BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

IN THE MATTER OF:

Dharmesh Shah, Chennai

…APPLICANT

VERSUS

Union of India & Others …RESPONDENTS

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Signed and verified on this 7th day of April, 2021 at Chennai

DEPONENT

H.D. VARALAXMI, M.Tech
Regional Director
CENTRAL POLLUTION CONTROL BOARD
(MoEF & CC, Govt. of India)
Regional Directorate (Chennai)
2nd Floor, 77-A, South Avenue Road,
Ambattur Industrial Estate, Chennai - 600 058

Place: Chennai
Date : 07.04.2021

Status Report
in
Compliance of Hon'ble NGT Order Dated 09th March, 2021 in OA No. 82/2021(SZ) (Dharmesh Shah, Chennai v/s Union of India & Ors.)

(April 2021)

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

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Status Report in Compliance of Hon'ble NGT Order Dated 09th March, 2021 in OA No. 82/2021(SZ) (Dharmesh Shah, Chennai v/s Union of India & Ors.)

1.0 Background

The Hon'ble Supreme Court of India, in the matter of Writ Petition (Civil) No. 375 of 2012 (Paryavaran Suraksha Samiti & Anr. v/s Union of India & Ors.), vide order dated 22.02.2017, directed that "*each concerned State (each concerned Union Territory) to make provision for 'online, real time, continuous monitoring system' to display emission levels, in the public domain, on the portal of the concerned State Pollution Control Board".*

The applicant, in the matter of OA No. 82 of 2021 (SZ), titled 'Dharmesh Shah, Chennai v/s Union of India & Ors.', filed before the Hon'ble National Green Tribunal (NGT), Southern Zone, Chennai, has alleged that the Hon'ble Supreme Court direction regarding availability of Online Continuous Emission Monitoring System (OCEMS) data in public domain, is not being implemented by the Southern States namely, Tamil Nadu, Karnataka, Andhra Pradesh, Kerala and the Union Territory of Puducherry. The Hon'ble NGT (SZ), reviewed the matter and vide order dated 09.03.2021, passed the following directions:

i. *We direct the concerned State Pollution Control Boards (SPCB) and the Central Pollution Control Board (CPCB) to prepare a chart regarding the status of implementation of the directions issued by the Hon'ble Supreme Court in the respective States and if it is not complied with what is the nature of action taken by them for implementing the same in its letter and spirit in these States as directed by the Hon'ble Supreme Court.*

ii. *The State Governments are also directed to file independent responses regarding the manner in which the directions issued by the Hon'ble Apex Court is being implemented in their respective States and also how it is being made available in the*

public domain and the monitoring mechanism as to how this is maintained and carried out properly by the responsible persons. In the cases of States which have not implemented the scheme so far, what is the reason for the delay and how much time they require for implementing the directions issued by the Hon'ble Apex Court in this regard.

iii. *The Central Pollution Control Board (CPCB) is also directed to give these details and also action plan for implementation of the directions in the States and who have not yet implemented so far, or any improvement required in the places where it has been implemented but not properly monitored or exhibited.*

iv. *They are directed to submit the above reports to this Tribunal on or before 09.04.2021 by e-filing in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF along with necessary hard copies to be produced as per rules.*

A copy of the Hon'ble NGT order dated 09.03.2021, in the matter of OA No. 82 of 2021 (SZ), titled 'Dharmesh Shah, Chennai v/s Union of India & Ors.', is given at **Annexure-I**.

2.0Proceedings of Hon'ble NGT, Principle Bench, New Delhi, in the matter of OA No. 593/2017, titled 'Paryavaran Suraksha Samiti & Anr. v/s Union of India & Ors.'

2.1 Hon'ble NGT order dated 31.08.2018:

The Hon'ble Supreme Court matter of WP(C)-375 of 2012, was taken up by the Hon'ble National Green Tribunal, Principal Bench, New Delhi in OA No. 593 of 2017 (Paryavaran Suraksha Samiti & Anr. v/s Union of India & Ors.), in furtherance to the order of Hon'ble Supreme Court dated 22.02.2017. The Hon'ble NGT vide order dated 03.08.2018, directed CPCB to prepare an action plan for implementation by SPCBs/PCCs to ensure the compliance of Hon'ble Supreme Court Order dated 22.02.2017, to constitute two-member

Monitoring Committee (CPCB and MoEF&CC) for monthly review of the issues, to upload quarterly steps taken report on CPCB website and to assess & recover compensation for damage to the environment.

In compliance with the directions of the Hon'ble NGT, CPCB filed 'Status Reports' on 04.09.2018, 26.11.2018, 12.12.2018, 30.05.2019, 14.08.2019, 14.05.2020 and 16.09.2020.

2.2 Hon'ble NGT order dated 21.09.2020:

During the hearing in the matter of OA No. 593 of 2017, held on 21.09.2020, the Hon'ble NGT also reviewed the following matters:

i. OA No. 673 of 2018 (In Re: News item published in "The Hindu" authored by Shri Jacob Koshy, titled "More river stretches are now critically polluted: CPCB"),
ii. OA No. 829 of 2019 (Lt. Col. Sarvadaman Singh Oberoi v/s Union of India & Ors.),
iii. OA No. 148 of 2016 (Mahesh Chandra Saxena v/s South Delhi Municipal Corporation & Ors.).

The Hon'ble NGT vide order dated 21.09.2020 passed following directions:

i. All the States/UTs may address gaps in generation and treatment of sewage/effluents by ensuring setting up of requisite number of functional ETPs, CETPs and STPs, as directed by the Hon'ble Supreme Court in (2017) 5 SCC 326.

ii. The timeline for commissioning of all STPs fixed by the Hon'ble Supreme Court, i.e., 31.03.2018, has long passed. The Hon'ble Supreme Court directed that the State PCBs must initiate prosecution of the erring Secretaries to the Governments, which has also not happened. This Tribunal was directed to monitor compliance and in the course thereof, we direct that compensation may be recovered in the manner already directed in earlier orders (See, Paras 5 and

6 herein), which may be deposited with the CPCB for restoration of the environment.

iii. *The unutilized capacity of the existing STPs may be utilized expeditiously.*

iv. *The States/ UTs may ensure that the CETP, ETPs and STPs meet the laid down norms and remedial action be taken wherever norms are not met.*

v. *It must be ensured that no untreated sewage/effluent is discharged into any water body. Prompt remedial action may be taken by the State PCBs/PCCs against non-compliant ETPs/CETPs by closing down or restricting the effluents generating activity, recovering compensation and taking other coercive measures following due process of law.*

vi. *Directions outlined in Paras 24-26 herein may be implemented by the States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the Central Monitoring Committee (CMC) at the National level.*

vii. *Wherever action plans have not yet been finalized in respect of polluted river stretches or polluted coastal stretches, the same may be completed within one month from today. The execution of action plans may be overseen in the manner already directed in OA 673/2018 by River Rejuvenation Committees (RCCs). In the coastal areas, the said Committees may be known as 'River/Coastal Rejuvenation Committees'. The action plans must have provision for budgetary support in the manner laid down by the Hon'ble Supreme Court or otherwise which aspect may also be monitored by the CMC.*

viii. *Directions outlined in Para 29 herein may be implemented by the concerned coastal States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. OA No. 829/2019 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018.*

ix. *Directions outlined in Para 34 and 35 herein may be implemented by the States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. OA No. 148/2016 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018.*

x. *CMC may consider development of an appropriate App to enable easy filing and redressal of grievances with regard to illegal discharge of sewage/effluents.*

xi. *The monitoring by the CMC may have the target of reduction of pollution loads and improvement of water quality of rivers and coastal areas.*

xii. *The CMC may also monitor the setting up of the bio-diversity parks, constructed wetlands and other alternative measures to reduce pollution load.*

xiii. *The CMC may also monitor demarcation of flood plain zones.*

xiv. *The treated sewage water may be duly utilized for secondary purposes by preparing appropriate action plans and reports in this regard be filed with the CPCB periodically.*

xv. ***CMC may submit its consolidated update report incorporating all the above, before the next date. Each action point mentioned in Para 26 may be individually covered, and summarized in a tabular format.***

The Ministry of Jal Shakti (MoJS), Government of India submitted its consolidated report to Hon'ble NGT in February, 2021. A copy of the report filed by MoJS is given at **Annexure-II**.

2.3 Hon'ble NGT order dated 22.02.2021:

During the last hearing in the matter of OA No. 593/2017, held on 22.02.2021, the Hon'ble NGT reviewed the consolidated report filed by MoJS and **highlighted that the monitoring by the Tribunal cannot be unending and must now be taken over by the concerned**

authorities. The Hon'ble NGT disposed of the case while directing that **MoJS may devise an appropriate mechanism for more effective monitoring of steps for control of pollution and rejuvenation of all polluted river stretches in the country. The Hon'ble NGT also directed the Chief Secretaries of all States/UTs to personally monitor progress at least once every month and the National River Rejuvenation Mechanism (NRRM) every quarter.**

The conclusion part of the order dated 22.02.2021 is reproduced below:

> *"**Conclusion:***
>
> *37. In view of the above, **we are of opinion that the monitoring by the Tribunal cannot be unending and must now be taken over by the concerned authorities**. The roadmap stands laid out. Action plans have been prepared for remediation of all the 351 identified polluted river stretches. Gaps have been identified for ETPs/CETPs/STPs (including modular STPs wherever necessary). Timelines are clear. Sources of funding are clear in the Supreme Court order. HAM model is also available as per Govt. of India Policy mentioned in the report of the CMC. Alternative conventional methods of bio/phytoremediation are also available as mentioned in the report of the CMC. Existing treatment capacity is not fully utilised. New projects, already ongoing or those yet to commence need to be expedited. Consequences for delay in terms of compensation and administrative measures have been clearly mentioned. The river rejuvenation committees in the States/UTs, as per directions of the Chief Secretaries may perform their obligations accordingly which may be monitored by the Central Monitoring Committee, headed by Secretary, Jal Shakti, as directed earlier.*

38. We find that the monitoring mechanism introduced as per directions of this Tribunal in the form of RRCs at the States level and CMC at the Central level is to an extent identical to the monitoring mechanism laid down under the River Ganga Rejuvenation, Protection and Management Authorities Notification 2016. However, mechanism under the 2016 notification being statutory and exhaustive, it will be better that the same is adopted for all the river stretches as issues involved are common. The Empowered Task Force on river Ganga headed by Union

Minister of Jal Shakti may exercise all powers and discharge all functions in relation to all the polluted river stretches in the same manner as the functions entrusted to it under the River Ganga 2016 order for control of pollution and rejuvenation of polluted river stretches. This is necessary so that the Nation/Central Monitoring Mechanism can be effective, in view of continuing failure of statutory mechanism under the Water Act for preventing pollution of water, resulting in pollution of almost all the rivers and water bodies in the country, posing serious threat to availability of potable water for drinking purposes as well as for safety of food chain. Hardly any accountability has been fixed for such serious failures. It will be open to the MoJS to issue any further appropriate statutory order to give effect to the above directions under the EP Act. The National/Central Mechanism may enforce the earlier directions of this Tribunal for collecting compensation for the failure to commence or complete the projects for setting up of sewage treatment equipments or taking steps for interim remediation measures. This is necessary for accountability for the failure to obey the law. The compensation so assessed may bedeposited in

a separate account to be used for rejuvenation of the polluted river stretches in the same manner as directed in the case of Ganga quoted above. As directed vide order dated 19.12.2018 inOA 673/2018, responsibility to pay compensation on behalf of the States/UTs will be of the Chief Secretaries. As per scheme of the NGT Act, every order of NGT is executable as a decree of Civil Court.

Further, failure to comply order of the NGT is an offence punishable with imprisonment upto three years or fine upto Rs. 10 crores with additional fine for continuing offence after conviction.28 If the offence is by a Government Department, Head of the Department is deemed to be guilty. Cognizance of the offence can be taken by a Court on a complaint of Central Government or any other person who has given notice to the Central Government or its authorized representative. The complaint can be filed before a Court of Magistrate of first class. It is, thus, necessary in view of continuing violation of NGT order, requiring payment of compensation to reiterate the direction of responsibility for payment of compensation, to be of the Chief Secretaries and in default, their liability to be proceeded against for coercive measures for execution or by way of prosecution as per NGT Act, 2010.

39. Our directions are summed up as follows:

(i) In the light of observations in Para 38 above, ***MoJS may devise an appropriate mechanism for more effective monitoring of steps for control of pollution and rejuvenation of all polluted river stretches in the country.*** *The said mechanism may be called "National River Rejuvenation Mechanism" (NRRM) or given any other suitable*

name. NRRM may also consider the observations with regard to setting up of National/State/District Environment Data Grid at appropriate levels as an effective monitoring strategy.

(ii) *Chief Secretaries of all States/UTs and PCBs/PCCs must work in mission mode for strict compliance of timelines for commencing new projects, completing ongoing projects and adopting interim phyto/bio-remediation measures, failing which compensation in terms of earlier orders be deposited with the MoJS, to be utilised in the respective States as per action plan to be approved by the NRRM. Other steps in terms of action plans for abatement of pollution and rejuvenation of rivers, including preventing discharge or dumping of liquid and solid waste, maintaining eflow, protecting floodplains, using treated sewage for secondary purposes, developing bio-diversity parks, protecting water bodies, regulating ground water extraction, water conservation, maintaining water quality etc. be taken effectively. The process of rejuvenation of rivers need not be confined to only 351 stretches but may be applicable to all small, medium and big polluted rivers, including those dried up.*

(iii) ***The Chief Secretaries of all States/UTs may personally monitor progress at least once every month and the NRRM every quarter."***

A copy of Hon'ble NGT order dated 22.02.2021 is given at **Annexure-III**.

3.0 State-wise status of web-links for display of 'Online Continuous Emission/Effluent Monitoring System (OCEMS)' data

As directed by Hon'ble Supreme Court of India regarding provisions for display of OCEMS data in public domain by SPCBs/PCCs, the matter was followed-up. As per the information received from SPCBs/PCCs, the status of web-links for OCEMS data is as follows:

i. The 14 SPCBs/PCCs (namely- Andhra Pradesh, Assam, Bihar, Goa, Gujarat, Himachal Pradesh, Haryana, Kerala, Madhya Pradesh, Odisha, Puducherry, Tamil Nadu, Telangana, West Bengal) are displaying OCEMS data in public domain.

ii. The Mizoram SPCB has informed that there is no industry requiring OCEMS connectivity.

iii. The Lakshadweep PCC informed that there is no industry in the Union Territory of Lakshadweep.

iv. The Chandigarh PCC has informed that data will be displayed after up gradation of STPs.

v. The link provided by Maharashtra SPCB is password protected and data is not available in public domain.

vi. The web-links provided by 5 SPCBs (namely, Chhattisgarh, Jammu & Kashmir, Punjab, Karnataka and Sikkim) are not working.

vii. The 13 SPCBs/PCCs (Andaman & Nicobar, Arunachal Pradesh, Daman &Diu, Dadra Nagar Haveli, Delhi, Jharkhand, Manipur, Meghalaya, Nagaland, Rajasthan, Tripura, Uttar Pradesh and Uttarakhand) are not displaying OCEMS data in public domain.

The state-wise details ofweb-links for OCEMS data are given at **Annexure-IV**.

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Item No. 01:

BEFORE THE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE, CHENNAI

Original Application No. 82 of 2021 (SZ)

(Through Video Conference)

IN THE MATTER OF:

Dharmesh Shah,

Chennai. ....Applicant(s)

Versus

Union of India and Others.

....Respondent(s)

Date of hearing: 09.03.2021.

CORAM:

HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER

HON'BLE MR. SAIBAL DASGUPTA, EXPERT MEMBER

For Applicant(s): Mr. Ritwick Dutta

For Respondent(s): Ms. Kanimozhi represented
Smt. Maduri Donti Reddy for R3 & R4
Mr. E.K. Kumaresan for R11
Dr. V.R. Thirunarayanan for R13
Mr. C. Kasirajan through
Mr. Ajith Kumar for R14

ORDER

1. The above case has been filed by the applicant, on the allegation that the directions issued by the Hon'ble Supreme Court in ***(Paryavaran Suraksha Samiti Vs. Union of India), reported in (2017) 5 SCC 326,*** have not been implemented by the Southern States namely, Tamil Nadu, Karnataka, Andhra Pradesh, Kerala and the Union of Territory of Puducherry.

2. Further, as per the decision, the State Government will have to take steps to install Online Continuous Emission Monitoring System (OCEMS) in all places showing the emission level for the knowledge of the people and that has not been carried out by these States.

3. It is also alleged in the application, that though some of the States have installed the system, they have protected the pass word, denying access to information to the public regarding pollution level, including the past and present data.

4. The main purpose of implementing the scheme is for public access to such information showing the status of the past as well as current pollution data, so as to ascertain as to whether any further steps will have to be taken to remedy the situation by the public who want to interfere in this matter by approaching appropriate forum.

5. The applicant also produced certain details that have been collected by them regarding this aspect, which will go to show that it has not been strictly complied with by the States mentioned above. So the applicant filed this application seeking the following reliefs:-

1) Direct the Respondent State Governments and Union Territories to install and upload on their Websites a proper and effective Online Continuous Emissions Monitoring System which is easily accessible to the public

2) Direct the Respondents to ensure that raw data is made available in a harmonized format for public use ad to ensure that historic data is made available for public use in raw and harmonized formats.

3) Direct that station specific coordinates should be made available specifically to understand the efficacy of

monitors vis-a-vis pollution sources since such data can also help pollution impact communities guide decision makers in future placement of quality infrastructure.

4) *Direct the CPCB to prepare a central repository of OCEMS data from all states and host the same on its website as the same would be useful in developing national/regional policies on air quality in industrial areas, especially critically polluted areas.*

6. When the matter came up for hearing for admission today through Video Conference, Sri. Ritwick Dutta represented the applicant. Ms. Kanimozhi represented Smt. Maduri Donti Reddy represented respondents 3 and 4, Mr. E.K. Kumaresan represented 11th respondent, Dr. V.R. Thirunarayanan represented 13th respondent and Mr. C. Kasirajan through Mr. Ajith Kumar represented 14th respondent.

7. On going through the allegations in the application, we are satisfied that there arises a substantial question of environment which requires the interference of this Tribunal for resolving the same.

8. Non-compliance of the directions issued by the Hon'ble Supreme Court in respect of environmental matter on the basis of the environmental laws by the authorities will give rise to the jurisdiction of this Tribunal under Section 14 of the National Green Tribunal Act, 2010 to direct the authorities to take appropriate steps to implement the directions which are intended for the purpose of protecting environment on the precautionary principles.

9. So under such circumstances, we feel that the matter has to be admitted and notice will have to be issued. So the matter is admitted.

10. Issue notice to the respondents by Registered post with acknowledgement due, by e-mail and also by dusthi if possible and produce proof of service on them by filing proof of affidavit as per rules.

11. The applicant is also directed to serve a copy of the application along with the documents, if any, produced to the standing counsels appearing for some of the respondents whose names have been mentioned above within a week and produce proof of such service by filing proper affidavit as per rules.

12. The applicant is also directed to produce necessary requisites along with postal cover and the necessary postal stamps before this Tribunal within a week, so as to enable this Tribunal to send notice to all the respondents through Tribunal, to ensure service on them, so as to enable this Tribunal to proceed against them, if they did not appear in their absence in accordance with law.

13. In the meantime, we direct the concerned State Pollution Control Boards (SPCB) and the Central Pollution Control Board (CPCB) to prepare a chart regarding the status of implementation of the directions issued by the Hon'ble Supreme Court in the respective States and if it is not complied with what is the nature of action taken by them for implementing the same in its letter and spirit in these States as directed by the Hon'ble Supreme Court.

14. The State Governments are also directed to file independent responses regarding the manner in which the directions issued by the Hon'ble Apex Court is being implemented in their respective States and also how it is being made available in the public domain and the monitoring mechanism as to how this is maintained and carried out properly by the responsible persons. In the

cases of States which have not implemented the scheme so far, what is the reason for the delay and how much time they require for implementing the directions issued by the Hon'ble Apex Court in this regard.

15. The Central Pollution Control Board (CPCB) is also directed to give these details and also action plan for implementation of the directions in the States and who have not yet implemented so far, or any improvement required in the places where it has been implemented but not properly monitored or exhibited.

16. They are directed to submit the above reports to this Tribunal on or before 09.04.2021 by e-filing in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF along with necessary hard copies to be produced as per rules.

17. The Registry is directed to communicate this order along with the copy of the application to the official respondents immediately through e-mail so as to enable them to comply with the direction.

18. For return of notice and for filing the respective reports mentioned above, post on 09.04.2021.

.....J.M.
(Justice K. Ramakrishnan)

.....E.M.
Shri. Saibal Dasgupta)

O. A. No.82/2021, (SZ)
09th March, 2021. Sr.

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
O. A. No. 673 of 2018

IN THE MATTER OF:

News item published in "The Hindu" authored by Shri Jacob Koshy, titled "More river stretches are now critically polluted: CPCB"

3rd QUARTERLY REPORT OF
THE CENTRAL MONITORING COMMITTEE (CMC)
IN COMPLIANCE OF THE ORDER DATED 21.09.2020
(UPLOADED ON 26.09.2020)

NATIONAL MISSION FOR CLEAN GANGA
DEPT. OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION,
MINISTRY OF JAL SHAKTI,
GOVERNMENT OF INDIA, NEW DELHI

FEBRUARY 2021

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3rd QUARTERLY REPORT OF THE CENTRAL MONITORING COMMITTEE (CMC) IN COMPLIANCE OF THE ORDER DATED 21.09.2020 (UPLOADED ON 26.09.2020) IN THE MATTER OA No. 673 of 2018

I. General

That this Hon'ble Tribunal in matter O. A. No. 673 of 2018 is seized of the issues, amongst others, regarding remedial action to be taken for abatement of pollution in the polluted river stretches identified by the CPCB based on data collected from the SPCBs/ PCCs and preparation of "*Action Plans*" and their implementation by the concerned State Governments and the UTs. The Hon'ble Tribunal, vide its order dated 21.09.2020 *(uploaded on 26.09.2020)* has passed certain further directions to be complied with by all concerned.

II. Directions of National Green Tribunal vide order dated 21.09.2020

1. *All the States/UTs may address gaps in generation and treatment of sewage/ effluents by ensuring setting up of requisite number of functional ETPs, CETPs and STPs.*
2. *The timeline for commissioning of all STPs fixed by the Hon'ble Supreme Court, i.e., 31.03.2018, has long passed. The Hon'ble Supreme Court directed that the State PCBs must initiate prosecution of the erring Secretaries to the State Governments, which has also not happened. This Tribunal was directed to monitor compliance and in the course thereof, we direct that compensation may be recovered in the manner already directed in earlier orders, which may be deposited with the CPCB for restoration of*

the environment.

3. *The unutilized capacity of the existing STPs may be utilized expeditiously.*

4. *The States/ UTs may ensure that the CETPs, ETPs and STPs meet the laid down norms and remedial action be taken wherever norms are not met.*

5. *It must be ensured that no untreated sewage/ effluent is discharged into any water body. Prompt remedial action may be taken by the State PCBs/ PCCs against non-compliant ETPs/ CETPs by closing down or restricting the effluents generating activity, recovering compensation and taking other coercive measures following due process of law.*

6. Directions outlined in Paras 24-26 of the NGT order dated 21.09.2020 may be implemented by the States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. Directions outlined in Para 26 of the NGT order dated 21.09.2020 are as follows:

i. *Setting up of STPs, Interception and Division (I&D) of drains and preventing untreated sewage and effluents,*
ii. *Use of treated water,*
iii. *Use of sludge manure,*
iv. *Status of septage management,*
v. *Compliance in relation to industries,*
vi. *Installation of STPs/ treatment facilities in Hotels/ Ashrams and Dharmshalas,*
vii. *Water quality monitoring of river Ganga and its tributaries,*
viii. *Maintenance of environmental flow in river Ganga,*
ix. *Disposal of Bio-medical waste,*

x. *Compliance of Solid Waste Management (SWM) Rules, 2016,*

xi. *Preparation of maps and zoning of flood plains,*

xii. *Mining activity under supervision of the concerned authorities,*

xiii. *Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring*,

7. Wherever action plans have not yet been finalized in respect of polluted river stretches or polluted coastal stretches, the same may be completed within one month from today. The execution of action plans may be overseen in the manner already directed in OA 673/2018 by *River Rejuvenation Committees (RCCs)*. In the coastal areas, the said Committees may be known as '*River/ Coastal Rejuvenation Committees*'. The action plans must have provision for budgetary support in the manner laid down by the Hon'ble Supreme Court or otherwise this aspect may also be monitored by the CMC.

8. Directions outlined in Para 29 of the NGT order dated 21.09.2020 may be implemented by the concerned coastal States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. *OA No. 829/2019* stands disposed of and further monitoring of the issue will henceforth be in *OA 593/2017* and OA *673/2018*.

9. Directions outlined in Para 34 and 35 of the NGT order dated 21.09.2020 may be implemented by the States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. OA No. *148/2016* stands disposed of and further monitoring of the issue will

henceforth be in *OA 593/2017* and OA *673/2018*.

10. CMC may consider development of an appropriate App to enable easy filing and redressal of grievances with regard to illegal discharge of sewage/ effluents.

11. The monitoring by the CMC may have the target of reduction of pollution loads and improvement of water quality of rivers and coastal areas.

12. The CMC may also monitor the setting up of the bio-diversity parks, constructed wetlands and other alternative measures to reduce pollution load.

13. The CMC may also monitor demarcation of flood plain zones.

14. The treated sewage water may be duly utilized for secondary purposes by preparing appropriate action plans and reports in this regard be filed with the CPCB periodically.

15. CMC may submit its consolidated update report incorporating all the above, before the next date. Each action point mentioned in Para 26 of the NGT order dated 21.09.2020 may be individually covered and summarized in a tabular format.

III. Status of Monitoring by Central Monitoring Committee

1. Correspondences made with States

That it is submitted for consideration of this Hon'ble Tribunal that in furtherance of the above order, communications were addressed vide D.O. letters of Secretary, Department of Water Resources, River Development &

Ganga Rejuvenation to all the Chief Secretaries addressing the specific issues in States and reiterating the urgency and significance of the measures which are required to be taken for preventing and controlling pollution in rivers/ water bodies/ lakes and ensuring that no untreated effluent/ sewage (beyond the prescribed standards) is allowed to be discharged from the ETPs/ CETPs/ STPs. Copies are enclosed as **ANNEXURE – I.**

2. NMCG had organized a webinar on '*Municipal Solid Waste Management'* on 06.11.2020, for informing the State Governments/ UT Administrations on different successful approaches and models that can be adopted for management of municipal solid waste. In the webinar, presentations were made by MoEF&CC with regard to the Solid Waste Management Rules, 2016 and MoHUA on the status of various initiatives being undertaken in India and the achievements under Swachh Bharat Mission. States of Odisha, Chhattisgarh and Goa shared their experiences with regard to some of the successful approaches being adopted by them.

In Chhattisgarh, almost all of the solid waste generated in the State is being collected, segregated, treated and re-used by adopting practical, scientific, sustainable model for solid waste management – Mission Clean City (Recycle and Reuse Model). Standard Operating Procedure has been developed for the State which is followed across 166 ULBs in decentralized manner. The State aimed at achieving cost effective solution, a livelihood opportunity for women (9000+ women trained & engaged), involve

community participation, incentivizing for promotion, adopting innovative methods such as Garbage Café, Bartan Bank, Balli Vaishya etc and converting waste to wealth. Through this State has achieved the rank of India's first Zero Landfill State.

Decentralized approach similar to Chhattisgarh has been adopted by Odisha, wherein Women/ Transgender SHGs facilitate collection of segregated waste from the households and the revenue from sale of recyclables distributed to sanitation workers as incentives. Highlights of decentralized model taken up by Odisha are 100% source segregation, decentralized processing, community partnership, circular economy and zero-landfilling.

For setting up Integrated SWMF in Goa, a High Level Task Force was constituted under the Chairmanship of Chief Minister Goa, DST&WM was appointed as Nodal and a SWM Cell was created, Goa State Infrastructure Department Corporation was appointed as Executing Agency and a Goa Waste Management Corporation was constituted. State is working towards establishment of SWMF at 3 location, E-waste Management Facility, CBMWTF, plastic waste to fuel plant, C&D Waste Treatment Facility and expansion of already existing SWF. Further, two sanitary pad incinerators of 1.4 TPD each as pilot project has been installed at two locations. State adopted few policy such as remediation of existing waste dump, utilization of existing dumpsite for construction of solid waste management facility, State to provide approach road, water and power and the plants to be built on

Design, Finance, Build, Operate and Transfer (DFBOT) basis. The existing SWF at Saligao is a Biogas Genset based Power plant and around 50% of electricity is used for in-house operations and rest is fed to the power grid of the Electricity Department. SCADA system has been installed for monitoring the plant operations.

Earlier, NMCG had a discussion meeting with NITI AYOG on 24th Sep 2020, under the chairmanship of CEO, NITI AYOG and presented various business model that could be adopted in FSSM. In the meeting, NMCG also explained the case study of Chunar, Uttar Pradesh on FSSM. This case study of Chunar has been included in the latest book on the subject "*Fecal Sludge and Septage Management in Urban Areas: Business and Service Models*" published by NITI AYOG.

3. Further, an online Webinar on "*Strengthening Capacity of ULBs in Planning and Implementation of FSSM across Cities and Towns of Ganga Basin*" was held virtually on January 19, 2021 wherein officials from all the ULBs across the 33 States/ UTs were requested to attend. The webinar presented case studies of various states where FSSM has been scaled up. Presentations were made by National Institute of Urban Affairs (NIUA) with regard to integrating FSSM in river management plan and by MoHUA on the schemes and initiatives of MoHUA that ULBs can utilize to scale up FSSM. The Webinar aimed to reiterate the commitment and focus towards Faecal Sludge and Septage Management (FSSM) as one of the key approaches to

reducing the pollution into river. Additionally, the webinar also aims to build awareness around the broad array of capacity building opportunities in the sector for effective planning and implementation of FSSM.

In the webinar, experts highlighted successful implementation of FSSM projects in States such as Andhra Pradesh, Maharashtra, Odisha and Telangana by adopting combination of FSTP, co-treatment in STP, cluster approach.

State	**Maharashtra**	**Tamil Nadu**	**Odisha**	**Andhra Pradesh**	**Telangana**
Co-treatment in existing STPs	69	50	2	28 including proposed STPs	12
Independent FSTPs	327	59	97	77	71 (PPP-HAM)+70 (EPC)
Area	All towns covered	75% urban population - 600 towns	All Cities covered	All towns covered	All towns covered
Total investment	45 Cr	200 Cr	298 Cr	259 Cr	250+ Cr

Odisha has given O&M of the FSTPs to the Self-help women groups which resulted in better utilization of the existing infrastructure. Further, case study on how PPP/ HAM model have been adopted in successful implementation of FSSM projects was elaborated on. It was reported that NITI Aayog shall be shortly publishing a detailed report on '*Faecal Sludge and Septage Management in Urban Areas - Service & Business Models'*, which shall include best practices being adopted across India. The report has been

published and is available online on NITI Aayog website.

4. Besides, officials from the NMCG/ NRCD are also regularly interacting with the concerned officials in the States/ UTs to impress upon timely completion of projects by the concerned States/ UTs.

5. That so far as the consent to establish (CTE) and consent to operate (CTO) for ETPs/ CETPs/ STPs to the industries/ municipalities in the concerned States/ UTs are concerned, the same are regulated by the State Pollution Control Boards (SPCBs)/ Pollution Control Committees (PCCs) established in accordance with the provisions of the *Water (Prevention and Control of Pollution) Act, 1974*. The SPCBs/ PCCs are vested with the requisite powers to take appropriate legal action, including issuing of directions for closure against the erring units for non-compliance of the industrial/ domestic effluent discharge norms and other conditions, like pollution load, design capacity for the treatment of the effluent, point of discharge of the treated effluent etc from the ETPs/ CETPs/ STPs. SPCBs/ PCCs as also the CPCB are mandated under the *Water Act,1974* to ensure compliance of the effluent norms and conditions for the operations of the concerned plants in their respective jurisdictions.

6. **Meetings of Central Monitoring Committee (CMC)**

That, meetings of the Central Monitoring Committee (CMC) under the Chairmanship of Secretary, Department of Water Resources River

development & Ganga Rejuvenation, Ministry of Jal Shakti to monitor the progress of the implementation of the Action Plans by the concerned State/ UTs are being regularly held. The minutes of the meetings dated 30th September 2020, 9th November 2020 and 5th January 2021 are annexed as **ANNEXURE – II.**

That detailed meetings were also held, through Video Conferencing with the senior level officials of the State Governments/ UTs to discuss state specific issues on 23rd October and 21st December 2020 with the States of Rajasthan and Kerala at the level of the Director General, NMCG cum Project Director, National River Conservation Directorate, along with the officials of the National Mission for Clean Ganga (NMCG) and National River Conservation Directorate (NRCD).

7. **Monthly Progress Reports**

Monthly Progress Reports (MPRs) are being received regularly from the States. These are being uploaded on website of NMCG at https://nmcg.nic.in/ngtprogressreport.aspx.

8. **Monitoring mechanism**

In the CMC meetings, it has been informed by the States that the implementation of the projects is being monitored in the State regularly at appropriate level, including at the level of Chief Secretary. The progress

made by the State(s) are being reviewed at Central Level based on the submissions made by the States in their Monthly Progress Report and the monthly review meetings of CMC. The necessary reporting from the States is being taken up and will be followed up in future review meetings. In general, most of States have informed that the progress of ongoing works has been severely affected due to COVID-19 pandemic which has impacted issues related to mobilization of skilled and unskilled manpower as well as supply of materials besides site works. Site works often reportedly get affected due to lockdown kind of situations whenever the same is under enforcement. States have also informed that financing difficulties are being faced by them on account of resource crunch due to COVID-19 situation. In spite of this situation, States, reportedly are trying to galvanize funding for priority projects and will be apprising the status in subsequent meetings of the CMC.

9. The present report is being submitted, in compliance of the order dated 21.09.2020 and earlier observations passed by this Hon'ble Tribunal in the above matter. The progress reports were obtained and meetings were held to monitor the progress of the implementation of the "*Action Plan*" by the concerned States/ UTs and to ensure that no pollution is discharged in rivers/ water bodies, and wherever necessary appropriate legal action taken against the erring/ violating industrial units/ local bodies or private persons and arrange to recover compensation as per the laid down scale.

IV. Compliance to Directions of Hon'ble Tribunal

That the status of compliance by each State/ UTs has been presented based on the inputs received from the concerned State Government/ UTs along with the remarks/ comments of the NMCG.

Central Monitoring Committee while monitoring the status of implementation of directions of Hon'ble NGT laid its emphasis on the fact that *rivers which are already clean should remain so and compliance to the environmental laws* in respect of existing sewage infrastructure is maintained. Accordingly, apart from details towards pollution measures being taken in respect of 351 polluted river stretches and action plan thereto, efforts were made to compile data base for each State/ Union Territory with requisite information on sewage infrastructure and industrial pollution.

1. Specific directions for CMC

For compliance and monitoring of directions of NGT, the format of Monthly Progress Report was accordingly modified and the States/UTs were directed to submit requisite information in order to deliberate on the issues in CMC meetings. Other than establishment of STPs, status of alternate treatment technologies adopted by the States/UTs have also been discussed in detail in the CMC meetings. Best practices adopted by a particular State/ UT are being highlighted in the meetings and other States are being directed to

assess and appropriately implement the same in their States. 13 Coastal States/UTs were directed to submit Action Plan with regard to Coastal Pollution to CPCB by November 2020. However, as reported by CPCB, till 31st January 2021, Action Plans for Coastal Pollution Management have only been received from Andhra Pradesh and Kerala. With regard to reuse of treated water, States have been suggested to develop State level policy/ framework and to implement the same. A grievance module for addressing the issues of sewage/ effluent has been developed and made online on NMCG website, the States/ UTs have been directed to regularly monitor and update the status. Further, compliance of directions have been provided in detail in the following paragraphs.

2. **Existing Sewage Infrastructure**

States and UTs have submitted updated information with regard to the sewage generation and existing sewage infrastructure in the States/ UTs. Earlier figures on sewage generation and existing sewage infrastructure compiled based on inputs from the States and presented in 2nd Quarterly Report submitted to this tribunal have accordingly been modified. Therefore, as per the updated information provided in the MPRs, **48,004 MLD** of sewage (from urban settlements) is being generated in 31 States/ UTs and **30,001 MLD capacity of STPs (1249 nos.)** is existing which approximates to about 62% of sewage generation. Against the existing capacity, only 56% of the capacity is being utilized for treatment of

municipal sewage. Rest of the existing capacity remains unutilized because of various reasons, including lack of availability of conveyance of sewage to treatment plants, technology issues requiring up-gradation of plants, or dysfunctionality on various counts. This leaves a gap of **17,027 MLD** in treatment capacity for which States are regularly being asked to provide details with regards to their plans to fill the gap, including that for financing the creation of infrastructure. It is also important that operational STPs remain compliant to the STP outlet standards as per environmental norms. The details of sewage generation, existing sewage treatment capacity, its utilization and gap thereof is presented in **Table-1**.

