures for correction thereof to maintain the continuous flow of water for rejuvenation, protection and management of River Ganga and its tributaries;
  - (c) identify places of discontinuity of water in River Ganga and its tributaries due to engineered diversion of water or storage of water or by any other means and execute plans in respect thereof or take remedial action therefor;
  - (d) devise a system to be put in place for continuous monitoring of flow of water and pollution levels in River Ganga and its tributaries;
  - (e) take all such measures which may be necessary to give effect to the decisions of the National Ganga Council so as to maintain adequate ecological flows in the River Ganga and tributaries;
  - (f) render assistance or cause them to be rendered by any agency for preparation of detailed project reports or execution of projects for abatement of pollution and rejuvenation, protection and management of the River Ganga and its tributaries to the State Governments, the State Ganga Committees, District Ganga Committees or local authorities or any person or body, any authority, Board or Corporation;
  - (g) set up or facilitate setting up or designate and direct one or more existing centers to research, develop and disseminate knowledge base and analytical tools on abatement of pollution and rejuvenation, protection and management of River Ganga and its tributaries;
  - (h) take any other measures which may be necessary for continuous flow of water and abatement of pollution in River Ganga and its tributaries
- (4) The National Mission for Clean Ganga shall take all such other emergency measures as outlined in paragraph 7.
- 40. Establishment of River Ganga Monitoring Centres at suitable locations along River Ganga and its tributaries. The National Mission for Clean Ganga may identify the places in the River Ganga Basin and establish at such places or designate any existing laboratory or station or institute as Centres to be called the "River Ganga"

Monitoring Centre" for monitoring amongst other things, continuous flow of water and pollution levels as required under this Order and such Centre shall report immediately to the National Mission for Clean Ganga for taking remedial action

- 41. Powers of National Mission for Clean Ganga. (1) The National Mission for Clean Ganga being the national agency charged with the role, responsibility and powers to facilitate the task of rejuvenation, protection and management of River Ganga and its tributaries, under the supervision and direction of the National Ganga Council, shall recommend to the National Ganga Council or Central Government for issuing directions or issue directions itself, to the State Ganga Committees or District Ganga Committees or local authority or any other authority or any person, institution, consortium or agency, as it may decide, for the rejuvenation, protection and management of River Ganga and have the power to take all such measures and discharge such functions as it may deem necessary or expedient for prevention, control and abatement of environmental pollution in River Ganga and its tributaries so as to rejuvenate the River Ganga to its natural and pristine condition and ensure continuous and adequate flow of water in River Ganga and for protection and management of River Ganga and for matters connected therewith.
- (2) In particular and without prejudice to the generality of the provisions of sub-paragraph (1), and save as otherwise. provided in this Order, such directions may include all or any of the following matters in the management of River Ganga, namely:-
- (a) fulfillment of the functions mentioned in paragraph 55 in accordance with the principles in paragraph 4;
- (b) formulate, with the approval of the Central Government, the National policy for effective abatement of pollution and rejuvenation, protection and management of River Ganga;
- (c) enter into memorandum of understanding, with the approval of the Central Government, with any country or foreign agency for effective implementation of the River Ganga Basin Management Plan for rejuvenation, protection, prevention, control and abatement of pollution in the River Ganga and its tributaries;
- (d) approve, with or without modifications, the River Ganga Basin Management Plan and direct amendments, if any, to be made therein;
- (e) supervise and review the progress reports, and issue directions to the State Ganga Committees, District Ganga Committees or local authorities and other authorities in the implementation of the River Ganga Basin Management Plan and any other matter connected with affairs of the River Ganga and its tributaries;
- (f) approve the planning, financing and execution of programmes for abatement of pollution in the River Ganga including augmentation of sewerage and effluent treatment infrastructure, catchment area treatment, protection of flood plains, creating public awareness, conservation of aquatic and riparian life and biodiversity and such other measures for promoting environmentally sustainable river rejuvenation;
- (g) coordination, monitoring and review of the implementation of various programmes or activities taken up for prevention, control and abatement of pollution and protection and management in the River Ganga and its tributaries;
- (h) direct any person or authority to take measures for restoration of river ecology and management in the River Ganga Basin States:
- (i) recommend to the Central Government, for creation of special purpose vehicles (whether as a company under the companies Act, 2013(18 of 2013) or Societies Registration Act, 1860 (21 of 1860) or a Trust under the Indian Trust Act, 1882 (2 of 1882)), as may be considered appropriate, for implementation of this Order and for the purposes of the Act;
- (j) take such measures as may be necessary for the better co-ordination of policy and action to ensure effective prevention, control and abatement of pollution, rejuvenation and protection and management in the River Ganga and its
- (k) issue such directions to any person or authority, as it may consider necessary, for proper or prompt execution of the projects or cancel such projects or stop release of funds or direct refund of amount already released and assign the same to any other person or authority or Board or Corporation for prompt execution thereof;
- (1) direct any person or authority to maintain such books of account or other documents, without prejudice to any law for the time being in force, as may be specified by the National Mission for Clean Ganga;
- (m) take such other measures which may be necessary for achievement of prevention, control and abatement of pollution, rejuvenation and protection and management in the River Ganga and its tributaries;
- (3) The National Mission for Clean Ganga shall have the power to issue directions mentioned under section 5 of the Act.
- (4) The National Mission for Clean Ganga may evolve an appropriate mechanism for implementation of its decisions and the decisions of the National Ganga Council.

- 42. Giving of prior approval in certain matters.- Every person, the State Ganga Committees, District Ganga Protection Committees, local authorities and other authorities shall obtain prior approval of the National Mission for Clean Ganga, on the following matters, relating to River Ganga and any area abutting River Ganga or its tributaries, if required to implement the decisions of the National Ganga Council, namely:-
- (a) engineered diversion and storage of water in River Ganga without affecting the flow of water downstream of the River Ganga;
- (b) construction of bridges and associated roads and embankments over the River Ganga or at its River Bank or its flood plain area;
- (c) construction of Ghats or extension of any existing Ghat;
- (d) construction of jetties;
- (e) construction of permanent hydraulic structures for storage or diversion or control of waters or channelisation of River Ganga or its tributaries;
- (f) deforestation of hill slopes and notified forest and other eco-sensitive areas;
- (g) any other activity which contravenes the principles laid out in paragraph 4 which the National Mission for Clean Ganga may specify.
- 43. Financial framework.- (1) The budgetary allocation shall be utilised by the National Mission for Clean Ganga for meeting expenses in connection with the discharge of its functions, objects and purposes and establishment expenditure: Provided that the money received by way of grants, loans and borrowings shall be expended for the specific purpose for which such grants, loans and borrowings have been received.
- (2) The National Mission for Clean Ganga shall maintain proper accounts and other relevant records and prepare an annual expenditure statement.
- (3)The audit of National Mission for Clean Ganga accounts shall be done by the Comptroller and Auditor-General of India and after completion of annual audit, the audit agency shall furnish annual audit certificate.
- (4)The affairs of National Mission for Clean Ganga shall be subject to the control of Central Vigilance Commission and there shall be a Vigilance Officer to look after vigilance related matters.
- (5) The annual expenditure statement with the audit report shall be forwarded annually to the Empowered Task Force, and the Central Government for being laid before each House of Parliament.
- 44. Engagement of legal experts.- The National Mission for Clean Ganga shall have proper legal set up for which it may engage legal experts, consultants and legal firms as may be necessary for advising it on legal matters and providing support for discharging its duties.
- 45. Scrutiny of reports.- All the reports relating to its activities and reports received from the State Ganga Committees, District Ganga Committees, local authority, Board, Corporation or any person shall be scrutinised by the National Mission for Clean Ganga and placed by it along with its views on the matters mentioned in such report before the National Ganga Council for soliciting its guidance thereon, if required.
- 46. Consolidated report of Ganga Safety audit. The National Mission for Clean Ganga shall prepare and submit a consolidated report of the Ganga safety audits of River Ganga to the National Ganga Council along with the remedial action taken thereon and also make available the same in public domain and exhibit the same at its website.
- 47. Powers of National Mission for Clean Ganga to call for information, conduct inspection, publish reports, etc.(1) Where the National Mission for Clean Ganga considers it expedient so to do under section 5 of the Act, it may, by order in writing.-
- (a) call upon any State Ganga Committees, District Ganga Protection Committees, local authority, other authority, Board, Corporation or person, who has been allotted any project for execution or connected with such project or utilisation of funds, at any time, to furnish in writing or make public for dissemination such information or explanation relating to such project allotted for execution or executed or utilisation of fund allotted as the National Mission for Clean Ganga may require; or
- (b)appoint one or more persons or any authority to make an inquiry in relation to project allotted for execution or executed or utilisation of fund allotted; or
- (c) direct any of its officers or employees or the officers or employees of the Central Government or State Government or any other authority to inspect the books of account or other documents of the State Ganga Committees, District Ganga