Table-1: Details of Existing Sewage Infrastructure in the 31 States/ UTs

No.	State	Sewage Generation (in MLD)	Existing STP (capacity in MLD and No.)	Capacity Utilization (In MLD)	Gap in Treatment at present (in MLD)
1	**Andhra Pradesh**	1463.20	515.85 (43 STPs)	473.77 (91%)	947.35
2	**Assam**	435.53	0	0	435.53
3	**Bihar**	651.5	230 (6 STPs)	100 (44%)	421.5
4	**Chhattisgarh**	600	73.1 (3 STPs)	6 (8%)	526.9
5	**Daman, Diu And Dadra Nagar Haveli**	21.2	17.21 (2 STPs)	6.1 (35%)	3.9
6	**Delhi**	3273	2715 (35 STPs)	2432 (90%)	558
7	**Goa**	112.53	78.35 (9 STPs)	29 (37%)	34.18
8	**Gujarat**	4003	3485 (73 STPs)	2739 (78%)	518
9	**Haryana**	1267	1892 (155 STPs)	1189 (62%)	-
10	**Himachal Pradesh**	163.5	120.5 (65 STPs)	76.8 (64%)	43
11	**Jammu & Kashmir**	523	139 (15 STPs)	82.9 (60%)	383.08

No.	State	Sewage Generation (in MLD)	Existing STP (capacity in MLD and No.)	Capacity Utilization (In MLD)	Gap in Treatment at present (in MLD)
12	**Jharkhand**	452	108 (14 STPs)	83%	343.8
13	**Karnataka**	3356.5	2242 (125 STPs)	1513.5 (67%)	1114
14	**Kerala**	317	124.15 (13 STPs)	91.12 (73%)	192
15	**Madhya Pradesh**	2183.65	618.23 (23 STPs)	472.6 (76%)	1565.4
16	**Maharashtra**	9758	7747 (142 STPs)	4207 (54%)	2011
17	**Manipur**	115	27 (1 STP)	9 (33%)	88
18	**Meghalaya**	75	1.85 (8 STPs)	1.82 (98%)	73
19	**Mizoram**	68	10 (1 STP)	0	58
20	**Nagaland**	44.3	25.4 (1 STP)	0	18.9
21	**Odisha**	367	91 (5 STPs)	70 (76%)	276
22	**Puducherry**	88	56 (5 STPs)	35 (62%)	32
23	**Punjab**	2111	1628.5 (116 STP)	80%	482.5
24	**Rajasthan**	1551	999 (80 STPs)	694.5 (69%)	552
25	**Sikkim**	47.68	19.5 (7 STPs)	60%	28
26	**Tamil Nadu**	3673.3	1616 (66 STPs)	919 (56%)	1320
27	**Telangana**	2613	888 (31 STPs)	735.8 (82%)	1724.45
28	**Tripura**	82.5	8 (1 STP)	3 (37%)	74.5
29	**Uttarakhand**	329.3	379 (63 STPs)	232.9 (61%)	-
30	**Uttar Pradesh**	5500	3370 (106 STPs)	2630.6 (78%)	2130
31	**West Bengal**	2758	776.32 (47 STPs) + 910 MLD addl treatment through EKW	289.89 (37%)	1071.68
Total		**48,003.69**	**30,000.96 (1261 STPs)**	**55.9%**	**17,026.58**

*State reported that 910 MLD of sewage is being treated by East Kolkata wetlands by natural process.

In particular, poor capacity utilization of Chhattisgarh (8%), Manipur (33%),

Daman Diu & Dadra Nagar Haveli (35%), Goa (37%), West Bengal (37%), Maharashtra (54%) and Tamil Nadu (56%) needs consideration and attention for which Chief Secretaries of the concerned States have been apprised during the monthly review meetings as well as through D.O. letters from Secretary, Department of Water Resources, River Development & Ganga Rejuvenation. As many of the STPs are under–utilized due to pending house sewer connections, States have been requested to expedite the remaining works. The State of Assam does not have any existing treatment capacity while Tripura & Manipur has only one STP each. STPs at Nagaland and Mizoram are yet to be made operational. The compliance of existing STPs in Andhra Pradesh (90%), Delhi (90%), Telangana (82%), Punjab (80%) Gujarat (78%), Uttar Pradesh (78%), Madhya Pradesh (76%), Haryana (62%) and Odisha (76%) remains good. This needs to be maintained and continuously improved.

Many of the States such as Haryana, Uttarakhand, Uttar Pradesh, Delhi, Madhya Pradesh, West Bengal, Tamil Nadu, Karnataka are installing online monitoring systems for capturing the real time data of the existing STPs. In November 2020, Madhya Pradesh has developed an "*Env Alert app*" and the same has been placed on Google play store and a WhatsApp group "*M.R STP Cap. Utilization*" has also been framed for day-to-day monitoring of STPs by the senior officials of the State. As reported by the State, this has led to improvement in the utilization capacities of the existing STPs as well as regular monitoring of projects under construction. Other States have been requested to adopt such measures for monitoring the

performance of the already developed sewerage infrastructure.

Further, many States such as Meghalaya, Mizoram, Nagaland, Tripura are opting for alternate sewage treatment such as Faecal Sludge Treatment Plants, bio-digester/ bio-remediation/ phyto-remediation over the conventional treatment technologies for treatment of sewage/ septage in their States. Details of the same are provided in **para 7 and 8**.

3. Water Quality in Polluted River Stretches

The water quality data presented by the States during period since January 2020 up to December 2020 has been analyzed and the same has been summarized in **Table-2**.

The water quality data has not been provided by Rajasthan, Nagaland (only September 2020 data for River Dhansari has been provided), Telangana (regular data not being provided in the MPR) and Karnataka.

Table 2: Water Quality Data in Polluted River Stretches in 31 States/ UTs for the year 2020 (January-December)

S. No.	State	Water Quality Status Stretch wise	
		Stretch	**Range of BoD (mg/l)**
1	**Andhra Pradesh**	River Tungbhadra, River Kundu, River Godavari, River Nagavali River Krishna	0.8-3.0 1.2-2.8 0.9-2.8 1.0-2.9 0.8-2.8
2	**Assam**	Based on the water quality data received in the MPR from August – December 2020 Bharalu River Borsola Ceel Silsaka Beel Sorusala Beel	 36.4 to 38.4 25.5 to 28.6 15.0 to 16.3 25.5 to 27.2

		Deepar Beel Digboi River Kamalpur Beel Kharsang River Pagladia River Panchoi Bogibeel Nimatighat Dhenukhana pahar Chandrapur Kacharighat Sualkuchi	3.3 to 3.5 2.4 to 2.8 28.2 to 29.2 1.5 to 1.6 1.5 to 1.6 1.3 to 1.6 2.1-2.6 2.3-2.8 1.6-2.2 2-2.8 2-2.6 2-2.4
3	**Bihar**	Ganga River, Buxar to Manihari; P-V Punpun River, Fatuha; P-V, Ramrekha River Harinagar (Ramnagar) ; P-V Sikrahna River , Narkatiaganj; P-V Parmar River, Jogbani; P-V Sirsia River, Raxual –P-III	1.2-5 1.8-5.6 1.9-4.0 1.1-3.2 1.9- 4.0 3-5
4	**Chhattisgarh**	Water quality of the rivers monitored in the year 2019 has been provided in the MPR: Hasdeo (Korba to Urga) – P – IV Kharoon (Bhatagaon to Bendri) – P – IV Mahanadi Sihawa to Arrang) – P – IV River Seonath (Bemta to Simga) – P – IV River Kelo: (Raigarh to Kanaktora) – P – V	 0.6 – 2 2.1 - 8.6 2.2 - 4.2 2.33- 3.8 1.7 – 3.9
5	**DDDNH**	Damanganga	1-2.7
6	**Delhi**	Yamuna	2.6-73
7	**Goa**	Chapora/ Tiracol/ Sinquerim/ Zuari/ Assanora/ Valvanti/ Khandepar/ Bicholim/ Mandovi/ Talpona/ Sal	<3
8	**Gujarat**	Amlakhadi Bhadar Bhogavo Khari Sabarmati Vishwamitri Dhadar Triveni Amravati Damanganga Kolak Mahi Shedi	1.71 – 18.0 2.9 – 238 1.0 – 20.5 42 – 189 0.8 – 168 0.57 – 24.0 0.17 – 19 1.7 – 2.9 0.82 – 1.63 0.6 – 2.8 0.60 – 2.9 0.38 – 0.58 0.96 – 8.7

		Tapi Anas Baleshwar Khadi Kim Meshwa Mindhola Narmada	0.26 – 2.3 0.43 – 0.75 0.43 – 1.5 0.39 – 1.8 0.6 – 1.49 0.4 – 8.0 0.56 – 0.98
9	**Haryana**	River Ghaggar, P-I River Yamuna, P-I	3.5- 52 3.5- 74
10	**Himachal Pradesh**	Sukhna Nallah at Parwanoo P-I River Markanda at Kala Amb PII River Sirsa, Baddi, Nalagarh P-III River Ashwani P-V River Beas from Kullu to Dehra Gopipur P-V River Giri at Sainji P-V River Pabbar along Rohru P- V	0.1 to 1.2 1.6 to 8 0.4 to 2 0.4 to 1.7 0.1 to 0.3 0.4 to 1 0.3 to 0.8
11	**Jammu & Kashmir**	River Devika (Guru Ram Das temple to Nainsa), P-II Banganga River Holy Stream (Ponyshed to Bathing Ghat) P-III River Tawi (Surajpur to Belicharana), P-IV River Basantar at (Samba to Chakmanga Rakawl adjoining IGC), P-V River Chenab (Jal Patan to Pargwal), P-V Chuntkol (Maulana Azad Bridge to Kanikadal), P-III River Gawkadal (Gawkadal Bridge to Nowhata), P-IV River Jhelum (Chattabal Weir to Anantnag), P-V River Sindh (Along Duderhamal), P-V	0.3-7.2 1.3-5.8 0.1-7.0 1.5-2.2 0.6-0.8 2.5-9.3 1.8-4.6 1.2-2.8 1-1.8
12	**Jharkhand**	Garga, Along Talmuchu, P-IV Sankh, Kongserabasar to Bolba Swarnrekha, Hatia Dam to Jamshedpur, P-IV Damodar, Phusro Road Bdg to Turio, P-V Jumar, Kanke Dam to Kadal, P-V Konar, Along Tilaya and Komar, P-V Nalkari, Along Patratu, P-V	3.7 8.4 3.4-10 3.9 2.1- 3.3 3.4-3.6 3.8
13	**Karnataka**	Water Quality reported for Oct-20 only. Arkavathi, Thippagondana Halli Reservoir Lakshmantirtha, Hunsur To Kattemalavadi, Malaprabha Khanapur To Ramdurg Tungabhadra Harihara To Harlahalli Bridge Bhadra Holehunnur To Bhadravathi	 6.3 mg/l 2-2.4 mg/l 1-1.02 mg/l 2-2.6 mg/l 2.7-3 mg/l

		Cauvery Ranganathittu To Sathigala Kabini Nanjangud To Hejjige Kagina Shahabad To Hongunta Kali, Hasan Maad (West Coast Paper) Krishna, Yadurwadi To Tintini Bridge Simsha, Yediyur To Halagur- Krishna, Asangi Barrage Bhima, Ghanagapur To Yadgir; Kumaradhara, Along Uppinangadi Netravathi, Uppinangadi To Mangaluru Tunga, Shivamogga To Kudli Yagachi, Along Yagachi, Hassan	Not provided 1.6-2.1mg/l 2-3mg/l 2.5 mg/l 0.95-2.5mg/l Not Provided 1.3 mg/l 2.5-3mg/l 2.1 mg/l 1.5-3 mg/l 2.8 mg/l 2 mg/l
14	**Kerala**	Karmana River, Malekkdu To Thiruvallam, P-I; Uppala- Poyya To MulinjaP-V Mogral - Along Mogral, P-V; Kavvai-Along Kavvai, P-V; Kuppam, Thaliparamba To Velichangool, P-V; Peruvamba, Along Peruvamba, P-V; Ramapuram, along Ramapuram, P-V Thirur, Naduvilangadi To Thalakkadathur- PV; Kadalundi , Along Hajirappally, P-V; Bharathapuzha, Along Patambi, P-IV; Bhavani, Along Elachivazhy,P-V; Kecheri , Puliyannor To Kechery, P-IV; Karuvannur Along Karuvannur, P-IV; Puzhakkal, Olarikkara To Puzhackal, P-V Chithrapuzha, Irumpanam To Karingachira, P-V; Kadambrayar, Manckakadavu To Brahmapuram, P-IV; Periyar Alwaye- Eloor To Kalamassery, P-V; Kallayi, Thekepuram To Arakkinar, P-V Kuttiyadi Along Kuttiyady, P-V; Pamba, Mannar To Thakazhy, P-IV; Manimala, Kalloopara To Thondra, P- IV;	BOD less than 3 mg/l
15	**Madhya Pradesh**	Betwa, River, P-IV & III, Bichiya River, P-V Chambal River, P-I Chamla River, P-V Choupan River, P-V Gohad River, p-V Kailsoat River, P-V Kanhan River, P-V Katni River, P-V	NA 4 mg/l 2-6 mg/l 2 mg/l 1.2-1.6 mg/l 2.1- 6 mg/l NA 1.40 mg/l 1.6 mg./l

		Khan River, P-I	10-14mg/l
		Kshipra River, P-III	2-11 mg/l
		Kunda River, P-V	1-1.2 mg/l
		Maleni River, P-IV	1.8-2 mg/l
		Mandakini River, P-IV	2.9 mg/l
		Newaaj River, P-V	2 mg/l
		Parwati River, P-V	1.6-1.8 mg/l
		Simrar River, P-V	1.6 mg/l
		River Sone, P-V	1.5 mg/l
		Tapti River, P-V	1.1-1.8 mg/l
		River Tons, P-V	1.8- 1.9 mg/l
		River Wainganga, P-V	1.6- 2 mg/l
		River Kolar,	Data-NA
16	**Maharashtra**	Water quality data is submitted till September 2020	
		The priority of river stretches is as under:	
		Priority I: 1, Priority II: 4, Priority III: 9,	3.6-8.8 mg/l
		Priority IV: 6, Priority V: 20	3.7 mg/l
		Priority I:	4 - 12 mg/l
		Godavari- Someshwar Temple To Rahed;	54 mg/l
		Kalu River, Along Atale Village;	8 mg/l
		Kundalika River, Salav To Roha	16-18mg/l
		Mithi River, Powai To Dharavi;	8-26mg/l
		Morna, Akola To Takalijalam;	7-12mg/l
		Mula, Bopodi To Aundh Gaon	12mg/l
		Mutha, Shivaji Nagar To Khadakwasla Dam;	
		Nira Sangavi To Shindewadi	
		Vel Nhavare To Shikarpur;	6.5 – 25 mg/l
			10-12 mg/l
		Priority II:	20 mg/l
		Bhima, Vithalwadi To Takli	4-20 mg/l
		Indrayani, Moshigaon To Alandigaon;	4-16 mg/l
		Mula-Mutha, Theur To Mundhwa Bridge	5-14 mg/l
		Pawana, Dapodi To Ravet;	
		Wainganga, Tumsa To Ashti	
		Wardha, Ghughus To Rajura	10 mg/l
			7.8-9 mg/l
		Priority III:	8.6 mg/l
		Ghod, Annapur To Shishur	1.8-8 mg/l
		Kanhan, Bhandara To Nagpur	3.8 mg/l
		Kolar (Mah) Along Koradi	4-12 mg/l
		Krishna, Shindi To Kurundwad;	5 mg/l
		Mor Jalgaon To Amoda; BOD is 3.8 mg/l	4.8 – 5 mg/l
		Patalganga, Khadepada To Kopoli	5.4 – 6.8 mg/l

		Pedhi, Narayanpur To Bhatkuli	3.6-7 mg/l
		Penganga, Mehkar To Umarkhed	6 mg/l
		Purna, Dhupeshwar To Asegaon	4-5.5 mg/l
		Tapi, Raver To Shahada;	3.4 mg/l
		Urmodi, Dhangarwadi To Nagthane	4-5.8 mg/l
		Venna, Mahabaleshwar To Mahuli	
		Waghur, Sunasgaon To Sakegaon	
		Wena, Kawadghat To Hindanghat	8.5 mg/l
			4.2 mg/l
		Priority IV:	8.5-11 mg/l
		Bindusar, Swaraj Nagar To Snehnagar;	
		Bori, Along Amalner;	3.8-10 mg/l
		Chandrabhaga, Pandharpur To Shegaon	3.2-5 mg/l
		Dhumala;	
		Darna, Igatpuri To Sansari;	
		Girna, Malegaon To Jalgaon;	
		Hiwara, Pachora To Nimbora	3.6 mg/l
		Koyna, Karad To Papdarde;	10 mg/l
		Pelhar, Pelhar Dam To Golani Naka	3.8 mg/l
		Sina, Solapur To Bankalagi;	13 mg/l
		Titur, Along Chalisgaon, Jalgaon;	3.8 mg/l
		Priority V:	
		Amba, Bense To Roha;	3.8 mg/l
		Bhatsa, Shahapur To Bhadane	3.2-3.4 mg/l
		Gomai, Lonkheda To Shahda;	3.8 mg/l
		Kan, Kavathe To Sakari;	3.2 mg/l
		Manjara, Latur To Nanded Bridge	Dry
		Panchganga, Shirol To Kolhapur;	2 -2.2 mg/l
		Panzara, Varkhede To Dhule;	4 mg/l
		Rangavali, Tintemba To Navapur	3.4 mg/l
		Savitri, Dadli To Muthavali	2 - 2.8 mg/l
		Surya, Dhamni Dam To Palghar	3.6 – 3.8 mg/l
		Tansa, Along Thane; BOD is	4 mg/l
		Ulhas, Kalyan To Badlapur;	3.6 – 3.8 mg/l
		Vaitarna, Gandhre To Sarashi BOD is	4 mg/l
		Vashishthi, Kherdi To Dalvatne;	1.8-2mg/l
17	**Manipur**	Imphal River;	2.62 -3.7 mg/l
		Iril:	2.2-3.8 mg/l
		Khuga:	3-3.7 mg/l
		Khujairok:	2.8-32 mg/l
		Lokchao:	2.6-3.7 mg/l
		Manipur:	2.4-3.7 mg/l
		Thoubal:	2.4 -3.8 mg/l

		Wangjing: Nambul;	2.6-3.7 mg/l 2.4-6.8 mg/l
18	**Meghalaya**	Umkhrah: Umshyrpi: Kyrhukhala: Nonbah: Umtrew: Lukha: Myntdu:	5-20 mg/l 6.8-28 mg/l 2.2-2.4 mg/l 2.2-2.5 mg/l 2.2-2.7 mg/l 2.4-2.5 mg/l 2.3-2.4 mg/l
19	**Mizoram**	For all the river stretches, the BOD is in the range	0.5-8.83 mg/l
20	**Nagaland**	Dhansiri (only for September 2020 provided). River water quality not provided in the MPRs.	1.4-2.6mg/l
21	**Odisha**	Gangua, Along Bhubaneswar: Priority I Daya, (Bhubaneswar to Bargarh):P-IV Kuakhai Kathajodi, (Cuttack to Urali): Serua, (Khandaeta to Sankhatrasa): Guradih Nala, Rourkela : Priority III Brahamani, (Rourkela to Biritol): Priority V Nandirajhor,(D/s of Talcher) Banguru Nala, (Along Talcher, Rengali): Mahanadi, (Sambalpur to Paradeep): Bheden, (Along Bheden): Mangla, Along Puri: Nuna, (Along Bijipur): Ratnachira, (Along Bhubaneswar, Puri): Nagavalli, (Jaykaypur to Rayagada): Budhabalanga, (Mahulia to Baripada): Kusumi, Along Talcher: Rushikulya, (Pratappur to Ganjam): Sabulia, (Jagannathpatna, Rambha):	19.9 mg/l 4.7 mg/l, 1.8 mg/l 3.6 mg/l, 3.8 mg/l 8 mg/l, 6.3 mg/l 1.9 mg/l 1.6 mg/l 0.2-2.7 mg/l 1.8 mg/l 4.6 mg/l 1.6 mg/l 1.7 mg/l 2.1 mg/l 1.6 mg/l 2 mg/l 2.1 mg/l 1.7 mg/l
22	**Puducherry**	River Arasalar/ Chunnambar:	1.25-5.25 mg/l
23	**Punjab**	Sutlej , Rupnagar to Harike Bridge, P-I; Beas, Beas along Mukerian, P-I Beas, From Sultanpur Lodhi to confluence point at Harike, P-IV; Ghaggar, Mubarakpur to Sardulgarh, P-I;	less than 2mg/l less than 2 mg/l above 3mg/l above 3mg/l
24	**Rajasthan**	No tangible information provided	
25	**Sikkim**	River Maney Khola/ Rangit/ Ranichu/ Teesta	2-2.5
26	**Tamil Nadu**	Cauvery Sarbanga Thirumunitharu	2.3-12 <2 and no flow during July to November,2020 3.2-21

		Vasistha Bhavani Thamirabarani	2.1-30 <2 2-5.1
27	**Telangana**	Musi Manjeera Nakkavagu drain Karakavagu drain: part of kinnerasani Maner Godavari Kinnersani Krishna **Note: Water Quality not being provided regularly in the MPRs.**	3-48 2-3 5.8-12 2-4 2-4 2.1-6 2-6
28	**Tripura**	Burigaon/ Gumti/ Haora/ Juri/ Khowai/ Manu	within prescribed limits
29	**Uttar Pradesh**	Based on Water Quality report for August& September 2020, as reported in the MPR provided. Ganga Yamuna Kali East Hindon Gomti Sai Ami Rapti Saryu Betwa	 2.1-4.8 1.9-27 4.6 – 66 14-52 2.8 – 14 3.2 – 4.6 5.8 -20 4-5.4 3.2 5.4
30	**Uttarakhand**	Dhella Bhella Kichha Suswa Kalayni Kosi Pilakhar Nandhour Ganga	1.8-16 4-17 3-9 2-28 2.4-18 3-7.8 4.1-10 2.5- 5 1- 1.2
31	**West Bengal**	Vidyadhari Mahananda Ganga Churni Dwarka Damodar Mathanbhanga Kansi Jalangi	5.42-10 1.20-21 1-3.20 2-7.3 3.05-4.20 1.65-3.75 4-5.88 0.6-2.40 2.25-2.85

		Rupnarayan	0.90-1.70
		Mayurakshi	<2
		Dwarakeshwar	1.85 - 2.80
		Silabati	<2
		Barakar	2.15-2.45
		Kaljani	1.20-2.10
		Karola	<2
		Teesta	0.80-1.4

It is seen from the above table that following river polluted stretches have now been reporting BoD levels which are conforming to bathing standard. The efforts need to be continued to ensure that these stretches which reportedly fall under cleaner category shall continue to remain clean and should not slip back to polluted stretches. Efforts made by State in this directions need to continue and propagated amongst other States through the framework of Central Monitoring Committee.

River stretches having BOD levels less than 3 mg/l as reported in the year 2020

- Andhra Pradesh (River Tungabhadhra, Kundu, Godavari, Nagavali, Krishna),
- DDDNH (River Damanganga),
- Goa (River Chapora, Tiracol, Sinquerim, Zuari, Assanora, Valvanti, Khandepar, Bicholim, Mandovi, Talpona, Sal),
- Gujarat (Triveni, Amravati, Damangana, Kolak, Mahi, Shedi, tapi, Anad, Baleshwar Khasi, Kim, Meshwa, Narmada),
- Himachal Pradesh (River Sukhna, Sirsa, Ashwani, Beas, Giri, Pabbar),
- Jammu & Kashmir (Basantar, Chenab, Jhelum, Sindh),

- Kerala (Karmana, Uppala, Mogral, Kavvai, Kuppam, Peruvamba, Ramapuram, Thirur, Kadalundi, Bharathapuzha, Bhavani, Karuvannur, Puzhakkal, Chitrapuzha, Kadambrayar, Peeriyar, Kallayai, Kuttiyadi, Pamba, Manimala),
- Madhya Pradesh (River Chamla, Choupan, Kanhan, Katni, Kunda, Maleni, Mandakini, Newaah, Parwati, Simrar, Sone, Tapti, Tons, Wainganga),
- Meghalaya (Kyrukhala, Nonbha, Umtrew, Lukha, Myntdu), Odisha (River Kuakhai, Nandirajhor, Banguru Nala, Mahanadi, Bheden, Nuna, Ratnachira, Nagavalli, Budhabalanga, Kusmi, Rushikulya, Sabulia),
- Punjab (River Sutlej), Sikkim (River Maney Khola, Rangit, Rangichu, Teesta),
- Tamil Nadu (River Sarbanga, Bhavani),
- Tripura (River Burigaon, Gumti, haora, Juri, Khowai, Manu),
- Uttarakhand (River Ganga)
- West Bengal (River Kansi, Jalangi, Rupnarayan, Mayurakshi, Dwarakeshwar, Silabati, Barakar, Kaljani, Karola, Teesta)

Similarly following stretches have now BoD levels which are slightly higher than limit of 3m/l and accordingly fall under priority-V. These stretches are low hanging fruits which can be easily transformed into clean stretches by concerted efforts and less investments. Focus of the States may remain on these stretches which can provided primary treatments to control the pollution levels.

River stretches having BOD levels level between 3 mg/l to 6 mg/l as reported in the year 2020

- Bihar (Punpun, Ramrekha, Sikrahna, Parmar, Sirsia),
- Jammu & Kashmir (Banganga, Gawkadal), Jharkhand (River Garga, Damodar, Jumar, Konar, Nalkari),
- Madhya Pradesh (River Bichiya, Chambal, Gohad),
- Maniour (River Imphal, Itil, Khuga, Khujairok, Lokchao, Manipur, Thoubal, Wangjing, Nambul),
- Odisha (RiverDaya, Kathajodi, Serua, Mangla),
- Puducherry (River Arasalar, Chunnambar),
- Tamil Nadu (River Thamirabarani),
- Uttar Pradesh (River Ganga, Sai, Rapti, Saryu, Betwa),
- Uttarakhand (River Nandhour)
- West Bengal (River Ganga, Dwarka, Damodar)

4. **State-wise details of STP Projects completed from August – December 2020 (since submission of 2nd Quarterly Report which gave the status till July 2020)**

During the period w.e.f August to December 2020, States except Rajasthan have reported that 59 sewerage projects (STPs) have been completed adding a total capacity of 1116.885 MLD. These sewerage infrastructure plants are under commissioning. Further, Rajasthan has reported that 15 STPs of 45.5 MLD have

been completed and made operational in the State in 2020 during January to December'2020.

The details are as below:

- **Bihar** – 60 MLD STP at Saidpur

- **Gujarat** –

Sr.No.	Name of STP	Capacity (MLD)	Status
1.	Anand	33	Completed
2.	Porbandar-2	19.10	Completed
3.	Surat Bhesan	100	Completed
4.	Valsad-1	20.2	Completed
5.	Morbi	28.8	Completed
6.	Dehgam	7.6	Completed
7.	Dhrangadhra	11.60	Completed
Total (MLD)		**220.3**	

- **Haryana** –

No.	Location	Capacity in MLD	Status
1	Nangal & Allipur	0.5	Completed
2	Kot	0.75	Completed
3	Baddi Majra,Yamuna Nagar	10	Completed
	Total	**11.25**	

- **Jharkhand –** 3.5 MLD STP at Rajmahal

- **Orissa –** 5 STPs completed and are under trial

No.	Location	Capacity in MLD	Status
1	Meherpalli, Bhubaneswar	56	Under Trial
2	Basuaghai, Bhubaneswar	28	Under Trial
3	Kochilaput, Bhubaneswar	43.5	Under Trial
4	Paikarapur, Bhubaneswar	8	Under Trial
5	Ruptala Balughat, Rourkela	40	Under Trial
		175.5	

- **Karnataka** –

No.	Location	Capacity in MLD	Status
1	Humnabad	6	Completed
2	Chikkabegur	5	Completed
3	K R Puram	20	Completed
		31 MLD	

- **Kerala –** 0.05 MLD STP at Tirur Bus Stand completed and made functional

- **Madhya Pradesh**

No.	Location	Capacity in MLD	Status
1	Indore	8	Completed
2	Indore	7	Completed
3	Gwailor	145	Completed
4	Gwailor	4	Completed
5	Gwailor	65	Completed
6	Gwailor	8	Completed
7	Indore	6	Completed
8	Indore	35	Completed
9	Indore	11	Completed
10	Khargone	17.6	Completed
11	Morena	25	Completed
12	Neemuch	7	Completed
13	Neemuch	9.5	Completed
	Total	**348 MLD**	

- **Maharashtra**

No	Location	Capacity in MLD	Status
1	Panvel	28	Completed
2	Somalwada	20	Completed
3	Dabha	5	Completed
4	Washim	4	Completed
		57 MLD	

- **Punjab**

No	Location	Capacity in MLD	Status
1	Ferozepur	18	Under Stabilization

2	Jaito	6	Under testing
3	Khanna	29	Completed
4	Tarn Taran	4	Completed
5	Amritsar (South East Zone)	27.5	Completed
6	Barnala	20	Completed
7	Shahkot	3	Under testing
		107.5	

- **Tamil Nadu**

No.	Location	Capacity in MLD	Status
1	Velankanni TP	2.33	Completed
		2.33 MLD	

- **Uttar Pradesh**

No.	Location	Capacity in MLD	Status
1	Firozabad	67	Under Trial
		67 MLD	

- **West Bengal**

No.	Location	Capacity in MLD	Status
1	Budge-Budge	9.33	Completed
2	Barrackpore	18	Completed
3	Barrackpore	6	Completed
		33.33 MLD	

- **Uttarakhand**

2 STPs of 0.05 and 0.075 MLD completed and made operational

- **Rajasthan**

State has reported that 15 STPs of 45.5 MLD have been completed and made operational in the year 2020.

No.	Location	Capacity in MLD	Status
1	Near Madela Road (Chirawa)	3	Operational

2	Near Karola village (Jaitaran)	2	Operational
3	Near Indira Awas colony (Laxmangarh)	1.5	Operational
4	Near Vijay Nagar Private Bus Stand (Beawar)	5	Operational
5	Near Narsingh Pura (Beawar)	4	Operational
6	Near Bichral Tank (Beawar)	1.5	Operational
7	Kundan Nagar (Beawar)	1	Operational
8	Santhalka (Bhiwadi)	3	Operational
9	Nr.Existing STP (Bhiwadi)	3	Operational
10	Near Shamshan Ghat, Kartana (Nimbahera)	2	Operational
11	Near Panchayat Samiti (Kushalgarh)	1	Operational
12	FCI godown (Udaipur)	10	Operational
13	Kajrali house (Udaipur)	5	Operational
14	Shamshan ghat (Ramgarh Shekhawati)	2	Operational
15	Near Mangri road (Badi Sadari)	1.5	Operational
		45.5 MLD	

Now since these projects have been completed, State has to ensure that conveyance to these STPs is established and sewage treatment in these assets is optimal. Besides, the capacity utilization of these STPs should be regularly monitored both in terms of quantity of inflow and quality of outflow using online monitoring system.

5. **Details of on-going Projects**

As per the information submitted by the States, STPs of around 8859 MLD treatment capacity are under-construction in the on-going projects in the States/ UTs. It is seen that States of Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha,

Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Uttarakhand, Uttar Pradesh and West Bengal will be able to complete 163 projects with capacity of about 1989.211 MLD in the States/ UTs by March 2021. The States have been directed in the meetings to ensure that monthly monitoring and regular watch on the progress of these projects is to be maintained, so that the completion timelines are strictly complied without any time lag and projects commissioned in time. Progress of these projects is also required to be continuously monitored at State level using progress monitoring mechanism (creation of *Whatsapp group*) similar to one established by Madhya Pradesh so that further lag in completion of timeline is avoided.

Among on-going projects, the projects which will be completed during the period beyond April 2021 have also been indicated. It is apparent that all these projects will be spilling beyond the timelines prescribed by Hon′ble Tribunal in its order.

States have been requested to provide further details of these projects as well as to review whether the timelines of these projects can be compressed for effecting their early completion. State of Bihar has not given revised timelines for completion of their ongoing projects. State have to look into these issues and provide feedbacks in the subsequent meeting of CMC. State wise details of on-going projects with their completion timeline and status of physical progress has been indicated in **Table 3**.

Table 3: Details of on-going projects

No.	State	Completion By			
		January 2021-March 2021	**April 2021-December 2021**	**January 2022-June 2022**	**Beyond June 2022**
1	**Andhra Pradesh**	2 STPs of 7 MLD	29 STPs of 328.4 MLD	1 STP of 123 MLD	15 MLD STP
2	**Bihar**	12 projects of 355.5 MLD. Revised timeline to be provided			
3	**Chhattisgarh**	-	6 STPs of 238 MLD	-	-
4	**Daman, Diu And Dadra Nagar Haveli**	-	-	-	-
5	**Delhi**	-	1 STP of 318 MLD (new)	-	STPs of 950.8 MLD (Rehabilitation)
6	**Goa**		5 STPs of 35.5 MLD including sewer networks		3 STPs of 43 MLD – work not started due to issues by locals.
7	**Gujarat**	23 STPs of 426.72 MLD	44 STPs of 571.68 MLD	4 STPs of 116.6 MLD	10 STPs of 125.4 MLD
8	**Haryana**	15 STPs of 59.45 MLD	19 STPs of 168.75 MLD	2 STPs of 45 MLD	2 STPs of 180 MLD
9	**Himachal Pradesh**	5 STPs of 26 MLD	10 STPs of 7.9 MLD	6 STPs of 6.1 MLD	5 STPs of 8.26 MLD
10	**Jammu & Kashmir**	2 STPs of 61.2 MLD	4 STPs of 17.6 MLD	4 STPs of 13.21 MLD	-
11	**Jharkhand**	-	3 STPs of 89 MLD	-	-
12	**Karnataka**	21 STPs of 427.17 MLD	9 STPs of 197.3 MLD	21 STPs of 115.67 MLD	4 STPs of 16.07 MLD
13	**Kerala**	STP/ETP/FSTP of 0.331 MLD	STP of 0.01 MLD		
14	**Madhya Pradesh**	15 STPs of 212 MLD	2 STPs of 22.25 MLD	19 STPs of 212.5 MLD	
15	**Maharashtra**	10 STPs of 141.5 MLD	5 STPs of 110.26 MLD	2 STPs of 13 MLD	-
16	**Manipur**	-	-	2 STPs of 17 MLD	-
17	**Meghalaya**	115 KLD Septage Treatment Plant			
18	**Mizoram**	Sewer connections in	-	-	-

No.	State	Completion By			
		January 2021-March 2021	**April 2021-December 2021**	**January 2022-June 2022**	**Beyond June 2022**
		progress			
19	**Nagaland**		sewer connections in progress	-	-
20	**Odisha**	2 STPs of 56 MLD	48 MLD STP	-	-
22	**Punjab**	6 STPs of 27.5 MLD	12 STPs of 49.2 MLD	4 STPs of 67.5 MLD	8 STPs of 109 MLD
23	**Rajasthan**	29 STPs of 126 MLD	15 STPs of 113.5 MLD	4 STPs of 59.5 MLD	12 STPs of 141 MLD
24	**Sikkim**	2 STPs of 3 MLD	-	-	3.25 MLD STP
25	**Tamil Nadu**	18 STPs of 244 MLD	8 STPs of 203.46 MLD	6 STPs of 450.53 MLD	16.71 MLD STP
26	**Telangana**	2 STPs of 16.45 MLD	12 STPs of 73.96 MLD	3 STPs of 120 MLD	-
27	**Tripura**	-	-	8 MLD STP	-
28	**Uttarakhand**	3 STPs of 8.9 MLD	3 STPs of 23.7 MLD	1 STP of 28 MLD	
29	**Uttar Pradesh**	6 STPs of 122.01 MLD	21 STPs of 523.55 MLD	7 STPs of 161.5 MLD	3 STPs of 80 MLD
30	**West Bengal**	1 STP of 24 MLD	4 STPs of 47.75 MLD	6 STPs of 271.5 MLD	-
	Total (except Bihar)	**163 STPs of 1989.211 MLD**	**214 STPs of 3187.77 MLD**	**93 STPs of 1828.61 MLD**	**1688.49 MLD**

Further details of each project is at **ANNEXURE-III.**

6. **Projects under Tendering, DPRs awaiting sanction and DPRs yet to be prepared**

Against the list of projects which will not be completed within the timelines prescribed by NGT, there are 242 projects under tendering in Andhra Pradesh, Bihar, Chhattisgarh, DDDNH, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Maharashtra, Puducherry, Punjab, Uttar Pradesh and West Bengal, while a

large no. of projects are awaiting sanction of the DPR or DPR is yet to be prepared. Details of the projects under tendering and works yet to be awarded, DPR is yet to be sanctioned, DPR yet to be prepared are given in **Table 4, 5 and 6**.