- (d) require any person, officer, State Government or authority to furnish to it any reports, returns, statistics, accounts and other information and such person, officer, State Government or other authority shall be bound to do so.
- 48. Financing and implementation model.— The National Mission for Clean Ganga shall develop and constantly refine financial models that would improve the performance and sustainability of projects, and which can be adopted by the State Ganga Committees. District Ganga Committees, local authority, other authority or person for abatement of pollution and rejuvenation, protection and management of the River Ganga.
- 49. Preparation of consolidated reports. (1) The National Mission for Clean Ganga shall, on the basis of the reports and other information forwarded by the State Ganga Committees, District Ganga Committees, local authorities, other authorities, Board, Corporation or person, prepare a consolidated report every year indicating therein in respect of each specified District abutting River Ganga and its tributaries.
- (a) the status of the plans being executed and measures taken by them and any other activity relating to the health of River Ganga and its tributaries;
- (b) the quality of water in River Ganga and its tributaries and remedial action in respect thereof;
- (c) any interruption of water in the River Ganga and reasons therefor:
- (d) condition of River Bed and flood plains and habitat in the specified District;
- (e) remedial measures taken on the complaints received from public by the District Ganga Committee or local authorities;
- (f) threats remaining to be addressed by then with remedial action proposed therefor;
- (g) report if any as reported by Ganga safety auditors;
- (h) all other information relevant about the health of River Ganga and its tributaries.
- (2) The National Mission for Clean Ganga shall submit a consolidated report referred to in sub-paragraph (1) after review thereof to the Empowered Task Force along with remedial action thereof.
- 50. Annual report.- (1) The National Mission for Clean Ganga shall, within three months of the end of every year, prepare an annual report of all work undertaken by it and by the Empowered Task Force on River Ganga, the State Ganga Committees, District Ganga Committees, concerned local authorities, other authorities, Board, Corporation or persons during the immediately preceding year.
- (2) The National Mission for Clean Ganga shall include under separate parts in its annual report referred to in sub-paragraph (1), all works undertaken by it and the Empowered Task Force on River Ganga, the State Governments, the State Ganga Committees, District Ganga Committees, concerned local authorities, other authorities, Board, Corporation or person, and forward the said annual report to the National Ganga Council and the Central Government and also make available in public domain and exhibit at its website.
- 51. Constitution of Committees.- The National Mission for Clean Ganga may, constitute one or more River Ganga Management Committees from amongst its members and such experts in the field of rivers or water as it may consider appropriate for the efficient discharge of its functions under this Order.
- 52. Soliciting guidance.- In case any difficulty arises in implementing decisions of the National Ganga Council of the provisions of this Order, it shall be duty of the National Mission for Clean Ganga to solicit the guidance of the National Ganga Council and take appropriate action accordingly.
- 53. Constitution of District Ganga Protection Committees.- (1) The Central Government shall immediately after the commencement of this Order, in consultation with concerned State Ganga Committee, by notification constitute, in every specified District abutting River Ganga and its tributaries in the States mentioned in paragraph 2, the "District Ganga Committees" for the prevention, control and abatement of environmental pollution in the River Ganga.
- (2) Every District Ganga Committee in each specified District shall consist of the following members, namely:-
- (a) the District Collector in the specified District;

- Chairperson, ex-officio;
- (b) not more than two nominated representatives from Municipalities and Gram Panchayats of the specified District nominated by the State Government.

   Members;

- (c) one representative each of the Public Works, Irrigation, Public Health Engineering, and Rural Drinking Water Departments, and State Pollution Control Board working in the specified District abutting River Ganga to be nominated by the District Collector

   Member, ex-officio;
- (d) two environmentalists associated with River Ganga protection activities and one representative of local industry association in the specified District to be nominated by the District Collector Members,;
- (e) one Divisional Forest Officer of the specified District

- Member, ex-officio

(f) one District official to be nominated by the District Collector.

- Member:
- (2) The District Collector shall be the Chairperson of the District Ganga Committee and the Divisional Forest Officer shall be the Convener of the District Ganga Committee.
- (3) The District Ganga Committees shall meet at such times and at such places as the Chairperson of that Committee may decide and exercise such powers and functions as may be conferred under this Order:

Provided that at least one meeting of the District Ganga Committee shall be held every three months.

- (4) A non ex-officio member may resign his office by giving notice in writing thereof to the Central Government or to the District Collector concerned, as the case may be, and shall cease to be a member on his resignation being accepted by the Government or the District Collector concerned, as the case may be.
- 54. Superintendence, direction and control of District Ganga Committee. The superintendence, direction and control of the management of the District Ganga Committee (including financial and administrative matters) shall, notwithstanding anything contained in this Order, vest in the National Mission for Clean Ganga which may be exercised by it either directly or through the State Ganga Committee or any of its officer or any other authority specified by it.
- 55. Functions and powers of District Ganga Committees.- (1) Every District Ganga Committee shall discharge functions and exercise powers for rejuvenation, protection, restoration and rehabilitation of River Ganga and its tributaries in each specified District as laid out in paragraph 6 and 7 as per the principles specified in paragraph 4.
- (2) In particular, and without prejudice to the generality of the provisions of sub-paragraph (1) for rejuvenation and protection and restoration or rehabilitation of degraded areas abutting River Ganga and its tributaries and subject to other provisions of this Order and rules made thereunder, every District Ganga Committee shall have the following powers and functions in relation to River Ganga and its tributaries abutting in the area in specified District, namely:-
- (a) identifying activities which may be threats in the area of specified District abutting the River Ganga for protection of River Ganga and its tributaries or its River bed and making a plan for remedial action and take remedial action in respect thereof:
- (b) taking remedial action at its own end for protection of River Ganga and its tributaries or its River bed abutting in the specified District (excluding enforcement of the provisions of this Order)
- (c) in the event of its inability to take remedial action, reporting (electronically as well as by sending written communication in hard copy) to the National Mission for Clean Ganga and concerned State Government, the State Ganga Committee, as the case may be, for issue of direction for protection of River Ganga and to formulate appropriate management or remedial actions.
- (d) taking suitable administrative and other measures, to give effect to the provisions of this Order so as to prevent the environmental pollution in the River Ganga and its tributaries, not being inconsistent with the provisions of this Order, or any law for the time being in force.
- (3) In case, the District Ganga Committee is of the opinion that any contravention has been made of any other law for the time being in force or in respect of provisions of this Order, it shall take appropriate action in accordance with the law for the time being in force.
- (4) The District Ganga Committee shall take all such emergency measures as specified in paragraph 7.
- 56. Designation of Nodal Officer.- (1) Every District Ganga Committee shall nominate as Nodal Officer for the purposes of this Order -
- (a) the Sarpanch of Gram Sabha of every village in the areas abutting the River Ganga and its tributaries;

- (b) in case of an area, not being village abutting the River Ganga, the Chairperson of Municipality Planning Committee or Metropolitan Planning Committee or Chairperson of any local authority, as the Chairperson of the District Ganga Committee.
- (2) Every Nodal Officer nominated under sub-paragraph (1) shall take measures to prevent the pollution of River Ganga and its tributaries and take remedial action for protection of River Ganga and its tributaries or their River bed abutting in such village or other area, as the case may be, of which he is the Nodal Officer and in case of his failure to do so, he shall report the violation of this Order to the Chairperson of the District Ganga Committee for remedial action.
- (3) After receipt of the report under sub-paragraph (2), the Chairperson of the District Ganga Committee shall take remedial action for protection of River Ganga or its River bed abutting the specified District.
- 57. Preparation of plans.- (1) Every District Ganga Committee shall prepare its plan for protection of River Ganga and its tributaries and their River bed abutting the specified District and submit the same to the National Mission for Clean Ganga for its approval.
- (2) The plan under sub-paragraph (1) shall include the activities to be undertaken by the District Ganga Committee for protection, control and abatement of environmental pollution in River Ganga and its tributaries and their River Bed area abutting the specified District which may be recommended by the State Government, State Ganga Committees, the National Mission for Clean Ganga, any other authority or Board and the expenditure involved for such plan and time within which such activities shall be completed.
- 58. Preparation of budget and maintenance of accounts.- Every District Ganga Committee shall prepare its budget for every financial year indicating therein the funds required and purposes for which such funds shall be spent and the time limit within which the activity mentioned in the budget shall be completed and submit to concerned State Ganga Committee under intimation to National Mission for Clean Ganga and such Committee shall ensure proper maintenance of accounts as directed by National Mission for Clean Ganga, for audit by the Comptroller and Auditor-General of India or any other agency appointed by the Comptroller and Auditor-General of India and such accounts shall be subject to inspection by National Ganga Council, National Mission for Clean Ganga, State Ganga Committee or any of their appointed entities.
- 59. Monthly and annual reports.- (1) Every District Ganga Committee shall, submit monthly and annual reports to the National Ganga Council, National Mission for Clean Ganga and State Ganga Committee as directed by National Mission for Clean Ganga within specified timelines.
- (2) In addition to the annual report referred to in sub-paragraph (1), the District Ganga Committee shall furnish to the National Mission for Clean Ganga at such time and in such form and manner it may direct to furnish such other returns, statements and other particulars in regard to any proposed or existing programme for the River Ganga Basin Plan for the abutting area in the specified District.
- 60. Budget allocation. The National Mission for Clean Ganga shall consolidate and prepare the budget requirement and submit the same to the Ministry of Water Resources, River Development and Ganga Rejuvenation.
- 61. Direction by Central Government.- Notwithstanding anything contained in this Order, it shall be lawful for the Central Government to issue directions in writing to the Ministries or Departments of the Government of India, or the State Government or the State Ganga Committees, the National Mission for Clean Ganga or District Ganga Committees, or local authority or other authority or statutory bodies or any of its officers or employees, as the case may be, to facilitate or assist in the rejuvenation, protection and management of River Ganga and its tributaries in such manner as it may direct, and such Ministry or Department or Authority or Mission or Board, Committee or Government or statutory body, officer or employee shall be bound to comply with such directions.
- 62. Making of complaint under section 19 of the Act. All the authorities constituted under this Order or their officers authorised by such authorities may make complaint before the court under section 19 of the Act for taking cognizance of any offence under the said section.
- 63. Order to be in addition to other laws.- The provisions of this Order are without prejudice to the discharge of functions by any local authority or other authority or Board or corporation or any person for taking measures for the purposes of effective abatement of pollution and rejuvenation of the River Ganga and its protection and management and any other law for the time being in force.

#### **SCHEDULE**

[See paragraph 20]

### COMPOSITION OF STATE GANGA COMMITTEES

Serial No.	Name of the State Ganga Committee	Composition of the State Ganga Committees
(1)	(2) .	(3)
1.	(Name) State Ganga Protection and Management Committee	(a)Chief Secretary, Government of State of (Name) - Chairperson, ex-officio;
		(b) Principal Secretary, Department of Finance, Government of State of (Name)
· · · · · · · · · · · · · · · · · · ·		- Member, ex-officio;
		(c) Principal Secretary, Department of Urban Development and Housing, Government of (Name)
		- Member, ex-officio;
		(d Principal Secretary, Department of Environment and Forests, Government of State of
		(Name) - Member, ex-officio
		(e)Principal Secretary, Department of Water Resources, Government of State of
		(Name) - Member, ex-officio;
₹ <sub>3</sub>		(f) Principal Secretary, Department of Public Health Engineering, Government of State of
		(Name) - Member, ex-officio
	,	(g) Chairman, (Name) State Pollution
		Control Board - Member, ex-officio; -
		(h)Chief Executive Officer of executing agency in the State of (Name) - Member, ex-officio;
		(i)Principal Chief Conservator of Forests,
		Government of State of (Name) - Member, ex-officio;
		(j) not more than five experts from relevant fields to be nominated by the Government of
[		(Name) - Members

[F. No. Estt-01/2016-17/111/NMCG] SANJAY KUNDU, Jt. Secv.

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## Comparative of Heavy Metals Under National Water Quality Monitoring Programme (NWMP) Year-2014, 2015 & 2016

U.P. Pollution Control Board has been monitoring Heavy Metals in River Ganga, Kali(East) & Ramganga upto Kanpur City at 13 locations. Total 09 Heavy Metals Namely-Mercury(Hg), Arsenic(As), Total Chromium (T.Cr.), Cadmuin (Cd), Lead (Pb), Copper (Cu), Nickel (Ni), Zinc (Zn) & Iron (Fe) had been analyzed. On the comparison of the data of the Year 2014, 2015 and 2016 following are the conclusions:

- 1. The Values of Pb, Fe & Cd has decreased in the year 2016 as compared to the years 2014 & 2015.
- 2. The Values of Total Cr has increased during the year 2016 at as compared to the year 2014 & 2015

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U.P. POLLUTION CONTROL BOARD

NATIONAL WATER QUALITY MONITORING PROGRAMME (NWMP)

MONTH - April & May 2015

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1	Ganga river at Shukratal Muzaffarnagar	2502	Ghaziabad			0.009	0.009	0.01	1,0,0,0,0	0.36	0.42	24.05
2	Ganga D/s at Garhmukteshwar, Ghazlabad	1062	Bulandshahak	7 2 4	BDL	BDL	BDL	BDL	0,03		0.04	-
3	Ganga U/s Annodshahar, Bulandshahar	2488	Bulandshahar		BDL	BDL	BDL	BDL	0.04		0.04	28,45
4	Ganda D/s Ancopshahar, Bulandshahar	2489			BDL	BDL	BDL	BDL	0.04	BDL	0.04	30,45
5	Ganga, Rajghat D/S Narota, Bularidshahar	1145	Bulandshahar Bulandshahar		BDL	BDL	BDL	BDL	0.03	BDL	0.01	19,45
6	Ganga at Kachhia Ghat, Badaun, Bulandhshahar	2490	Bulatiustiana				ND	0.048	0.003	0.006	0.137	1,136
		1063	Kanpur		1	0.04	316	0103	0.009	0.04	0,201	1,167
	Ganga at Kannau V/s	1066	Kanpur			0.019	Annt	0.105	0.005	0.015	מא	0,755
8	Ganga at Kannaul 19/5	1146	Kanpur			0.02	0.001	A 106		0.012	ND	ND
9	Ganga at Bithoofs Kanput	1067	Kanpur			0.002	0.001	P. 0.127	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.022	0,003	0.718
10	Ganga at Kanpuru/\$	1068	Kanpur			0.07	0.004	0.034	37.00	0.013	0.063	1,119
11	Ganga at Kanpur 0/5	1065	Kanpur	1 1		ND	0.001	0.034	0.009		0.038	0.632
12	Kall river at Kannau	1064	Kanpur	<b>8</b>		0.036		0.031	1.5	112	15	0.3
13	Ramganga at Kannau)		Category-'A'	0.00	1 0,0	<u> </u>	0.01	0.1	1.0	<del></del>		
300		-	Category-'B'	-	0.2	<u> </u>		<del> </del>	<del>                                     </del>	<del></del>	15	0.5
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	* <b>C</b>		Category-'E'			<u> </u>	<u> </u>				ببيتين	<u> ميسود يعتبسنا</u> ل
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Note. ND-Not Detected BDL- Below Detection Limit

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### Water Quality Of River Ganga In UP 4 22 Year 2016 (January to September)

The Ganga River is a trans-boundary river of Asia which flows through the nations of India and Bangladesh. The 2,525 km river rises in the western Himalayas in the Indian state Uttaranchal, and flows south and east through the Gangetic Plain of North India into Bangladesh, where it empties into the Bay of Bengal. It is the third largest river by discharge.

Uttar Pradesh Pollution Control Board has been continuously monitoring water quality of River Ganga at 11 sampling points up to Kanpur in UP under National Water Quality Monitoring Programme(NWMP) and 03 sampling points through Boards own resources. These sampling stations are located at Bijnore, Muzaffarnagar, Ghaziabad, Bulandshahar, Badaun, Farrukhabad, Kannauj, Kanpur.

Average data of Dissolved Oxygen (D.O.), Biochemical Oxygen Demand (B.O.D.) and Total Coliform (T.C.) obtained from water quality monitoring during 2015 indicates that:-

- Water quality Of River Ganga at U/S Near Railway Bridge Gangaghat
  Balawali and D/S Near Village Rasolrpur Bhawar, Amroha a/c with Chhuuiya
  River Bijnore falls under category -A.( Drinking Water Source without
  conventional treatment but after disinfection.)
- Water quality Of River Ganga at Shukratal-Muzaffarnagar and Ghatiya Ghat-Farrukhabad falls under category —B(Outdoor Bathing).
- Water quality Of River Ganga at D/s Brij Ghat Garhmukteshwar, U/s &D/s
  Annopshahar-Bulandshahar, Rajghat, D/s Narora Kachhla Ghat-Badaun,
  Bithoor-Kanpur, U/s falls under category-C(Drinking Water Source with
  conventional treatment and after disinfection).
- Water quality Of River Ganga at U/s & D/s Kannauj, U/s & D/s Kanpur falls under category-D( Fish Culture and wild life propagation).
- River water was found least polluted at Bijnore and most polluted at Kanpur downstream.