Table 4: Projects under Tendering and works to be awarded

No.	State	STPs in Tendering
1	**Andhra Pradesh**	6 STPs of 52.4 MLD
2	**Bihar**	7 projects of 149.5 MLD
3	**Chhattisgarh**	5 STPs of 40.5 MLD
4	**Daman, Diu And Dadra Nagar Haveli**	1 STP of 7 MLD
5	**Gujarat**	59 STPs of 445 MLD
6	**Himachal Pradesh**	8 STPs of 33.31 MLD
7	**Jharkhand**	15 MLD STP - Sanctioned
8	**Karnataka**	14 STP, 1 UGD for STP, 144 MLD 15 STP, 57.366 MLD (work order given)
9	**Kerala**	Projects for treatment of 55.8 MLD effluent
10	**Madhya Pradesh**	STPs of 53.4 MLD
11	**Puducherry**	2 STPs of 6 MLD
12	**Punjab**	43 STPs of 388 MLD
13	**Telangana**	17 STPs of 376.5 MLD
14	**Uttar Pradesh**	24 STPs of 568.1
15	**West Bengal**	9 STPs of 122.36 MLD
	Total	**Projects of 2514.236 MLD**

Table 5: Projects awaiting sanctioning of the DPR

No.	State	STPs awaiting sanctioning of DPR
1	**Assam**	2 STPs of 4 MLD
2	**Bihar**	4 projects

No.	State	STPs awaiting sanctioning of DPR
3	**Chhattisgarh**	1 STP of 35 MLD
4	**Delhi**	14 STPs in Najafgarh zone (of which 7 STPs sanctioned and work to be started)
5	**Himachal Pradesh**	2 STPs of 4 MLD
6	**Jammu & Kashmir**	STPs of 59.9 MLD
7	**Jharkhand**	STPs of 184 MLD
8	**Karnataka**	29 STP of 134.846 MLD
9	**Kerala**	Treatment Plants of 0.71 MLD
10	**Manipur**	STP of 49 MLD
11	**Telangana**	31 STPs of 1098.17 MLD
12	**Sikkim**	0.72 MLD STP
13	**Uttarakhand**	STPs of 67 MLD

Table 6: Projects in Proposal stage (DPR to be prepared)

No.	State	STPs in proposal stage
1	**Andhra Pradesh**	STPs of 1215 MLD in proposal stage
2	**Assam**	17 STPs of 163 MLD
3	**Bihar**	20 Projects of which 5 DPR prepared
4	**Daman, Diu And Dadra Nagar Haveli**	1 STP of 16 MLD
5	**Delhi**	42 decentralized STPs and Mori Gate STP
6	**Gujarat**	19 STPs of 472.3 MLD
7	**Haryana**	8 STPs of 64 MLD (for future)
8	**Himachal Pradesh**	22 STPs of 32 MLD
9	**Jammu & Kashmir**	STPs of 47.9 MLD
10	**Jharkhand**	STP of 43 MLD
11	**Karnataka**	23 STP of 72.136 MLD;3 FSSM, 4.5 cum
12	**Kerala**	STP/ETP/FSTP of 2.776 MLD
13	**Madhya Pradesh**	1 scheme at DPR Stage

No.	State	STPs in proposal stage
14	**Maharashtra**	58 STPs of 3569.82 MLD - Proposed
15	**Meghalaya**	STP of 0.105 MLD
16	**Punjab**	53 STPs of 183.5 MLD
17	**Sikkim**	6 STPs of 10.61 MLD
18	**Tamil Nadu**	DPRs prepared and are being prepared on cluster basis
19	**Telangana**	13 STPs of 99.85 MLD
20	**Uttarakhand**	STPs of 39.25 MLD
21	**West Bengal**	12 STPs of 228.89 MLD

Further, project-wise details are at **Annexure-IV**.

7. **Status of Bio-remediation projects**

The status of in-situ bioremediation/ phyto-remediation in Polluted River Stretches being undertaken by the State was monitored. Accordingly, Andhra Pradesh, Goa, Karnataka Kerala, Nagaland, Odisha, Rajasthan, Sikkim, Tamil Nadu are yet to take up any such measures on the drains in the polluted river stretches. Other States have taken up measures on pilot basis only which they propose to evaluate based on the results obtained before works in other reaches are taken. Uttar Pradesh, Bihar, West Bengal, DDDNH, Delhi, Haryana, Himachal Pradesh, Madhya Pradesh, Maharashtra and Telangana have reported that bio-remediation/ phyto-remediation works have been taken up in their States. Chhattisgarh has implemented phytorid treatment in all the ULBs. Puducherry has reported that all the drains reaching the rivers Sankaraparani and Arasalar were identified and in-situ remediation of providing grills gratings and bar screen are provided to all the 172 drains. Punjab has reported that in-situ remediation of the Sirhind Choe with

the demonstration of Constructing Wet Land Technology has been completed and performance of the technology is under evaluation. Further, in-situ remediation of Bhulana drain was carried out with installing bioremediation, phyto-remediation enhanced through Nano Bubble Technology on Pilot basis and the same is under evaluation. The States are also taking up alternate treatment technologies as a measure to abate pollution.

State wise status of bio-remediation/ phyto-remediation projects is given in **Table-7** below.

Table-7: Status of bio-remediation/ Phytoremediation projects

No.	State	Action Taken
1	**Andhra Pradesh**	No information provided in the MPR.
2	**Assam**	GMDA has taken up scheme for treatment of polluted water of Borsola Beel through Bioremediation. RFP document for 'Treatment of Polluted Water of Borsola Beel through Bio-remediation' will be floated after approval of RFP document. GMDA has taken up a scheme for de-siltation and cleaning of Borsola Beel and the physical progress of the work as on 05.11.2020 is 100%. Govt. of has accorded Administrative approval for the scheme treatment of polluted water of Sarusola Beel and notice inviting RFP will be floated shortly. Tender Notice has been floated for the scheme 'Cleaning of Sarusola Beel' in compliance with Hon'ble NGT order amounting to Rs. 47.61 Lakh. GMDA has taken up a scheme on Bioremediation measures for Silsako Beel. Govt. has accorded Administrative approval amounting to Rs. 921.00 Lakh (Rupees Nine Hundred Twenty One Lakh) for the scheme. Finalization of draft RFP document is under process. GMDA has taken up cleaning activities in Silsako Water body through removal of water – hyacinths and floating garbage along with de-siltation of the water body with the help of machineries.
3	**Bihar**	Bio-mining/bioremediation work has been initiated at

		Bairiya, Patna and Muzaffarpur for disposal of legacy waste. UD&HD, GoB has issued Work Order dated-24.09.2020 to the successful bidder for In-situ treatment through bio-remediation of drains joining Ganga and other polluted rivers for 89 drains. Work has been started in all 89 drains.
4	**Chhattisgarh**	All the households in polluted river stretches have on-site sanitation systems, either twin pits or septic tanks. The State has implemented phytorid treatment in all ULBs.
5	**Daman Diu & Dadra Nagar Haveli**	Phyto-remediation and Bioremediation proposal for the 13 identified drain has been received from NEERI and the same is under process. The drain near Rajiv Gandhi Setu, Daman is being taken up for in-situ treatment on pilot basis. Another drain near Kabra Industrial Estate, Kachigam, Daman is proposed for in-situ treatment.
6	**Delhi**	Integrated Drain Management Cell (IDMC) has been formed for remediation and management of all drains in Delhi. Drain owing agencies have submitted their action plan and started its implementation. The waste water in Kushak Nala running through NDMC areas is under bio-remediation and the water quality parameters are being monitored. Delhi Cantonment Board has started implementation of bio-remediation plan w.e.f 11.06.2020.
7	**Goa**	Conventional method of septic-tank / soak-pit is adopted by individual housing /complexes, wherever underground sewer network did not exist. In villages or hinterland-areas (i.e. pocket settlement areas), stand alone soak-pit / septic-tanks system ensures effective treatment of domestic-sewage.
8	**Gujarat**	State has implied in-situ treatment towards legacy waste management (Pirana dumping site). Pilot project for in-situ remediation at Ankleshwar and Kheda municipalities are under implementation and after positive reviews, the same shall be replicated in 7 municipalities.

9	**Haryana**	ULB Department has started bio/phyto remediation works in the drains in Municipal Corporation, Yamuna Nagar – Jagadhri, as a pilot project, which will be replicated at other places. Municipal Corporation of Sonepat has also invited tenders for the bio/phyto remediation of drains. Similarly, Municipal Corporations of Gurugram and Faridabad are in the process of preparing the proposals for bio/phyto remediation. Municipal Corporation of Panipat has already floated the tenders for the process in their jurisdiction. GMDA has also initiated a pilot project as an interim treatment for untreated discharge of Leg I via geo-synthetic dewatering tubes in consultation with CPCB. PHED has undertaken the in-situ phyto/bio remediation in its new STPs at Indri and Beri.
10	**Himachal Pradesh**	In-situ Phytoremediation technique is being applied in nallahs for treatment of water. The work of in-situ remediation in Priority-I (Sukhna Nallah) has been started and civil work and plantation work is completed and construction of polishing tank is under progress. The tender work in-situ remediation in Jattan Wala Nallah (catchment of Priority-II river stretch) has been awarded and work is in progress.
11	**Jammu & Kashmir**	Tenders for in-situ bio-remediation of drains floated, work yet to commence.
12	**Jharkhand**	Preparation of DPR to adopt in-situ remediation at drains at identified ULBs viz. Chas, Ranchi, Mango and Adityapur, involving CSIR–NEERI and tendering is under process from competent authority from approx. 120 MLD of waste water will be treated.
13	**Karnataka**	Drains contributing to the pollution of the 17 Polluted River Stretches have been identified. Status of bioremediation or any other insitu remediation not provided.

14	**Kerala**	In situ primary treatment were proposed for the river stretches Bharathapuzha and Pamba in the action plans.
15	**Madhya Pradesh**	In-situ bio-remediation for Nagda and Mandideep town has been initiated as pilot project to be adopted a model for replication in other towns of the State.
16	**Maharashtra**	Demonstration project has been started by MPCB for in-situ treatment of wastewater at Kotwali village drain on Vashisthi River to explore the possibilities and viability of the interim measures.
17	**Manipur**	DPR submitted to NRCD for in-situ treatment through Bio-remediation of 16.75 MLD.
18	**Meghalaya**	PMC of Smart City has prepared the feasibility report for Nallah in-situ treatment for the drain falling within the ADB and has been approved and accepted report by RRC for Umkhrah & Umshyrpi. Preparation of DPR for the bio-remediation of remaining drains has been communicated to the PMC for finalization of terms & conditions. DPR has been completed and for remaining rivers and the Water Resources Department is seeking fund for implementing the same.
19	**Mizoram**	For the treatment of sewage, in-situ remediation such as onsite grey-water management systems in rural areas and setting up of improved septic tanks and Bio-digesters for black water management in the catchment areas of the polluted rivers are in process.
20	**Nagaland**	Phytoremediation and Faecal Sludge and Septage Management Plants are proposed in all the ULBs. DPR to be completed by November 2020. Bioremediation is adopted for treatment of legacy waste along 1 km buffer stretch of river Dhansiri
21	**Odisha**	H & UD Department has identified Drains contributing to

		river pollution.
22	**Puducherry**	All the drains reaches the rivers Sankaraparani and Arasalar were identified and in-situ remediation of providing grills gratings and bar screen are provided to all the 172 drains.
23	**Punjab**	The work for in-situ remediation of the Sirhind Choe (near Bhadson, District Patiala), with the demonstration of Constructing Wet Land Technology has been completed. The performance of the technology is under evaluation and will be replicated in rest of the drains in depending upon its success. In-situ remediation of Bhulana drain carried out by Punjab Pollution Control Board with installing bioremediation, phyto-remediation enhanced through Nano Bubble Technology on Pilot basis and is under evaluation. WSP based STP at Bhulath has been upgraded by adding Nano Bubble Technology. The performance of the technology is under evaluation and will be replicated in rest of the drains in depending upon its success. The work on piloting low cost ecofriendly on 500 KLDSTP for Banur, based on modified constructed wetland approach, is near completion
24	**Rajasthan**	The State has implemented bioremediation treatment for legacy waste, for which tenders have been invited. Drain identified for contribution in River Chambal in Kota Region.
25	**Sikkim**	**No tangible information is provided**
26	**Tamil Nadu**	**No details have been provided.** The State has proposed for incinerator installation to process plastic waste.
27	**Telangana**	HMWSSB has entrusted for preparation of DPRs for In-situ remediation for 5 drains leading to lakes to NEERI, Hyderabad. NEERI has submitted DPR for Kokapet drain of 1.0 MLD Capacity. It is under implementation stage by NEERI. For balance 4 drains, DPRs are received from

		NEERI which are under sanction stage. In-Situ remediation is proposed only in priority I&II and in priority III to V stretches it is not feasible as Flat terrain is not available, Steep slope gradient leading to high velocity and Flow of greater than 5 MLD
28	**Tripura**	As reported in the MPRs, the State has directed all ULBs to adopt in-situ bioremediation and phytoremediation of sewage in drains. 210 drains and land identified. Tender for Bio remediation of 5 drains as pilot basis in Agartala has been completed.
29	**Uttar Pradesh**	Bio-remediation is being done in 42 drains of Prayagraj.
30	**Uttarakhand**	DPR for treatment of 19 drains by bioremediation approved and is under tendering.
31	**West Bengal**	Work started as pilot project for drains for Ganga & Churni river stretches.

8. **Details of Alternate technology adopted or proposed to be adopted by the States/ UTs for treatment of sewage**

a. Faecal Sludge Treatment Plants

States are taking up projects for treatment of sewage through Septage Treatment Plants, which takes up lesser time in construction as compared to conventional STPs or are implementing co-treatment facilities in the existing STPs. Chhattisgarh has reported that 100% septage management scheme has been achieved in all the cities under polluted river stretches. Maharashtra has installed 15 FSTPs with total capacity of 290 KLD along polluted river stretches. Similarly, Odisha is implementing Septage Management System in a phased manner in all its ULBs, 10 FSTPs in 10 ULBs of 440 KLD have been commissioned, 82 Nos. in 82 ULBs of

1367 KLD are under construction. Tamil Nadu also proposes to establish 49 FSTPs, of which 5 FSTPs have been completed and co-treatment facility at 38 STPs have been facilitated. In Telangana, co-treatment of septage from the Septic Tanks of individual and community septic tanks in the existing 6 STPs have been completed and about 26 million liters of septage has been treated so far at these co-treatment plants, thereby preventing the pollution of lakes to that extent. 2 FSTPs have been completed in Uttar Pradesh.

Details of measures taken by the States are given below.

- **Andhra Pradesh**

  77 Faecal sludge Treatment plants are under construction in the State.

- **Chhattisgarh**

  FSTP based on low-cost gravity based Phytorid technology are operational in all 166 ULBs in the State for treatment of septage. All the cities under polluted river stretches are under 100% septage management scheme.

- **Daman, Dadra Nagar Haveli & Diu:**

  12 nos Septic tank emptier vehicles in Daman district and 08 nos in DNH district to clean and collect the sewage from septic tank of individual households and transport it to sewage treatment plant are under operation.

- **Himachal Pradesh**

  Tenders are under evaluation (3 bids received) for FSSM under AMRUT for drains contributing to Ashwani Khad. Septic tanks have been provided either at Community Level or by the individual households and Himachal Pradesh is one

of the states in the country which has achieved ODF status. In rural areas double pit (septic tanks) treatment is being provided under Swachh Bharat Mission.

- **Jammu & Kashmir**

  Septage Treatment Plants of 164 KLD at Bhagwati Nagar Jammu, 62 KLD at Anantnag, 164 KLD at Alluchi Bagh and 130 KLD at Achan have been commissioned.

- **Karnataka**

  4.53MLD of sewage is treated through Fecal Sludge and Septage Management (2.26 MLD in Devanahalli and 2.27 MLD in Nelamangala). 50 Fecal Sludge Management plants of 433 KLD are proposed to be developed in the State.

- **Kerala**

  2 FSTPs are functional in Kochi-Ernakulam and 1 FSTP has been completed to be commissioned in Thrissur. 8 FSTPs are in various stages of construction, tendering and approval. Further, Electro coagulation method is being adopted for sewage treatment in STPs.

- **Maharashtra**

  15 FSTPs have been installed along polluted river stretches, with total capacity of 290 KLD.

- **Manipur**

  Fecal Sludge and Septage Management (FSSM) of 50 KLD are proposed.

- **Meghalaya**

  115 KLD Septage Treatment Plant is under construction in Shillong which is 75% complete. Proposal has been sanctioned under AMRUT for FSSM & 5 on-site treatment systems (total capacity- 13.42 MLD) and is under tendering. DPR for FSSM at Jowai is also under preparation.

- **Mizoram**

  In-situ remediation such as on-site greywater management systems in rural areas and setting up of improved septic tank is proposed. Construction of bio-digesters for in-situ remediation of black water at household levels in urban areas under process. About 80 nos. of bio-digesters have been constructed for households in the catchment area. Construction of dam reservoir and recreation centre is under progress on Keilungliah stream, a polluting stream of Tuipui River at Champhai, which is expected to minimize contamination of Tuipui river.

- **Nagaland**

  2 units of Faecal Sludge Treatment Plant (20 KLD and 90 KLD) are in operation and serviced by 13 cesspool vehicles. Further, phytoremediation and Faecal Sludge and Septage Management Plants are proposed in all the ULBs. DPR is to be completed by November 2020.

- **Punjab**

  The work for in-situ remediation of the Sirhind Choe (near Bhadson, District Patiala), with the demonstration of Constructing Wet Land Technology has

been completed. The performance of the technology is under evaluation and will be replicated in rest of the drains based on outcome of evaluation. In-situ remediation of Bhulana drain was carried out by Punjab Pollution Control Board by installing bioremediation, phyto-remediation enhanced through Nano Bubble Technology on Pilot basis and same is under evaluation. WSP based STP at Bhulath has been upgraded by adding Nano Bubble Technology. The performance of the technology is under evaluation and will be replicated in rest of the drains in depending upon its success. The work on piloting low cost ecofriendly 500 KLD STP for Banur, based on modified constructed wetland approach, is also nearing completion.

- **Odisha**

  Coverage of all ULBs under Septage Management System in a phased manner is envisaged to be taken up during the period from 2016-17 to 2021-22 which will lead to improved urban sanitation with positive impact on public health, environment & river water quality. Since the cost of construction, operation and maintenance of Septage Treatment Projects is low, such projects are now implemented in different ULBs of the State. Total Septage Treatment Capacity is 1767 KLD of which 10 Nos in 10 ULBs of 440 KLD have been commissioned, 82 Nos. in 82 ULBs of 1367 KLD are under construction.

- **Rajasthan**

  17 KLD of sewage is treated through FSSM. However, 3 FSTPs of capacity 0.01 MLD and 0.02 MLD capacity have been proposed at Khandela, Lalsot and Sambhar respectively.

- **Tamil Nadu**

  49 FSTPs are proposed & are under various stages of implementation out of which 5 FSTPs have been completed. The State has installed co-treatment facility at 38 STPs. Co-treatment facility is also being enabled in other existing and under construction STPs.

- **Tripura**

  Preparation for floating of tenders for installation of 15 Faecal Sludge Treatment Plants (FSTPs) of 600 KLD capacity for 15 ULBs is underway and will be completed shortly. 0.72 MLD of sewage is being treated using Faecal sludge co-treatment.

- **Telangana**

  HMWSSB has proposed 6 FSTPs as an interim measure to avoid pollution of lake bodies. As such HMWSSB has taken up construction of one FSTP of 40 KLD capacity at Navakunta, under CSR funding and executed by ASCI, Hyderabad which will be completed within 3 months. 5 more FSTPs will be taken up and will be completed in another 5 months. The septage in areas where there are no STPs will get treated to lake water standards. Out of 5 FSTP

location sites, the proposal at Injapur & Nagaram for construction of FSTPs, are under tender stage and the bids will be opened on 28.12.2020. HMWSSB has enlisted 87 nos of Septic Tank Cleaning Vehicle operators and provided training for safe handling of septage and issued safety equipment. HMWSSB has taken up co-treatment of septage from the Septic Tanks of individual and community septic tanks at the existing STPs by setting up co-treatment facilities in the year 2018. So far 6 Co-treatment plants are established and functioning (may also be taken in first para) and 2 more are in progress which will be completed in 2 months. About 26 million liters of septage has been treated so far at these co-treatment plants, thereby preventing the pollution of lakes to that extent. Further it is proposed to set up another co-treatment facility at STP, Attapur. Rain guard/ wet land construction on Kukatpally nala which joins Hussainsagar lake pilot project is taken-up by HMDA for a length of 300 RMT to reduce the BOD load of the water passing through it. The efficacy is under testing.

- **Uttar Pradesh**

  Bioremediation being done in 42 drains of Prayagraj. Uttar Pradesh Septage Management Policy- 2019 has been approved on 30.10.2019. The State has set up Faecal Sludge and Septage Treatment Plant (FSSTP) in Jhansi and Unnao. Tender has been also finalized and LoA issued for another 50 FSTP Plants and expected to be completed by 30.09.2021. The State has proposed to cover all the ULBs by year 2023.

- **West Bengal**

Primary treatment of drains identified on rivers in Priority V by adopting techniques such as providing screens, sedimentation tank followed by disinfection has been proposed. 82.58 MLD is proposed to be treated using primary treatment techniques. The projects are yet to be taken up. Further, it is reported that 900 MLD of sewage is treated by East Kolkata Wetland using natural processes.

b. Decentralized/ modular STPs

Decentralized modular STPs are assets that can be created for sewage management of smaller capacity. These tailored systems, being pre-fabricated and involves minimal on-site civil construction and hydro-electro-mechanical installations, are easy to install, take significantly less time in commissioning (only few months) and easy to operate being compact systems. Accordingly, they are suited in situations where sewage generation is say less than 2 MLD, water quality profile permits tailoring the modular STP system specific to the requirements of site water quality and time available for commissioning the system is less. Many of States can therefore adopt such systems in situations instead of conventional STPs (which take much longer time, not less than 24 months, for construction) based on evaluation of techno-commercial merits.

Many States/ UTs are constructing or have proposed to develop STPs in Polluted River Stretches with capacity less than 2 MLD. Details of such

projects are as follows:

- Daman Diu, Dadra Nagar Haveli - Stand-alone modular STP for each Gram Panchayat proposed. District Panchayat, Daman is working out the details for preparation of DPR.
- Delhi - 42 no. of decentralized STPs have been proposed.
- Haryana- 5 STPs are under construction having capacity 3.25 MLD in Ghaggar river basin.
- Kerala – STPs of 10 KLD and 50 KLD are under construction, STPs of carrying capacity from 10 KLD to 2 MLD are under tendering and at DPR stage.
- Maharashtra – Maharashtra Pollution Control Board will provide financial & technical assistance to 19 villages in the polluted river stretches in next three years to comply with waste management.
- Meghalaya - DPR for 7 STPs of capacity varying from 0.3 to 1.2 MLD has been prepared and awaiting approval.
- Sikkim – 2 STPs of 1.6 MLD and 1.4 MLD are under-construction. STPs of varying capacity from 0.7 to 3 MLD are in proposal stage.

The States may consider to adopt installation of decentralized modular STPs instead of conventional centralized STPs based on merits. This will also enable them to complete these projects in shortest possible time without compromising the standards.

9. **Industrial Pollution Management in the State/ UTs:**

Most of States have reported that functional ETPs exists in water polluting industries. State-wise details about number of water polluting industries, industries having ETPs, quantity of effluent discharge, treatment capacity of ETPs and number of ETPs and CTPs is given in **Table-8**.

Table-8: Statement on Industries and Treatment Capacity established in States/ UTs

State	Stretch	No. of Industries(Water Polluting)	Current Effluent Discharge (MLD)	No. of Industries having ETPs	Treatment Capacity of ETPs (MLD)	CETPs (Nos. and Capacity in MLD)
Gujarat	State	12815	NA	12700	NA	Existing CETPs : 34 of 755.259 MLD, Proposed/Under construction: 16 of 263.35 MLD, Under expansion: 3, Capacity: 45.5 MLD
Tamil Nadu	State	11445	2835.7	11445	NA	**Existing**-36 of 87.350 MLD capacity. Proposed- 10 (41MLD) 1497 units connected to CETP.
	PRS	1770	452.696	1770	NA	**Existing – NA** Proposed- 10 CETPs (41MLD)
Haryana	PRS	3729	126	3729	-	**Existing-** 19 CETPs of 190.1 MLD capacity. **Proposed-** 11 CETPs 141.5 MLD capacity **Under Construction:** 1 CETP of 6 MLD
Karnataka	State	3503	1339	3287	4523	Existing - 10 CETPs of 5.875 MLD installed capacity; Operational Capacity = 3.445 KLD (59%); 733 units

State	Stretch	No. of Industries(Water Polluting)	Current Effluent Discharge (MLD)	No. of Industries having ETPs	Treatment Capacity of ETPs (MLD)	CETPs (Nos. and Capacity in MLD)
						connected Under construction = 2 (in Bidar and Yadgir), Expression of Interest issued = 1
Delhi	UT	1516	36	1516 (100%)	-	**Existing** – 13 CETPs of capacity 212.3MLD of which 2 are complying, 11 non complying. All CETPs have OLMS installed. Upgradation of CETPs has been proposed.
Goa	State	NIL				
Odisha	State	1031	886	1030	886	NIL
Tripura	PRS	179	0.0144	18 ETPs Installed	-	1 CETP of 500 KLD capacity installed
Maharashtra	State	16597	2100	16597	NA	**Existing CETPs**: 26 nos. (244.85 MLD) **Under Construction**-2CETPs, **Proposed**: 2 CETP at Nashik and Kolhapur
Himachal Pradesh	State	2773	45.67	955	35.1	**Existing:** 25 MLD CETP at Baddi. (468 units connected) **Proposed**: 2 MLD at Poanta Sahib **Under Construction**: 5 MLD at Kala Amb
Jammu & Kashmir	State	450	17	239	-	2 CETPs of 1.05 MLD functional, 1 CETP under trial, 10 CETP under construction and 10 CETP proposed
Uttarakhand	State	830	145	830	175	**Existing**-3 (13.2MLD) **Proposed**- 3 CETPs of 18 MLD

State	Stretch	No. of Industries(Water Polluting)	Current Effluent Discharge (MLD)	No. of Industries having ETPs	Treatment Capacity of ETPs (MLD)	CETPs (Nos. and Capacity in MLD)
Uttar Pradesh	State	1648	850.5	1404	NA	**Existing** – 7 (58.60 MLD) (NC-01/07 operational) **Under Construction** – 01No. (20 MLD)/ 3 Nos. of 26.65 MLD **Sanctioned** – 2 Nos. of (6.65 MLD)
Rajasthan	State	1199	-	1167	3173.61	16 CETPs (14 Operational, 01 under construction and 01 closed) Capacity - 159.88MLD
Assam	State	2641	-	2134	-	-
Sikkim	State	63	1.926	63	3.385	NIL
Meghalaya	State	260	3.5	254	-	-
DDDNH	UT/PRS	262	6.54	262	11.39	NIL
Nagaland	State	5	102 KLD	3	102 KLD	2 Units of 30KLD is under process
Manipur	State	Non-polluting industries	-	-	-	5 industrial units are connected to 1 non-functional CETP of 400 KLD
Mizoram	State	56	0.0438	56	0.099	NIL
Punjab	State	4055	402	1760	398	**Existing –** 4 CETPs of 20.535 MLD. **Under Construction** – 3 CETPs: 50 MLD -91% work completed & 40 MLD at Ludhiana-completed , 0.15 MLD at Jalandhar- status quo against court orders, hearing date on 15.02.2021
Madhya	State	1186	25100	1186	28000	**Existing:** 3 CETPs of 9.1

State	Stretch	No. of Industries(Water Polluting)	Current Effluent Discharge (MLD)	No. of Industries having ETPs	Treatment Capacity of ETPs (MLD)	CETPs (Nos. and Capacity in MLD)
Pradesh						MLD
Jharkhand	State	190	-	187	-	**Existing** : 2 Nos. of 25.05 KLD **Under Construction**: 3.5 MLD at Ranchi, Tupadana Industrial Cluster.
Bihar	State	219	NA	212	-	**Existing :** NA **Under Construction/ Proposed:** There are 52 industrial areas under control of BIADA, 5 Industrial Areas were identified in first Phase for construction of CETPs – Fathua, Hajipur-Vaisali-Bela, Barai, Bhagalpur, Patliputra. DPR for all Industrial area except for Patliputra was finalized and in first three calls for Bid submission no bidder responded.
West Bengal	State	454	1360.60	454(400 SPIs & 54 GPIs)	1360.60	**Existing**: 20 MLD CETP, **Under Construction**: 4 module of 20 MLD
Kerala	State	1401	156.3	5166	-	**Existing**- 8 CETPs of 12.4 MLD. 64 units connected.
Telangana	State	2178	603	1519	593.85	**Existing**- 4 Nos. of 7 MLD capacity operational. **Under Construction** – 1 CETP of 480 KLD
Andhra Pradesh	State	1069	4494.33	1069	-	**Existing**-7 CETP of (31 MLD) total capacity having 330 units as members

State	Stretch	No. of Industries(Water Polluting)	Current Effluent Discharge (MLD)	No. of Industries having ETPs	Treatment Capacity of ETPs (MLD)	CETPs (Nos. and Capacity in MLD)
Puducherry	UT	96	4.75	95	4.75	NIL

Further, Karnataka has reported that works of installation of the water quantity flow meters with real time monitoring (RTM) system in the existing and new CETPs is in progress. The system also facilitates transfer of data from the plant to the Integrated Command Control Center (ICC) at Pollution Control Board head office in real-time. Further, GPS Tracking device have been installed on the vehicles carrying effluent to CETP and incinerable hazardous waste to TSDF to regulate illegal dumping. Similar systems can be adopted by other States also.

V. State Specific Issues

Based on the discussions and review carried out in monthly meetings of Central Monitoring Committee, the issues flagged therein were brought to the notice of Chief Secretaries of concerned States through DO letters from Secretary, Ministry of Jal Shakti as per details below.

5.1 Andhra Pradesh (DO letter dated 19th October 2020 and 19th January 2021)

Non-attendance of CMC meetings by State officials. There is huge gap of

947.35 MLD in sewage treatment. Inflow of sewage is not reported in 6 STPs of 36 MLD capacity out of the existing 43 STPs of 515.85 MLD capacity. The data along with compliance/ non-compliance status, reasons and corrective action plan needs to be reported in the MPR. For the 32 under construction STPs of 458.9 MLD capacity, no incremental progress has been achieved in the last 2 months (October –November). The State Govt. is to ensure that progress is steadily registered and work is expedited to achieve their completion as per timeline. Details of the proposed projects under HAM model in respect of 16 Municipal corporations needs to be provided with status for Individual Corporation and their respective projects in the MPR. As reported, total MSW generation from 120 ULBs is reported to be 6850 TPD but, the data does not match with the bifurcated tabulated status provided for the ULBs.

5.2 Assam (DO letter dated 17th September 2020 and 19th January 2021)

Tendering process for setting up of STPs at Mangaldoi, Tezpur, Naugaon, Jorhat and Silchar, has been pending since long, and apparently no progress has been made for according Administrative Approval to these projects. About 980 TPD municipal solid waste (MSW) processing facility is available for 95 ULBs in the State with their capacity utilization of 393 TPD. Similarly, total MSW generation in Guwahati is nearly 550 TPD, out of which only 75 TPD is processed. ULBs concerned are required to process all solid waste generated in their jurisdiction. Also, efforts to be made for optimal capacity utilization of

these existing facilities. For setting up of an Integrated Solid Waste Management Plant, new site has been identified at Sonaguli. Further action in this regard needs to be expedited to set up the Plant ensuring compliance with the provisions of the Solid Waste Management Rules, 2016. Assam Pollution Control Board has received Expression of Interest for setting up TSDF to treat 43 TPD of hazardous waste generated in the State. Further necessary action (Issue of RFP, etc) is required to expedite the implementation of the Project.

5.3 Bihar (DO letter dated 18th January 2021)

Sewage generation of 651 MLD seems to be on lower side and needs to be reviewed. NIT for Buxar has been published the bidding for the scheme need to be monitored closely and need to be awarded within next 3 months. State to provide detailed status of the bio-remediation projects. The Land NOC is pending for projects proposed at Maner, Bakhtiyarpur, Kankarbagh, Digha, Begusarai. Permission is pending from RCD, NHAI and local authorities for various projects. The tendering for the schemes like Munger, Hajipur, Barahiya, Kahalgaon and Khagaria has been pending for a long. In many of these cases, the guidelines and/or directions of NMCG have not been adhered by State authorities, which has led to inordinate delays in finalization of procurement. These schemes along with Buxar sewerage network and STP need to be awarded without further delay.

5.4 Chhattisgarh (DO letter dated 18th January 2021)

Out of the total installed capacity of 73.1 MLD, roughly 6 MLD capacity is being utilized mainly due to non-completion of trunk line (3.5 km remaining) and sewerage pumping stations. The matter regarding the purchase of treated waste water from the proposed 35 MLD STP at Korba to be resolved with NTPC at the earliest, as the same is causing delay in implementation of the project. Funding to be finalized for STPs proposed at Rajim (2.8 MLD), Simga (2.8 MLD), Kanker (7.88 MLD), Dhamtiri (19.6 MLD) and Nawapara (7.5 MLD). The progress in ongoing projects at Jagdalpur (25 MLD), Rajnadgaon (6.2 MLD) and Raigarh (4 STPs with 206 MLD capacity) is found to be slower and needs to be expedited to ensure the completion of these projects by June 2021.

5.5 Daman, Diu and Dadra Nagar Haveli (DO letter dated 19th January 2021)

There exists a gap of 6.5 MLD in sewage treatment in the UT.13 MLD STP existing at DNH is being utilized at 2.10 MLD owing to absence of household connections (out of 24105 connections proposed only 4220 has been so far taken up). The State Government therefore, needs to expedite laying of sewer network and provide house sewer connection to make the STP operational to its capacity. The proposal for 16 MLD capacity capacity at Nani Daman under World Bank ENCORE Project is reported to have been submitted to Govt. of

India for approval. Also, the tenders to be floated for 7 MLD capacity STP proposed at Diu under Smart Cities Mission. These needs to be pursued rigorously to meet the timelines as stipulated by NGT.UT Pollution Control Committee, being the regulatory body, should ensure compliance of ETPs with respect to the prescribed discharge standards. It is reported that treatment facilities of 100 TPD at Daman and 150 TPD at Silvasa exist against solid waste generation of 29 TPD & 46 TPD respectively. For the solid waste management in Diu, MoU has been signed with M/s Ultra Tech Cements. In this regards, UT Administration needs to ensure that municipal solid waste management is carried out as per the Solid Waste management Rules, 2016.

5.6 Delhi (DO letter dated 18th January 2021)

Insignificant progress has been made in last one year in the 11 projects sanctioned for pollution abatement works of River Yamuna under Namami Gange Programme. The progress of three crucial projects in Rithala, Kondli and Okhla zone STPs are hindered due to non-granting permission for tree cutting/ transplantation by Delhi government. It has come to notice that contractors are not being paid timely for executed works by DJB. Since the significant share of these projects is borne by Central Government so there should not be any restriction on release of Central's share lying idle with DJB as substantial fund is still available with DJB as Central's share, which could be utilized for resolving this issues and expediting progress of work. Completion timelines of

Interceptor Sewer project needs to be closely monitored and should not be allowed to further slip.

5.7 Goa (DO letter dated 14th September 2020)

Average capacity utilization of the existing STPs is around 30 MLD (38%) mainly due to no proper conveyance system. Five STPs of total capacity 35.5 MLD are reported to be under construction from the resources mobilized by the State. Earlier, these STPs were reported to be under final stages of commissioning, but now scheduled for completion by December, 2021, which is not in conformity with the directions of NGT. For the proposed STPs (3 nos) of total capacity 43 MLD, it was informed that works could not be taken up due to local issues, these needs to be resolved at the earliest. Integrated solid waste management facilities proposed at Saligao (250 TPD), Cacora (100 TPD), Bainguinim (250 TPD+20%) and Verna (250 TPD+20%) require regular monitoring at appropriate level to ensure smooth and timely implementation.

5.8 Gujarat (DO letter dated 19th January 2021)

It is reported that 22 STPs of 1271.46 MLD capacity are non-complying, action to be taken against non-complying STPs. State Government is required to improve capacity utilization of the existing STPs; especially the STP at Gavier, Surat having utilization of only 5.37 MLD against its design capacity of 53 MLD. Also, State Government is required to expedite the progress of the 97

ongoing STPs in the State. There is an urgent requirement to acquire about 43 land parcels for setting up of 37 STPs/SPSs for pollution abatement works of River Tapi at Surat under NRCP. However, while possession has been taken for 4 land parcels, 'in-principal' approval have been granted for 7 more land parcels. Action may be expedited to resolve the same and acquire the remaining lands at the earliest to facilitate commencement of works. Out of 43,039 existing industrial units in the State, 7701 of them have ETPs installed and 34 CETPs are operational. Out of these 34 operational CETPs, 11 CETPs are non-complying in terms of the discharge norms. Appropriate action may be taken as per statutory provision by Gujarat Pollution Control Board (GPCB). In case of Bio-remediation of drains, no significant progress is observed in the State. A 155 MLD capacity STP under NRCP at Pirana, Ahmedabad is scheduled for completion by 31/03/2021. It may be ensured that this STP is completed within the stipulated time and commissioned at the earliest. With regards to deep see pipeline project, it was informed that tenders will be floated within few months' time for Jedpur, Ahmedbad and Vadodara area. The State Government needs to expedite the process of implementation of the project.

5.9 Jammu & Kashmir (DO letter dated 19th January 2021)

In Jammu, 10 MLD STP is reported to be under refurbishment but, no details are available indicating efforts made to make it operational. Other two STPs of 30 MLD & 27 MLD capacities are much underutilized (only 29 MLD) mainly

due to absence of proper conveyance system. The progress of NBCC's project is not satisfactory and requires regular monitoring at appropriate level of the the UT to increase utilization. Also, the proposal for I&D of 13 drains along river Tawi needs to be expedited to increase sewage inflow to these STPs. For optimal capacity utilization of STPs, proper sewer network with house service connections, interception & diversion works with proper conveyance system are necessarily to be taken up in parallel. The project for pollution abatement of river Devika at Udhampur was sanctioned under NRCP by the Ministry in September 2018 at a cost of Rs.186.74 crore and was scheduled for completion by March, 2021. However, physical progress achieved so far is not satisfactory. Out of three STPs proposed under the project, work on only one STP of 8 MLD has commenced whereas, for other two STPs, even design has not yet been finalized. The Government of J&K is required to rigorously monitor the project to expedite implementation and avoid cost and time overrun. It is informed that the proposal for bio-remediation on identified polluted river stretches has been submitted to the Government of J&K for approval, with funding by the concerned department. This needs to be taken up on priority. Against total municipal solid waste generation of 1500 TPD in J&K, only 550 TPD is processed. The UT Administration is required to initiate suitably and timely action to bridge the said gap by ensuring compliance of the Solid Waste Management Rules, 2016.

5.10 Jharkhand (DO letter dated 18th January 2021)

The total urban population in Jharkhand is about 79,33,061 which corresponds to sewage generation of around 700 MLD (approx.), against this State has reported sewage generation of 452 MLD in the MPR, this needs to be revisited and reviewed. Total gap in treatment capacity remains 504 MLD. Out of this in the CMC meeting, it has been mentioned that 331 MLD STP is proposed. A FSTP is also working at Chas ULB. Earlier, 232 MLD of STP was proposed in Ranchi out of this only 63 MLD (10+16+37) is reported to be created. Clarity may be given on creation of the remaining STP capacities. Funding for I&D and STP scheme in Dhanbad and Ramgarh, is yet to be firmed up.

5.11 Karnataka (DO letter dated 21st September 2020 and 19th January 2021)

It is reported that against a total sewage generation of 3356.5 MLD in the State, there are 125 existing STPs with 2242 MLD cumulative capacity; leaving is a gap of 1114 MLD between sewage generation and treatment capacity. The existing treatment facilities are also underutilized at only 67.5%. Therefore, the State Government is to ensure enhanced utilization of existing STPs by providing I&D work, laying sewer network and house service connections along with proper conveyance system to the STPs. Inconsistency in number of STPs have been observed in the MPRs. The State Government is required to reconcile and provide exact number of STPs. As reported, 2 STPs each of 3.72

MLD capacity at Sadalaga village and 5.8 MLD capacity in Chikkodi are barely receiving only 2 MLD total sewage. The State Government is to initiate corrective measures at the earliest to optimise their utilization. The STP/FSTP projects of proposed action plan are at different stages of progress along the PRS. The State Government is to ensure that the sewerage works in all the ULBs are expeditiously carried out to accomplish their completion within the stipulated timeline. It has been reported that against 11800 TPD of municipal solid waste (MSW) generation (MSW) in the State, 10198 TPD is processed. To bridge the gap of processing of remaining 1602 TPD of MSW, 9159 TPD capacity plants are reportedly approved for 219 ULBs. The State is to expedite the implementation process and ensure that the projects are in conformity with the MSW Rules, 2016. Out of 10 CETPs of 5.8 MLD capacity; 6 CETPs are reported to be non-compliant. Appropriate action may be taken as per statutory provision by Karnataka State Pollution Control Board (KSPCB) against these non-compliant units.

5.12 Kerala (DO letter dated 19th January 2021)

The compliance status in term of discharge standards STPs and CETPs have not been provided in the MPR. The State is to analyze and provide reasons for non-compliance as well as under-utilization of the STPs in order to initiate corrective actions. The State Government is reportedly planning to set up 43 additional STPs/FSTPs of a total capacity of 89.556 MLD. Completion of these

projects will still leave a gap of 103 MLD of sewage treatment capacity. Therefore, the State Government may initiate necessary action to create infrastructure to bridge this gap at the earliest. The State is to also provide details of the plan to handle liquid waste through FSTP and smaller STPs in the semi-urban and rural areas. Against a total generation of 3521 TPD of Municipal Solid Waste; treatment facility is available for 2844.5 TPD. For bridging the gap of 676.5 TPD of Municipal Solid Waste processing, the State has proposed 8 Waste to Energy Plants in 8 Districts.

5.13 Maharashtra (DO letter dated 14th September 2020 and 19th January 2021)

To meet the sewage treatment gap for polluted stretches (53 nos) on different rivers/tributaries in the State, 77 STPs of nearly 1300 MLD capacity are proposed. Out of which, 15 STPs of 245.76 MLD capacity are reported to be under construction, including 2 STPs in Ulhasnagar and 2 in Akola Municipal Corporation, due for completion in December, 2020. However, no progress has been observed since last 6 months. In case of 11 STPs of 423.5 MLD capacity, tendering has been in process since long, whereas administrative approval is pending for 14 STPs of 205.5 MLD and technical sanction required for 5 STPs of 101.5 MLD. Out of 139 STPs in the State with the total installed capacity of 7747 MLD, 6 STPs are still reported to be non-operational due to various reasons and 18 STPs are non-compliant in terms of the prescribed norms for

discharge into recipient water bodies. Performance evaluation of FSTPs (15 nos) in terms of reduction in pollution load may be indicated in the MPRs. In case of in-situ remediation for the drains (56 of P-I & 25 of P-II) discharging to polluted river stretches, no progress has been observed so far which is not in conformity with the directions of NGT and requires strict measures accordingly. Regarding industrial effluent management in polluted river stretches, it is informed that Common Effluent Treatment Plants (CETPs) of total capacity 83.3 MLD are operational in different industrial estates/areas. To meet the gap of effluent treatment, four CETPs of capacity 7.84 MLD (1 MLD at Satpur in District Nashik, 0.64 MLD at Sangli, 1.2 MLD at Ichalkaranji in District Kolhapur and 5 MLD at Butibori industrial area) are proposed which are still in initial stages of implementation. Solid waste management facilities exist for 17420 TPD of municipal solid waste against total generation of 22945 TPD. The project for pollution abatement of river Mula Mutha at Pune was sanctioned in January, 2016 under NRCP at a cost of Rs.990.26 crore with Japanese ODA Loans from JICA, and was scheduled for completion in 6 years. However, the physical progress achieved so far is only 3%. For early commencement of the project, the State Government is required to facilitate transfer of land for all the STPs.

5.14 Manipur (DO letter dated 17th September 2020)

Against a total sewage generation of 115 MLD in the State, only one STP of 27

MLD capacity exists at Imphal. This STP currently receives only 9 MLD of sewage owing to absence/lack of adequate house service connections rendering the same grossly under-utilised. The State Government needs to expedite the progress of remaining household service connections and ensure that the existing STP operates to its design capacity. As far as construction of 2 additional STPs of 1 MLD & 16 MLD is concerned, it is observed that not much progress has been achieved. Only a meagre 10% progress is reported for 16 MLD capacity STP, whilst there is no progress at all for the 1 MLD capacity STP. The State Government needs to execute these Plants with due expedition and complete them within the stipulated timeline i.e. March, 2022. In respect of the proposed 49 MLD capacity STP at Imphal, the estimated cost seems to be very high. The State Government needs to review the project, revise the estimate downward and submit to the Ministry at the earliest. As regards industrial pollution, it is reported that 5 industrial units are connected to a 400 KLD capacity CETP which is non-operational. As reported, 1TPD of hazardous waste is generated from 334 automobile industries in the State and no treatment facility exists. The State Government needs to execute required Hazardous Waste Management Facilities like Treatment, Storage, and Disposal Facilities (TSDFs) at the earliest for processing and proper disposal of hazardous waste. Against a total municipal solid waste (MSW) generation of 309.5 TPD in the State, treatment capacity of 275.5 TPD exists. However, only 59.6 TPD MSW is being treated in the facilities. The State Government needs to expedite

process of enhancement of treatment capacity of the existing facility and meet the timeline for 100% utilization capacity by March-December, 2021 as committed in the MPR.

5.15 Meghalaya (DO letter dated 19th January 2021)

State generates a total sewage of 75 MLD against which treatment capacity of 24.65 MLD sewage is available. While 1.85 MLD of sewage is being treated through 8 STPs, 22.8 MLD sewage is being treated through a legion of septic tanks. There remains a huge gap of 50.35 MLD in sewage treatment. The treatment of sewage through septic tank needs to be upgraded/up scaled by providing faecal sludge treatment plant (FSTP) as an extension of treatment. Detail progress of proposed 0.35 MLD capacity FSTP plant and 5 onsite treatment plant of 13.45 MLD capacity plants needs to be provided. 5 out of 8 existing STPs are reported to be operational. Information pertaining to operational status of 0.05mld capacity STP at Polo market, compliance status of 0.03 MLD capacity STP at Nonshing & 0.05 MLD capacity STP at Thangskai have not been provided. The capacity utilization of 0.12 MLD capacity STP at Nongtrai is reported to be 0.03 MLD only. Against 245 TPD generation of Municipal Solid Waste (MSW), treatment facility for only 8.27 TPD only is available. The State is to ensure completion and commissioning of the proposed 10 plants of 166 TPD capacity for bridging the gap in MSW treatment capacity. Implementation of the 170 TPD capacity MSW project at Shillong

was to be completed by December, 2020.

5.16 Mizoram (DO letter dated 19th January 2021)

10 MLD STP at Aizawl which registered already a 99% progress is maintaining status quo and thus, yet to be made operational. During the 6th CMC meetings, it was urged that the said STP be made operational at the earliest to treat sewage of at least 3000 households (out of 19000 households) which are reportedly networked. State Govt. may issue necessary directions to authorities concerned to sort out issues impeding its further progress and make the STP operational at the earliest. It was also mentioned in the MPR that 30% of grey water management is completed. In this regard, details in respect of polluted river stretches, population & number of households covered, timelines of completion, quantity of grey water being remediated, etc need to be indicated in the MPR. It is reported that against 348.19 TPD Municipal Solid Waste (MSW) generation in the State, total treatment facility is available for 214 TPD, which includes 44 TPD capacity landfill site, 74 TPD capacity material recovery facility, 50 TPD mechanical composting plant and 46 TPD capacity vermi-composting plant in Aizawl alone. This leaves a gap of treatment capacity of 134.19 TPD.

5.17 Nagaland

25.43 MLD capacity STP at Dimapur under NRCP is under construction which

is 95% complete. Parshal Flume, Inlet Screen/Chamber and effluent disposal system are however pending. The State Govt. needs to rigorously monitor the project in totality to meet the timelines and commission the same as assured during CMC meetings. As far as the gap of 18.87 MLD of sewage treatment capacity in the State is concerned, no plan of action seems to have been made as yet by the State Government in this regard. It is observed that MPRs submitted by the State for October and November, 2020 are repetition of earlier MPRs without any material change and showing incremental progress during the last 3 to 4 months. In respect of solid waste management in the State, minimal information is available in the MPR. State Government should submit detailed information in this regard. Against 304 TPD of solid waste generated in the State, only 132 TPD is processed/treated. Another 50 TPD processing plant has been reportedly installed which still leaves a huge treatment gap of over 100 TPD in the State

5.18 Odisha (DO letter dated 19th September 2020 and 19th January 2021)

The State Govt is required to expedite networking and/or house service connections to ensure adequate inflow to the STPs for their optimal utilization. Progress of the 58 ongoing FSTPs needs to be monitored regularly to adhere to the proposed timelines. There seems no progress on bio-remediation for identified drains (18 nos) discharging into polluted river stretches, and thus

requires serious consideration vis-à-vis the directions of NGT.

5.19 Puducherry (DO letter dated 19th October 2020 and 19th January 2021)

Out of 5 existing STPs of 56 MLD capacity, 2 STPs of 2.5 MLD each are non-functional and the cumulative capacity utilization of the 3 STPs of 51 MLD capacity is 35 MLD only. These functional STPs are also reported to be non-compliant in terms of standard of discharge. The Govt. of Puducherry is to expedite the work of sewer network and House Service Connections to ensure optimum utilization of the existing STPs. It is reported that against 406 TPD of municipal solid waste (MSW) generation, treatment facility is available for 61 TPD only. On the other hand, the capacity utilization of the existing treatment facility is also low at 70%. Details pertaining to load of MSW to be processed in individual proposed plant to bridge the huge gap needs to be provided.

5.20 Punjab

One of the major reasons for pollution in river Satluj is discharge of wastewater through Buddha nala carrying waste generated from municipal areas of Ludhiana town, industrial clusters, dairy complexes, etc. The State Govt, therefore, is required to take immediate steps for tapping of 14 drains discharging into Buddha Nala. In order to minimize the sewage treatment gap for polluted river stretches, land acquisition issues for 9 of the proposed STPs

need to be resolved urgently. To cater to the effluent generated from textile clusters in Ludhiana, timely commissioning of the CETPs of 40 & 50 MLD to be ensured. Another concern regarding shifting of three dairy complexes from the catchment area of Buddha nala, it was suggested to explore viability of PPP model for utilization of dairy waste towards bio-methanisation to turn around this segment of pollution into an opportunity.

5.21 Rajasthan (DO letter dated 18th January 2021)

24 STPs are in advance stages of construction (progress > 90%), special efforts need to be taken to ensure their early completion and commissioning preferably by the indicated timeline of March 2021. There are about 6 lakh households, out of envisaged 15.5 lakh which are yet to be connected with the sewerage network. These house service connections need to be expedited in fixed timeframe for increasing capacity utilization of these STPs. In addition to suboptimal capacity utilization, the poor operation and maintenance of the created sewage and industrial effluent treatment also appear to be a critical issue of concern evident from the fact that 11 of the 14 operational CETPs and 39 of the 80 STPs are non-complying with prescribed standards. Action plan for making these STPs/ CETPs compliant needs to be drawn along with timelines. State is having capacity to process & recycle just 37% of its municipal solid waste generation. The SWM processing capacity needs to be enhanced. Legal issue for STPs at Bhiwadi and Hanumagarh (2 nos.) needs to be resolved. 2

STPs at Mandiya and Nokha are complete since September 2020. Efforts should be made to make these operational.

5.22 Sikkim (DO letter dated 17th September 2020)

STPs at Rangpo (1.40 mld) and Gangtok Zone-II (1.60 mld) are almost complete, but not operational and their commissioning is getting delayed due to fund constraints and other minor issues. Project for pollution abatement of river Rani Chu at Gangtok, Zone-III in Sikkim which was sanctioned under the National River Conservation Plan in July, 2018 at a cost of Rs.94.66 crore. Even after 2 years, physical progress of the scheme is only 42%, and needs to be expedited to complete the scheme within its stipulated completion time i.e. by 31st July, 2021. Land issues regarding proposed STPs at Namchi and Jorthang also needs to be resolved urgently. With regard to the proposed STPs, State to complete verification and finalize the DPRs first, as the projects are turning to be very costly. Further, as the STPs proposed are in the range of 1-3 MLD capacity, the State to explore alternate treatment technology such as Faceal Sludge Management.

5.23 Tamil Nadu (DO letter dated 24th September 2020 and 19th January 2021)

3 STPs are reported to be non-compliant. Existing STPs are utilized at about only 57%. Therefore, State is to ensure enhanced utilization of the existing

STPs by completing sewer network and house service connection with due expedition. Slow progress observed in respect of the under construction STPs. Out of the 36 CETPs, 4 are reported to be non-compliant. 10 CETPs of 41 MLD capacity have been in proposal stage for quite a long time, progress of which needs to be expedited. Against a total municipal solid waste (MSW) generation of 15,666 TPD in the State, treatment capacity of 7859.2 TPD only exists. State may take necessary action to bridge the gap.

5.24 Telangana (DO letter dated 19th January 2021)

Huge gap of 1724.45 MLD in sewage treatment. Out of 31 existing STPs, two STPs are not working (0.5 MLD at Krihnakanth Park of capacity and 2.5 MLD at Amber Cheruvu Pragathinagar). The reason for non-functioning of these STPs are to be reported and corrective measures are to be initiated. Regarding the 17 proposed STPs, progress on work of 6 STPs appear stagnant for consecutive 3 post monsoon months (October, November and December) and for remaining 11 STPs, work is yet to be started. While the work needs to be expeditiously carried out (Reasons for status quo in the progress of work is to be reported in the MPR). In view of no response to the tenders of Government of Telangana for package III consisting of 17 STPs of 376.5 MLD capacity under HAM model, a market consultation and discussion may provide clear understanding leading to course correction.It is to be ensured that the status of ongoing projects are correctly stated in the Monthly Progress Reports. For the

under construction of 5.45 MLD capacity STP at Myrialguda which was proposed to be completed by December, 2020, it is reported that the STP is 90% complete. Completion of remaining works is to be ensured expeditiously. The completion date of the under construction work of 0.5 MLD capacity CETP was stated as March, 2021 in the October, 2020 MPR while the MPR submitted for December, 2020, the date is extended to June 2021. The State is to ensure the completion of the work within the stipulated timeline. The number of waste to energy plants was reported to be 7 in the October, 2020 MPR whereas, in the MPR of December, 2020, the number of waste to energy plant is reported as 4. The State may reconcile and state correct figure in this regard. The treatment of total solid waste generation of 9285 TPD is not perspicacious. This needs to be clearly stated in the MPR. As the gap between solid waste generation and treatment is 2785 TPD, the State government needs to expedite implementation and ensure completion of remaining projects conforming to the Municipal Solid Waste Rules, 2016.

5.25 Tripura

To increase capacity utilization of 8 MLD STP at Agartala, expansion of sewer network and house service connections and one STP of 8 MLD under construction at Akhuaura ICP, Agartala are to be expedited to meet the timelines stipulated by NGT. In case of proposed Faecal Sludge Treatment Plants (15 nos) of total capacity 600 KLD for all 15 ULBs in the State, land

needs to be identified for grounding works followed by smooth implementation within the stipulated period of 16 months. There seems minimal progress on bio-remediation for identified drains (210 nos) discharging into polluted river stretches, and requires serious consideration vis-à-vis the directions of NGT. Municipal solid waste processing facility exists for 256 TPD (250 TPD composting plant at Agartala & 6 TPD at Kamalpur Nagar Pachayat of District Dhalai) against total municipal waste generation of 411.32 TPD in the State. This needs to be looked into for proper redressal to comply with the provisions of the Solid Waste Management Rules, 2016.

5.26 Uttar Pradesh (DO letter dated 19th January 2021)

9 STPs out of 32 STPs were expected to be completed by December 2020. However, construction for only 1 STP at Firozabad has been completed and is under trial run. Efforts should be made to complete remaining 8 STPs at the earliest and other 23 STPs as per indicated timelines. LoA for project at Lucknow was issued in September 2020 but the same has run into legal issues. Land issue for Moradabad project is pending for long and needs to be resolved at the earliest. Similarly, for Farrukhabad project, in spite NOC being given by NMCG, the LoA has not yet been issued to the successful concessionaire. 19 of the 101 STPs are non-complying with prescribed standards apart from 5 non-operational STPs. No progress since September 2020 for 4 projects at Balia, Pratapgarh, Jhansi & Kanpur (Baniyapuwa). Efforts should be made to

expedite the progress and complete the projects as per the timelines. Capacity utilisation of SWM processing plants needs to be improved. The SWM processing plants at Jaunpur & Fatehpur scheduled for completion by October 2020 have not yet been operational. In addition, there are land issues for 8 SWM plants at Bareily, Firozabad, Loni, Nazibabd, Bhadoi, Basti, Gorakhpur & Akbarpur which needs to be resolved at the earliest. STPs at Garhmukteshwar constructed under Namami Gange Programme are reported to be non-operational from last 3 months due to settlement of trunk sewers and choking of network. The issue need to be examined and resolved as soon as possible to ensure no untreated wastewater is discharged into river Ganga. Directions issued by NMCG in respect of non-operational or dysfunctional STPs at Ghaziabad, Noida and Greater Noida needs to be implemented.

5.27 Uttarakhand:

Out of 19 projects sanctioned (for towns situated on main stem of River Ganga) under Namami Gange programme, 18 projects have been completed. 1 STP project at Joshimath was delayed because of landslide at original STP location necessitating change of STP location. The STP is expected to be completed by end of March'2021. Towards monitoring of functioning of STPs, 16 STPs have online monitoring system which are connected to *Ganga Tarang* web portal. A dashboard is also being developed for monitoring the functioning of STPs.

5.28 West Bengal

Hooghly Chinsurah I&D and STP project: - Revised DPR of Hooghly Chinsura has been sanctioned in 29th EC meeting and AA&ES amounting of Rs. 154.73 Crs. was issued on 23rd Sep 2020. Kolkata Metropolitan Development Authority (KMDA) invited the tender on 23.11.2020. Now tenders have been kept on hold due to inter-Departmental issues (Department of Education) related to land which has not been sorted out by State. The land allocated for STP requires to be retained as proposal has already been changed twice and lingering since 2018.

Tolly Nullah I&D and STP project: - NMCG has sanctioned a project for Pollution Abatement & Rehabilitation of Tolly's Nullah (Adi Ganga), Kolkata (Interception & Diversion with Pumping Station and STP) at a cost of Rs. 307.12 crore on 17.08.2017. Kolkata Municipal Corporation (KMC) has invited the tenders and bid have been received on 2nd call on 10.12.2020. KMC has to complete the award process at the earliest as the grounding of project is inordinately delayed. NMCG has provided necessary advice in the procurement matter.

Rehabilitation of Keorapukur & Garden Reach STP:- NMCG has sanctioned the project on 05.03.2018 amounting of Rs. 165.16 Crs. State Government is revising the scope and revised DPR is yet to be received. State Government may expedite the work and submit the revised DPR at the earliest. The project will have to be re-sanctioned thereafter. State to ensure optimum utilization of the existing STPs. State to explore alternate treatment technologies as being

adopted by other States such as Odisha for management of the untreated sewage.

Some of case studies in respect of successful initiatives implemented in ULBs/ States are given below.

CASE STUDIES

Case Study-1: PPP Partnership for sustainable management of Infrastructure in Udaipur, Rajasthan

Udaipur city has been shortlisted as one of the Smart Cities in India and the treatment of domestic sewage has come as a boon to the city. Hindustan Zinc, corporate entity with its operations focused in the city and area around the city, being conscious of environment has been in forefront in adopting clean green technology in running its operations with focus on efficiency in use of water. Zinc, India's largest integrated zinc-lead- silver producer had commissioned a 20 MLD STP in Udaipur in 2014 to make Udaipur's lake, free from pollution by sewage inflow there in & develop alternative source of use and conserve potable water. Existing STP is among first treatment plant of Rajasthan under public private partnership commissioned in Udaipur.

In pursuance to take this initiative further, Hindustan Zinc has signed an agreement with Udaipur Smart City Limited on June 2017 to set-up another (three STP 25, 10 & 5 MLD) 40 MLD capacity STPs in Udaipur. With the additional commissioning of 40 MLD STP, the total treatment capacity for Udaipur town is 60 MLD, which is an important step towards treatment of domestic sewage and water conservation in Udaipur.

25 and 10 MLD STP have already been commissioned in Jan 2019, June 2020 and September 2020. The MoU with USCL is having provision for reuse of 50% treated water of Udaipur town or Aayad river. Treated water is

discharged into Aayad river and also for HZL plants.

Faecal sewage treatment plant(FSTP)

An MoU was signed between Hindustan Zinc Limited (HZL), Centre for Policy Research (CPR), Vidhya Bhavan Society (VBS) and Udaipur Municipal Corporation (UMC) to develop a robust and replicable partnership model between governmental, commercial and academic actors to bolster market oriented public good developmental interventions; ultimately accelerating progress towards safe and sustainable water and sanitation through Faecal Sludge Management in Udaipur City. The benefits out of this initiative of systematic FSSM by leveraging and revamping existing PPP arrangement for STP(s) construction will be as follows;

- Generation of non – hazardous material ash for land filling and industrial & partial distilled grade water for internal use
- 100% pathogen free sludge with recovering of phosphorous, potassium and carbon from the Faecal Sludge and using it as organic manure.
- Eradication of impacts of faecal sludge on open environment
- Treating sludge generated from 60 MLD STPs.

Case Study-2: Community driven Solid Waste Management in Chattisgarh

In Chhattisgarh, 1650 TPD of solid waste is generated in the State and almost all the waste is being collected, segregated, treated and re-used by adopting practical, scientific, sustainable model for solid waste management – Mission Clean City (Recycle and Reuse Model). Standard Operating Procedure has been developed for the State which is followed across 166 ULBs in decentralized manner. The State aimed at achieving cost effective solution, a livelihood opportunity for women (9000+ women trained & engaged), involve community participation, incentivizing for promotion, adopting innovative methods such as Garbage Café, Bartan Bank, Balli Vaishya etc and

converting waste to wealth. Through this State has achieved the rank of India's first Zero Landfill State.
Case Study-3: Community driven decentralized Solid Waste Management in Odisha Decentralized approach similar to Chhattisgarh has been adopted by Odisha, wherein Women/ Transgender SHGs facilitate collection of segregated waste from the households and the revenue from sale of recyclables distributed to sanitation workers as incentives. Highlights of decentralized model taken up by Odisha are 100% source segregation, decentralized processing, community partnership, circular economy and zero-landfilling

VI. Status of Solid Waste Management, Ground Water Augmentation, Afforestation, Floodplain and E-flow Management

State-wise status of solid waste management, hazardous and plastic waste management, ground water management, good irrigation practices adopted by farmers, installation of rain water harvesting, protection and management of Floodplain Zones and maintenance of minimum E-flow in the river stretches as per the Action Plan and MPR submitted by the States is placed at **Annexure- V**.

States of Andhra Pradesh, Goa, Haryana, Jammu & Kashmir, Maharashtra, Karnataka, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal have major gap in solid waste treatment facilities and have taken up projects for establishment of processing facilities, which are at various stages of implementation. These States need to ensure timely completion of the projects and ensure optimum utilization of their infrastructures. The status and progress will continue to be monitored in subsequent meetings of Central Monitoring Committee.

VII. Scrutiny of Action Plans for P-II and P-IV:

As reported by CPCB, all the Action Plans for Polluted river stretches in Priority I-IV have been approved with conditions.

VIII. Model River Stretch identified by the State

As directed by NGT, States have identified Model River to be taken up for rejuvenation in the first phase. States of Andhra Pradesh, Chhattisgarh, Jammu & Kashmir, Kerala, Mizoram, Rajasthan, Telangana and Uttar Pradesh are yet to identify Model River to be rejuvenated, the model of which can be replicated in rejuvenation of other river stretches. The identification and implementation of various strategies for rejuvenation of model river stretch assumes particular significance as it can translate as best ground to test the efficacy of various interventions so that such approach and models can be taken for implementation in other reaches. The experience gained out of such implementation will also help in wider dissemination of good and successful practices amongst the States. Accordingly, the State of Andhra Pradesh, Chhattisgarh, Jammu & Kashmir, Kerala, Mizoram, Rajasthan, Telangana and Uttar Pradesh may complete identification of Model River for rejuvenation and direct the concerned State officials to implement various interventions in coordinated manner as per Action Plan for rejuvenation of the model river.

Details as reported in the MPRs are in **Table-9** as below.

Table-9: Status of Model Rivers Identified by States

No.	State	Model River Identified
1	**Andhra Pradesh**	-
2	**Assam**	Digboi River
3	**Bihar**	Harbaura River
4	**Chhattisgarh**	-
5	**Daman, Diu And Dadra Nagar Haveli**	Damanganga
6	**Delhi**	Yamuna
7	**Goa**	Sal River
8	**Gujarat**	Sabarmati River
9	**Haryana**	Both Yamuna & Ghaggar
10	**Himachal Pradesh**	Beas River
11	**Jammu & Kashmir**	-
12	**Jharkhand**	Swarnrekha River
13	**Karnataka**	Tungabhadra River
14	**Kerala**	-
15	**Madhya Pradesh**	Khan River
16	**Maharashtra**	Chandrabhaga River
17	**Manipur**	Nambul River
18	**Meghalaya**	Nonbah River
19	**Mizoram**	-
20	**Nagaland**	Chathe River
21	**Odisha**	Kathajodi river
22	**Puducherry**	Sankarabarani River
23	**Punjab**	Beas River
24	**Rajasthan**	-
25	**Sikkim**	Maney Khol River
26	**Tamil Nadu**	Bhavani River
27	**Telangana**	-

No.	State	Model River Identified
28	**Tripura**	Haora River
29	**Uttarakhand**	Ganga River
30	**Uttar Pradesh**	-
31	**West Bengal**	Karola River

IX. Status of Preparation/Submission of Action Plan for Coastal Pollution

Subsequent to the Hon'ble NGT order dated 21.09.2020, CPCB has issued a reminder vide letter dated 10.12.2020 to all the concerned coastal States/ UTs (except Andhra Pradesh) to submit the Action Taken Report and Time Bound Comprehensive Action Plan to CPCB for control of coastal/ marine pollution within the jurisdiction of the State/UT. Also, reminder was issued to Andhra Pradesh State to submit the Action Taken Report for ensuring compliance to directions dated 31.08.2020 issued under section 18(1)(b) of Water (Prevention & Control of Pollution) Act, 1974 by CPCB.

Till 28.01.2021, Andhra Pradesh and Kerala State have submitted Time Bound Comprehensive Action Plan whereas Goa and Kerala State have submitted only the Action Taken Report. Remaining coastal States/ UTs viz Lakshwadeep, Daman, Diu & Nagar Haveli, Andaman & Nicobar, West Bengal, Tamil Nadu, Maharashtra, Karnataka, Gujarat, Odisha and Puducherry have yet not submitted the requisite information. Status of submission of Action Plan by States is as given **Table-10** below.

Table-10: Status of Submission of Action Plans for Coastal Pollution by States

No.	State	Status
1	Andhra Pradesh	Action Plan Submitted to CPCB and under consideration of CPCB
2	Daman, Diu & Dadra Nagar Haveli	-
3	Goa	-
4	Gujarat	-
5	Karnataka	-
6	Kerala	Action Plan Submitted to CPCB and under consideration of CPCB
7	Maharashtra	-
8	Odisha	-
9	Puducherry	-
10	Tamil Nadu	-
11	West Bengal	-
12	Andaman & Nicobar	-
13	Lakshadweep	-

x. **Development of Grievance portal**

As per directions of Hnn'ble NGT, it was directed that CMC may consider development of an appropriate App to enable easy filing and redressal of grievances with regard to illegal discharge of sewage/ effluents. Accordingly, NMCG has developed an online module on its website for submission of grievances and redressal of grievances with regards to illegal discharge of sewage/ effluents. The url of portal is **https://nmcg.nic.in/ngtgrievance.aspx** and has been operational with effect from January 2021. Chief Secretaries of all the 31 States/UTs have been directed to

regularly monitor and to address the issues within a stipulated time period. The status report in this regard shall be incorporated from next submission onwards.

XI. Reutilization of Treated water

Acknowledging the importance of safe reuse of treated waste water (SRTW) in India as well as prioritizing the same in planning and management due to rapid urbanisation and increased wastewater generation and also with an aim towards increased water security, the action plan for Reuse of Treated Waste Water has been undertaken at national level in Ministry of Jal Shakti. The introduction of the concept of SRTW into water resource strategies and policies could provide additional resources for multiple uses and water security for fast growing cities, industry, agriculture and the environment. So far, India has no national policy regarding SRTW, except for a few State policies viz., Gujarat, Maharashtra, Tamil Nadu and Haryana. Accordingly, National Mission for Clean Ganga Ministry of Jal Shakti in collaboration with the Indo-German 'Support to Ganga Rejuvenation' project (GIZ-SGR) and the India-EU Water Partnership (IEWP) has initiated formulation of National Policy on Safe Reuse of Treated Water (SRTW). The policy development is based on a comprehensive consultation process by engaging relevant stakeholders under a dedicated steering group. The stakeholders involved included MoEF&CC, MoHUA, industries, ULBs and representations from pioneering States (Maharashtra, Gujarat, Haryana, UP). The policy development process is supported by European and national experts bringing in

best international practice. Based on extensive consultations during various Consultation meetings, 1st Draft Working document has been prepared. Further consultation for finalisation of National Policy is underway.

State–wise details of re-utilization of treated water as reported by the State is provided in **Table-11** below.

Table-11: Status of Re-utilisation of Treated Water by States

State	Status
Andhra Pradesh	321.81 MLD of treated wastewater is being reused.
Assam	Being done by P&RD Department for rural areas. No further details provided.
Bihar	Treated sewage water of STP having capacity 100 MLD or above will be used by Water Resource Department and less than 100 MLD will be used by Minor Water Resource Department for agriculture purposes.
Chhattisgarh	Treated waste water will be utilized after the completion of construction of STPs.
DDDNH	Treated water is used daily for road washing, horticulture, soil compaction, irrigation etc.
Delhi	90 MGD is being used for various purposes e.g. horticulture, irrigation, DTC depot etc.
Goa	Part utilization has been proposed for (i) release of STP-treated water at Colva into Sal-river so as to maintain the flow, (ii) flushing of St. Inez creek, (ii) municipal gardening, (iii) social forestry, (iv) private plantation, (v) dust-suppression measures etc.
Gujarat	Gujarat Government has framed Policy for Reuse of Treated Waste Water (TWW) wherein targets have been set for use of 70% of the treated wastewater by 2025 and 100% of treated wastewater by 2030. 643 MLD of treated waste water is used by MC and Municipalities.

Haryana	State has prepared a draft policy for resuse of treated waste water and an action plan for reuse of treated sewage and as per the plan, approx. 80% of treated sewage will be reutilized by 2024-2025. Treated waste water will be used for the farming purpose.
Himachal Pradesh	JSV is providing facility for bulk water user at all the STPs to enable drawing the effluent for reuse.
Jammu and Kashmir	Reuse of Treated Water through Pumping Plant with Rising Main to Railway Station Katra for cleaning and washing purpose, Horticulture purpose at Air force station, at Army Unit for cleaning and washing purpose have been proposed.
Jharkhand	Water will be used for irrigation, fish farming, landscaping, cooling water for power plants and oil refineries, toilet flushing, public parks, dust control, artificial lakes, construction etc.
Karnataka	Quantity of treated water reused in Bengaluru = 427.5 MLD; other than Bengaluru = 106.65 MLD. It is to be used for recharge of lakes, use in industrial establishments, by horticulture departments, used in gardening etc.
Kerala	Utilization of the treated effluent for irrigation, gardening, industries, construction and recharge are being explored.
Madhya Pradesh	At present 84.96 MLD of treated water is being used or irrigation/gardening purpose (including STP of 35 MLD, Bhopal under AMRUT scheme)
Maharashtra	The Infrastructure Projects are mandated by MPCB to recycle 60% of treated sewage for secondary use by providing duel pipeline for different class of users like Thermal Power Plants, Industrial Units, Construction activities, non-potable municipal uses, Agriculture-Irrigation, etc. depending on its availability.
Manipur	No information provided.
Meghalaya	Stand-alone ETPs are operational in 260 number of hotels/guesthouse/health care centers /Industries and treated wastewater are reuse for gardening/cleaning purpose.