Prestib. Harris

### **UP Pollution Control Board** WATER QUALITY OF RIVER GANGA IN UTTAR PRADESH Year 2016 (January to September)

January   7.0   -   9.83   0.80   10.0   -   124.0   76.0   48.0   6.0   120.0   -									j	arameter							
January   7.0   -   -   9.83   0.80   10.0   -   124.0   76.0   48.0   6.0   120.0   -	S.No.	Sampling Point	Month	Πq	Conductivity (.µs/cm)	Turbidity (NTD)	(Lygm) OC	BOD(mg/l)	COD(mg/l)	Alkalaky (mg/ll)	Total Hardness (mg/ll)	Calcium Hardness (mg/ll)	Magnesium Hardness (mg/ll)	Chloride(mg/ll)	Total Dissolved solid (mg/ll)	Total Colifornim (MPN/100 ml)	Fecal Coliforum (MPN/100 m)
March   7.5   -   9.80   0.80   -   108.0   98.0   50.0   6.0   120.0   -			January	7.0	-	•	9.83	0.80-	10.0	·	124.0		l	6.0	120.0	·	-
U/S Near Railway Bridge Gangaghat Balawali Bijnore  May 7.6 9.80 0.40 - 104.0 48.0 56.0 4.0 110.0 - 104.0 48.0 56.0 4.0 110.0 - 11			February	7.3	-	+	10.03	1.00	12.0	ж 5. — И.	128.0	72.0	56.0	4.0	120.0	-	-
U/S Near Railway Bridge Gangaghat Balawali Bijnore  May 7.6 9.80 0.40 104.0 46.0 58.0 8.0 120.0 - Bijnore  June 7.6 9.20 0.40 104.0 46.0 58.0 6.0 110.0 -  July 7.6 9.00 0.80 76.0 28.0 48.0 12.0 100.0 -  August 7.4 8.20 1.00 64.0 20.0 44.0 8.0 100.0 -  September 7.6 8.40 0.60 60.0 22.0 38.0 10.0 80.0 -  January 7.5 9.83 1.30 16.0 136.0 84.0 52.0 12.0 140.0 -  Pebruary 7.9 9.78 1.40 16.0 136.0 78.0 58.0 12.0 170.0 -  D/S Near Village Rasolrpur 16.0  April 7.8 9.80 1.00 112.0 62.0 50.0 12.0 160.0 112.0 62.0 50.0 12.0 160.0 112.0 62.0 50.0 12.0 160.0 112.0 62.0 50.0 12.0 160.0 160.0 - 16			March	7.5	-	-	9.80	0.80	· · · · · · · · · · · · · · · · · · ·	eri Marie	108.0	98.0	50.0	6.0	120.0	-	-
Gangaghat Balawali Bijnore	,	U/S Near Railway Bridge	April	7.6	-	No. day	10.00	0.80	in de la companie de	ye, ie	104.0	48.0	56.0	4.0	110.0	in ja Anna Angela	
July 7.6 9.20 0.40 104.0 46.0 58.0 6.0 110.0 - 104.0 110.0 - 104.0 110.0 - 104.0 110.0 - 104.0 110.0 - 104.0 110.0 - 104.0 110.0 - 104.0 110.0 - 104.0 110.0 - 104.0 110.0 - 104.0 110.0 - 104.0 110.0 - 104.0 110.0 - 104.0 110.0 110.0 110.0 - 104.0 110	I .	Gangaghat Balawali	Мау	7.6	· ·	10 gasph	9.80	0.40	y Gr.	ر. بياني	104.0	46.0	58.0	8.0	120.0		•
August 7.4 8.20 1.00 64.0 20.0 44.0 8.0 100.0 -  September 7.6 8.40 0.60 60.0 22.0 38.0 10.0 80.0 -  January 7.5 9.83 1.30 16.0 136.0 84.0 52.0 12.0 140.0 -  February 7.9 9.78 1.40 16.0 136.0 78.0 58.0 12.0 170.0 -  March 7.9 9.00 1.20 116.0 64.0 52.0 14.0 170.0 -  D/S Near Village Rasolrpur		Ju Ju A Sc Ja	June	7,6		•	9.20	0.40			104.0	46.0	58.0	6.0	110.0		-
September 7.6 8.40 0.60 60.0 22.0 38.0 10.0 80.0 -  January 7.5 9.83 1.30 16.0 136.0 84.0 52.0 12.0 140.0 -  February 7.9 9.78 1.40 16.0 136.0 78.0 58.0 12.0 170.0 -  March 7.9 9.00 1.20 116.0 64.0 52.0 14.0 170.0 -  D/S Near Village Rasolrpur 16.0 7.8 9.80 1.00 112.0 62.0 50.0 12.0 160.0 -			July	7.6		•	9.00	0.80		-	76.0	28.0	48.0	12.0	100.0	•	-
September 7.6 8.40 0.60 60.0 22.0 38.0 10.0 80.0 -			August			-	8,20	1.00	•	-	64.0	20.0	44.0	8.0	100.0		-
February 7.9 9.78 1.40 16.0 136.0 78.0 58.0 12.0 170.0 - March 7.9 9.00 1.20 116.0 64.0 52.0 14.0 170.0 - D/S Near Village April 7.8 9.80 1.00 112.0 62.0 50.0 12.0 160.0 - Rasolrpur			September	7.6		•	8.40	0.60	•	. ;; ) 	60.0	22.0	38.0	10.0	80.0	•	-
February   7.9   -   9.78   1.40   16.0   136.0   78.0   58.0   12.0   170.0   -			January	7.5	-	•	9.83	1.30	16.0		136.0	84.0	52.0	12.0	140.0	•	-
D/S Near Village April 7.8 9.80 1.00 112.0 62.0 50.0 12.0 160.0			February	7.9	-	-	9.78	1.40	16.0		136.0	78.0	58.0	12.0	170.0		-
Rasolrpur 16 77 000 000 1160 500 610 100 1500			March	7.9	-	-	9.00	1:20		· -	116.0	64.0	52.0	14.0	170.0	-	-
		D/011000 11005	April .	7.8	-	· <b>-</b>	9.80	1.00	-	<u>-</u>	112.0	62.0	50.0	12.0	160.0	-	_
Bhawar, Amroha a/c with	2	Rasolrpur Bhawar, Amroha a/c with	May	7.7	-		9.80	0.80	-	-	116.0	52.0	64.0	12.0	150.0	_	-
Chhuuiya River Bijnore June 7.6 8.80 0.80 116.0 50.0 66.0 14.0 160.0 -			June	7.6	-	-	8.80	0.80	-	-	116.0	50.0	66.0	14.0	160.0	-	_
July 7.8 9.20 1.20 84.0 36.0 48.0 16.0 120.0			July	7.8	-	-	9.20	1.20	-	_	84.0	36.0	48.0	16.0	120.0	-	-
August 7.6 8.00 1.40 72.0 24.0 48.0 12.0 100.0 -			August	7.6	•	-	8.00	1.40°	-	-	72.0	24,0	48.0	12.0	100.0		-
September 7.6 8.20 1.20 72.0 34.0 38.0 12.0 110			September	7.6	-	-	8.20	1.20	-	-	72.0	34.0		12.0	110		-

	5 A - 2 A -			***************************************				•	Parameter	· · · · · · · · · · · · · · · · · · ·			<del></del>			*
3.No.	Sampling Point	Month	Hd :	Conductivity (µs/cm)	Turbidity (NTU)	DÓ (mg/l)	BOD(mg/l)	COD(mg/l)	Alkainity (mg/ll)	Total Hardness (mg/ll)	Calcium Hardness (mg/ll)	Magnesium Hardness (mg/ll)	Chloride(mg/ll)	Total Dissolved solid (mg/II)	Total Coliformm (MPN/100 ml)	Fecal Coliformm (MPN/100 ml)
	and the second s	January	7.4	250.0	30.0	9.2	2.1	12.0	115.0	148	92.0	56.0	11	120	630	430
316.1		February	7.5	200.0	30.0	9.9	2.3	11.0	120.0	202	124.0	78.8	10	120	610	410
		March	7.4	225.0	30.0	8.8	1.86	10.1	110.0	168.2	86.2	82.0	15	135	630	450
		April	7.3	250.0	30.0	7.0	1.4	11.0	160.0	141	59.0	52.0	10	150	710	470
5	U/s Annopshahar, Bulandshahar	Мау	7.4	253.0	30.0	8.2	2.5	11.2	151.0	146	98.0	48.0	12.5	152	700	320
		June	7.5	254.0	30.0	7.16	2.4	12.2	160.0	160	88.0	72.0	10.	152	550	370
		July	7.1	169.0	36.0	7.56	2.3	11.8	120.0	129	70.0	59.0	9	102	610	400
		August	7.3	168.5	36.0	7.04	1.8	6.8	110.0	114	67.0	47.0	8	107.	610	210
		September	7.2	164.0	34.0	7.3	2.3	10.2	J -	136	76.0	60.0	÷	110	550	370
		January	7.5	230.0	30.0	8.9	1.8	10.0	110.0	144	90.0	54.0	9	140	550	370
		February	7.3	199.0	30.0	10.2	2.0	11.0	100.0	163	97.4	65.6	10	110	410	350
		March	7,5	228.0	30.0	9.1	1.44	8.2	100.0	160.6	80.6	80.0	13.1	137	550	. 370
		April	7.4	252.0	30.0	7.0	1.62	9.0	170.0	148	. 87.0	61.0	10	252	610	430
6.	D/s Anoopshahar, Bulandshahar	May	7.5	250.0	30.0	8.5	2.54	10.2	150.0	148	98.0	50.0	10	153	550	220
		June	7.5	252.0	30.0	7.98	2.2	11.0	150.0	148	86.0	62.0	12	151	630	320
		July	7.3	174.0	36.0	7.61	2.1	9.3	100.0	128	71.0	57.0	9	105	650	350
	· .	August	7.2	168.0	36.0	. 8.22	1.5	3.48	100.0	108.4	81.2	27.2	7	101	550	170
		September	7.3	170.0	34.0	7.5	2.1	9.7	-	128	68.0	60.0	4	120	410	350

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		grame Alexander many					1	ار میموادد ده د د د د	Parameter			·	· · · · · · · · · · · · · · · · · · ·			. 3
fo.	Sampling Point	Month	Дď	Conductivity ( µS/Cm)	Turbidity (NTU)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	Alkainity (mg/ll)	Total Kardness (mg/ll)	Aglelum 26.5. Hardness (mg/l)	Magnesium Hardness (mg/li)	Chloride(mg/ll)	Total Dissolved solid (mg/II)	Total Coliformm (MPN/100 ml)	Fecal Coliformm (MPN/100 mf)
		January	7.4	217.0	30.0	9.7	2.1	10.8	110.0	188.2	111.2	77.0	9	130	700	550
		February	7.4	227.0	30.0	7.2	2.1	10.0	120.0	170	116.0	54.0	11	130	710	610
ý		March	7.4	208.0	30.0	9.0	2.1	12.0	130.0	156	84.0	72.0	12	125	630	410
		April	7.0	254.0	30.0	6.7	3,84	15.0	150.0	138	82.0	56.0	8	153	750	550
<b></b>	Rajghat D/S Narora	May	7.4	252.0	30.0	8.3	3.5	11.6	150.0	144	82.0	62.0	10	150	710	430
		June	7.5	251.0	30.0	7.64	3.12	15.4	150.0	118.6	91.6	37,0	10	151	900	550
		July	7.2	176.0	36.0	7.80	3.2	12.0	120.0	118.8	72.2	46.6	10	106	1000	610
٠. :		August	7.6	170.0	36.0	6.24	3.0	9.0	130.0	187.6	98.2	89.4	10	110	9000	410
	- : : : : : : : : : : : : : : : : : : :	September	7.4	156.0	32.0	. 7.2	3.4	12.6	-	134	74.0	60.0	-	134	900	550
		January	7.4	230.0	24.0	8.3	2.3	10.6	100.0	182	110.0	72.0	10	140	470	350
	·	February	7.3	220.0	24.0	7.6	2,36	12.1	130.0	160	113.0	47.0	8	130	450	370
		March	7.5	225.0	30.0	7.8	2,76	11.2 ·	120.0	164	96.0	68.0	9	150	550	350
	:	April	7.3	252.0	30.0	6.5	3.0	13.0	130.0	139.8	86.2	53.6	10	151	610	410
8	Kachhla Ghat, Badaun	May	7.0	255.0	30.0	7.9	3.2	15.0	150.0	138	97.2	40.8	11	153	630	370
:	Y	June	7.5	233.0	30.0	6.86	2.2	12.0	120.0	120.6	88.6	32.0	14	140	610	350
		July	7.5	167.0	36.0	7.32	2.0	10.0	110.0	131.0	68.0	63.0	8.5	100	630	370
		August	7.5	170.0	36.0	6.38	2.0	8.0		165.0	106.0	59.0	12	110	700	320
		September	7.6	174.0	32.0	7.1	2.2	12.2	-	125	64.0	61.0	•	130	430	350
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√o,	Sampling Point	Month	Нď	Conductivity (µs/cm)	Turbidity (NTU)	(V#w) OC: +	BOD(mg/l)	COD(mg/l)	Atkaldity (mg/ll)	Total Hardness (mg/ll)	Calcium Hardness (mg/l)	Magnesium Hardness (mg/ji),	Chloride(mg/ll)	Total Dissolved solid (mg/ll)	Total Coliformm (MEN/100 ml)	Fecal Coliformm (MPN/100 ml)
		January	7.12	304.0	-	9.50	1.90			- 45	•	-	20.0	238.0	-	-
		February	7.61	240.0	• ••• •• • • • • • • • • • • • • • • •	9.90	2.00	•	-	•	-	-	20.0	154.0	-	-
		March	8.29	224.0	*	9.20	1.90		•	-	-	•	18.0	141.0	-	-
		April	8.12	245.0	-	8.60	2.30	-	-	-	-	-	14.0	128.0	-	-
3	Ghatiya Ghat Farrukhabad	Мау	8.08	342.0		8.6	2.40	-	· -	-	. <u>-</u>	-	18.0	208.0	+	_
	: 	June	8.04	274.0	<u>.</u>	9.00	2.20	•	-	-	-	-	16.0	170.0	-	-
	r Ferral Control of Co	July	7.98	224.0	<b>-</b>	8.40	2.40		-	-		-	16.0	148.0	7	- :
	:	August	7.46	174.0	-	8.40	2.00	-	-	-	-	+	12.0	122.0	-	-
ton <u>de</u>		September	6.74	172.0	-	8.20	1.80	-				-	10.0	128.0	. "	-
:		January	7.01	342.0	56.0	9.10	3.00	11.6	92.0	144.0	88.0	56.0	28,0	. 222.0	4800	2400
- 1	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	February	7.54	307.0	64,0	9.70	3.40	12.0	144.0	144.0	88.0	56.0	24.0	200.0	4900	2700
j		March	8.30	327.0	56,0	9.00	3.10	11.2	168.0	120.0	92.0	28.0	28.0	213.0	4800	2600
		April	8.04	370.0	57.0	7.60	3.50	16.0	176.0	144.0	92.0	52.0	24.0	244.0	5400	2700
0	U/S Kannauj	Мау	8.39	397.0	60.0	8.20	3.30	13.2	168.0	136.0	84.0	52.0	30.0	240.0	4800	2500
=	i.	June	7.98	331.0	34.0	9.20	3.10	12.0	176.0	108.0	92.0	16.0	28.0	216.0	4700	2400
	l	July	6.89	201.0	331.0	7.9	2.4	8.0	92.0	96.0	64.0	32.0	16.0	130.0	3100	2200
	·	August	7.49	216.0	316.0	7.8	2.9	9.6	124.0	88.0	48.0	40.0	14.0	140.0	2600	1700
		September	7,21	291.0	171:0	7.7	3.0	10.2	128.0	104.0	80.0	24.0	18.0	188	2800	1700

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No.	Sampling Point	Month	· На	Conductivity (µs/Cm)	Tarbidity (NTO)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	Alkeinity (mg/li)	Total Hardness (mg/ll)	Calcium Hardness (mg/II)	Magnesium Hardness (mg/II)	Chloride(mg/ll)	Total Dissolved solid (mg/ll)	Total Coliformm (AZPN/100 ml)	Fecal Coliformm (MPN/100 ml)
		Janúary	7.92	492.0	70.0	8.8	4.2	12.8	96.0	112.0	76,0	36.0	32.0	249.0	7000	3300
		February	7.89	351.0	76.0	9:5	4.6	14.4	156.0	158.0	98.0	60.0	28.0	228.0	6300	3100
		March	8.24	358.0	87.0	8.8	4.0	15.2	236.0	128.0	96.0	32.0	34.0	228.0	7000	3200
		April	8.03	488.0	68.0	8.2	4.3	18.0	156.0	152.0	96.0	56.0	28.0	317.0	7900	3900
11	D/S Kannauj	May	8.27	391.0	70.0	7.9	3.7	14.4	176.0	164.0	108.0	56.0	38.0	235.0	7000	3400
		June	8.23	358.0	48.0	9.0	4.0	16.0	184.0	116.0	80.0	36.0	32.0	238.0	7000	3400
		July	6.99	222.0	325.0	7.8	2.8	8.8	96.0	88.0	60.0	28.0	18.0	136.0	3500	2700
		August	7.50	202.0	378.0	7.9	3.1	9.2	108.0	104.0	60.0	44.0	14.0	132.0	3300	2000
		September	7.31	306.0	176.0	7.5	3.2	12.0	120.0	108.0	82.0	26.0	20,0	198.0	3500	2200
	Y:	January	7.64	396.0	92.0	9.6	3.4	12.0	96.0	108.0	88.0	20.0	32.0	262.0	4700	2500
		February	7.78	398.0	90.0	9.9	2.8	11.4	104.0	128.0	104.0	24.0	22.0	234.0	4300	2100
		March	8.37	306.0	68.0	9.8	3.0	12.0	136.0	124.0	76.0	48.0	22.0	198.0	4600	2200
		April	8.34	394.0	56.0	8.3	3,6	14.0	156.0	140.0	92.0	48.0	24.0	258.0	5400	2800
2	Bithoor Kanpur	Маў	7.78	381.0	60.0	8.8	3.2	12.0	176.0	148.0	110.0	38.0	28:0	264.0	4900	2600
	. · · · · · · · · · · · · · · · · · · ·	June	8.14	345.0	52.0	8,5	3.2	12.8	128.0	124.0	92.0	32.0	30.0	224.0	5400	2700
		July	6.94	202.0	302.0	7.0	2.9	9.2	108.0	88.0	64.0	24.0	18.0	131.0	3300	2600
		August	6.98	208.0	263.0	7.7	2.8	6.4	92.0	72.0	32.0	40.0	12.0	133.0	2700	2100
		September	7.08	248.0	158.0	7.7	2.6	9.0	116.0	96.0	71.0	24.0	14.0	148.0	3100	2000