Mizoram	Action Plan for sewage treatment including recycle and reuse of treated waste water was submitted to the State Govt.
Nagaland	Treated water is to be used for agricultural farms, sprinkling the road construction sites, flushing/cleaning of the sewage drains
Orissa	806 MLD treated industrial wastewater are being recycled/ reused in the process or being utilized for plantation/ irrigation purposes. Bulk users have been identified for utilization of treated water for the STPs under commissioning.
Puducherry	15.3 MLD treated wastewater is been in use for Industrial usage, Silk cotton trees, Coconut Plantation, Construction activities, Watering the road side plantation
Punjab	The Government of Punjab has Notified "*The State Treated Waste Water Policy 2017*" to promote recycling and reuse of treated sewerage for non- potable applications. Till date, 47 number projects have been completed by Department of Soil & Water Conservation, Punjab for using 243.3 MLD treated wastewater of STPs. These projects have been implemented by laying underground pipeline system for irrigation water conveyance covering an area of 7652 hectares. The Department further proposes to utilize 1238.8 MLD of treated wastewater from 164 existing, under progress and proposed/new STPs for irrigation purposes for an agricultural area of 37,683 hectares. Others relevant Departments are also exploring various options to promote utilization of the treated wastewater of STPs for non-potable use such as domestic use, construction activities, industrial processes, urban landscaping & green belts, etc.
Rajasthan	No information provided.
Sikkim	Treated effluent is to be utilized in cooling towers, irrigation of green belt, evaporation or flushing purposes.
Tamil Nadu	Tamil Nadu Government has notified Promotion of Use of Treated Waste Water policy during December 2019 to maximize the collection & treatment of sewage generated and

reuse of treated waste water on a sustainable basis, thereby reducing dependency on fresh water resources. At present Memorandum of Understanding (MoU) has been executed between the ULB and the user agency for the re-use of secondary treated effluent water (STEW). 80.5 MLD of treated wastewater is being reused for cooling purpose, Agricultural use to farmers association, MRF Industrial use, to maintain the TDS level of Tanners for Agro- forestry etc.

Some of details are given in **Table-11.1** below.

Table-11.1: Status of Model Rivers Identified by States

S. No	Name of the ULB	Quantity (in MLD)	Usage/ Purpose
1	Nagapattinam	2.00	M/s KVK Power for cooling purpose
2	Dindugul	5.00	To maintain the TDS level of Tanners as well for Agro-forestry.
3	Tirunelveli	24.00	Nanguneri SEZ for Industries
4	Perambalur	3.00	MRF Industrial use
5	Ramanathapuram	3.00	NTC Infra
6	Coimbatore	15.00	Agricultural use to farmers association
7	Pollachi	11.50	Agricultural use to farmers association
8	Chinnamannur	3.00	Agricultural use

	<table><tr><td>9</td><td>Karur</td><td>7.00</td><td>Agricultural use</td></tr><tr><td>10</td><td>Arakkonam</td><td>7.00</td><td>MRF Industrial use</td></tr></table> As per the Policy, following is proposed. • The treated wastewater is to be utilized for eco-parking, greenery development and avenue plantation and the remaining will be disposed into the river after meeting the standards. • Industries having ZLD system are reusing the treated wastewater in the process. • Domestic grey water has been recharged into the ground through Individual soak pit constructed at individual households and filtered grey water from community soak pits are being utilized for agricultural purpose in Rural areas.
Telangana	Govt. of Telangana has released a policy for reuse of the treated water. 56 MLD has been reused.
Tripura	AMC is using treated waste water from the Barjala (Near Lankamura) STP for watering of gardens & open space in Agartala city, road watering in dry seasons, irrigation of agricultural fields etc.
Uttar Pradesh	No information provided.
Uttarakhand	Treated water of 95 MLD capacity at Jagjeetpur is used for irrigation through canal system.
West Bengal	*Treated Wastewater Re-use Policy of Urban West Bengal* has been notified by Urban Development & Municipal Affairs Department of Government of West Bengal in June'2020. Department has identified Kalyani Town as a model for resue of the treated water generated at Kalyani STP under KMDA. DPR is under preparation.

XII. Observations and Recommendations

Besides State specific issues highlighted under para-V of this report, following observations and recommendations are made.

- States are regularly submitting Monthly Progress Reports, in the requisite formats, by the stipulated dates. However, information provided in MPR on water quality aspects in respect of a few States may need to be regularly provided base on the data being collected by State Pollution Control Boards. As MPRs are one of an important document which provides requisite status in respect of various activities being undertaken as per approved Action Plans, the quality of information is important for meetings of CMC and further reporting to Hon'ble NGT. MPR before being submitted should therefore, necessarily be studied by senior officers in States and so certified.
- Most of States have informed during monthly meetings of CMC that the progress of ongoing works continues to be impacted due to COVID-19 pandemic on account of labour mobilization issues, financial resource availability besides site works. The project completion timelines, therefore, are getting impacted due to these factors also.
- The compliance of existing STPs in Andhra Pradesh (90%), Delhi (90%), Telangana (82%), Punjab (80%) Gujarat (78%), Uttar Pradesh (78%), Madhya Pradesh (76%), Haryana (62%) and Odisha (76%) remains good. This needs to be maintained and continuously improved.
- Many of the States such as Haryana, Uttarakhand, Uttar Pradesh, Delhi,

Madhya Pradesh, West Bengal, Tamil Nadu, Karnataka are installing online monitoring systems for capturing the real time data of the existing STPs. In November 2020, Madhya Pradesh has developed an "Env Alert app" and the same has been placed on Google play store and a WhatsApp group "M.R STP Cap. Utilization" has also been framed for day-to-day monitoring of STPs by the senior officials of the State. As reported by the State, this has led to improvement in the utilization capacities of the existing STPs as well as regular monitoring of projects under construction. Other States may consider adopting such measures for monitoring the performance of the already developed sewerage infrastructure.

- The river polluted stretches reporting BoD levels conforming to bathing standard have been given in para-3. The efforts need to be continued to ensure that these stretches which reportedly fall under cleaner category shall continue to remain clean and should not slip back to polluted stretches. Efforts made by State in this directions need to continue and propagated amongst other States through the framework of Central Monitoring Committee.
- Similarly, river stretches having BoD levels which are slightly higher than limit of 3m/l and accordingly fall under Priority-V are low hanging fruits which can be easily transformed into clean stretches by concerted efforts and less investments. Focus of the States may remain on these stretches which can provided primary treatments to control the pollution levels.

- During the period w.e.f August to December 2020, States except Rajasthan have reported that 59 sewerage projects (STPs) have been completed and are under commissioning adding a total capacity of 1116.885 MLD. These sewerage infrastructure plants are under commissioning. Rajasthan has reported that 15 STPs of 45.5 MLD have been completed and made operational in the State in 2020 during January to December'2020.
- STPs of around 8859 MLD treatment capacity are under-construction in the on-going projects in the States/ UTs. States of Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Uttarakhand, Uttar Pradesh and West Bengal will be able to complete 163 projects with capacity of about 1989.211 MLD in the States/ UTs by March 2021. The progress of these projects have to be regularly monitored using appropriate progress monitoring mechanism (eg., creation of Whatsapp group) similar to one established by Madhya Pradesh so that lag in completion of timeline is avoided.
- Among on-going projects, States may have to review the project timelines in detail so as to assess if any further reduction in completion timelines schedule in respect of projects scheduled for completion during the period beyond April 2021 as indicated in par – 5 of this report is possible.
- There are 242 projects under tendering in Andhra Pradesh, Bihar, Chhattisgarh, DDDNH, Gujarat, Himachal Pradesh, Jharkhand, Karnataka,

Kerala, Maharashtra, Puducherry, Punjab, Uttar Pradesh and West Bengal, while a large no. of projects are awaiting sanction of the DPR or DPR is yet to be prepared. States have reported about financing difficulties being faced by them on account of resource crunch due to COVID-19 situation. States, reportedly are trying to arrange funding for priority projects and will be apprising the status in subsequent meetings of the CMC. The process of sanctioning of projects, being dependent on funding, is getting affected due to this.

- Observations continued from 2nd Quarterly Report of Central Monitoring Committee:
  - Considering financial limitations, States/ UTs have been advised to take up STP projects on Hybrid Annuity Model, which, as a business model, enables the Urban Local Body/ State Government to fund the development and operation of sewage treatment infrastructure taking into account the future flow of revenue. It will help ULBs to tap the external market funding for development & operation of sewage infrastructure, apart from quality treatment services. NMCG has prepared model tender documents for development of STPs through HAM and recently these documents have also been approved by NITI Aayog. The documents have been made available to States as per their requests also.
  - "One City- One Operator" concepts offer integrating the rehabilitation and Operation & Maintenance of the existing treatment infrastructure along

with development & operation of new STPs. This concept can be integrated with HAM model, as is being done in many projects under Namami Gange.

- Government of India has also introduced National Faecal Sludge & Septage Management (FSSM) Policy in 2017 to emphasize the importance of treating the faecal sludge from on-site sanitation system. Some State Governments have also issued State level FSSM policies/ guidelines. More than 30 Faecal Sludge Treatment Plants (FSTPs) are operational and another 400 are in the offing in the country. Other States must consider adopting State level FSSM policies/ guidelines for regulating the handling, treatment and disposal of faecal sludge.
- Many of the States/ UTs have also been looking for alternatives beyond conventional STPs for treatment the sewage/ faecal sludge. States may consider implementation of FSTPs and/or co-treatment of faecal sludge in existing STPs, or may judiciously adopt any other alternate treatment technology, in towns wherever feasible.
- Many States/ UTs are constructing or have proposed to develop STPs in Polluted River Stretches with capacity less than 2 MLD. States, in such situations, may consider to adopt installation of decentralized modular STPs; which offer advantages in form of lesser time involved in commissioning of systems, less land footprints, easy operations; instead of conventional centralized STPs based on techno-commercial considerations.

- States have created assets for treatment of sewage and capacity of STPs so created is not being optimally utilised due to many reasons, including lack of availability of conveyance of sewage to treatment plants, technology issues requiring up-gradation of plants, or dysfunctionality etc. A large number of STPs remain non-compliant to STPs outlet norms. States must ensure optimum utilization of the existing treatment infrastructure and also ensure compliance of the plants with regard to the environment norms. For this purpose, States may carry condition assessment studies of existing STPs/ sewage infrastructure in a fixed time frame, say another 3 months so as to identify the reasons of suboptimum utilization and dysfunctionality of existing STPs. This will help them in finalizing plans to upgrade STPs requiring upgradation so as to make them functional.
- Most of the States do not have an online monitoring system in place to monitor (both quantity and quality of treated water) the health of existing sewerage infrastructure. States must consider to develop an online monitoring system, preferably IoT enabled platform for monitoring the performance of sewage infrastructure, with flexibility of integrating STPs under implementation and planning alike and which are likely to be commissioned in future. Such a system will enable that health of sewage treatment facility is readily available, with minimum human interference in regard to data inflows into the system, at appropriate levels in the Government and State and Central regulators. An IoT enabled platform

shall also be futuristic and will have common architecture, thus facilitating, horizontal integration of large number of STP plants (both existing and likely to come up in future) and uniform platform adaptable for all States and also at National level.

- There is need to have a separate paradigm in urban planning for river cities. As the urban system is key to impact the health of rivers and urbanization is likely to grow in future, this needs to be given due importance and urban river management plans need to be developed. Mainstreaming river and water body health into Master Plan is suggested to have long term perspective and enable legal support at municipal level for several of these activities.

12.2.02

D.P. Mathuria
Executive Director (Tech), NMCG
for and on behalf of the CMC

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यू. पी. सिंह, आई. ए. एस
U.P. SINGH, IAS
सचिव
SECRETARY
Tel. : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BAHWAN
RAFI MARG, NEW DELHI-110 001
http://www.mowr.gov.in

D.O. No. J-24031/1/2020-NRCD-II

14th September, 2020

Dear Parimal ,

Please refer my earlier DO letters dated 11th March, 2020, 2nd July, 2020 & 20th August, 2020 in reference to the directions of National Green Tribunal in OA No.673/2018 in the matter of News item published in 'The Hindu' authored by Shri Jacob Koshy titled 'More river stretches are now critically polluted: CPCB' regarding pollution abatement of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the directions of NGT, regular monitoring with the concerned States/UTs is being carried out at my level on monthly basis. Based on review during last meeting of Central Monitoring Committee held on 31st August, 2020, I would like to highlight some of the issues stated below, requiring your urgent attention:-

1. As per CPCB report of 2018, total sewage generation in the State is estimated to be 165 mld, against which treatment capacity is existing for 74.7 mld as per the MPR, which is now reported to be 78.35 mld. This may be reviewed by the State to reconcile the data, and to resolve the discrepancies/inconsistencies.
2. Average capacity utilization of the existing STPs is around 46.6 mld (62%) mainly due to no proper conveyance system. In order to achieve meaningful utilization of STPs, proper sewer network with house service connections, interception & diversion works, and/or the designed conveyance system would be required.
3. Six STPs of total capacity 36.3 mld are reported to be under construction from the resources mobilized by the State. Four of these are under final stages of commissioning. However, networking and house service connections are to be expedited to ensure their capacity utilization. The physical/financial progress achieved during incremental periods and the firm timelines for their completion need to be informed, and also mentioned in the Monthly Progress Reports submitted by the State Government.
4. For the proposed 3 nos of STPs of total capacity 38 mld, details in terms of status of approval of DPRs, receipt of tenders, award of work, nodal agency, mobilization of funds, etc, are required.
5. As desired earlier also, river wise details for sewage generation, STPs installed, and the gap in treatment needs to be worked out and informed. Also, action plan for bridging the gap of 16 mld in treatment capacity (165 mld - 74.7 mld - 36.3 mld - 38 mld) to be formulated by the State.

I would request for your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of NGT vide orders dated 6th December, 2019 & 22nd June, 2020.

With regards,

Yours sincerely,

(U. P. Singh)

Shri Parimal Rai
Chief Secretary,
Govt of Goa
Secretariat, Porvorim, Bardez,
Goa - 403 521

यू. पी. सिंह, आई. ए. एस
U.P. SINGH, IAS
सचिव
SECRETARY
Tel. : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BAHWAN
RAFI MARG, NEW DELHI-110 001
http://www.mowr.gov.in

D.O. No. J-24017/2/2020-NRCD-II

14th September, 2020

Dear Sri Kumar,

Please refer my earlier DO letters dated 11th March, 2020, 2nd July, 2020 & 20th August, 2020 in reference to the directions of National Green Tribunal in OA No.673/2018 in the matter of News item published in 'The Hindu' authored by Shri Jacob Koshy titled 'More river stretches are now critically polluted: CPCB' regarding pollution abatement of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the directions of NGT, regular monitoring with the concerned States/UTs is being carried out at my level on monthly basis. Based on review during last CMC meeting held on 31st August, 2020, I would like to highlight some of the issues stated below, requiring your urgent attention:-

1. Maharashtra has the maximum installed sewage treatment capacity of 7746 mld (138 nos of STPs) against total sewage generation of 9757 mld, but utilization of the STPs is only 4013 mld. That requires proper sewer network, interception & diversion works, and/or the designed conveyance system to achieve meaningful utilization of STPs.

2. In case of polluted river stretches, total sewage generation was earlier reported as 2728.65 mld, whereas the last Monthly Progress Report (for July, 2020) indicates the same as 3243.15 mld. Accordingly, data furnished for gap in treatment also gets changed. Similarly, it was earlier informed that STPs of 1317.16 mld capacity are proposed, but now changed to 1564.46 mld. This may be reviewed by the State to reconcile the data, and to resolve the discrepancies/inconsistencies.

3. As per the information furnished by Maharashtra Pollution Control Board (MPCB), 77 STPs of nearly 1300 mld capacity are proposed to meet the sewage treatment gap for polluted river stretches. Out of which, 15 STPs of 245.76 mld capacity are reported to be under construction and those of 80.1 mld are likely to be commissioned by April, 2021. In case of 11 STPs of 423.5 mld capacity, tendering has been delayed, Administrative approval pending for 14 STPs of 205.5 mld and technical sanction is required for 5 STPs of 101.5 mld.

   Given the progress/schedule of proposed STPs, timelines directed by NGT in this regard are not likely to be met, and thus requires serious consideration in terms of the NGT orders. It is also suggested to regularly monitor the projects which are due for completion in December, 2020.

4. Out of the 138 STPs in the State, 8 STPs of capacity 250 mld are reported to be non-operational, and 21 are non-compliant in terms of the prescribed norms for discharge into recipient water bodies. MPCB being the regulatory body, may look into the matter and take appropriate action against such defaults.

5. The project for pollution abatement of river Mula Mutha at Pune was sanctioned in January, 2016 under NRCP at a cost of Rs.990.26 crore with Japanese ODA Loans from JICA, and was scheduled for completion within a time span of 6 years. However, the physical progress achieved so far is only 3%, and the project is still in tendering stage. In view of the said progress and no requirement of funds since last 2 years, we have been surrendering the Budget Allocation (Externally Aided Component) for the project which is actually embarrassing.

   Identified stretches of rivers Mula, Mutha and Mula Mutha rivers in Pune have been categorized under Priority-I/II. As per the MPRs submitted, the project under NRCP has been relied upon for implementation of action plans for these stretches. Accordingly, the said project needs to be expedited to meet the timelines directed by NGT.

6. In case of in-situ remediation for the drains discharging to the identified polluted river stretches, no progress has been observed so far. The same is also not in conformity with the directions of NGT.

7. Being aggrieved by NGT order dated 8th April, 2019 in OA No.673 of 2018 directing for submission of Performance Guarantee of Rs. 15 crores and completion of STPs by April, 2021, State Govt of Maharashtra filed Civil Appeal Dy. No. 38922/2019 before Hon'ble Supreme Court of India. Hon'ble Court vide order dated 14th February, 2020 has granted stay to the impugned order and directed the State to file an affidavit.

   It is to be ascertained whether the said stay by Hon'ble Supreme Court would also hold good in case of the NGT orders dated 6th December, 2019 & 22nd June, 2020 in the same matter. It would be desirable to get the matter examined and/or seek legal opinion in order to ensure compliance of the directions of NGT in letter and spirit.

8. In case of industrial effluent management, it is informed that recently, NGT has imposed fine of Rs.160 crore as environmental compensation for the damage caused by 102 industrial units and CETP (25 mld) operators in Tarapur MIDC of Palghar. MPCB is required to monitor all CETPs in the State regularly and take action for non-compliance as per the statutory provisions.

9. Key concerned organizations/officers in the State, responsible for sewage management and/or other directions involved, may be asked to attend the CMC meetings in future for providing complete status.

I would request for your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of NGT vide orders dated 6th December, 2019 & 22nd June, 2020.

With regards,

Yours sincerely,

(U. P. Singh)

Shri Sanjay Kumar
Chief Secretary,
Govt of Maharashtra
Mantralaya, Madam Cama Raod,
MUMBAI-32

यू. पी. सिंह, आई. ए. एस
U.P. SINGH, IAS
सचिव
SECRETARY
Tel. : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
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GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DELHI-110 001
http://www.mowr.gov.in

D O No. J-24015/2/2020-NRCD-II

September 17, 2020

Dear Asit,

Please refer my earlier DO letters in reference to the directions of National Green Tribunal in OA No.673/2018 in the matter of News item published in 'The Hindu' authored by Shri Jacob Koshy titled 'More river stretches are now critically polluted: CPCB' regarding pollution abatement of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the directions of NGT, regular monitoring with the concerned States/UTs is being carried out at my level on monthly basis. Based on the review during last meeting of Central Monitoring Committee held on 31st August, 2020, I would like to highlight some of the issues stated below, requiring your urgent attention:-

i) As per CPCB report of 2018, total sewage generation in the State is estimated at 1273 MLD, whereas the same is reported to be 4200 MLD (includes sewage from rural areas) as per the information provided in the State dossier. This may be reviewed by the State to reconcile the data and confirm.

ii) In case of sewage management for polluted river stretches, it is informed that treatment capacity of 91 MLD has been created so far against total sewage generation of 439.49 MLD. Average capacity utilization of the existing STPs is only 30 MLD, primarily due to one STP of 33 MLD at Cuttack under renovation and inadequate conveyance system. For meaningful utilization of STPs, proper sewer network with house service connections, and/or the designed conveyance system would be required.

iii) Nine STPs of total capacity 288 MLD are reported to be under construction from the resources mobilized by the State. The physical/financial progress achieved along with the status on networking and/or house service connections during incremental periods, and the firm timelines for their completion need to be informed. The same also needs to be given in the Monthly Progress Reports submitted by the State Govt.

.....2/-

iv) With the above status of sewage treatment, both existing and under progress, there would be still a gap of 60.49 MLD (439.49 MLD- 91 MLD- 288 MLD), for which firm action plan is required to be formulated by the State Govt and reported.

v) It was informed that as per the Odisha Urban Sanitation Policy-2017, Faecal Sludge Treatment Plants (FSTPs) are planned for smaller towns. Such FSTPs are either operational (12 nos) or under different stages of implementation in nearly 40 towns in the State. However, as per the information provided by Odisha SPCB, six FSTPs at Puri, Bhubaneswar, Cuttack, Sambalpur, Rourkela and Behrampur, have been commissioned so far and two are under construction at Baripada and Balasore.

Factual information in this regard along with monthly incremental progress, needs to be mentioned in the MPRs. Also, sewage treatment planned through STPs and FSTPs separately, may be provided.

vi) There seems to be no progress on bio-remediation for identified drains discharging into polluted river stretches as per the directions of NGT, and thus requires serious consideration.

vii) As desired earlier also, river wise details for sewage generation, STPs installed, and the gap in treatment needs to be worked out and informed.

I would request for your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of NGT vide orders dated 6th December, 2019 & 22nd June, 2020.

With regards

Yours sincerely,

(U. P. Singh)

Shri Asit Kumar Tripathy,
Chief Secretary,
Govt of Odisha,
State Secretariat,
Bhubaneswar - 751 001

यू. पी. सिंह, आई. ए. एस
U.P. SINGH, IAS
सचिव
SECRETARY
Tel. : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

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GOVERNMENT OF INDIA
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SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DELHI-110 001
http://www.mowr.gov.in

D.O. No. J-24034/1/2020-NRCD-II **September 17, 2020**

Dear Sanjay,

Please refer my earlier D.O. letter dated 2nd July, 2020 in reference to the directions of National Green Tribunal in OA No.673/2018 in the matter of News item published in 'The Hindu' authored by Shri Jacob Koshy titled 'More river stretches are now critically polluted: CPCB' regarding pollution abatement of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the directions of NGT, regular monitoring with the States/UTs concerned is being carried out at my level on monthly basis. Based on the review during last meeting of Central Monitoring Committee held on 31st August, 2020, I would like to highlight some of the issues stated below, requiring your urgent attention:-

1. In compliance of the directions of Hon'ble Tribunal, States/UTs are required to submit Monthly Progress Reports (MPRs) to NMCG by 20th of the next month. However, it is observed that MPRs are not submitted on time. Moreover, the MPRs are not in the format provided by our Ministry, and also not having the requisite/complete information.

2. It is informed that Guwahati Development Department (GDD) is entrusted with sewage management in and around Guwahati, and accordingly responsible for four of the identified polluted rivers/stretches (Bharalu, Borsola, Silsako, Sorusola and Depor Beel) in the State. GDD proposes to construct decentralized STPs in the respective catchments with the financial assistance from JICA, for which the required approval is reported to be in advanced stages.

   In order to ensure timely grounding of the project, the State Government is required to take necessary measures such as consultation with the stakeholders, identification of the required land and its transfer from Revenue Department to Guwahati Jal Board.

3. In case of sewage management in other towns namely Tezpur, Silchar, Nagaon, Dibrugarh, etc under the jurisdiction of Urban Development Department (UDD), details in terms of status of approval of DPRs, receipt of tenders, award of work, nodal agency, mobilization of funds, etc, are to be taken up on priority.

.....2/-

4. River wise details for sewage generation, STPs installed, and the gap in treatment needs to be worked out and informed.

5. As per the directions of NGT, at least one polluted river stretch is to be identified for rejuvenation, which could serve as a model for other polluted stretches. Action taken in this regard needs to be informed.

6. We have been repeatedly insisting to explore low cost solution for sewage treatment in smaller towns which could be adopted at least for less polluted river stretches of Priority-IV&V. The State Government needs to examine the alternate treatment options, and submit a comprehensive plan.

7. We are also informed that large quantity of solid waste has been dumped at Boragaon site in the catchment of Depor Beel (Ramsar site) causing environmental hazards in the surroundings as well as contamination of ground water. Removal of such a legacy waste needs to be taken up on priority.

I would request for your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of NGT vide orders dated 6th December, 2019 & 22nd June, 2020.

With regards,

Yours sincerely,

(U. P. Singh)

Shri Kumar Sanjay Krishna
Chief Secretary,
Government of Assam,
Secretariat,
Guwahati.

यू. पी. सिंह, आई. ए. एस
U.P. SINGH, IAS
सचिव
SECRETARY
Tel. : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

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GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
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SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DELHI-110 001
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DO No. J-24030/1/2020-NRCD-II

September 17, 2020

Dear Rajesh,

Please refer my earlier DO letters dated 11th March, 2020, 2nd July, 2020 & 20th August, 2020 in reference to the directions of National Green Tribunal in OA No.673/2018 in the matter of News item published in 'The Hindu' authored by Shri Jacob Koshy titled 'More river stretches are now critically polluted: CPCB' regarding pollution abatement of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the directions of NGT, regular monitoring with the States/UTs concerned is being carried out at my level on monthly basis. Based on the review during last meeting of Central Monitoring Committee held on 31st August, 2020, I would like to highlight some of the issues stated below, requiring your urgent attention:-

i) As highlighted at the outset of the 5th CMC meeting, in addition to officials of CPCB and SPCB, those from other line Departments of the State Government responsible for management of sewage are also to attend the meeting so that proper details on their actions taken in the matter are provided.

ii) In the last meeting, States were asked to adopt one polluted stretch of river and rejuvenate it, which can serve as a model for other polluted stretches. The State is to submit details of the stretch identified for adoption as a model.

iii) In the last CMC meeting, it was observed that there is hardly any progress achieved in implementation of Action Plans by the State Government. Therefore, the implementation of Action plans may be expedited.

iv) Pending the commissioning of ongoing 17 MLD STP being funded under NRCP which is scheduled to be completed in April, 2022, you are requested to take up alternate means of treatment of sewage like through FSTP and insitu bio-remediation to contain the pollution in various rivers in the State.

...2/-

v) The existing 27 MLD STP at Imphal is getting only 8 MLD sewage and thus grossly under utilized. Therefore, the remaining household connections need to be expedited so that they are completed by December, 2020 and the STP runs optimally.

vi) The State Government is understood to have proposed another 49 MLD STP in Imphal. You are requested to critically review the need of this project. It is felt that instead, the State Government may submit FSTP for seeking financial assistance under NRCP.

vii) The State Government informed that they are preparing DPR for 4.3 MLD STP and 16.75 MLD phyto-remediation in order to bridge the gap between sewage generation and sewage treatment capacity available covering the entire State. This may be expedited to ensure that DPRs are prepared sooner and tendering process is started early so that the projects are executed on ground in a time bound manner.

I would request for your intervention to ensure necessary action on the decisions taken on the issues mentioned above.

With regards,

Yours sincerely,

(U. P. Singh)

Dr. Rajesh Kumar
Chief Secretary
Government of Manipur
South Block
Old Secretariat
Imphal- 795001

यू. पी. सिंह, आई. ए. एस
U.P. SINGH, IAS
सचिव
SECRETARY
Tel. : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

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DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DELHI-110 001
http://www.mowr.gov.in

DO No. J-24033/1/2020-NRCD September 17, 2020

Dear Sri Gupta ji

Please refer my earlier DO letter dated 2nd July, 2020 in reference to the directions of National Green Tribunal in OA No.673/2018 in the matter of News item published in 'The Hindu' authored by Shri Jacob Koshy titled 'More river stretches are now critically polluted: CPCB' regarding pollution abatement of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the directions of NGT, regular monitoring with the States/UTs concerned is being carried out at my level on monthly basis. Based on the review during last meeting of Central Monitoring Committee held on 31st August, 2020, I would like to highlight some of the issues stated below, requiring your urgent attention:-

i) In compliance of the directions of Hon'ble Tribunal, States/UTs are required to submit Monthly Progress Reports (MPRs) to NMCG by 20th of the next month. However, it is observed that MPRs are not submitted on time. Moreover, the MPRs are not in the format provided by our Ministry, and also not having the requisite/complete information.

ii) As per CPCB report of 2018, total sewage generation in the State is estimated at 28 mld, but the same is reported to be 47.68 mld. This may be reviewed by the State to reconcile and confirm. It is informed that existing sewage treatment capacity is 19.02 mld, five STPs of total capacity of 11.58 mld under construction and STPs of 6 mld are proposed. Accordingly, there would be still a gap between sewage generation and the treatment existing/envisaged, which needs to be suitably and timely addressed.

iii) The project for pollution abatement of river Rani Chu at Gangtok, Zone-III was sanctioned under the National River Conservation Plan in July, 2018 at a cost of Rs.94.66 crore on 90:10 funding pattern, and was scheduled for completion within 2 years. Out of Central share, funds amounting to Rs.47 crore have been released till date for project implementation. However, even after 2 years, physical progress is only 40%, and needs to be expedited.

...2/-

iv) It is observed that STPs at Melli (0.5 mld), Rangpo (1.40 mld) and Gangtok Zone-II (1.60 mld) are almost complete, but their commissioning is delayed due to fund constraints and other minor issues. These need to be looked into to ensure implementation of approved action plans for polluted river stretches in the State as per the timelines directed by NGT.

v) As desired earlier also, river wise details for sewage generation, STPs installed and the gap in treatment needs to be worked out and informed. For the proposed STPs, details in terms of status of approval of DPRs, receipt of tenders, award of work, nodal agency, mobilization of funds, etc, are required.

vi) As per the directions of NGT, at least one polluted river stretch is to be identified for rejuvenation, which could serve as a model for other polluted stretches. Action taken in this regard needs to be informed.

vii) We have been repeatedly insisting to explore low cost solution for sewage treatment in smaller towns which could be adopted at least for less polluted river stretches of Priority-IV&V. The State Government needs to examine the alternate treatment option, and submit a comprehensive plan.

I would request for your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of NGT vide orders dated 6th December, 2019 & 22nd June, 2020.

With regards,

Yours sincerely,

(U. P. Singh)

Shri S. C. Gupta
Chief Secretary
Government of Sikkim
Tashiling Secretariat
Gangtok - 737 101

यू. पी. सिंह, आई. ए. एस
U.P. SINGH, IAS
सचिव
SECRETARY
Tel. : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

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SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DELHI-110 001
http://www.mowr.gov.in

DO No. J-24020/1/2020 –NRCD-II

September 21, 2020

Dear Sri Vijaya Bhaskar,

Please refer my DO letter dated 2nd July, 2020 in reference to the directions of National Green Tribunal in OA No. 673/2018 in the matter of News item published in 'The Hindu' authored by Shri. Jacob Koshy, titled "More river stretches are now critically polluted: CPCB' regarding pollution abatement of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the directions of NGT, regular monitoring with the States/ UTs concerned is being carried out at my level on monthly basis. Based on the review during last meeting of Central Monitoring Committee held on 31st August, 2020, I would like to highlight some of the issues stated below, requiring your urgent attention:-

1. In compliance of the directions of Hon'ble Tribunal, States/UTs are required to submit Monthly Progress Reports (MPRs) to NMCG by 20th of the next month. However, it is observed that MPRs are not submitted on time. Moreover, the MPRs are not in the format provided by our Ministry, and also not having the requisite/ complete information.Timely submission of proper MPR may be ensured.

2. In case of polluted river stretches, it is informed that out of total sewage generation of 940 MLD, treatment capacity exists for 645 MLD. To bridge the gap of untreated sewage, 27 STPs of a total capacity of 108 MLD are proposed. The State Government is required to provide details in terms of status of approval of DPRs, receipts of tenders, award of work, nodal agency, mobilization of funds and progress made on ground, etc.

3. For the STPs of a total capacity of 150 MLD under construction, physical/financial progress achieved during intervening periods along with the firm timelines for their completion need to be mentioned in the MPRs to be submitted by the State Government.

4. River wise details for sewage generation, STPs proposed and installed, and the gap in sewage generation and treatment need to be worked out in detail and indicated.

...2/-

5. With the above status of sewage treatment both existing and under construction, there would still be a gap of 37 MLD (940 MLD - 645 MLD - 150 MLD - 108 MLD). Firm action plan in this regard along with timelines need to be formulated and informed.

6. In case of industrial effluent management, works on four CETPs proposed at Bellary, Pennya industrial area, Raichur and Bidar are not progressing since long. In order to achieve progress by the timelines stipulated by Hon'ble NGT, pending issues are to be resolved at appropriate level to expedite progress of these projects on priority.

7. As per the directions of NGT, at least one polluted river stretch is to be identified for rejuvenation, which could serve as a model for other polluted stretches. Action taken in this regard needs to be informed.

8. We have been repeatedly insisting to explore low cost solution for sewage treatment in smaller towns which could be adopted at least for less polluted river stretches of Priority-IV & V. The State Government needs to examine the alternative treatment options like FSTP and submit a comprehensive plan.

9. We are also informed that large quantity of municipal solid waste (6974 TPD) is generated in the State. Details of action plan/proposal for its handling and disposal are to be worked out and reflected in the MPRs.

10. All key officials of the line Departments of the State Government responsible for sewage management are required to attend the CMC meetings in future for providing complete status of action taken.

I would request your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of NGT vide order dated 6th December, 2019 & 22nd June, 2020.

With regards,

Yours sincerely,

(U. P. Singh)

Shri T. M. Vijaya Bhaskar
Chief Secretary,
Government of Karnataka,
Vidhana Soudha,
Bengaluru

यू. पी. सिंह, आई. ए. एस
U.P. SINGH, IAS
सचिव
SECRETARY
Tel. : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

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DEPARTMENT OF WATER RESOURCES,
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RAFI MARG, NEW DELHI-110 001
http://www.mowr.gov.in

D.O. No. J-24019/2/2020-NRCD-II **24th September, 2020**

Dear Shanmugam,

Please refer my earlier DO letter dated 2nd July, 2020 in reference to the directions of National Green Tribunal in OA No. 673/2018 in the matter of News item published in 'The Hindu' authored by Shri Jacob Koshy, titled "More river stretches are now critically polluted: CPCB' regarding pollution abatement of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the directions of NGT, regular monitoring with the States/ UTs concerned is being carried out at my level on monthly basis. Based on the review during last meeting of Central Monitoring Committee held on 31st August, 2020, I would like to highlight some of the issues stated below, requiring your urgent attention:-

1. In case of polluted river stretches, it is informed that out of total reported sewage generation of 6362 mld, sewage treatment capacity exists for 1484 mld only with the average utilization of 798 mld. For optimal utilization of STPs, proper sewerage network with household connections and/or the designed conveyance system by interception of drains would be required.

2. To bridge the gap between sewage generation and treatment capacity, STPs (70 nos) and FSTPs (66 nos) of total 580 mld capacity are proposed. In this regard, the State Government is required to provide details of status of approval of DPRs, receipts of tenders, award of work, nodal agency, mobilization of funds etc. with a firm timeline.

3. For the STPs for a total capacity 517 mld under construction, physical/financial progress achieved during intervening periods and the firm timelines for their completion need to be informed and also mentioned in the MPRs submitted by the State Government.

4. Polluted river stretch wise details of sewage generation, STPs proposed and installed and the gap between sewage generation and treatment capacity need to be worked out in detail and informed.

5. In case of industrial effluent management, works on proposed CETPs (8 nos) seem to be not progressing. In order to ensure completion by stipulated timeline of Hon'ble NGT, pending issues are to be resolved at appropriate level to expedite progress of these projects on priority.

6. As per the directions of NGT, at least one polluted river stretch is to be identified for rejuvenation, which could serve as a model for other polluted river stretches. Action taken in this regard needs to be informed.

7. State Government has been repeatedly requested to explore low cost solution for sewage treatment in smaller towns which could be adopted at least for less polluted river stretches of Priority-IV & V. The State Government needs to examine the alternate treatment options like FSTP and submit a comprehensive plan accordingly.

8. We are also informed that large quantity of municipal solid waste (7859 MTD) is generated in the State. Details of action plan/ proposal for handling and disposal of municipal solid waste are to be worked out and reflected in the MPRs.

9. All key officials of the State Government like Departments responsible for sewage management are required to attend the CMC meetings in future for providing complete status.

I would request your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of NGT vide order dated 6th December, 2019 & 22nd June, 2020.

With regards,

Yours sincerely,

(U.P. Singh)

Shri K. Shanmugam
Chief Secretary,
Government of Tamil Nadu,
Secretariat,
CHENNAI-600001.

यू. पी. सिंह, आई. ए. एस
U.P. SINGH, IAS
सचिव
SECRETARY
Tel. : 23710305
Fax : 23731553
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सत्यमेव जयते

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RAFI MARG, NEW DELHI-110 001
http://www.mowr.gov.in

J-24013/2/2020-NRCD-II **19th October, 2020**

Dear Nilamji,

Please refer my earlier D.O. letters in respect of the directions of National Green Tribunal in OA No. 673/2018 regarding pollution of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the direction of NGT, regular monitoring with the concerned States/ UTs is carried out at my level on monthly basis. Based on review during last meeting of Central Monitoring Committee held on 30th September, 2020, I would like to highlight some of the important issues below requiring your urgent attention:

1. As reported by the State, a total sewage of 1384 mld is generated against which 41 STPs of 515.45 mld capacity exists. The current utilization capacity of these STPs is reported to be 321.4 mld only. The State Govt. needs to ensure that the utilization capacity of these existing STPs is enhanced to the optimum level and expedite to bridge the gap of remaining 869 mld sewage by setting up required STPs.
2. Against the total sewage generation of 302 mld in polluted river stretches, only 162.40 mld treatment capacity exists. To bridge the gap of 140 mld sewage treatment, 7 STPs of 57 mld capacity are under construction. Another 141.7 mld capacity is also proposed. The State Government needs to expedite the implementation progress of these STPs to meet the timelines set by NGT. Stretch-wise details in respect of STPs proposed, sanctioned, tendered, awarded, timelines etc. are to be provided in the MPR.
3. As per the State's dossier, it is reported that the total industrial discharge from 9941 industrial units is 4494.33 mld, which is very high as compared to the total sewage generation in the State (1384 mld).This seems to be a flawed figure and needs rectification. Compliance status of the existing ETPs/CETPs and recycling/reuse of treated effluent are also to be indicated in the MPRs.
4. As reported, 34 ULBs out of 129 ULBs with population of 1 lakh and above have been identified for Phase-I UGD scheme along with STPs. Detailed action plan along with timelines are to be provided in this regard.
5. Action has not yet been taken by the State Govt. in implementation of in-situ bioremediation so far for the sewage carrying drains. This needs to be expedited as directed by NGT.
6. Against a total solid waste generation of 6766 TPD in the State, so far, only sites have been identified as a measure for Solid Waste Management. In this regard, rigorous action needs to be taken by the State Govt. In the polluted river stretches, 416 TPD of municipal solid waste is generated for which

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treatment for only 20 TPD of solid waste exists while treatment proposal for 225 TPD of solid waste is under process. As there is a huge gap between the solid waste generation and treatment, the State government needs to expedite the implementation of the proposals and ensure completion of proposed projects on priority conforming to the Municipal Solid Waste Rules, 2016.

7. As per direction of NGT, at least one polluted river stretch may be identified for rejuvenation that would serve as a model for other polluted stretches. However, no action seems to have been taken by the State in this regard. This needs to be expedited.

I would request your intervention to ensure necessary action on the decisions taken in earlier CMC meeting, issues mentioned above, and compliance of the directions of Hon'ble NGT issued vide orders dated 6th December, 2019, 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(U. P. Singh)

Ms. Nilam Sawhney
Chief Secretary,
Government of Andhra Pradesh,
Ist Block, A.P. Secretariat Office,
Velagapudi- 522 503

यू. पी. सिंह, आई. ए. एस
U.P. SINGH, IAS
सचिव
SECRETARY
Tel. : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DELHI-110 001
http://www.mowr.gov.in

J-24037/7/2020-NRCD-II **19th October, 2020**

Dear Ashwani,

Please refer to my earlier D.O. letters with regard to the directions on National Green Tribunal in O.A. No. 673/2018 regarding pollution of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the direction of NGT, regular monitoring with the concerned States/ UTs is being carried out at my level on monthly basis. Based on review during last meeting of Central Monitoring Committee held on 30th September, 2020, I would like to highlight some of the important issues enumerated below:

1. The total sewage generation in the UT of Puducherry is reported to be 84 mld against which a treatment capacity of 56 mld exists. This leaves a gap of 28 mld. The UT Govt. is, therefore, required to expeditiously set up STPs for the remaining capacity. Remaining works on house connections and works of 2 proposed STPs of 3 mld capacity each at Puducherry and Karaikal are also to be expedited. Present status of progress of these STPs may be indicated.

2. It has been stated that the total industrial discharge is 4.75 mld against an existing treatment facility of 5.2 mld capacity. The UT Govt. is to ensure that the industries abide by the norms of industrial effluent discharge and action is taken against the violators.

3. It has been informed that only 53 TPD of municipal solid waste is treated as against a total generation of 406 TPD. Thus, there is a staggering gap of 353 TPD of municipal solid waste between its generation and treatment. The UT Govt. needs to expedite the process of formulation and implementation of municipal solid waste management projects on priority basis conforming to the Municipal Solid Waste Rules, 2016. A firm timeline in this regard may be submitted.

I would request your kind intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues stated above, and compliance of the directions of NGT vide orders dated 6th December, 2019, 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(U. P. Singh)

Shri Ashwani Kumar
Chief Secretary,
Main Building, Chief Secretariat,
Puducherry-605 001.

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
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श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D. O No. J-24034/1/2020-NRCD-II

19th January, 2021.

Dear Jishnu

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No. 673/2018 regarding polluted river stretches in the country identified by Central Pollution Control Board (CPCB).

As per the direction of NGT, regular monitoring with the concerned States/ UTs is carried out at my level on monthly basis. Based on review meeting of Central Monitoring Committee held on 5th January, 2021, I would like to highlight some of the important issues enumerated below:

1. The State Government is reporting varying data of sewage generation in the State from time to time and thus, providing inconsistent data. This needs to be reconciled separately for rural and urban areas of the State and indicated in the MPR correctly.

2. Tendering process for setting up of STPs at Mangaldoi, Tezpur, Naugaon, Jorhat and Silchar, has been pending since long, and apparently no progress has been made for according Administrative Approval to these projects.

3. About 980 TPD municipal solid waste (MSW) processing facility is available for 95 ULBs in the State with their capacity utilization of 393 TPD. Similarly, total MSW generation in Guwahati is nearly 550 TPD, out of which only 75 TPD is processed.

   ULBs concerned are required to process all solid waste generated in their jurisdiction. Also, efforts to be made for optimal capacity utilization of the these existing facilities.

4. For setting up of an Integrated Solid Waste Management Plant, new site has been identified at Sonaguli. Further action in this regard needs to be expedited to set up the Plant ensuring compliance with the provisions of the Solid Waste Management Rules, 2016.

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5. Assam Pollution Control Board has received Expression of Interest for setting up TSDF to treat 43 TPD of hazardous waste generated in the State. Further necessary action (Issue of RFP etc.) is required to expedite the implementation of the Project.

6. As per the directions of NGT, at least one polluted river stretch requires to be identified for river rejuvenation that would serve as a model for other polluted river stretches. Action taken in this regard may be informed.

I would request for your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of NGT vide orders dated 6th December, 2019, 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(U.P. Singh)

Shri Jishnu Barua
Chief Secretary
Government of Assam
Secretariat
Guwahati, Assam

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
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श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
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DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

DO No.J-24037/7/2020-NRCD-II

19th January, 2021.

Dear Ashwani,

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No. 673/2018 regarding pollution of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the direction of NGT, regular monitoring with the concerned States/ UTs is carried out at my level on a monthly basis. Based on review during last meeting of Central Monitoring Committee held on 5th January, 2021, I would like to highlight some of the important issues enumerated below requiring your urgent attention:

1. As per information provided by Government of Puducherry, out of 5 existing STPs of 56 MLD capacity, 2 STPs of 2.5 mld capacity each are non-functional and the cumulative capacity utilization of the 3 STPs of 51 MLD capacity is 35 MLD only. These functional STPs are also reported to be non-compliant in terms of standard of discharge. The Govt. of Puducherry is to provide reasons for non-compliance and non-operational state of the STPs. Accordingly, corrective measures to be initiated to enhance the utilization capacity, make non-functional STPs operational and ensure compliance in terms of discharge standards.

2. During the 8th CMC meeting, it has been informed that due to lack of sewer network, the STPs remain underutilized. The Govt. of Puducherry is to expedite the work of sewer network and House Service Connections to ensure optimum utilization of the existing STPs. Details of progress achieved in respect of 2 STPs of 3 MLD capacity each at Karaikal and Puducherry proposed in the action plan have not been provided and needs to be reported in the MPR.

3. It is reported that against 406 TPD of municipal solid waste (MSW) generation, treatment facility is available for 61 TPD only. On the other hand, the capacity utilization of the existing treatment facility is also low at 70%. Details pertaining to load of MSW to be processed in individual proposed plant to bridge the huge gap needs to be provided. The Govt. of Puducherry is to expedite the implementation of the action plan and ensure completion of the projects conforming to the Municipal Solid Waste Rules, 2016 at the earliest.

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4. As per the direction issued vide NGT order dated 21/09/2020, it is required to prepare time bound comprehensive action plans in consultation with the respective Coastal Zone Management Authority for control of coastal Pollution in coastal States/UTs, and submit the same to CPCB by 25th November, 2020. The Govt. of Puducherry is to comply with the NGT order and provide details of the approved action plan in the MPR.

5. In view of 3rd quarterly report of Central Monitoring Committee to be submitted in Hon'ble NGT, relevant information that needs to be highlighted in the report may also be kindly submitted.

I would request your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of Hon'ble NGT issued vide orders dated 6th December, 2019 and 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(**U.P. Singh**)

Shri Ashwani Kumar,
Chief Secretary,
Govt. of Puducherry
Main Building, Secretariat,
Puducherry-605001

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
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श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O.No.24015/2/2020-NRCD-II

19th January, 2021.

Dear Suresh,

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No.673/2018 regarding polluted river stretches in the country identified by Central Pollution Control Board (CPCB).

As per the directions of NGT, regular monitoring with the concerned States/UTs is carried out at my level on a monthly basis. Based on review during last CMC meeting held on 5th January, 2021, I would like to highlight some of the issues requiring your urgent attention as stated below:-

1. Total estimated sewage generation from six major towns in the State (Bhubaneswar, Cuttack, Puri, Sambalpur, Rourkela and Talcher) is reported to be 367 mld. However, sewage treatment capacity created so far is 91 mld only with 5 STPs installed in these towns. It is noted that with more sewage treatment of 280 mld capacity and the FSTPs planned for these towns, gap between sewage generation and treatment will be bridged after their execution/commissioning. However, for meaningful utilization of STPs, proper sewer network with house service connections, and/or the designed sewage conveyance system would be required, planning for which may also be initiated.

2. Four STPs of total 136 mld capacity at Bhubaneswar (Meherpalli-56 mld, Basuaghai-28 mld, Kochilaput-43.5 mld and Paikarpur-8.5 mld), are reported to be under trial-run and likely to be commissioned by March, 2021. One STP of 48 mld at Rokat is scheduled for completion by June, 2021. STPs of 40 mld capacity at Ruptala Balugh, Rourkela and 40 mld capacity at Dhanupalli, Sambalpur, are although, reported to be completed but, likely to be commissioned by June, 2021 due to pending house connections.

   The State Govt. is required to expedite laying of sewer network and house service connections to ensure adequate inflow of sewage to these STPs for their optimal utilization.

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3. Faecal Sludge Treatment Plants (FSTP/SeTPs) are proposed to cover all 114 ULBs in the State. Out of these, 10 FSTPs are operational in major towns with an installed capacity of 440 kld. Thirty FSTPs are in final stages of implementation, and likely to be commissioned by March, 2021. Also, 58 FSTPs are in different stages of implementation, and scheduled for completion by December, 2021. Progress of these FSTPs needs to be monitored regularly to adhere to the proposed timelines.

4. In case of industrial effluent management, it is informed that there are 1030 water polluting industries in the State generating 886 mld of effluent, and all these units are equipped with ETPs. State Pollution Control Board is required to monitor the ETPs regularly and take action for non-compliance, if any, as per the statutory provisions.

5. For municipal solid waste management; additional landfill sites, composting plants, material recovery facilities need to be set up and made operational to achieve the desired target within the stipulated time period.

6. There seems to be no progress on bio-remediation for identified drains (18 nos) discharging into polluted river stretches and thus, requires serious consideration vis-à-vis the directions of NGT.

7. River wise details for sewage generation, STPs installed, and the gap in treatment needs to be worked out and informed.

8. Details of action plan for management of sewage, industrial effluent and municipal solid waste in coastal towns of the State and the compliance w.r.t. the relevant statutory provisions, need to be duly mentioned in the MPR.

9. As per the directions of NGT, at least one polluted river stretch is to be identified for rejuvenation, which could serve as a model for other polluted stretches in the State . Action taken in this regard needs to be informed.

I would request for your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of NGT vide orders dated 6th December, 2019, 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(U.P. Singh)

Shri Suresh Chandra Mahapatra
Chief Secretary
Govt. of Odisha,
State Secretariat,
Bhubaneswar - 751 001

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
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श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O. No.J-24025/1/2020-NRCD-II

19th January, 2021

Dear Vishwas,

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No. 673/2018 regarding pollution of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the direction of NGT, regular monitoring with the concerned States/ UTs is carried out at my level on a monthly basis. Based on review during last meeting of Central Monitoring Committee held on 5th Jan, 2021, I would like to highlight some of the important issues enumerated below requiring your urgent attention:

1. As per information provided by Govt. of Kerala, total sewage generation in the State is 1192 mld of which, urban area generates 317 mld. It has been reported that 13 STPs of 124.145 mld capacity are operational. Capacity utilization of these existing STPs is only 91 mld which is about 73%. The compliance status in term of discharge standards STPs has not been provided in the MPR. The State is to analyze and provide reasons for non-compliance as well as under-utilization of the STPs in order to initiate corrective actions. The State Government is reportedly planning to set up 43 additional STPs/FSTPs of a total capacity of 89.556 mld. Completion of these projects will still leave a gap of 103 mld of sewage treatment capacity. Therefore, the State Government may initiate necessary action to create infrastructure to bridge this gap at the earliest. The State is to also provide details of the plan to handle liquid waste through FSTP and smaller STPs in the semi-urban and rural areas.

2. The incremental physical progress registered in respect of the 43 proposed STPs/FSTPs which are at different stages of progress, has not been provided. The State is to ensure that incremental physical progress is reflected in the MPR and all work are completed within stipulated time with due expedition.

3. Capacity utilization and compliance status of the 8 CETPs of a total capacity of 124.25 mld has not been provided. As per the report, a treatment gap of 32.05 mld of trade effluent exists. The State Government is to ensure necessary action as per statutory provisions against defaulting industrial units and reported in the MPR.

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4. Against a total generation of 3521 TPD of Municipal Solid Waste; treatment facility is available for 2844.5 TPD. For bridging the gap of 676.5 TPD of Municipal Solid Waste processing, the State has proposed 8 Waste to Energy Plants in 8 Districts. Details pertaining to load of MSW to be processed in individual waste to energy plants needs to be reported in the MPR along with their physical progress.

5. As per the direction issued vide NGT order dated 21/09/2020, it is required to prepare time bound comprehensive action plans in consultation with the respective Coastal Zone Management Authority for control of coastal Pollution in coastal States/UTs, and submit the same to CPCB by 25th November 2020. The State Govt. is to comply with the NGT order and provide details of the approved action plan in the MPR.
6. As decided in the meeting held on 21st December, 2020 under the chairmanship of DG, NMCG/PD, NRCD the State Govt. is to provide a written consolidated report to NMCG in respect of all the parameters enlisted in the MPR. This needs to be submitted at the earliest.

I would request your intervention to ensure necessary action on the decisions taken in earlier CMC meeting, issues mentioned above, and compliance of the directions of Hon'ble NGT issued vide orders dated 6th December, 2019 and 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(U.P. Singh)

Dr. Vishwas Mehta,
Chief Secretary,
Government of Kerala,
Secretariat,
Thiruvunanthapuram-695001

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
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श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

DO No.J-24016/1/2020-NRCD-II

19th January, 2021.

Dear Anil

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No.673/2018 regarding polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the directions of NGT, regular monitoring with the concerned States/UTs is being carried out at my level on a monthly basis. Based on review during last meeting of Central Monitoring Committee held on 5th January, 2021, I would like to highlight some of the issues stated below, requiring your urgent attention:-

1. With regard to performance of STPs, it is reported that 22 STPs of 1271.46 MLD capacity are non-complying. State Government is required to improve capacity utilization of the existing STPs; especially the STP at Gavier, Surat having utilization of only 5.37 MLD against its design capacity of 53 MLD. Also, State Government is required to expedite the progress of the 97 ongoing STPs in the State. Details of completion schedule with updated progress of individual STP may be submitted in the MPR.

2. There is an urgent requirement to acquire about 43 land parcels for setting up of 37 STPs/SPSs for pollution abatement works of River Tapi at Surat, under NRCP. However, while possession has been taken for 4 land parcels, 'in-principal' approval has been granted for 7 more land parcels. I understand that you have taken a meeting with all concerned in this regard to resolve this long pending issue. Action may be expedited to resolve the same and acquire the remaining land at the earliest to facilitate commencement of works.

3. Out of 43,039 existing industrial units in the State, 7701 of them have ETPs installed and 34 CETPs are operational. Out of these 34 operational CETPs, 11 CETPs are non-complying in terms of the discharge norms. Appropriate action may be taken as per statutory provision by Gujarat Pollution Control Board (GPCB).

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4. In case of Bio-remediation of drains, no significant progress is observed in the State. State Government needs to expedite the same to comply with NGT directions.

5. A 155 MLD capacity STP under NRCP at Pirana, Ahmedabad is scheduled for completion by 31/03/2021. It may be ensured that this STP is completed within the stipulated time and commissioned at the earliest.

6. With regard to deep-sea pipeline project, it was informed that tenders will be floated within few month's time for Jedpur, Ahmedabad and Vadodara area. The State Government needs to expedite the process of implementation of the project.

7. As per the direction issued vide NGT order dated 21/09/2020, the State is to prepare time bound comprehensive action plans in consultation with the respective Coastal Zone Management Authority for control of coastal pollution in Coastal States/UTs, and submit the same to CPCB within three months from the date of issuance of these directions i.e. by 25th November, 2020. The State Government is to comply with the NGT order and provide details of the approved action plan in the MPR.

8. In view of 3rd quarterly report of Central Monitoring Committee to be submitted in Hon'ble NGT, relevant information that needs to be highlighted in the report may also be kindly submitted immediately.

I would request for your kind intervention to ensure necessary action on the decisions taken in CMC meetings, issues stated above and compliance of the directions of NGT vide orders dated 6th December, 2019, 22nd June, 2020, 26th September, 2020 and 9th November, 2020.

With regards,

Yours sincerely,

(U.P. Singh)

Shri Anil Mukim
Chief Secretary,
Govt. of Gujarat
1st Block, 5th Floor, Sachivalaya
Gandhinagar-382020

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
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रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O.No.J-24013/2/2020-NRCD-II

19th January, 2021.

Dear Adityanath,

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No.673/2018 regarding pollution of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the direction of NGT, regular monitoring with the concerned States/ UTs is carried out at my level on a monthly basis. Based on review during last meeting of Central Monitoring Committee held on 5th January, 2021, I would like to highlight some of the important issues enumerated below requiring your urgent attention:

1. I am constrained to express displeasure that neither the Commissioner cum Director of Municipal Administration, appointed as Nodal Officer nor Secretary, Municipal Administration, Andhra Pradesh Govt. attended the 7th & 8th Central Monitoring Committee Meetings. This reflects lack of seriousness on the part of the State Govt. in following up and compliance of directions of Hon'ble NGT. If this state of affairs continue, I am afraid, we will be left with no option but to report the matter to NGT.

2. As per the information provided by Govt. of Andhra Pradesh, only 326.97 mld sewage is treated in the existing 43 STPs of 515.85 mld capacity against a total sewage generation of 1463.20 mld in urban area of the State. Thus, a huge gap of 947.35 mld between sewage generation and treatment capacity is evident.

3. As per the MPR, 6 STPs of 36 mld capacity out of existing 43 STPs with a treatment capacity of 515.85 mld, the inflow of sewage is not reported. The data along with compliance/non compliance status, reasons and corrective action plan needs to be reported in the MPR.

4. For the 32 under construction STPs of 458.9 mld capacity, no incremental progress has been achieved in the last 2 months. The State Govt. is to ensure that progress is steadily registered and work is expedited to achieve their completion as per timeline.

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5. Details of the proposed projects under HAM model in respect of 16 Municipal Corporations needs to be provided with status for individual Corporation and their respective projects in the MPR.

6. Regarding Municipal Solid Waste management, data needs to be reconciled. As reported, total MSW generation from 120 ULBs is reported to be 6850 TPD but, the data does not match with the bifurcated tabulated status provided for the ULBs. This discrepancy in data is to be rechecked and correctly reported in MPR.

7. As per the direction issued vide NGT order dated 21/09/2020, the State is to prepare time bound comprehensive action plans in consultation with the respective Coastal Zone Management Authority for control of coastal Pollution in coastal States/UTs, and submit the same to CPCB within three months from the date of issuance of these directions, i.e., by 25th November 2020. The State Govt. is to comply with the NGT order and provide details of the approved action plan in the MPR.

8. In view of 3rd quarterly report of Central Monitoring Committee to be submitted in Hon'ble NGT, relevant information that needs to be highlighted in the report may also be kindly submitted immediately.

I would request your intervention to ensure necessary action on the decisions taken in earlier CMC meeting, issues mentioned above, and compliance of the directions of Hon'ble NGT issued vide orders dated 6th December, 2019 and 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(**U.P. Singh**)

Shri Aditya Nath Das
Chief Secretary,
Government of Andhra Pradesh,
1st Block, A.P Secretariat Office
Velagapudi-522503

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O.No. J-24013/3/2020-NRCD-II

19th January, 2021.

Dear Somesh,

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No.673/2018 regarding pollution of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the direction of NGT, regular monitoring with the concerned States/ UTs is carried out at my level on a monthly basis. Based on review during last meeting of Central Monitoring Committee held on 5th Jan., 2021, I would like to highlight some of the important issues enumerated below requiring your urgent attention:

1. As per the information provided by Govt. of Telangana, only 735.8 mld sewage is treated in the existing 31 STPs of 888.55 mld capacity against a total sewage generation of 2613 mld in the State. Thus, a huge gap of 1724.45 mld between sewage generation and treatment is evident.

2. Out of 31 STPs, two STPs are not working (0.5 mld at Krishnakanth Park and 2.5mld at Amber Cheruvu Pragathinagar). The reason for non-functioning of these STPs are to be reported and corrective measures are to be initiated.

3. Regarding the 17 proposed STPs, progress on work of 6 STPs appear stagnant for consecutive 3 post monsoon months (October, November and December) and for remaining 11 STPs, work is yet to be started. While the work needs to be expeditiously carried out (Reasons for status quo in the progress of work is to be reported in the MPR).

4. In view of no response to the tenders of Government of Telanagana for package III consisting of 17 STPs of 376.5 MLD capacity under HAM model, a market consultation and discussion may provide clear understanding leading to course correction.

5. It is to be ensured that the status of ongoing projects are correctly stated in the Monthly Progress Reports.

6. For the under construction of 5.45 mld capacity STP at Myrialguda which was proposed to be completed by December, 2020, it is reported that the STP is 90% complete. Completion of remaining works is to be ensured expeditiously.

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7. The completion date of the under construction work of 0.5 mld capacity CETP was stated as March, 2021 in the October, 2020 MPR while the MPR submitted for December, 2020, the date is extended to June 2021. The State is to ensure the completion of the work within the stipulated timeline.

8. The number of waste to energy plants was reported to be 7 in October, 2020 MPR, whereas in the MPR of December, 2020, the number of waste to energy plant is reported as 4. The State may reconcile and report correct figure in this regard.

9. The treatment of total solid waste generation of 9285 TPD is not perspicacious. This needs to to be clearly stated in the MPR. As the gap between solid waste generation and treatment is 2785 TPD, the State Governments needs to expedite implementation and ensure completion of remaining projects conforming to the Municipal Solid Waste Rules, 2016.

10. In view of 3rd quarterly report of Central Monitoring Committee to be submitted in Hon'ble NGT, relevant information that needs to be highlighted in the report may also be kindly submitted immediately.

I would request your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of Hon'ble NGT issued vide orders dated 6th December, 2019 and 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(U.P. Singh)

Shri Somesh Kumar
Chief Secretary,
Government of Telangana,
Block C, 3rd floor, Telangana Secretariat
Khairatabad, Hyderabad
Telangana.

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
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रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O. J-24036/1/2020-NRCD-II

19th January, 2021.

Dear Sri Lalnunmawia,

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No.673/2018 regarding pollution of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the direction of NGT, regular monitoring with the concerned States/ UTs is carried out at my level on a monthly basis. Based on review during last meeting of Central Monitoring Committee held on 5th January, 2021, I would like to highlight some of the important issues enumerated below requiring your urgent attention:

1. As per information provided by the Govt. of Mizoram, total sewage generation in the State is 104 mld against which available treatment capacity is Nil. On the other hand, the only under construction 10 mld capacity STP at Aizawl which registered already a 99% progress is maintaining status quo and thus, yet to be made operational. During the 6th CMC meeting, it was urged that the said STP be made operational at the earliest to treat sewage of at least 3000 households (out of 19000 households) which are reportedly networked. State Govt. may issue necessary directions to authorities concerned to sort out issues impeding its further progress and make the STP operational at the earliest. This will facilitate commencement of at least treatment of some sewage in the State which can be reported to NGT.

2. It is noticed that latest MPR is the repetition/duplication of previous MPR and thus, serves no meaningful purpose. The State Government must look into the same and provide the complete MPR with current status showing incremental progress of all activities.

3. There are 56 water polluting industries in the State which generate about 0.04384 mld of effluent. All the 56 industries are reported to be having ETPs with a total treatment capacity of 0.099 mld. The State Government needs to provide the compliance status of each of the ETP in the MPR.

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4. It was also mentioned in the MPR that 30% of grey water management is completed. In this regard, details in respect of polluted river stretches, population & number of households covered, timelines of completion, quantity of grey water being remediated, etc need to be indicated in the MPR.

5. It is reported that against 348.19 TPD Municipal Solid Waste (MSW) generation in the State, total treatment facility is available for 214 TPD, which includes 44 TPD capacity landfill site, 74 TPD capacity material recovery facility, 50 TPD mechanical composting plant and 46 TPD capacity vermi-composting plant in Aizawl alone.This leaves a gap of treatment capacity of 134.19 TPD. To bridge this gap, State Govt. needs to expedite implementation of the action plan and ensure completion of the MSW processing projects conforming to the Municipal Solid Waste Management Rules, 2016 at the earliest.

6. As per the directions of NGT, States/UTs are required to identify one polluted river stretch and rejuvenate, which can serve as a model for other polluted river stretches. However, no action is taken by the State Govt. in this regard as yet. This needs to be expedited.

I would request for your kind intervention to ensure necessary action on the decisions taken in CMC meetings, issues stated above and compliance of the directions of NGT vide orders dated 6th December, 2019, 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(**U.P. Singh**)

Shri Lalnunmawia Chuaungo
Chief Secretary
Government of Mizoram
New Secretariat Complex
Aizawl- 796001

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
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श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O.No.J-24035/1/2020-NRCD-II

19th January, 2021.

Dear Sri Rao,

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No. 673/2018 regarding pollution of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the direction of NGT, regular monitoring with the concerned States/ UTs is carried out at my level on a monthly basis. Based on review during last meeting of Central Monitoring Committee held on 5th January, 2021, I would like to highlight some of the important issues enumerated below requiring your urgent attention:

1. As per information of the Govt. of Meghalaya, the State generates a total sewage of 75 MLD against which treatment capacity of 24.65 MLD sewage is available. Regarding mode of treatment, it has been reported that while 1.85 MLD sewage is being treated through 8 STPs, 22.8 MLD sewage is being treated through a legion of septic tanks. Even considering the fact that Septic tanks do not provide full fledged treatment of sewage, there remains a huge gap of 50.35 MLD between sewage generation and treatment capacity created in the State. The treatment of sewage through septic tank needs to be upgraded/up scaled by providing faecal sludge treatment plant (FSTP) as an extension of treatment for which efforts may be made by State Government to set up required number of FSTPs. Details of progress of proposed 0.35 MLD capacity FSTP plant and 5 onsite treatment plant of 13.45 MLD capacity plants needs to be provided. The State is to formulate action plans like Septage Management/ Faecal Sludge Treatment Plant (FSTP)/STPs to bridge the gap of treatment capacity in order to prevent discharge of untreated sewage into recipient water bodies.

2. As reported in the MPR, 5 out of 8 existing STPs are operational. Information pertaining to operational status of 0.05 mld capacity STP at Polo market, compliance status of 0.03 mld capacity STP at Nonshing & 0.05 mld capacity STP at Thangskai have not been provided. The capacity utilization of 0.12 mld capacity STP at Nongtrai is reported to be 0.03 mld only. The State Government is to provide the reasons for non compliance/ non operation and low capacity utilization of the existing STPs and come up with corrective measures to remedy them.

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3. Against 245 TPD generation of Municipal Solid Waste (MSW), treatment facility for only 8.27 TPD only is available. The State is to ensure completion and commissioning of the proposed 10 plants of 166 TPD capacity for bridging the gap in MSW treatment capacity. Implementation of the 170 TPD capacity MSW project at Shillong was to be completed by December, 2020. However, neither the updated nor the incremental progress was reflected in the MPR. The Status of its completion is to be reported in the MPR.

4. In view of 3rd quarterly report of Central Monitoring Committee to be submitted in Hon'ble NGT, relevant information that needs to be highlighted in the report may also be kindly submitted.

I would request your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of Hon'ble NGT issued vide orders dated 6th December, 2019 and 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(U.P. Singh)

Shri M.S Rao
Chief Secretary
Govt. of Meghalaya
Main Secretariat, Riland Building
Shillong-793001

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
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श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D. O No. J-24023/3/2020-NRCD-II

19th January, 2021.

Dear Subramanyam,

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No.673/2018 regarding polluted river stretches in the country identified by Central Pollution Control Board (CPCB).

As per the direction of NGT, regular monitoring with the concerned States/ UTs is carried out at my level on a monthly basis. Based on review during last meeting of Central Monitoring Committee held on 5th January, 2021, I would like to highlight some of the issues stated below, requiring your urgent attention:

1. Out of 15 STPs of total capacity of 139.40 mld in UT of J&K, 11 STPs of 120 mld capacity are operational with a capacity utilization of 82 mld. To minimize sewage treatment gap in J&K, non-operational STPs need to be made functional and utilized. In case of non-compliant STPs, UT Pollution Control Board may look into the matter and take appropriate action as per the statutory provisions.
2. In Jammu, one 10 mld capacity STP is reported to be under refurbishment but, no details are available indicating efforts made to make it operational. Other two STPs of 30 mld & 27 mld capacities are much underutilized (only 29 mld) mainly due to absence of proper conveyance system. The progress of NBCC's project is not satisfactory and requires regular monitoring at appropriate level of the the UT to increase utilization. Also, the proposal for I&D of 13 drains along river Tawi needs to be expedited to increase sewage inflow to these STPs.

   For optimal capacity utilization of STPs, proper sewer network with house service connections, interception & diversion works with proper conveyance system are necessarily to be taken up in parallel.

3. The project for pollution abatement of river Devika at Udhampur was sanctioned under NRCP by the Ministry in September 2018 at a cost of Rs.186.74 crore and was scheduled for completion by March, 2021. However, physical progress achieved so far is not satisfactory. Out of three STPs proposed under the project, work on only one STP of 8 mld has

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commenced whereas, for other two STPs, even design has not yet been finalized. The Government of J&K is required to rigorously monitor the project to expedite implementation and avoid cost and time overrun.

4. It is informed that the proposal for bio-remediation on identified polluted river stretches has been submitted to the Government of J&K for approval, with funding by the concerned Department. This needs to be taken up on priority.

5. Against total municipal solid waste generation of 1500 TPD in J&K, only 550 TPD is processed. The UT Administration is required to initiate suitably and timely action to bridge the said gap by ensuring compliance of the Solid Waste Management Rules, 2016.

I would request for your intervention to ensure necessary action on the decisions taken in earlier CMC meetings, issues mentioned above, and compliance of the directions of NGT vide orders dated 6th December, 2019, 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(U.P. Singh)

Shri B.V.R. Subramanyam
Chief Secretary
Government of UT of Jammu & Kashmir
Secretariat, Srinagar (J&K)

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O.No. J-24037/6/2020-NRCD-II

19th January, 2021.

Dear Sri Patel,

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No. 673/2018 regarding pollution of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the direction of NGT, regular monitoring with the concerned States/ UTs is carried out at my level on a monthly basis. Based on review during last meeting of Central Monitoring Committee held on 5th January, 2021, I would like to highlight some of the important issues enumerated below requiring your urgent attention:

1. As per information provided by the Govt. of Daman and Diu and Dadar & Nagar Havelli (DNH), against an estimated total sewage generation of 21.2 mld (at Daman and Diu, DNH) 4.21 mld capacity STP exists at Daman and 13 mld capacity STP exists at DNH. At present, there is no treatment facility available at Diu. Thus, a gap of 6.5 mld exists between sewage generation and the available treatment capacity. While STP at Daman is operational to its full capacity, STP at DNH is utilizing only 2.10 mld capacity at present leaving an unutilized capacity of 11 mld. This is owing to absence of household connections (Out of 24105 connections proposed, only 4220 has been so far taken up). The State Government, therefore, needs to expedite laying of sewer network and provide house sewer connection to make the STP operational to its capacity.

2. The proposal for 16 MLD capacity at Nani Daman under World Bank ENCORE Project is reported to have been submitted to Govt. of India for approval. Also, the tenders for 7 MLD capacity STP proposed at Diu under Smart Cities Mission would be floated in January. These need to be pursued rigorously to meet the timelines as stipulated by NGT.

3. It was reported that 262 water polluting industries are generating around 6.5 MLD of effluent and each of these industries is having ETPs with a total capacity of 11.4 MLD. Its encouraging to note that these ETPs are reportedly installed with energy meters and flow meters and are regularly monitored and online monitoring facility is available for highly polluting industries and monitored by CPCB and PCC on a daily basis.

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4. UT Pollution Control Committee, being the regulatory body, should ensure compliance of ETPs with respect to the prescribed discharge standards. UT Administration must provide the compliance status of each of these ETPs in the MPR.

5. In respect of Municipal Solid Waste Management (MSW), it is reported that treatment facilities of 100 TPD at Daman and 150 TPD at Silvasa exist against solid waste generation of 29 TPD & 46 TPD respectively. For the solid waste management in Diu, MoU has been signed with M/s Ultra Tech Cements. In this regards, UT Administration needs to ensure that municipal solid waste management is carried out as per the Solid Waste management Rules, 2016.

6. As per the direction issued vide NGT order dated 21/09/2020, it is required to prepare time bound comprehensive action plans in consultation with the respective Coastal Zone Management Authority for control of coastal Pollution in coastal States/UTs, and submit the same to CPCB by 25th November 2020. The UT Administration is to comply with the NGT order and provide details of the approved action plan in the MPR.

I would request for your kind intervention to ensure necessary action on the decisions taken in CMC meetings, issues stated above and compliance of the directions of NGT vide orders dated 6th December, 2019, 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(**U.P. Singh**)

Shri Praful Patel
Administrator
Daman and Diu and Dadra and Nagar Haveli
SILVASA

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O.No.24015/2/2020-NRCD-II

19th January, 2021.

Dear Sanjayji,

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No.673/2018 regarding polluted river stretches in the country identified by Central Pollution Control Board (CPCB).

As per the directions of NGT, regular monitoring with the concerned States/UTs is carried out at my level on a monthly basis. Based on review during last CMC meeting held on 5th January, 2021, I would like to highlight some of the issues requiring your urgent attention as stated below:-

1. As per the information provided by Maharashtra Pollution Control Board (MPCB) on sewage management in the State, there is a gap of 2000 mld between total sewage generation (9757 mld) and the treatment capacity available which includes only 700 mld for Mumbai. This needs to be addressed urgently to comply with the orders of NGT in letter and spirit by formulating and implementing necessary sewerage infrastructures .

2. To meet the sewage treatment gap for polluted stretches (53 nos) on different rivers/tributaries in the State, 77 STPs of nearly 1300 mld capacity are proposed. Out of which, 15 STPs of 245.76 mld capacity are reported to be under construction, including 2 STPs in Ulhasnagar and 2 in Akola Municipal Corporation, due for completion in December, 2020. However, there has been status quo since last 6 months without any progress. In case of 11 STPs of 423.5 mld capacity, tendering has been in process since long, whereas administrative approval is pending for 14 STPs of 205.5 mld and technical sanction required for 5 STPs of 101.5 mld.

   There seems to be no change in the status from that informed during last CMC meetings. Given the progress/schedule of proposed STPs, timelines stipulated by NGT are not likely to be met, and will amount to non-compliance of the directions.

3. Out of 139 STPs in the State with the total installed capacity of 7747 mld, 6 STPs are still reported to be non-operational due to various reasons and 18 STPs are non-compliant in terms of the prescribed norms for discharge into recipient water bodies. To minimize sewage treatment gap, non-operational STPs need to be made functional and utilized. In case of non-compliant

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STPs, MPCB may look into the matter and take appropriate action as per the statutory provisions. Concurrently State Government may analyse these STPs to see if their up-scaling and/or up-gradation is required.