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### Status of Water Quality of River Ramganga in Uttar Pradesh

### Year 2016 (Jan - September)

- ➤ The River Ramganga originates from Paudi Garhwal of Uttarakhand and finally meets in River Ganga at Kannauj. During its course it flows through Moradabad, Rampur, Bareilly and Shahjahanpur.
- ➤ Uttar Pradesh Pollution Control Board has been continuously monitoring water quality of River Ramganga through Boards own resources at 05 stations and at 01 station under National Water Quality Monitoring Programme.
- ➤ These sampling points are located in Moradabad, Rampur, Bareilly, Shahjahanpur and Kannauj district of Uttar Pradesh.
- > Average data of Dissolved Oxygen (DO), Biochemical Oxygen Demand (BOD) and Total Coliform (TC) values obtained from Water Quality Monitoring during 2016 (Jan September) indicates that-

Water of River Ramganga at all sampling stations is fit for Propagation of Wild life and Fisheries (category-D).

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								· P	arameter	1.00		a spilasija – i		en e		
S.No.	Sampling Point	Month	Hď	Conductivity (µS/Cm)	Turbidity (NTU)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	Aikalnity (mg/ll)	Total Hardness (mg/ll)	Calcium Hardness (mg/ll)	Magnesium Hardness (mg/ll)	Chloride(mg/ll)	Total Dissolved solid (mg/ll)	Total Coliformkq(MPN/100 ml)	Fencial (ATPN/100 ml)
<b> </b>		January	7.4		<u>-</u>	10.2	3.0	20.0		136	104.0	32.0	11.98	230		
	ŀ	February	7.2	-	-	10.4	3.0	16.0		130	106.0	24.0	9.99	280	11000	-
	U/s Ramganga near	March	7.1	-	-	8.4	2.4	16.0	-	148	112.0	36.0	12.98	210	6300	2600
		April	7.4	-		6.6	3.0	24.0	-	140	96.0	44.0	16.95	180	54000	35000
1		May	7.1		all professional designation of the second s	6.8	3.0	32.0		168	128.0	40.0	16.98	190	35000	21000
	Moradabad	June	7.2	-	i <del>e</del> ts Agai	6.6	3.0	24.0		148	112.0	36.0	18.96	210	35000	17000
ŀ		July ·	7.2	-	-	7.4	3.0	20.0		124	96.0	28.0	11,98	260	54000	28000
		August	7.2	-	- ,	7.2	2.0	24.0	• • •	136	108.0	28.0	13.98	180	35000	170000
1		September		-		6.5	3.0	22.0	•			-	04.04		35000	<u>-</u> :
	<u> </u>	January	7.5	-	_	9.3	8.0	68.0	<del>-</del> ``	272	212.0	60.0	36.96	290	540000	280000
	[	February	7.3	-	-	7.6	6.0	48.0	-	264	198.0	66.0	35,96	310	6300	<del></del>
İ	Moradabad Rampur road	March	7.6	-	-	8.4	2.4	16.0	-	148	112.0	36.0	12.98	210	540000	260000 350000
		April	7.5	-	-	4.8	12.0	80.0	-	328	256.0	72.0	51.94	340	920000	540000
2		May	7.3	-	2 4	2.6	9.0	68.0		376	304.0	74.0	55.94	370 370	920000	350000
	bridge, Moradabad	June	7.6	-		1.7	9.0	72.0	-	372	296.0	56.9	56.94	360	350000	<del>} - ****</del>
1		July	7.6	-	-	3.1	5.0	48.0	-	256	196.0	60.4	35.96	ļ	920000	350000
ı	1		<del> </del>	1	1	6.2	60	60.0		248	1 192.0	56.0	31,96	260	32000	350000

August

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### UTTAR PADESH POLLUTION CONTROL BOARD WATER QUALITY OF RIVER RAMGANGA IN UTTAR PRADESH Year 2016 (January to September)

		<b> </b>			<del>,</del>		· · · · · · · · · · · · · · · · · · ·	<del>- 1,5, 3, 4, 4, 2, 5,</del>	Parameter	<del> </del>	<del></del>		<del></del>		*****	
S.No.	Sampling Point	Month	Ηď	Conductivity ( µS/Cm)	Turbidity (NTV)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	Alkalnity (mg/li)	Total Hardness (mg/ll)	Calclum Hardness (mg/ll)	Magnesium Bardness (mg/ll)	Chloride(mg/ ii)	Total Dissolved solid (mg/ll)	Total Coliformta( MPN/100 mt)	Fepcal(MPN/ 100 ml) Catiforn
		January	7.6	380,0	· -	8.5	1.0	24,0	218	248.0	138.0	111.3	28	314	21000	
		February	7.6	364.0	_	8.3	1.1	20.0	182	214.0	104.0	111.3	25	262	21000	-
		March	7.6	344.0	-	7.9	1.2	32.0	188	220.0	106.0	115.4	27	274	21000	-
	n, n mn 1	April	7.6	278.0	-	7.8	1.2	40.0	192	228.0	104.0	125.4	27	278	20000	-
5	D/s Ramganga FBD road bridge Shahjahapur	May	7.8	356.0	-	7.9	1.8	44.0	208	230.0	108.0	123.3	- 31	294	28000	-
:	bridgo onanjanapa	June	7.8	358.0	,	6.9	2,2	48.0	212	230.0	106.0	125.4	31.	360	23000	
	,	July	7.7	380.0		7.2	2.1	48:0	240	230.0	82.5	127.5	41.6	342	24000	-
		August	7.5	360.0	-	7.1	2.1	40.0	186	170.0	100.0	70.8	37.	334	28000	•
		September	7.8	354.0	-	7.2	1.8	32.0	216	162.0	104.0	14.1	29	330	24000	
		January	7.42	570.0	68.0	8.1	4.5	16.0	144	204.0	144.0	60.0	38	340	7000	3800
		February	7.59	584.0	72.0	8.8	4.8	14.0	164	204.0	148.0	56.0	34	379	6300	3300
		March	8.41	573.0	50.0	8.9	5.8	28.0	248	176.0	140.0	36.0	38	370	7900	3900
		April	8.24	575.0	48.0	6.1	5.8	28.0	575	152.0	112.0	40.0	42	374	840	4100
6	Ramganga at Kannauj	May	8.31	584.0	82.0	7.8	. 6.0	22.0	204	164.0	120.0	44.0	48	348	8409	3800
1		June	8.51	614.0	73.0	7.5	5.8	24.0	204	184.0	112.0	72.0	60	400	6309	3100
		July	6.90	302.0	324.0	7.5	3.8	14.8	116	108.0	72.0	36.0	24	182	3809	2100
		August	7.51	350.0	320.0	6.4	3.5	14.0	160	152.0	100.0	52.0	20	227	3400	2200
		September	7.05	493.0	138.0	7.1	3.9	16.0	493	164.0	108.0	56.0	20	322	3905	2400

Certification Compiled By

Rocation A.S.O. 10/16

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Contral Lab



#### UTTAR PADESH POLLUTION CONTROL BOARD WATER QUALITY OF RIVER RAMGANGA IN UTTAR PRADESH Year 2016 (January to September)

7									Parameter					:		
S.No.	Sampling Point	Month	рЖ	Conductivity ( µs/cm)	Turbidity (NTU)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	Alkalnity (mg/II)	Total Hardness (mg/ll)	Calcium Hardness (mg/ll)	Magnesium Hardness (mg/il)	Chloride(mg/ll)	Total Dissolved solid (mg/ll)	Total Coliformb (MPN/1 60 ml)	Feacai (MFN/100 Colv (e-v)
		January	7.8	-	-	6.0	6	48.0	-	210	156,0	54.0	31.96	240	-	-
		February	7.6	- :		7.3	5	40.0	- '	244	186.0	58.0	39.96	330	92000	11000
		March	7.3	-	-	4.8	8	60.0		272	204.0	68.0	31.96	390	92000	35000
		April	7.5	-	-	4,5	10	72.0	-	292	224.0	68.0	44.95	340	160000	92000
3	Ju	May	7.3	-	<b>.</b>	2.9	7	56.0	-	340	172.0	68.0	49.95	330	540000	350000
	Kampur Jur	June	7.4	-	-	2.1	. 8	64.0	-	342	286.0	56.0	51.94	390	160000	92000
-	<u>J</u> 1	July	7.6	-	-	3.8	7	56.0	-	240	192.0	48.0	31.96	350	160000	54000
	Ju Ar Se	August	7.5		-	5.8	5	40.0	-	238	194.0	44.0	25,97	310	92000	17000
		September	-	-	-	5.3	. 5	-	- ``	-	-	-		-	160000	•
		January	7.8	380.0	-	8.5	1.0	24.0	218	248.0	138.0	111.25	28	314	30000	-
		February	7.5	364.0	-	7.6	1.4	32.0	176	170.0	210.0	362.5	27	258	30000	-
		March	7.6	368.0	-	7.6	1.4	28.0	176	170.0	86.0	85	28	260	30000	-
1	U/s Ramganga Kapurpur	April	7.6	374.0	-	7.5	1.4	40.0	180	166.0	84.0	82,92	28	338	31000	•
4	village, Meerganj,	May	7.5	366.0	<i>,</i> -	7.2	2.4	52.0	214	188.0	92.0	97.08	48	352	34000	-
	bareilly	June	7.5	374.0	-	6.3	2.7	52.0	<b>-</b>	186.0	92.0	95	46	236	31000	-
		July	7.5	418.0		6.6	2.4	52.0	214	198.0	116.0	-	43	408	36000	
		August	7.7	394.0	-	6.8	2.1	44.0	186	170,0	100.0	70.83	170	376	41000	_
	-	September	7.6	386.0	-	6.5	2.1	40.0	188	172.0	100.0	72.92	35	378	38000	-
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### Status of water quality of River Kali (East) in Uttar Pradesh Year 2016 (January to September)

- River Kali (East) is a tributary of River Ganga and originates from Antwada village of Muzaffarnagar and passes through Meerut, Bulandshahar, Aligarh, flows approximately 500 Km and finally meets river Ganga near Madhopur village at Kannauj. Initially river flows like a small drain with water from seepage and natural resources, with minimum water and flourish only in rainy season.
- U.P. Pollution Control Board has been monitoring water quality of river Kali
  once in a month at one station under National Water Monitoring Programme
  (NWMP) and at 09 stations through Board resources. At one location namely
  Daurala Lawar Road, Meerut the river remains dry.
- These sampling stations are located in Meerut, Ghaziabad, Bulandshahar, Aligarh, Kasganj and Kannauj district.
- Average data of Dissolved Oxygen (D.O.), Biochemical Oxygen Demand (B.O.D.) and Total Coliform (T.C.) values obtained after monitoring of water quality of river from 2015 indicates that:-
  - At U/s Kannauj, water of river Kali is fit for fish culture and wild life propagation.(Categary-D)
  - At remaining 08 monitoring stations, Saini-Mawana Road, Garh Road Meerut, Kharkhoda-Parikshit-Garh Road Meerut, Babugarh Ghaziabad, Devipura-Bulandshahar, Mohan Kuteer-Bulandshahar, Ramghat Road (Before Bridge), Atrauli Aligarh and Nadrai gate, Kasganj due to low values of DO (below 4mg/l) water quality is suitable for irrigation purposes (Categary-E)
  - The higher Total coliform values may be due to the direct discharge of untreated Sewage & Industrial effluent into the river.

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#### WATER QUALITY OF RIVER Kali (East) IN UTTAR PRADESH Year 2016 (January to September)

<u> </u>						1.00		Pa	rameter			· · · · · · · · · · · · · · · · · · ·		<del></del>		50 y 2 - 12 - 1
S.No.	Sampling Point	Month	pH	Conductivity (µS/Cm)	Turbidity (NTU)	DO (mg/l)	BOD (mg/l)	COD(mg/l)	Alkalnity (mg/l)	Total Hardness (mg/l)	Calcium Hardness (mg/)	Magnesium Hardness (mg/l)	Chloride(mg/l)	Total Dissolved solid (mg/l)	Total Coliformm (AIPN/100 ml)	Recal Coliformm (APN/106 mf)
		January	7.2	1410.0		Nil	40.0	248.0		280.0	162.0	118.0	54.0	980.0	130000	79000
		February	7.4	1330.0		Nil	40.0	208.0		342.0	202.0	140.0	49.0	950.0	150000	840000
		March	7.5	1360.0		Nil	46.0	240.0		366.0	218.0	148.0	64.0	910.0	140000	79000
		April	7.2	1410.0		Nil	48.0	248.0	·	370.0	216.0	154.0	76.0	980.0	150000	84000
1	Saini-Mawana Road,	May	7.5	1280.0		Nil*	45.0	256.0		396.0	250.0	146,0	81.0	880.0	110000	79000
	Meerut	June	7.0	1390.0		Nil	52.0	272.0		448.0	256.0	192.0	85.0	940.0	150000	94000
		July	7.1	1260.0		Nil	50.0	220,0	*	356.0	220.0	136.0	90.0	922.0	120000	84000
		August	7.3	1180.0		Nil	46.0	240.0		388.0	250.0	138.0	78.0	810.0	110000	63000
		September	7.7	1310.0	Data not	Nil	54.0	288.0	Data not	438.0	290.0	148.0	85.0	1010.0	149000	94000
-		January	7,5 .	1320.0	reported	Nii	45.0	256.0	reported	290.0	182.0	108.0	61.0	890.0	150000	84000
		February	7.5	1440.0		Nil	50.0	256.0		378.0	222.0	156.0	. 87.0	990.0	150000	83000
		March	7.4	1490.0		Nil	54.0	272.0		410.0	338.0	172.0	93.0	1040.0	170000	94000
		April	7.7	1510.0		Nil	58.0	288.0		440.0	262,0	178.0	111.0	1070.0	170000	94000
2	Garh Road, Meerut	May	7.5	1520.0	1	Nil	56.0	280.0		418.0	252.0	166.0	103.0	1110.0	120000	84000
	Va. 10	June	7.4	1690.0	1	Nil	62.0	300.0		472.0	270.0	202.0	108.0	1260.0	176000	110000
		July	7.6	1470.0	1	Nil	60.0	268.0		460.0	238.0	222.0	100.0	1020.0	155000	80000
		August	7.5	1410.0	1	Nil	55.0	280.0		418.0	250.0	168.0	97.0	940.0	176000	110000
		September	7.3	1540.0	1	Nil	57.0	290.0	] .	484.0	302.0	182.0	108.0	1540.0	159000	110000

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J.						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	P:	rameter		·	T				
S.No.	No. Sampling Point	Month	Eld	Conductivity (µS/Cm)	Turbidity (NTO)	DO-(mg/l)	BOD(mg/l)	COD(mg/1)	Alkalnity (mg/j)	Total Hardness (mg/l)	Calcium Hardness (mg/l)	Magnosium Hardness (mg/l)	Chloride(mg/l)	Total Dissolved solid (mg/l)	Total Coliformm (MPN/100 ml)	Fecal Coliforum (MPN/100 ml)
	<del> </del>	January	7.4	1760.0		Nil	58.0	290.0		362.0	230.0	132.0	75,0	1140.0	240000	130000
		February	7.5	1790.0	┥ ⊢	Nil	52.0	260.0	Data not reported	386.0	248,0	138.0	82.0	1190.0	210000	110000
		March	7.4	1850.0		Nil	64.0	290.0		392.0	256.0	136.0	104.0	1210.0	220000	120000
		April	7.6	1780.0		Nil	60.0	320.0		472.0	280.0	192.0	137.0	1190.0	240000	130000
3	Kharkhoda Parikshit Garh Road, Meerut	May	7.2	1890.0	Data not reported	Ņil	64.0	306.6		494.0	292.0	202.0	149.0	1480.0	210000	110000
		June	7.4	1950.0		Nil	70.0	340.0		522.0	290.0	232.0	171.0	1540.0	240000	150000
		Јшу	7.6	1752.0		Nil	62.0	310.0		430.0	264.0	166.0	137.0     1190.0     240000     130000       149.0     1480.0     210000     110000       171.0     1540.0     240000     15000       140.0     1210.0     170000     90000       113.0     1130.0     210000     12000       136.0     1390.0     240000     14000       162.6     190000     90000       170.0     210000     11000	90000		
	:	August	7.5	1610.0		Nil	60.0	300.0		438.0	246.0	192.0	113.0	1130.0	<del></del>	120000
		September	7.5	1790.0		Nil	63.0	320:0		516.0	326.0	190.0	136.0	1390.0	240000	140000
		January	7.0	1384.0	70.0	Nil	42.0	140:0	520.0	409.0	252.2	150.0	162.6		190000	90000
		February	7.4	1436.0	70.0	Nil	46.3	167.0	560.0	419.0	235.0	185.0	170.0			110000
		March	6.9	1325.0	70.0	Nil	57.0	196.0	510.0	393.0	206.0	187.0	153.0	-	210000	80000
		April	7.3	1295.0	65.0	Nil	67.5	180.0	500.0	375,0	224.2	150.8	163.0	 	190000	90000
4	Babugarh, Ghaziabad	May	7.0	1386.0	50.0	Nil	45.0	124.0	650.0	385.0	252.0	133.0	165.0	Data not reported	180000	80000
		June	7.2	1271.0	50.0	Nil	45.6	161.0	600.0	326,4	178.0	146.0	161.0		160000	60000
		July	7.2	1295.0	50.0	Ńil	28.0	110.0	620.0	336.0	170.0	166.2	144.0	_	150000	50000
		August	7.5	1275.0	55.0	Nil	24.0	82.0	610.0	440.0	380.0	160.0	135.0	-	140000	60000
		September	7.1	1307.0	50.0	Nil	27.0	122.0	640.0	176.4	139.4	37.0	153.0		1450000	80000