4. Performance evaluation of FSTPs (15 nos) in terms of reduction in pollution load may be indicated in the MPRs.

5. In case of in-situ remediation for the drains (56 of P-I & 25 of P-II) discharging to polluted river stretches, no progress has been observed so far which is not in conformity with the directions of NGT and requires strict measures accordingly.

6. Regarding industrial effluent management in polluted river stretches, it is informed that Common Effluent Treatment Plants (CETPs) of total capacity 83.3 mld are operational in different industrial estates/areas. To meet the gap of effluent treatment, four CETPs of capacity 7.84 mld (1 mld at Satpur in District Nashik, 0.64 mld at Sangli, 1.2 mld at Ichalkaranji in District Kolhapur and 5 mld at Butibori industrial area) are proposed which are still in initial stages of implementation. All concerned agencies may be asked to expedite commissioning of the proposed CETPs. Also, MPCB being the regulatory body, is required to ensure proper functioning of all the CETPs in the State to meet the prescribed norms.

7. In case of solid waste management in the State, it is informed that processing facilities exist for 17420 TPD of municipal solid waste against total generation of 22945 TPD. These include 337 composting plants, 82 vermi-composting facilities, 62 bio-methanization plants, one waste to energy (W to E) plant and 26 RDF plants. Also, 18 landfill sites are presently under development out of 320 sites proposed to cater to solid waste generation from 394 ULBs in the State. The State Government is required to monitor their operational status along with capacity utilization, and to take necessary steps to comply with the statutory provisions in this regard.

8. The project for pollution abatement of river Mula Mutha at Pune was sanctioned in January, 2016 under NRCP at a cost of Rs.990.26 crore with Japanese ODA Loans from JICA, and was scheduled for completion in 6 years. However, the physical progress achieved so far is only 3%.

   Identified stretches of rivers Mula, Mutha and Mula Mutha rivers in Pune have been categorized under Priority-I/II. The said project under NRCP, envisaged to fulfill the sewage treatment gap of 396 mld (11 nos of STPs), has a direct bearing on timely implementation of action plans for these stretches. The project, therefore, requires regular monitoring at appropriate level with the direction to Pune Municipal Corporation to adhere to the timelines as directed by the NGT. For early commencement of the project, the State Govt. is required to facilitate transfer of land for all the STPs.

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9. Recently, NGT has imposed a penalty of Rs.29.75 crore on BMC for letting untreated sewage into the sea through 85 major outfalls, and also ordered to pay Rs.4.25 crore per month as compensation for environmental damage to CPCB till remedial measures are taken. Factual status and the action taken in this regard may be informed.

10. Regarding stay granted by Hon'ble Supreme Court vide order dated 14th February, 2020 to the impugned order dated 8th April, 2019 in OA No.673 of 2018 by NGT, it was earlier requested to get the matter examined and/or seek legal opinion to ascertain whether the said stay would also hold good in case of subsequent orders of NGT in the same matter. However, nothing has been heard so far in this regard. This needs to be taken up on priority, so that the NGT could be informed accordingly.

I would request for your kind intervention to ensure priority actions on the decisions taken in monthly CMC meetings, issues mentioned above, and compliance of the directions of NGT vide orders dated 6th December, 2019, 22nd June, 2020 & 26th September, 2020.

With regards,

Yours sincerely,

(U.P. Singh)

Shri Sanjay Kumar
Chief Secretary,
Govt. of Maharashtra
Mantralaya, Madam Cama Raod,
Mumbai – 400032

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

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भारत सरकार
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GOVERNMENT OF INDIA
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SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O.No.J-24019/2/2020-NRCD-II

19th January, 2021.

Dear Sri Rani Kumar,

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No.673/2018 regarding pollution of 351 polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the direction of NGT, regular monitoring with the concerned States/ UTs is carried out at my level on a monthly basis. Based on review during last meeting of Central Monitoring Committee held on 5th Jan, 2021, I would like to highlight some of the important issues enumerated below requiring your urgent attention:

1. It is reported that against a total sewage generation of 3356.5 MLD in the State, there are 125 existing STPs with 2242 MLD cumulative capacity; leaving a gap of 1114 MLD between sewage generation and treatment capacity. The existing treatment facilities are also underutilized at 67.5% only. Therefore, the State Government is to ensure enhanced utilization of existing STPs by providing I&D work, laying sewer network and house service connections along with proper conveyance system to the STPs. Inconsistency in number of STPs have been observed in the MPRs. The State Government is required to reconcile and provide exact number of STPs.

2. As reported, 2 STPs each of 3.72 MLD capacity at Sadalaga village and 5.8 MLD capacity in Chikkodi are barely receiving only 2 MLD total sewage. The State Government is to initiate corrective measures in this regard at the earliest to optimise their utilization. Action also needs to be taken to resolve land issues for 2 STPs at Kamaje and Kaikunje.

3. As reported in MPRs, there are 39 ULBs along 17 PRS in the State. Among these, 33 ULBs are under Karnataka Urban Water Supply and Drainage Board (KUWSB), 4 ULBs are under Karnataka Urban Infrastructure Development (KUID) and 2 ULBs under Directorate Of Municipal Administration (DMA). The STP/FSTP projects of proposed action plan are at different stages of progress along the PRS. The State Government is to ensure that the sewerage works in all the 39 ULBs are expeditiously carried out to accomplish their completion within the stipulated timeline. The State also to ensure that untreated sewage is not discharged into any water bodies.

Contd...2/-

4. It has been reported that against 11800 TPD of municipal solid waste (MSW) generation in the State, 10198 TPD is processed. To bridge the gap of processing of remaining 1602 TPD of MSW, 9159 TPD capacity plants are reportedly approved for 219 ULBs. The State is to expedite the implementation process and ensure that the projects are in conformity with the MSW Rules, 2016.

5. Out of 10 CETPs of 5.8 MLD capacity; 6 CETPs are reported to be non-compliant. Appropriate action may be taken as per statutory provision by Karnataka State Pollution Control Board (KSPCB) against these non-compliant units.

6. As per the direction issued vide NGT order dated 21/09/2020, it is required to prepare time bound comprehensive action plans in consultation with the respective Coastal Zone Management Authority for control of coastal pollution in Coastal States/UTs, and submit the same to CPCB by 25th November, 2020. The State Government is to comply with the NGT order and provide details of the approved action plan in the MPR.

7. In view of 3rd quarterly report of Central Monitoring Committee to be submitted in Hon'ble NGT, relevant information that needs to be highlighted in the report may also be kindly submitted immediately.

I would request for your kind intervention to ensure necessary action on the decisions taken in CMC meetings, issues stated above and compliance of the directions of NGT vide orders dated 6th December, 2019, 22nd June, 2020 and 26th September, 2020.

With regards,

Yours sincerely,

(U.P. Singh)

Shri P.Ravi Kumar
Chief Secretary
Government of Karnataka
Vidhana Soudha
Bengaluru, Karnataka.

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
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श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
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RIVER DEVELOPMENT & GANGA REJUVENATION
SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O.No.J-24019/2/2020-NRCD-II

19th January, 2021.

Dear Shanmugam,

Please refer to my earlier DO letters pursuant to the directions of National Green Tribunal in OA No.673/2018 regarding polluted river stretches identified in the country by Central Pollution Control Board (CPCB).

As per the directions of NGT, regular monitoring with the concerned States/UTs is being carried out at my level on a monthly basis. Based on review during last meeting of Central Monitoring Committee held on 5th January, 2021, I would like to highlight some of the issues stated below, requiring your urgent attention:

1. It is reported that there are 66 existing STPs with a total capacity of 1616 MLD. Of these, 3 STPs are non-compliant. The existing treatment plants are also underutilized at about only 57%. Therefore, the State Government is to ensure enhanced utilization of the existing STPs by completing sewer network and house service connection with due expedition.

2. Additionally, 40 STPs with a cumulative capacity of 971 MLD are under construction and 57 STPs are at proposal stage. However, slow progress was observed in respect of the under construction STPs. The State Government is to ensure that construction of these STPs are completed within stipulated time and commissioned at the earliest.

3. Out of 36 CETPs, 4 are reported to be non-compliant. Appropriate action may be taken as per statutory provision by Tamil Nadu Pollution Control Board (TPCB) against the non-compliant units. 10 CETPs of 41 MLD capacity have been in proposal stage for quite a long time, progress of which needs to be expedited.

4. Against a total municipal solid waste (MSW) generation of 15,666 TPD in the State, treatment capacity of 7859.2 TPD only exists. To bridge the huge gap of 7807 TPD treatment capacity, the State Government is to expedite creation of additional infrastructure for management and processing of remaining solid waste complying with the provisions contained in the Municipal Solid Waste Rules, 2016.

Contd...2/-

5. As per the direction issued vide NGT order dated 21/09/2020, it is required to prepare time bound comprehensive action plans in consultation with the respective Coastal Zone Management Authority for control of coastal pollution in Coastal States/UTs, and submit the same to CPCB by 25th November, 2020. The State Government is to comply with the NGT order and provide details of the approved action plan in the MPR.

6. In view of 3rd quarterly report of Central Monitoring Committee to be submitted in Hon'ble NGT, relevant information that needs to be highlighted in the report may also be kindly submitted immediately.

I would request for your kind intervention to ensure necessary action on the decisions taken in CMC meetings, issues stated above and compliance of the directions of NGT vide orders dated 6th December, 2019, 22nd June, 2020, 26th September, 2020, 26th October, 2020 and 9th November, 2020.

With regards,

Yours sincerely,

(U.P. Singh)

Shri K. Shanmugam
Chief Secretary
Govt. of Tamil Nadu
Secretariat
Chennai- 600001

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
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श्रम शक्ति भवन
रफी मार्ग, नई दिल्ली-110 001
GOVERNMENT OF INDIA
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SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O. No. Legal/OA673/2018/NMCG/2019 (Part File) 18th January, 2021.

Dear Deepakji,

This is in reference to the ongoing matter OA No. 673 of 2018 in Hon'ble NGT pertaining to the pollution abatement in the 351 polluted river stretches identified by CPCB. Based on the review meetings held at my level and the Monthly Progress Reports (MPRs) received from the State in the matter, I would like to highlight a few points requiring immediate attention:

1. The total urban population in Bihar, as mentioned in the MPR, is 1,17,58,016 and accordingly the sewage generation would be around 1100 MLD and not 651 MLD as reported in the MPR. Rather 651 MLD could be the sewage generated along the polluted river stretches only. This needs to be reviewed and reported in the next MPR.

2. In polluted river stretches other than River Ganga, DPRs are yet to be sanctioned and funds to be tied up (namely for towns like Raxaul, Jogbani, Harinagar, Narkatiaganj) by State Government.

3. Out of 4 remaining towns along Ganga, DPRs have been received for 3, namely Dighwara, Manihari and Teghra in December 2020 for FSSM scheme. Necessary review in NMCG and through TPA (CSE) is in process. DPR for I&D and STP scheme Jamalpur is awaited.

4. The NIT for Buxar has been published, the bidding for the scheme need to be monitored closely and need to be awarded within next 3 months.

5. It has been mentioned that UD&HD has issued work order dated 24.09.2020 to the successful bidder for the in-situ bioremediation of drains joining Ganga and other polluted rivers for 89 drains. A list of the drains considered for the bioremediation work may be provided in the next MPR along with drain wise stretches allotted to the concerned contractor. The technology used and results of intervention may also be shared.

6. The data captured in Annexure-I, in MPR to be rectified. At present it has been shown that as against the sewage generation of 651 MLD, the present capacity is NIL. This is not a correct statement. As per record available with NMCG, the existing installed STP capacity in Bihar is 90 MLD (Beur STP-20 MLD, Saidpur STP-45 MLD and Pahari STP-25 MLD) and newly constructed STP of 140 MLD (Beur -43 MLD, Saidpur-60 MLD and Karmalichak-37 MLD). Similarly number of STPs in Bihar has been mentioned as NIL. This needs to be corrected.

Contd...2/-

7. The Land NOC is still pending for the following schemes which requires immediate solution for timely implementation of projects namely:
   a. Land NOC for STP and IPS for the Maner I&D and STP scheme is pending;
   b. Land NOC for the 2 IPS land in Bakhtiyarpur is pending, NOC for STP land received only on 2.12.2020;
   c. Land NOC for the IPS-1 in Kankarbagh and IPS-B in Digha is pending
   d. Land NOC for the Begusarai STP is cleared, however compensation issue to be resolved so that work can start at site.

8. Permission is pending from RCD, NHAI and local authorities for various projects. Details of status of the NOC receipt may be made part of next MPR:
   - RCD permission is pending for 39km and NHAI permission is pending for 5.62 km for projects in Patna.
   - For sewerage projects outside Patna, RCD permission is pending for 30.22 km, from NHAI-8.66km (mainly in Naugachia, Begusarai and Chhapra) and Rly crossing permission in Mokama, Begusarai and Sonepur.

9. The tendering for the schemes like Munger, Hajipur, Barahiya, Kahalgaon and Khagaria has been pending for a long. In many of these cases, the guidelines and/or directions of NMCG have not been adhered by State authorities, which has led to inordinate delays in finalization of procurement. These schemes along with Buxar sewerage network and STP need to be awarded without further delay. The concerned officials sitting over the directions/ guidelines of NMCG needs to be directed or else identified so that seamless procurement procedures are implemented without further delays.

I would therefore request your intervention for ensuring necessary action on the decisions taken in the eight meetings at the Central Level, issues highlighted above and directions of Hon'ble NGT vide order dated 21st September 2020.

With regards,

Yours sincerely,

(U.P.Singh)

Shri Deepak Kumar,
Chief Secretary,
Government of Bihar,
Main Secretariat, Patna – 800015.

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

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RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O. No.M-12011/5/2013-NRCD-II/NMCG 18th January, 2021.

Sub: Progress and Expenditure in ongoing projects in Delhi on Yamuna River under Namami Gange implemented by Delhi Jal Board.

Dear Vijay ji,

This is in reference to the ongoing matter OA No. 673 of 2018 in Hon'ble NGT pertaining to the pollution abatement in the 351 polluted river stretches identified by CPCB. Based on the review meetings held at my level on 05/01/2021 and the Monthly Progress Reports (MPRs) received from the State in the matter, I would like to highlight a few points requiring immediate attention:

1. 11 projects with estimated cost of Rs. 2398 crore have been sanctioned for Delhi for pollution abatement works of River Yamuna under Namami Gange Programme. These projects are under various stages of implementation and are being executed by Delhi Jal Board (DJB). It is seen that unimpressive and insignificant progress has been made in last one year.

2. The progress of three crucial projects in Rithala, Kondli and Okhla zone STPs are hindered due to non granting permission for tree cutting/ transplantation by Delhi Government **(enclosed)**. These are long pending issues and were also highlighted in meeting of Hon'ble Minister for Jal Shakti with Hon'ble Chief Minister of Delhi dated 13.10.2020 The necessary permission of tree felling/ transplantation has to be given by GNCTD. Strict instruction need to be issued to the concerned authorities to expedite the same as this has been pending for more than a year.

3. It has come to our notice that contractors are not being paid timely for executed works by DJB. Since the significant share of these projects is borne by Central Government, there should not be any restriction on release of Central's share lying idle with DJB as substantial fund is still available with DJB as Central's share, which could be utilized for resolving this issues and expediting progress of work.

4. All the ongoing projects are very important as these are linked with the performance of other projects e.g. Interceptor Sewer Project etc. By completing these ongoing projects, there will be addition of 12 STPs as per new outlet norms with 11 nos STPs already completed in Delhi, which will be a significant progress in pollution abatement works of Yamuna River.

Contd...2/-

5. Completion timelines of Interceptor Sewer project needs to be closely monitored and should not be allowed to further slip.

In all these issues, your intervention is very much needed as State Government may miss the completion timelines in all these projects. Since these projects are monitored by Hon'ble NGT also, such delays may bring unnecessary legal complications to the State. I shall be thankful if you could kindly look into the matter and instruct DJB and other concerned Departments to resolve these issues on priority & ensure timely completion of projects.

With regards,

Yours sincerely,

(U.P.Singh)

Shri Vijay Kumar Dev
Chief Secretary
Union Territory of Delhi
Delhi Secretariat, IP Estate
New Delhi- 110 113.

Encl : As above.

(Enclosure)

Details of Trees to be cut / transplanted

S.No	STP Details	No of Trees	Date of Application	Status
1.	Rithala STP	88	18/06/2019	Granted
2.	Kondli Phase I&III	492	19/02/2019	Granted
3.	Rithala Ph-I STP	860	17/12/2019	Pending
4.	Kondli Ph-II STP	1142	09/03/2020	Pending
5.	Okhla STP	409	14/10/2019	Pending

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
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GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
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SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

DO. No. Legal/OA/673/2018/NMCG/2019 18th January 2021.

Dear Rajendra,

This is in continuation to my earlier DO letter No. Legal/OA/673/ 2018/NMCG/2019 dated 2nd July 2020 and decisions taken in subsequent CMC meetings in the matter OA No.673 of 2018 pertaining to pollution abatement of 351 polluted river stretches (PRS) identified in the country by CPCB.

2. Based on the above review meetings and in addition to the observation in my above referred letter, I would like to appreciate the progress made in compilation of the baseline information and highlight the following specific points for consideration emerging from the review meetings and monthly progress reports:

(i) It was informed that as per September 2020 monthly progress report, 9 STPs out of 32 STPs were expected to be completed by December 2020. However, construction for only 1 STP at Firozabad has been completed and is under trial run. Efforts should be made to complete remaining 8 STPs at the earliest and other 23 STPs as per indicated timelines.

(ii) LoA for project at Lucknow was issued in September 2020 but the same has run into legal issues. Land issue for Moradabad project is pending for long. The issue for these projects need to be resolved at the earliest.

(iii) Similarly, for Farrukhabad project, in spite NOC being given by NMCG, the LoA has not yet been issued to the successful Concessionaire. The LoA may be issued at the earliest.

(iv) In addition to suboptimal capacity utilization, poor operation and maintenance of the created sewage and industrial effluent treatment infrastructure also appears to be a critical issue of concern evident from the fact that 19 of the 101 STPs are non-complying with prescribed standards apart from 5 non-operational STPs. Action plan for making these STPs compliant needs to be drawn along with timelines. Officials responsible for maintenance of these infrastructures need to be made accountable.

(v) It appears that there is no progress since September 2020 for 4 projects at Balia, Pratapgarh, Jhansi & Kanpur (Baniyapuwa). Efforts should be made to expedite the progress and complete the projects as per the timelines.

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(vi) Capacity utilisation of SWM processing plants needs to be improved. The SWM processing plants at Jaunpur & Fatehpur scheduled for completion by October 2020 have not yet been operational. In addition, there are land issues for 8 SWM plants at Bareily, Firozabad, Loni, Nazibabad, Bhadoi, Basti, Gorakhpur & Akbarpur which needs to be resolved at the earliest.

(vii) The State need to provide STP/ CETP and SWM plant wise monthly incremental progress on projects construction status. In addition, developments in tendering status, DPR status, issues resolved etc. may be indicated in the monthly progress report.

(viii) It has been learnt that Garhmukteshwar STPs constructed under Namami Gange Programme are not operational from last 3 months due to settlement of trunk sewers and choking of network. The issue need to be examined and resolved as soon as possible to ensure no untreated wastewater is discharged into river Ganga.

(ix) Directions issued by Director General, NMCG in respect of non-operational or dysfunctional STPs at Ghaziabad, Noida and Greater Noida needs to be implemented and compliance reported in MPRs.

3. In view of the above, I would request your personal intervention in the matter for ensuring necessary actions on the decisions taken in the meetings at the Central Level and the issues highlighted above.

With regards,

Yours sincerely,

(U.P.Singh)

Shri R.K. Tiwari
Chief Secretary,
Government of Uttar Pradesh,
Secretariat, Lucknow

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

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RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

DO. No. Legal/OA/673/2018/NMCG/2019 18th January 2021.

Dear Sri Arya,

This is in continuation to my earlier DO letter No. Legal/OA/ 673/2018/NMCG/2019 dated 2nd July 2020 and decisions taken in subsequent CMC meetings in the matter OA No.673 of 2018 pertaining to pollution abatement of 351 polluted river stretches (PRS) identified in the country by CPCB.

2. Based on the above review meeting and in addition to the observation in my above referred letters, I would like to appreciate the progress made in compilation of the baseline information and highlight the following specific points for consideration emerging from the review meetings and monthly progress reports:

(i) It emerged that around 24 STPs are in advance stages of construction (progress > 90%). Special efforts need to be taken to ensure their early completion and commissioning preferably by the indicated timeline of March 2021.

(ii) The overall capacity utilization of the sewage treatment plants (STP) in the State is around 69%. There are about 6 lakh households, out of envisaged 15.5 lakh, which are yet to be connected with the sewerage network. These house service connections need to be expedited in fixed timeframe for increasing capacity utilization of these STPs.

(iii) In addition to sub-optimal capacity utilization, the poor operation and maintenance of the created sewage and industrial effluent treatment also appear to be a critical issue of concern evident from the fact that 11 of the 14 operational CETPs and 39 of the 80 STPs are non-complying with prescribed standards. Action plan for making these STPs/ CETPs compliant needs to be drawn along with timelines.

(iv) State is having capacity to process & recycle just 37% of its municipal solid waste generation. The SWM processing capacity needs to be enhanced and a detailed action plan may be developed and sent.

(v) The State need to develop a mechanism for daily assessment and reporting of capacity utilization and compliance status in respect of all its existing STPs and CETPs.

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(vi) The state need to provide STP/ CETP and SWM plant wise monthly incremental progress on project's construction status. In addition, developments in tendering status, DPR status, issues resolved etc. may be indicated in the monthly progress report.

(vii) Legal issue for STPs at Bhiwadi and Hanumangarh (2 nos.) needs to be resolved.

(viii) 2 STPs at Mandiya and Nokha are complete since September 2020. Efforts should be made to make these operational.

(ix) The action plans drawn appears to be generic & vague with no clarity on projects, activities & sub-activities, intermediate milestones, time lines, current status of implementation etc.

3. In view of the above, I would request your personal intervention in the matter for ensuring necessary actions on the decisions taken in the meetings at the Central Level and the issues highlighted above.

With regards,

Yours sincerely,

(U.P.Singh)

Shri Niranjan Kumar Arya
Chief Secretary,
Government of Rajasthan,
Secretariat, Jaipur – 302005

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

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SHRAM SHAKTI BHAWAN
RAFI MARG, NEW DLEHI-110 001
http://www.mowr.gov.in

D.O.No.Legal/OA673/2018/NMCG/2019 (Part File) 18th January, 2021.

Dear Sukhdev,

This is in reference to the ongoing matter OA No. 673 of 2018 in Hon'ble NGT pertaining to the pollution abatement in the 351 polluted river stretches identified by CPCB. Based on the review meetings held at my level and the Monthly Progress Reports (MPRs) received from the State in the matter, I would like to highlight a few points requiring immediate attention:

1. The total urban population in Jharkhand is about 79,33,061 which corresponds to sewage generation of around 700 MLD (approx.), against this State has reported sewage generation of 452 MLD in the MPR, this needs to be revisited and reviewed.

2. Total GAP in treatment capacity remains 504 MLD. Out of this in the CMC meeting dated 5.1.2021, it has been mentioned that 331 MLD STP is proposed. A FSTP is also working at Chas ULB.

3. Earlier, 232 MLD of STP was proposed in Ranchi, out of this only 63 MLD (10+16+37) is reported to be created. Clarity may be given on creation of the remaining STP capacities.

4. Funding for I&D and STP scheme in Dhanbad and Ramgarh, is yet to be firmed up.

5. State may ensure timely submission of the MPR as the MPR for November & December was submitted after the CMC meeting held on 5th January 2021.

I would, therefore, request your intervention for ensuring necessary action on the decisions taken in the eight meetings at the Central Level, issues highlighted above and directions of Hon'ble NGT vide order dated 21st September 2020.

With regards,

Yours sincerely,

(U.P.Singh)

Shri Sukhdev Singh
Chief Secretary,
Government of Jharkhand,
1st Floor, Project Building,
Dhurwa, Ranchi-834004

यू. पी. सिंह
U.P. SINGH
सचिव
SECRETARY
Tel : 23710305
Fax : 23731553
E-mail : secy-mowr@nic.in

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D.O. No. Legal/OA673/2018/NMCG/2019 (Part File) 18th January, 2021.

Dear Dr Jain,

This is in reference to the ongoing matter OA No. 673 of 2018 in Hon'ble NGT pertaining to the pollution abatement in the 351 polluted river stretches identified by CPCB. Based on the review meetings held at my level and the Monthly Progress Reports (MPRs) received from the State in the matter, I would like to highlight a few points requiring immediate attention:

1. The total sewage generation in Chhattishgarh is 600 MLD as against at present the installed capacity is only 73.1 MLD. STPs of 238 MLD are under construction in polluted river stretches and DPR have been prepared for STPs of 75.5 MLD capacity.

2. It is understood that the Government of Chhattisgarh is working for DPR preparation for the STP in Bhilai-Durg (Population 10 Lakh+) but clear picture has not come up yet. It is requested to provide the current status of DPR preparation/ tendering/ work award in the next MPR.

3. Out of the total installed capacity of 73.1 MLD, roughly 6 MLD capacity is being utilized mainly due to non completion of trunk line (3.5 km remaining) and sewerage pumping stations. These works will be completed by June 2021. However, the progress of network and pumping station need to be captured in the next MPR.

4. Regarding the Korba STP (35 MLD), it was agreed that the matter will be sorted out with NTPC very soon regarding the purchase of treated waste water from the STP. As per the notification of Ministry of Power, NTPC is bound to purchase the treated waste water from the STP and necessary polishing/ treatment of the treated waste water to the requirement of the thermal power plant including conveyance of the treated waste water shall be the responsibility of NTPC. The matter may be pursued accordingly.

5. For the several other STPs like Rajim (2.8 MLD), Simga (2.8 MLD), Kanker (7.88 MLD), Dhamtiri (19.6 MLD) and Nawapara (7.5 MLD), DPRs are ready and is under tendering. However, it appears that the funding for these schemes are not yet finalized. In the meeting it was requested to be funded from NMCG. It was made clear to the State authorities that cleaning of polluted river stretch is primarily the responsibility of the State Government irrespective of funding available from NMCG or not. At present, NMCG has sanctioned projects in excess of approved outlay. New projects can be considered after approval of Cabinet for revised outlays.

Contd...2/-

6. It is noted that State has established Faecal Sludge Management in all the 166 ULBs including FSTPs. Details of the same including present utilization of the FSTPs and the treated effluent quality may be provided. In addition, the remediation of quantity of municipal sewage from the ULBs due to utilization of these FSTPs may be provided.

7. For the ongoing projects in Jagdalpur (25 MLD), Rajnadgaon (6.2 MLD), Raigarh (4 STPs with 206 MLD capacity) progress is found slower when compared with previous months, on an average 2% physical progress from previous months. This needs to be expedited to ensure the completion of these projects by June 2021.

I would therefore request your intervention for ensuring necessary action on the decisions taken in the eight meetings at the Central Level, issues highlighted above and directions of Hon'ble NGT vide order dated 21st September 2020.

With regards,

Yours sincerely,

(**U.P.Singh**)

Shri Amitabh Jain
Chief Secretary,
Government of Chhattisgarh,
Mahanadi Bhawan, Mantralaya,
Naya, Raipur – 492002

Annexure-II

Legal/OA673/2018/NMCG/2019
National Mission for Clean Ganga
Department of Water Resources, River Development
& Ganga Rejuvenation, Ministry of Jal Shakti

I st Floor,
Major Dhyan Chand National Stadium
India Gate, New Delhi-110002
Dated: 8th October 2020

OFFICE MEMORANDUM

Subject: **Minutes of the 6th meeting of Central Monitoring Committee in the NGT Matter OA No.673 of 2018 held on 30.09.2020 from 10.00 AM onwards**

A copy of Minutes of the 6th Meeting of Central Monitoring Committee in the NGT matter O.A. No. 673 of 2018 held through Video Conference on 30.09.2020 from 10.00 AM onwards under the Chairmanship of Secretary, Ministry of Jal Shakti is forwarded herewith for information/ necessary action.

(D. P. Mathuria) 08.10.2020
Executive Director -Technical
National Mission for Clean Ganga
uyrb-mowr@nic.in

Encl: As above.

To,

1. Chief Secretary, Government of Andhra Pradesh, I st Block, A.P Secretariat Office, Velagapudi – 522503
2. Chief Secretary, Government of Assam, Block- C, 3rd Floor, Assam Sachivalaya, Dispur - 781006, Guwahati
3. Chief Secretary, Government of Bihar, Main Secretariat, Patna – 800015
4. Chief Secretary, Government of Chhattisgarh, Mahanadi Bhawan, Mantralaya, Naya, Raipur – 492002
5. Chief Secretary, Government of Goa, Secretariat, Porvroim, Bardez, Goa – 403521
6. Chief Secretary, Government of Gujarat, 1st Block, 5th Floor, Sachivalaya, Gandhinagar – 382010
7. Chief Secretary, Government of Haryana, 4th Floor, Haryana Civil Secretariat, Sector-1, Chandigarh – 160019
8. Chief Secretary, Government of Himachal Pradesh, H P Secretariat, Shimla –171002
9. Chief Secretary, Government of Jammu & Kashmir, R. No. 2/7, 2nd Floor, Main Building, Civil Secretariat, Jammu -180001

10. Chief Secretary, Government of Jharkhand, 1st Floor, Project Building, Dhurwa, Ranchi-834004
11. Chief Secretary, Government of Karnataka, Room No. 320, 3rd Floor, Vidhana Soudha, Bengaluru -560001
12. Chief Secretary, Government of Kerala, Secretariat, Thiruvananthapuram -695001
13. Chief Secretary, Government of Madhya Pradesh, MP Mantralaya, Vallabh Bhavan, Bhopal – 462004
14. Chief Secretary, Government of Maharashtra, CS office main Building, Mantralaya, 6th floor, Madame Cama Road, Mumbai – 400032
15. Chief Secretary, Government of Manipur, South Block, Old Secretariat, Imphal – 795001
16. Chief Secretary, Government of Meghalaya, Main Secretariat Building, Room no 316, Shillong – 793001
17. Chief Secretary, Government of Mizoram, New Secretariat Complex, Aizwal – 796001
18. Chief Secretary, Government of Nagaland, Civil Secretariat, Kohima – 797004
19. Chief Secretary, Government of Odisha, General Administration Department, Odisha Secretariat, Bhubaneswar – 751001
20. Chief Secretary, Government of Punjab, Chandigarh – 160001
21. Chief Secretary, Government of Rajasthan, Secretariat, Jaipur – 302005
22. Chief Secretary, Government of Sikkim, New Secretariat, Gangtok – 737101
23. Chief Secretary, Government of Tamil Nadu, Secretariat, Chennai-600009
24. Chief Secretary, Government of Telangana, Block C, 3rd floor, Telangana Secretariat Khairatabad, Hyderabad, Telangana
25. Chief Secretary, Government of Tripura, New Secretariat Complex Secretariat – 799010, Agartala, West Tripura
26. Chief Secretary, Government of Uttar Pradesh, 1st floor, Room No. 110, Lal bahadur Sastri Bhawan, Uttar Pradesh Secretariat, Lucknow – 226001
27. Chief Secretary, Government of Uttarakhand, 4 Subhash Road, Uttarakhand, Secretariat Dehradun – 248001
28. Chief Secretary, Government of West Bengal, Nabanna, 13th Floor, 325, Sarat Chatterjee Road, Mandirtala, Shibpur, Howrah – 711102
29. Administrator, Daman & Diu and Dadra and Nagar Haveli, Secretariat, Moti, Daman -396220
30. Chief Secretary, Govt. of NCT of Delhi, Delhi Secretariat, IP Estate, New Delhi – 110002
31. Chief Secretary, Govt. of Puducherry, Main Building, Chief Secretariat, Puducherry-605001

Copy To:

1. Secretary, Department of Forest, Ecology & Environment, J&K, Room no. 2/33-34, Main Building, Civil Secretariat, J&K, Jammu.
2. Secretary, Department of Environment, Science and Technology Paryavaran Bhawan, Near US Club, Shimla, Himachal Pradesh-171001
3. Principal Secretary, MGSIPA Complex, Sector-26, adjacent Sacred Heart School, Chandigarh, 160019
4. Additional Chief Secretary to Govt. of Haryana, Environment Department of Environment & Climate Change, R.No. 108, 7th Floor, Main Secretariat Sec16, Chandigarh 160017

5. Principal Secretary, Department of Environment, U.P., Room No. 601, Bapu Bhawan Secretariat, Vidhan Sabha Marg, Lucknow – 226001.
6. Special Chief Secretary, Department of Environment, Forest, Science & technology, 4th Block, Ground Floor,Room No:268, A.P Secretariat Office, Velagapudi
7. Secretary, Department of Environment and Forest, H-Block, 2nd Floor Janata Bhawan, Dispur, Guwahati 781006, Assam
8. Principal Secretary, Department of Environment, Forest and Climate Change, Van Vibhag Rd, Nehru Nagar, Patliputra Colony, Patna, Bihar 800013
9. Additional Chief Secretary (Forests & Environment), Forests & Environment Department, Block 14, 8 th floor, Sachivalaya, Gandhinagar - 382 010 Gujarat.
10. Principal Secretary, Department of Environment, Room No. S-2/23, Mahanadi bhawan, Mantralaya, Nava Raipur, Atal Nagar, Raipur - 492001
11. Additional Chief Secretary to Government, Forest, Environment and Ecology, Department, Karnataka Government Secretariat, Room No. 447, 4th Floor, Gate no. 2, Multi-storey Building, Bangalore-560001.
12. Principal Secretary, Department of Environment, Room No. 406 4th Floor Annex II, Secretariat, Kerala Thiruvananthapuram, Kerala, PIN- 695001
13. Principal Secretary, Department of Housing and Environment, Government of Madhya Pradesh, Paryavaran Parisar, E- 5, Arera Colony, Bhopal, Madhya Pradesh, 462016
14. Principal Secretary, Environment Department, Maharashtra 15th Floor, New Administrative Building, Madam Cama Road, Mantralaya, Mumbai – 400032
15. Additional Secretary, Forests & Environment Deptt, Secretariat Building, North Range, Forest Colony, Khasi Hills, Shillong, Meghalaya 793001
16. Deputy Conservator of Forest (Headquarters) Environment, Forests & Climate Change Department Tuikhuahtlang, Aizawl Mizoram.
17. Principal Secretary, Department of Environment, Forest & Climate Change, New Secretariat, Kohima, Nagaland Tel.- 0370-2243025
18. Additional Chief Secretary, State Silvicultural garden, Khandagiri, Bhubaneswar, Odisha 751003
19. Principal Secretary, Forest and Environment Department, Rajasthan 4, Jhalana Institutional Area, Jhalana Doongri, Jaipur, Rajasthan 302004
20. Principal Secretary, Chief Project Director (SBFP-JICA), Forests, Environment & Wildlife Management Department, Government of Sikkim
21. Principal Secretary, Namakkal Kavignar Maaligai, Fort St. George, Chennai 600 009
22. Secretary, Department of Science, Technology & Environment, Vigyan Prajukti O Paribesh Bhawan, P.N. Complex, Gorkhabasti, Agartala,West Tripura, PIN-799006
23. Special. Chief Secretary, TSCOST, 4th Floor, Aranya Bhavan, Saifabad, Hyderabad, Telangana State, Pin – 500004
24. Deputy Conservator of Forests, (Territorial Division), Department of Environment & Forest Office of the Deputy Conservator of Forest, Daman, Fort Area, Post Office Moti Daman Daman & Diu (U.T.)
25. Deputy Conservator of Forests, (Territorial Division), Van Bhavan, Dadra and Nagar Haveli