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S.No.	Sampling Point	Month	рН	Conductivity (µS/Gm)	Turbidity (NTO)	DO (mg/l)	BOD(mg/l)	COD(mg/l)	Alkshnity (mg/l)	Total Hardness (mg/l)	Calcium Harduess (mg/l)	Magnosium Hardness (mg/l)	Chloride(mg/l)	Total Dissolved solid (mg/l)	Total Coliformm (MPN100 ml)	Fecal Coliformun (MPN/100 ml)
	:	January	8.5	1591.0	36.0	Nil	68.0	172.0	620.0	471.2	254.0	217.0	276.0	954.0	290000	120000
		February	8.5	1679.0	40.0	Nil	114.0	354.0	750.0	430	233.0	196.0	215.0	1007.0	310000	130000
		March	8.1	1380.0	34.0	Nil	90.0	324,0	580.0	380	250.0	130.0	180.0	752.0	290000	110000
	U/s Devipura,	April	7.4	1136.0	36.0	Nil	78.0	294.0	400.0	316	189.0	127.0	150.0	681.0	320000	130000
5	Bulandshahar	May	7.3	1220.0	30.0	Nil	65.0	280.0	520.0	470	260.0	210.0	110.0	930.0	320000	140000
		June	7.0	1236.0	32.0	Nil	68.0	173.0	520.0	343.4	200.0	143.0	135.0	741.0	280000	160000
	:	July	7.1	953.0	30.0	Nil ·	60,0	138.4	398.0	285.8	149.2	136.6	11.0	573.0	260000	150000
		August	7.3	1236.0	30.0	Nil	50.0	91.6	530.0	331.4	179.4	151.8	15.0	742.0	250000	160000
		September	7.6	1097.0	36.0	Nil	68.0	164.0	410.0	310	156.0	154.0	32.0	560.0	160000	140000
		January	8.0	1496.0	36.0	Nil	72.0	150.0	650.0	456.0	230.0	226.0	196.0	897.0	260000	110000
		February	8.0	1661.0	40.0	Nil	106.2	301,6	700.0	404.0	213.0	191.0	210.0	996.0	280000	120000
ļ.	ericker.	March	7.8	1380.0	38.0	Nil	74.0	284,0	642.0	380.0	206.0	174.0	110.0	897.0	260000	110000
		April	7.6	1125.0	36.0	Nil	64.2	270.0	430.0	315.0	183.0	132.0	153.0	678.0	280000	120000
6	D/s Mohan Kuteer	May	7.3	1230.0	32.0	Nil	45.0	210,0	440.0	360.0	202.0	158.0	98.0	710.0	290000	130000
	Bulandshahar	June	7.1	1232.0	32.0	Nil	48.0	150.0	510.0	327.2	185.0	142.0	130.0	739.0	260000	140000
		July	7.2	957.0	30.0	Nil	45.0	169.6	400.0	278.8	153.2	125.6	10.5	574.0	240000	130000
		August	7.2	1233.0	30.0	Nil	40.0	86.4	450.0	296.8	149.2	147.6	15.0	740.0	230000	140000
		September	7.4	950.0	36.0	Nil	57.0	152.0	415.0	290.0	157.0	133.0	21.0	615.0	280000	250000

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S.No.	Sampling Point	Month	Βď	Conductivity ( µS/Cm) Turbidity (NTU)	DO (mg/n)	BOD(mg/l)	COD(mg/l)	Alkalulty (mg/l)	Total Hardness (mg/l)	Calclum Hardness (mgl) Magnesium Hardness (mgl)) Chlorido(mgl)	Total Dissolved solid (mg/l)	Total Coliformum (MPNI00 ml)				
		January	8.5		NIL	188.0	468.0									
		February	8.0		NIL	180.0	560.0									
		March	7.6		NIL	180.0	460.0									
		April	7.4		NIL	200.0	520.0									
7	Kali River Before Distt., Ramghat, Atrauli, Aligarh	May	7.5	1. 12 P	NIL	420.0	1240.0			engalagian di Albanda (1946). Paganagan di Albanda (1946).		,				
	Kambaar'yarann bangarn	June	7.6	N. 4-22 C. T. 4	NIL	440.0	1280.0			And the same that						
		July	7,4		NIL	410.0	1200.0			45		•				
		August	7.6		NIL	420.0	1220.0					•				
		September	7.5		NIL	420.0	1240.0	1.		Data not repor	rted					
-		January	8.7	Data not reported	NIL 198.0 478.0											
		February	8.0		NIL	200,0	608.0	_								
		March	8.0		NIL	200.0	520.0									
		April	7.68	1	NIL	260.0	580.0			1						
	Kali River After Wave Disttilary,Ramghat	Мау	8.00	· .	NIL	460.0	1400.0					;				
	Road,Atrauli,Aligarh	June	7.80	1	NIL	460.0	1400.0	<u></u>				÷ .				
		July	7.60	1	NIL	460.0	1400.0	<u> </u>				į				
		August	7.60	]	NIL	460.0	1400.0									
		September	7.50	7	NIL	460.0	1320.0									
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		Parameter														
S.No.	Nadroj Cata Kasyani	Month	Цď	Conductivity ( µS/Cm)	Turbidity (NTU)	DO (mg/l)	ВОD(mg/l)	COD(mg/l)	Alkainity (mg/II)	Total Hardness (mg/ll).	Calcium Hardness (mg/li)	Magnesium Hardness (mg/li)	Chloride(mg/ll)	Total Dissolved solid (mg/ll)	Total Coliformm (MPN/190 ml)	Fecal Colifornim (MPN/100 ml)
, ,		January	8,30			1.0	180:0	480.0					,			
		February	8.00			Nil	200.0	600.0					•			
		March	7.50	-		Nii	200.0	540.0								
9		April	7.38			Nil	200.0	480.0								
		May	7.50	Data not	reported	Nil	440.0	1360.0		-		Data n	ot reported			
		June	7.50	: :		Nil	440.0	1420.0								
		July	7.50			Nil	420.0	1260.0								
		August	7.45	]		Nil	460.0	1410.0								
<u> </u>		September	7.45			Nil	440.0	1300.0						,		
		January	7.52	761.0	162.0	7.5	5.8	19,2	88.0	88.0	64.0	24.0	0 92.0 645.0 7000 3800			
		February	7.47	993.0	148.0	6.3	5.6	18.0	176.0	196.0	118.0	Data not reported  24.0 68.0 492.0 5800  78.0 92.0 645.0 7000	7000	3800		
		March	8.07	710.0	117.0	8.6	6.4	24.0	272.0	152.0	104.0	48.0	74.0	461.0	8400	4300
		April	8.02	808.0	72.0	9.4	7.0	32.0	236.0	192.0	140.0	24.0     68.0     492.0     5800       78.0     92.0     645.0     7000       48.0     74.0     461.0     8400       52.0     84.0     509.0     9200       64.0     88.0     312.0     8400       76.0     78.0     411.0     7900       28.0     12.0     138.0     4100	9200	4700		
10	U/S Kannauj, Kanpur	May	7.69	519.0	96:0	7.8	6:0	20.0	248.0	204.0	140.0	64.0	88.0	312.0	8400	4000
	-	June	8.21	631.0	99.0	5.9	6.8	28.0	212,0	200.0	124.0	Data not reported  54.0 24.0 68.0 492.0  18.0 78.0 92.0 645.0  04.0 48.0 74.0 461.0  40.0 52.0 84.0 509.0  40.0 64.0 88.0 312.0  24.0 76.0 78.0 411.0  52.0 28.0 12.0 138.0  68.0 28.0 16.0 131.0	411.0	7900	3300	
		July	6.95	213.0	203.0	7.0	3.1	9.6	104.0	80.0	52.0	28.0	12.0	138.0	4100	2600
		August	7.51	203.0	382.0	8.0	4.0	13,6	100.0	96.0	68.0	28.0	16.0	131.0	3800	2100
		September	7.51	245.0	185.0	7.0	3.9	12.4	112.0	112.0	80.0	32.0	22.0	160.0	3900	2100

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