26. Secretary, Department of Environment, Govt. of NCT of Delhi, 6th Floor, Delhi Secretariat, IP Estate, New Delhi 110002
27. Secretary, Environment & Forest, Govt. of Uttarakhand, 4 Subhash Road, Secretariat, Forth Floor, New Building Dehradun, Pin code-248001
28. Joint Secretary, Department of Science, Technology & Environment, 1st Floor, Pandit Deendayal Upadhay Bhavan, Behind Pundalik Devasthan, Near Sanjay School, Porvorim, Bardez - Goa
29. Secretary, Environment, Office of Environment, Chief Secretariat, Goubert Avenue, Puducherry 605001
30. Principal Secretary, Department of Environment, 5th Floor, Pranisampad Bhawan, Block LB-II, Salt Lake, Sector III, Bidhannagar, Kolkata – 700 106
31. Additional Chief Secretary Forest, Environment & Climate Change Deptt., Nepal House, Doranda, Ranchi-834002, Jharkhand
32. Additional Chief Secretary, Forest and Environment Department, Government of Manipur, Secretariat, Imphal- 705001
33. The Member Secretary, Assam Pollution Control Board, Bamunimaidam, Guwahati – 781021
34. The Member Secretary, Andhra Pradesh Pollution Control Board D.No. 33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre, Chalamalavari Street, Kasturibaipet, Vijayawada – 520 010
35. The Member Secretary, Bihar State Pollution Control Board, Parivesh Bhawan, Plot No. NS-B/2 Paliputra Industrial Area, Patliputra, Patna (Bihar) - 800 010
36. The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhavan, North Block Sector-19, Atal Nagar Dist- Raipur (C.G.) 492002
37. The Member Secretary, Delhi Pollution Control Committee, Government of N.C.T. Delhi 4th Floor, ISBT Building, Kashmere Gate, Delhi-110006
38. The Member Secretary, Daman, Diu & Dadra Nagar Haveli Pollution Control Committee, Office of the Deputy Conservator of Forests, Fort Area, Court Compound, Moti Daman, Daman – 396220
39. The Member Secretary, Goa State Pollution Control Board, 1st Floor, Dempo Tower, EDC Patto Plaza, Panaji, Goa-403 001
40. The Member Secretary, Gujarat Pollution Control Board Paryavan Bhavan, Sector 10- A, Gandhinagar – 382 043
41. The Member Secretary, Haryana State Pollution Control Board, C-11, Sector-6, Panchkula-134109, Haryana
42. The Member Secretary, Himachal Pradesh Pollution Control Board, Him Parivesh, Phase-III, New Shimla, Himachal Pradesh 171009
43. The Member Secretary, Jammu & Kashmir State Pollution Control Board, Parivesh Bhawan, Forest Complex, Gladni, Narwal, transport Nagar, Jammu, Jammu and Kashmir 180004
44. The Member Secretary, Jammu & Kashmir State Pollution Control Board, Shiekh-ul-Campus, behind Govt. Silk Factory, Raj Bagh, Srinagar (J&K)
45. The Member Secretary, Jharkhand Pollution Control Board, T.A Building, HEC, P.O. Dhurwa, Ranchi – 834004

46. The Member Secretary, Karnataka State Pollution Control Board, Parisara Bhavan, 4th & 5th Floor, # 49, Church St., Bengaluru-560 001
47. The Member Secretary, Kerala State Pollution Control Board, Plamoodu Jn., Pattom Palace P.O. Thiruvananthapuram - 695 004
48. The Member Secretary, Manipur Pollution Control Board, Lamphelpat, Imphal West D.C. Office Complex Imphal– 795004
49. The Member Secretary, Meghalaya Pollution Control Board Arden- Lumpyngngad Shillong: 793014
50. The Member Secretary, Nagaland Pollution Control Board, Signal Point, Dimapur Nagaland – 797112
51. The Member Secretary, Madhya Pradesh Pollution Control Board, E-5, Arera Colony, Paryavaran Parisar, Bhopal - 462 016, Madhya Pradesh
52. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 2nd – 4th Floor Opp. Cine Planet Cinema, Nr. Sion Circle, Sion (E) Mumbai – 400 022
53. The Member Secretary, Mizoram Pollution Control Board, New Secretariat Complex, Khatla Thlanmual Peng, Khatla, Aizawl, Mizoram: 796001
54. The Member Secretary, Puducherry Pollution Control Committee, Housing Board Complex, Anna Nagar, Puducherry -600 005
55. The Member Secretary, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala, Punjab 147001
56. The Member Secretary, Odisha Pollution Control Board, A-118, Nilakanta Nagar, Unit – VIII, Bhubaneshwar – 751012
57. The Member Secretary, Rajasthan Pollution Control Board, 4, Jhalana Institutional Area, Jhalana Doongri, Jaipur (Rajasthan) - 302 004
58. The Member Secretary, Sikkim State Pollution Control Board, Department of Forest, Environment & Wildlife Management Government of Sikkim, Deorali, Gangtok, - 737102
59. The Member Secretary, Telangana State Pollution Control Board, Paryavaran Bhawan, A-3, I.E. Sanath Nagar, Hyderabad-500 018
60. The Member Secretary, Tripura Pollution Control Board, Vigyan Bhawan, Pandit Nehru Complex, Gorkhabasti, PO: Kunjaban Agartala – 799006
61. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600 032
62. The Member Secretary, Uttarakhand Environmental Protection & Pollution Control Board, 29/20, Nemi Road, Dehradun, Uttarakhand – 248001
63. The Member Secretary, Uttar Pradesh Pollution Control Board, Building.No. TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow-226 010
64. The Member Secretary, West Bengal Pollution Control Board, Paribesh Bhavan, 10A, Block-L.A., Sector III, Salt Lake City, Kolkata - 700 106

Copy for kind information:

1. PPS to Secretary, Ministry of Jal Shakti, Shram Shakti Bhavan, Rafi Marg, Sansad Marg Area, New Delhi- 110001
2. PS to Director General, NMCG cum Project Director, NRCD

3. Chairman, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032
4. Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032
5. PS to ED (/Project/ Finance), NMCG
6. Adviser, NRCD

Minutes of the 6th meeting of the Central Monitoring Committee held on 30.09.2020 through Video Conferencing regarding 351 polluted river stretches based on the directions of Hon'ble NGT in the matter OA No. 673 of 2018

The 6th meeting of the Central Monitoring Committee (CMC) constituted by Hon'ble NGT in the matter OA No. 673 of 2018 was held through Video Conferencing with the States on 30.09.2020 from 10.00 AM onwards in Conference Room, NMCG under the Chairmanship of Secretary, Ministry of Jal Shakti. The list of participants of NMCG, NRCD and CPCB present at the meeting is at ***Annexure-I.***

II. Director General, NMCG welcomed all participants.

Secretary, Ministry of Jal Shakti informed that the previous meetings of CMC focussed primarily on sewage and industrial waste management. However, as per NGT orders, solid waste management, ground water regulation, issues relating to removal of encroachment from floodplains, etc. also need to be addressed. Therefore, in this meeting, discussions regarding solid waste management, industrial pollution in the States/UTs shall also be taken up. It was stressed that each State should have proper database with regards to sewage, industrial effluent, solid waste, hazardous waste and biomedical waste as well as its management. Data should be collected in respect of the whole State and also proper monitoring mechanism should be adopted by the States. Further, for proper functioning of the STPs, the States were suggested to adopt HAM based model. The States were also advised to take up Faceal Sludge Management wherever STP is not technically and economically feasible. Further, it was suggested that States should have a policy for recycle and reuse of treated water, which could also include providing incentives for the best practices. It was highlighted that management of solid waste is a major issue apart from sewage & industrial effluent, which also needs adequate attention and monitoring of the existing infrastructure. The States need to ensure that the existing solid waste processing facilities are optimally utilized, sanitary landfill sites are properly maintained, dumping on floodplains/ghats needs to prevented & checked regularly, and screens/ traps may be installed on the drains and should be regularly cleaned.

Executive Director (Technical), NMCG informed that the 2nd Quarterly Report of the CMC was submitted on 15th September, 2020 before the hearing of NGT. Further, it was informed that NGT in the hearing held on 21.09.2020 in OA No. 673 of 2018 had also considered O.A No. 593/2017- Paryavaran Suraksha Samiti Vs. Union of India related to the establishment and functioning of ETPs/CETPs/STPs, O.A. No. 148/2016: Mahesh Chandra Saxena Vs South Delhi Municipal Corporation & Ors. related to the utilization treated water, O.A. No.

606/2018 related to monitoring compliance of Municipal Solid Waste Management Rules-2016, O.A. 829/2019: Lt. Col. Sarvadaman Singh Oberoi Vs Union of India & Ors. related to coastal pollution on account of discharge of untreated effluent in the 13 coastal States and O.A. 1038/2018: related to industrial pollution management. NGT vide its order dated 24.09.2020 (based on the hearing held on 21.09.2020) has directed that all the issues in these OAs need to be monitored by CMC. Accordingly, a template would be finalsed and shall be circulated to the States for submission of requisite information as pertaining to implementation of directions of NGT for these OAs. It was also informed that after consideration of the reports submitted, NGT observed that effort should be for '*each city - each STP'* based monitoring. The Tribunal stressed for implementation of bioremediation/ phyto-remediation as an interim measure for improving the water quality in the drains and rivers with NMCG adopting a mentor like approach in the endeavour. With regards to the re-use of treated water, the need to have quantifiable data from the State was stressed. The Tribunal appreciated the success of Feacal sludge management model in Odisha and Chhattisgarh, and directed that it should be adopted in other places where there is problem of laying sewerage lines as well as on merits. Further, it was directed to develop a national portal housing water related information for effective monitoring of issues of management of sewage and industrial effluent. The Tribunal also observed that their direction for developing model river stretches of PRS have not been complied by the States/UTs. Best practices followed for rejuvenation of model stretch should be documented and shared with all the States. CSR funds may be tapped for sewage management and Ministry of Jal Shakti should take lead in assisting States in this regard. The Tribunal also extended the scope of CMC to include overseeing the aspect of coastal pollution in 13 coastal States/UTs, which are being monitored by MoEF&CC. Therefore, representation from MoEF&CC, MoHUA and CPCB in these regard shall be sought for participation in the future meetings of CMC. However, CPCB, National Coastal Zone Management Authority and State regulators shall continue to perform their regulatory functions and assist CMC in this regard. Tribunal wanted CMC to consider development of an appropriate App to enable easy filing and redressal of grievances with regard to illegal discharge of sewage/ effluents.

Secretary, Ministry of Jal Shakti highlighted that in the daylong meeting of the CMC, it would not be possible to discuss each city wise details of the STPs, therefore States should provide details in their Monthly Progress Reports (MPR) and suggested that higher officials in the States should also have regular internal meetings to monitor the STP projects. With regard to submission made for delisting criteria of PRS, the Tribunal has observed that it should be allowed only in case of consistent compliance of standards over a sufficient long

period of time. With regards to tapping of CSR funds, States should look for contribution of big industries in their State and should engage them.

III. Subsequently, State-wise discussions held are as follows:

Executive Director Technical (ED Tech), NMCG through a presentation briefed about the status of sewage, industrial and solid waste management in the States, as per the information submitted in MPR and the State dossiers. The information provided by the States were found to be inadequate in most cases, and therefore the States were requested to provide following information in their next MPRs:

With regard to the industrial pollution management:

- No. of industries in the State
- No. of water polluting industries in the State
- Quantity of effluent generated from the industries in MLD
- Quantity of hazardous sludge generated from the industries in TPD
- Number of industrial units having ETPs
- Number of industrial units connected to CETP
- Number and total capacity of ETPs (details of existing/ under construction / proposed)
- Compliance status of the ETPs
- Number and total capacity of CETPs (details of existing/ under construction / proposed)
- Status of compliance and operation of the CETPs

With regard to solid waste management:

- Total number of Urban Local Bodies and their population
- Current municipal solid waste generation
- Number, installed capacity and utilization of existing MSW processing facilities in TPD (bifurcated by type of processing eg- Waste to Energy (Tonnage and Power Output), Compost Plants (Windrow, Vermi, decentralized pit composting), biomethanation, MRF
- Action plan to bridge gap between installed capacity and current utilization of processing facilities (if gap > 20%)
- No. and capacity of C&D waste processing plants in TPD (existing, proposed and under construction)
- Total no. of wards, no. of wards having door to door collection service, no. of wards practicing segregation at source falling into PRS

- Details of MSW treatment facilities proposed and under construction (no., capacity, and technology)
- No. and area (in acres) of uncontrolled garbage dumpsites and sanitary landfills.
- No. and area (in acres) of legacy waste within 1km. buffer on both side of the PRS
- No. of drains falling into PRS and no. of drains having floating racks/screens installed to prevent solid waste from falling into PRS

1. <u>Gujarat</u>

ED Tech, NMCG informed that in the previous meeting of the Committee, the State had informed that a high level Committee meeting would be held soon to resolve the land allotment issues in 34 proposed STP sites and requested the State to provide updated status on this issue as well as the deep sea disposal project. With regards to industrial pollution, it was informed that State has 43,039 industries, of which 7701 industries have ETPs installed and there are 34 CETPs operational in the State. As per the details submitted by State, it generates total municipal solid waste of 10149 MTD, of which treatment capacity of 8544.88 MTD exists. State needs to provide details of the existing facilities and utilization capacity of these plants. State already has a treated wastewater reuse policy and is following up on the same.

Member Secretary, Gujarat Pollution Control Board informed that the high level Committee meeting was held on 10.09.2020 under the Chairmanship of Chief Secretary, Gujarat, wherein discussions with regard to the issues pertaining to land allotment were held and timeline for the same has been fixed. Further, it was informed that for the projects wherein completion dates are being extended beyond the NGT timeline, the State is planning to approach NGT seeking extension of time. With regards to the deep sea disposal pipeline project, it was informed that tenders are likely to be floated within a month's time for Jedpur, Ahmedabad and Vadodara area. Further, it was also informed that CPCB convened a meeting on the deep sea disposal project under the chairmanship of Member Secretary, CPCB, minutes of which are awaited. For one of the areas where pipeline is to be laid, CPCB has asked for a detailed study before the norms can be fixed. Work has started on the CETP at Danilimda, which was held up due to COVID-19 pandemic. Action plans have been prepared by PHED for abatement of rural sewage. With regards to reuse of treated water, it was informed that 600 MLD of treated wastewater is being re-used and 1000 MLD is planned to be reused in future in different activities. It was informed that while 20 rivers stretches were identified as polluted, however as per the latest monitoring data only 8 river stretches remain polluted.

Further, it was informed that the State generates 10,798 MTD of municipal solid waste, of which 100% is collected and about 70% waste is being processed and the remaining 30 % is being dumped, for which processing plants are being planned and are expected to be commissioned by next year. With regards to plastic waste management, it was informed that MoEF&CC's EPR is being implemented, which also includes remediation of legacy waste and plastic is being recovered and recycled.

Secretary, Ministry of Jal Shakti highlighted that solid waste can be seen dumped/ littered everywhere in major cities as well as rural areas. He suggested that after submission of detailed information by the States, issues may be separately discussed in detail. NMCG was directed to convene a workshop in collaboration with CPCB on solid waste management – centralized and decentralized approach, for disseminating information to all the States. CPCB was directed to look into the matter of deep sea disposal project and expedite the process.

2. <u>Maharashtra</u>

ED Tech, NMCG informed that issues discussed in the previous meeting of the Committee were communicated to the Chief Secretary, Maharashtra vide DO letter of 14.09.2020. The issues highlighted included 8 non-operational STPs out of 138 STPs in the State, 21 non-complying STPs and delay in Mula-Mutha project. With regards to industrial pollution in the PRS, it was informed that 7946 industries are operational having total industrial discharge of 343 MLD, all the industries are having ETPs and there are 14 CETPs of 83.3 MLD existing and 3 CETPs are proposed - 1 MLD at Satpur (tender awarded), 0.64 MLD in Sangli (90% completed) and 1.2 MLD at Ichalkaranji (no progress). Compliance status of the existing CETPs needs to be provided in the MPR by the State. It was informed that the State generates 23607 MT/day of municipal solid waste and has treatment facilities of 17420 MT/day. ULB-wise details for existing and proposed facilities need to be provided. With regard to the reuse of treated water, infrastructure projects under the State recycle 60% of treated sewage for secondary use by providing duel pipeline and Thermal Power Plants are utilizing the treated water. Further, incremental progress against each activity has not been provided in the MPR. None of the 81 drains (56 of P-I & 25 of P-II) discharging untreated sewage to the identified PRS have been provided with in-situ bio-remediation. Performance evaluation of 13 FSTPs has not been provided in terms of reduction in pollution load.

Member Secretary, Maharashtra Pollution Control Board informed that out of the non-operational 8 STPs of total capacity 271 MLD, commissioning of 3 STPs of 112 MLD is under progress, 3 STPs of 62 MLD have been commissioned (connections under progress),

one STP of 90 MLD at Pune is to be replaced with 127 MLD, one STP of 4.2 MLD is under maintenance and one STP of 3.6 MLD is to be upgraded. He further informed that ULB wise information with regards to solid waste and industrial waste shall be submitted along with the next MPR.

Secretary, Ministry of Jal Shakti observed that there was no change in the status as compared to that reported during the last CMC meeting. He took cognizance of the fact that given the progress of the proposed STPs, timelines directed by NGT in this regard are not likely to be met, and the work is required to be expedited for compliance in letter and spirit. He also insisted for rigorous monitoring of the STPs of total capacity 80 MLD & 202 MLD proposed for completion by April, 2020 and April, 2021 to achieve the target.

3. <u>Punjab</u>

ED Tech, NMCG informed that negligible progress has been made over the last few months in the two on-going CETP projects of 40 and 50 MLD at the textile clusters in Ludhiana, which have completion timeline of December 2020. Status of 9 STPs having land acquisition issues needs to be appraised. Further, it was informed that a total of 171 MLD of industrial effluent is being generated, which is treated in 509 ETPs operational in the catchment area of rivers. 4 CETPs of total installed capacity of 20.535 MLD exist, of which, 2 CETPs are complying with the norms. One CETP of 5 MLD at Jalandhar is shut down due to non-compliance and for up-gradation of the plant, tender is under evaluation. A new 15 MLD CETP for textile dyeing at Ludhiana is under stabilization. With regards to solid waste management in the State, it was informed that 97.3% house-holds are covered under door to door collection. 78% households are practicing segregation at source with proposed target for 100% coverage by 31.03.2021. Out of 4100 TPD MSW generated in the State, 1930 TPD of wet waste is processed in decentralized compost pits (5940 no.), including Central Processing Plants set up at Ludhiana & Bathinda. 950 TPD of dry waste is being processed at Central Processing facilities of 800 TPD and 150 TPD set up at MC, Ludhiana and Bathinda respectively. Remaining 1230 TPD is being sent to dump sites of respective ULBs for land filling. Setting of 3 Waste to Energy Plants are proposed for 100 % processing of waste. With regards to reuse of treated water, Government of Punjab has notified the "State Treated Waste Water Policy 2017" to promote recycling and reuse of treated sewerage for non-potable applications. Till date, 47 number projects have been completed by Department of Soil & Water Conservation, Punjab for using 243.3 MLD treated wastewater of STPs. These projects have been implemented by laying underground pipeline system for irrigation water

conveyance covering an area of 7652 hectares. The Department further proposes to utilize 1238.8 MLD of treated wastewater from 164 existing, under progress and proposed/new STPs for irrigation purposes for an agricultural area of 37,683 hectares.

Secretary, Ministry of Jal Shakti appreciated that efforts being put in by the State for management of solid waste and re-use of treated water. However, it was highlighted that major concern remains with regard to the two on-going CETPs for textile cluster, Buddha Nallah project and the shifting of dairies in Ludhiana. Secretary, Ministry of Jal Shakti suggested that viability of PPP model for utilisation of dairy waste towards bio-methanisation can be explored to turn around this segment of pollution into an opportunity.

Principal Secretary (Environment), Punjab informed that 28 MLD STP at Phagwara has been awarded by Water Mission award in 2019 by MoJS. It was informed that slow progress of the 40 and 50 MLD CETPs is attributed to the remaining electrical works and installation of mechanical equipments, for which supply has been received and the installation works shall commence shortly. Civil works of these plants have been completed and efforts are being made to complete the CETPs by December 2020. With regards to stabilisation of new 15 MLD CETP, it was informed that final confirmation from MoEF&CC is awaited. Details of the existing/ on-going/ proposed STPs are provided in the MPR. With regard to the STPs, it was informed that 5 new tenders have been opened, work has been allotted for one STP, technical evaluation for 3 STPs is in progress and tender for one has been recently allotted. With regards to the Buddha Nallah project, it was informed that a comprehensive plan has been made and date for submission of tender has been extended due to certain clarifications. Shifting of dairies is being contemplated, and the decision in this regard is under process.

4. <u>Tamil Nadu</u>

ED Tech, NMCG informed that issues discussed in the previous meeting of the Committee were communicated to the Chief Secretary, Tamil Nadu vide DO letter of 24.09.2020. It was informed that the State generates about 2070 MLD of sewage, for which STPs of 1484 MLD capacity have been installed, which have a poor utilisation capacity of only 798 MLD (53%) and includes few non-complying STPs. The progress of 17 STPs and 66 FSTPs of total 580 MLD capacity and 8 CETPs proposed for bridging the gap in treatment capacity appears to be slow. As per the MPR submitted by the State, 100% of the industrial effluent generated along the polluted river stretches is being treated, which needs to be verified and updated status in this regard to be provided. With regard to the solid waste management, it was informed that the State generates 15,288 MTD of municipal solid waste, of which 7,429 MTD is being

treated in the existing facilities. State has informed that it has established solid waste management facilities in the village panchayats with required infrastructure facilities like segregation cum storage sheds, street garbage collection bins, etc. for collection, segregation and safe processing of waste. Solid waste collected is segregated into biodegradable and non-biodegradable components, and the bio-degradable waste is converted to compost and provided to farmers for agricultural and other purposes. It is also proposed to establish 300 Micro-Composting Centres (MCC) in Peri-Urban/ bigger village panchayats.

Additional Chief Secretary (Environment), Tamil Nadu informed that the State has gone through the recent order of NGT in the matter and are trying to comply with the orders. With regard to the 61 STPs which are under construction in the State, close monitoring of the progress is being made and STP wise progress shall be shared. Further, it was informed that 12 STPs existing in the polluted river stretches are working well. 9 STPs are under construction stage and are expected to be completed by June 2022. 31 STPs are under tendering/ DPR stage. State has assured to improve the capacity utilisation, which has already increased slightly from July to August 2020. All the industrial units whether ZLD or not, are using CETPs and 81 MLD of treated effluent is being reused daily. All local bodies are directed to prepare a plan to reuse treated sewage as well. From recharge perspective, the State has proposed "Nadanathai Vaazhi Cauvery" scheme (currently under DPR stage) to rejuvenate river Cauvery. MGNREGA is a very big component in this proposal. For rejuvenation of polluted river stretches, 85 different structures including barrages, check dams etc., have been completed, another 23 structures are under construction which shall be completed soon. More than 300 structures are under planning and tendering stage. ULBs have MSW processing capacity of 90% of the total MSW generation. Another 152 TPD of processing capacity shall be completed by March 2021. There are 24472 Health Care Facilities and 12 Common Biomedical Waste Treatment Plant in the State. Total 22.74 TPD of Biomedical Waste is generated, 100% of which is treated. Out of 1947 TPD of hazardous waste generated in the polluted river stretches, 100% is collected by authorized agencies. In terms of river quality, 2 of the polluted river stretches – Bhavani and Thamirabarani have shown significant improvement. The BOD level in River Bhavani has been brought down to 3mg/l. As directed by Hon'ble NGT in their order dated 21.09.2020, Tamil Nadu has taken Bhavani as a model river stretch. With regards to coastal pollution, action plan shall soon be shared. Hon'ble NGT has recommended developing an app to address grievance regarding illegal disposal of effluent discharge. The State already has a similar system in place and is in the process of developing an app to further improve it. Detailed plan in this regard shall be shared in the next meeting.

Also, as directed by Hon'ble NGT of having a real time monitoring system, a beta version of online monitoring tool is ready with data for August 2020. The State is currently monitoring 3 categories of projects via this tool – (i). Existing utilities, (ii). Utilities under construction and (iii). Utilities under planning. State is also in the process of linking GIS data to it. Detailed PPT in this regard shall be shared in the next meeting.

Secretary, Ministry of Jal Shakti appreciated the fact that Additional Chief Secretary has thoroughly gone through the Hon'ble NGT's order dated 21.09.2020 and accordingly presented detailed response. He also appreciated State's performance with respect of solid waste management, treated water utilization and FSSM. It was suggested States should show case their best practices in the form of presentation for other States. NMCG may also share the booklet developed by INTACH on rejuvenation of small rivers with all the States.

5. <u>Odisha</u>

ED Tech, NMCG informed that issues discussed in the previous meeting of the Committee were communicated to the Chief Secretary, Odisha vide DO letter of 17.09.2020. It was highlighted that the quantum of sewage generation in the State remains an issue. As per the data provided by CPCB, 1273 MLD of sewage is generated in the State, but as per the submission of the State 4200 MLD of sewage is generated, which needs to be resolved. Further, it was informed that against total sewage generation of 439.49 MLD in polluted river stretches, treatment capacity of 91 MLD has been created so far with present capacity utilization of only 30 MLD. 9 STPs of total capacity 288 MLD are under construction. The State needs to inform the action proposed for bridging the gap in treatment capacity of 60.49 MLD (439.49 MLD - 91 MLD - 288 MLD). There are 181 industries in the State having industrial discharge of 133 MLD, 40 industries have ETP and no CETP is existing in the State.

With regards to the polluted river stretches, 22 wastewater generating industries are operational along the stretches, of which 12 industries have already adopted ZLD, 3 industries have been directed to adopt ZLD and remaining 7 industries are discharging to river and sea after meeting the prescribed standards, 21 industries have installed OCEMS and connected to servers of SPCB and CPCB.

With regard to the solid waste management, it was informed that the State generates 2686 TPD of municipal solid waste, 612 TPD waste processing facility is operational and 190 TPD facility is under construction. For Bhubaneswar and Cuttack city, agreement has been signed with concessionaire for setting up of 550 TPD centralized Waste to Energy plant. For

Rourkela, 110 TPD Waste to Energy centralised plant tender process initiated by RSP Ltd. got into a problem and as per the backup plan – decentralised compost plants shall be set up. Decentralized compost plants are also to be set up with a total capacity of 215 TPD in 45 ULBs. With regards to polluted river stretches, 1571.89 TPD of municipal solid waste is generated, which is treated through micro-composting and disposal is through open dumping. Utilization of treated water in various sectors is proposed to be adopted after commissioning of the STPs.

Principal Secretary (Urban Development), Odisha informed that the estimate of 4200 MLD of sewage generation for the State was based on water supply rate of 150 LPCD. As the State is adopting faecal sludge treatment plants for treatment of sewage, this estimate may not be appropriate. Therefore, a study is being undertaken by the State to get actual sewage generation data. Project of 50 more FSTPs have been taken up recently, therefore 75 FSTPs shall be commissioned in the State within the next 6 months. It was informed that the data with regards to solid waste management shall be verified and updated status shall be provided in the next MPR. State is proposing decentralized approach for establishment of solid waste processing facilities except for Behrampore. 130 micro composting plants have been set up and 25 plants are in progress and shall be completed within 4-5 months.

Member Secretary, Odisha Pollution Control Board informed that information with regard to 181 operational industries in whole State shall be provided and all the 22 industries along the polluted river stretches are complying to the norms. Industries are also encouraged to utilize the treated water.

Secretary, Ministry of Jal Shakti highlighted that State may specify the sewage generated from the urban areas and may separately indicate the amount of sewage being treated through installation of STPs and the amount of sewage being treated through FSTPs respectively. Further, it was desired that a presentation on decentralized approach for solid waste management may be made by the State for sharing the information and encouraging other States to adopt such methodology. With regards to the compliance monitoring of the industries, it was suggested that status of compliance of industry may also be verified through assessment of water quality of near-by drains/wells/ tube-wells in the catchment area of the industry, in addition to the monitoring of discharge norms.

6. Kerala

ED (Tech), NMCG informed that the State has 3759 MLD of sewage generation and have 10 existing STPs with a treatment capacity of 124 MLD. It was informed that updated MPR from the State was not received. For on-going projects, timelines have not been provided by the State and for proposal stage projects, location and capacity of STP is not provided. Details of industrial pollution management for polluted river stretches has been provided, but details for the whole State have not been provided. From secondary sources it is known that Kerala has 5166 industries, out of which GPIs are 2291 and 100% industries have ETPs. State generates municipal solid waste of 11449 TPD. Existing treatment facilities of 220 TPD at Kochi and 100 TPD at Kozhikode are operational. Windrow composting and vermi-composting, aerobins, biogas plants, kitchen bins, bio composter, biobins, pipe compost, ring compost, compost pits etc. are facilitated in local bodies to treat waste at decentralized level. 28.8 MLD of treated waste water by industrial ETP is being reused in various industrial process, floor cleaning, fire fighting and for irrigation purposes.

Secretary, Ministry of Jal Shakti raised concern over the large amount of sewage generation from the State and emphasised that only urban sewage generation needs to be considered. Also, there is a huge gap in treatment capacity which needs to be bridged.

Principal Secretary (Environment), Kerala highlighted the issue raised in the DO letter of Secretary, Ministry of Jal Shakti to Chief Secretary, Kerala with regards to slow incremental progress being achieved by the State. It was informed that due to COVID-19 and quarantine of engineering staff in various State Government departments, there is a delay in works. Further it was informed that a project of Rs. 2100 crore has been negotiated with the World Bank exclusively for management of liquid and solid waste in the State. Therefore, the State Dossier shall be accordingly updated and submitted to the Ministry. One STP at Kalamsherry has been completed and commissioned recently. It was also informed that MPR for August 2020 has already been submitted by the State to Ministry of Jal Shakti, and the same shall again be submitted. With regards to the sewage generation issue, it was informed that it was projected sewage generation based on the population of the State, and the State shall re-verify the same. With regards to coastal pollution, KSPCB shall work with Cochin University for action plan preparation. A Haritha Kerala Mission is under progress in the State for rejuvenation of the traditional water bodies in the State. Many of the on-going projects are under AMRUT and the local bodies, and timelines for these projects shall be obtained from them and shall be incorporated in the next MPR.

Principal Secretary (Local Self Government Department), Kerala informed that one month time would be required to figure out the problem and the methodologies for rectification.

7. <u>Goa</u>

ED (Tech), NMCG informed that there is major change in data in the MPR submitted for August 2020. As per the details provided in the previous MPRs, installed capacity of STPs in the State was 74.7 MLD against sewage generation of 165 MLD (as per CPCB report). However, now the sewage generation is reported to be 112.54 MLD and the installed capacity of STPs as 78.35 MLD. A number of projects are now in DPR stage, contrary to the previously submitted data, wherein more number of projects were under construction phase. There are no CETPs existing in the State and no industrial issue exists in the State. As the information submitted by the State is being incorporated in the Quarterly Report being submitted to NGT, the State must submit factually correct information in the MPR.

With regard to solid waste management in the State, it was informed that Integrated Solid Waste Management Facility (SWMF) of 100 TPD at Saligao has been augmented to 150 TPD and further proposed its enhancement from 150 TPD to 250 TPD by December 2021. LoA has been issued for Integrated Solid Waste Management Facility of 100 TPD at Cacora, and the work shall commence post monsoon in September 2020 with completion by December 2021. EC has been obtained for Integrated Solid Waste Management Facility- Bainguinim (250 TPD +20%) and tender document has been floated. The work shall commence from April 2021 and is expected to be completed by October 2022, which includes 3 months of trial operation. GWMC will complete EIA studies for Solid Waste Management Facility at Verna (250 TPD + 20%) by December 2020.

Official from Goa informed that taking into account water supply rate of 150 LPCD and 9 lakh urban population, actual sewage generation comes out to be 112 MLD. 30.5 MLD is the utilization capacity of the STPs in the State and more STPs are planned. For Sal river (Priority III), extensive works are planned and the PRS is expected to achieve bathing quality standard by March 2021. With regards to change in number of STPs under-construction, works related to few STPs could not be started due to various factors.

Director General, NMCG directed the State to submit factual details in their MPR and avoid any discrepancies in the data being submitted as the same shall be reflected in the report being submitted to NGT.

Secretary, Ministry of Jal Shakti highlighted that Goa being a smaller State should look into the management of sewage for the whole State instead of polluted river stretches and Goa should become an ideal State.

8. Haryana

Director (Technical), NMCG informed that as per the MPR of August 2020, State has informed that work has been tendered for 80 and 100 MLD STP at Faridabad, but as per the information provided separately, work has been awarded for the two STPs. With regard to the solid waste generation in the State, 87 ULBs generates around 5568 TPD of municipal solid waste, of which 2108 TPD is being processed and remaining 3460.12 TPD is being sent to landfills. Government of Haryana has adopted cluster based integrated approach for solid waste management. The entire State has been broadly divided into 14 clusters, out of which 4 will be Waste To Energy i.e ., Faridabad, Rohtak, Sonepat, Ambala and 10 will be waste to compost & l RDF processing, i.e. Jind, Hisar, Dabwali with Sirsa, Rewari, Panchkula, Bhiwani, Faruknagar, Yamuna Nagar, Punhana and Fatehabad. Suitable sites for setting up of 13 clusters have already been procured. The procurement of site (processing facilities and sanitary landfill) for Hisar Cluster is under progress. Further, 60% of construction of 500 TPD WtE at Sonepat-Panipat Cluster has been completed and expected commissioning is by December 2020. Environmental Clearance of 1500 WtE at Gurugram-Faridabad has been granted and application has been submitted for obtaining Consent to Establish (CTE) for same and construction is likely to be started soon.

Secretary, Ministry of Jal Shakti highlighted that the issue in Haryana is under-utilization of the existing facilities as the State already has good number of infrastructure for sewage treatment.

Member Secretary, Haryana Pollution Control Board informed that 80 and 100 MLD are being executed by ULBD and tenders have been opened in June 2020 and the updated information same shall be verified.

9. Manipur

ED (Tech), NMCG informed that one 27 MLD STP is existing in the State having utilization capacity of 8.2 MLD, one STP of 17 MLD is under construction and one STP of 49 MLD is proposed. With regard to the industries, it was informed that 72 industries are existing having no industrial discharge, 1 CETP is existing and 3 CETPs are proposed (DPR under preparation). The State generates 284.33 MTD of municipal solid waste, of which 199.15

MTD of solid waste is collected, 85.18 MTD is being treated using home yard composting/ landfill at rural areas, 121.306 MTD of the solid waste collected is processed and 77. 844 MTD is sent to landfill. There are 8 sanitary land fill sites and 18 dumpsites. Against the total hazardous wastes generation of 1.17 TPD, no treatment facility is existing in the State.

Director General, NMCG informed that a separate review meeting with the State was held on 21.09.2020.

Additional Chief Secretary (Environment), Manipur informed that DO letter by Secretary, Ministry of Jal Shakti addressed to Chief Secretary, Manipur has been received. Further, it was informed that 100% door to door collection of solid waste is being done and eviction from flood plain zone has been done and 60 % has been completed. Nambul river has been taken as model stretch. DPR is under preparation for treatment of 17 MLD sewage using faecal sludge and bioremediation and shall be completed by October 2020. The house sewer connections for the existing 27 MLD STP by PHED is still going slow and the same is being reviewed so that the same is completed by December 2020-January 2021.

Secretary, Ministry of Jal Shakti directed the State to regularly monitor the issues raised in order to complete the works within the scheduled timeframe.

10. <u>Mizoram</u>

ED (Tech), NMCG informed that 10 MLD STP at Aizawl has been completed and works of network connection are still in progress. Further, the State is constructing decentralized Bio-digesters for in-situ remediation of black water at household levels in urban areas. It was informed that there are 83 water polluting industries identified in the catchment areas of the polluted rivers, which generates 0.2 MLD of waste water. 69 industries have valid consent from MPCB and the remaining are being regulated to comply with the norms. There is no CETP existing in the State yet. The State generates 251.42 MTPD (as per 2018-19 Annual Report) of total municipal solid waste. 44 MTPD of landfill site, 74 MTPD of material recovery facility and 50 MTPD of mechanical composting plant is existing at Aizawl. Further, 22 MTPD of vermi-composting plant at Aizawl, 9 MTPD at Lunglei and 6 MTPD at Kolasib is existing. For the remaining 18 urban towns, vermi-composting plants of 0.5 MTPD each are existing.

Scientist B, Mizoram Pollution Control Board informed that all the 9 rivers have achieved bathing quality standards and the State has requested CPCB for de-listing of the stretches. However, the State shall also follow the directions passed by the Hon'ble NGT. Further, it

was informed that due to lockdown imposed in the State due to COVID-19, not much progress has been obtained with regard to connections of sewer lines to the STP.

11. Assam

ED (Tech), NMCG informed that there is no STP existing in the State. For Guwahati area, STPs of 135 MLD are in proposal stage and for remaining areas timeline for the project is provided. There are 97 industries along polluted river stretches, which are equipped with ETPs and no CETP is existing in the State. With regard to solid waste management, it was informed that 1 processing plant is operational at Guwahati, 1 plant is under construction and 1 plant is proposed. A total of 688 TPD is generated in the other Urban Local Bodies of Assam (except Guwahati) out of which 391 TPD are processed. 8 nos. Waste to Compost plant of 274.14 TPD are operational and 3 plants with total capacity of 130 tons are under construction. 1 Waste to Energy plant with capacity of 100 MTD is operational in Tezpur.

Principal Secretary (Guwahati Development Department), Assam informed that on 15th September, JICA had given consent to the proposal of Assam Government for establishment of STPs in Guwahati. Further, it was informed that instead of 5 STPs as planned earlier, 14 decentralized STPs are proposed in Guwahati now. Redesigning of the DPR for the project shall be taken up. NOC has been obtained for 10 STP sites, and for remaining sites NOC is being pursued. Till commissioning of these STPs, bio-remediation is proposed for Bharalu, Borosola Beel and Silisako Beel. RFP is being prepared and shall be submitted to Assam Pollution Control Board for vetting. With regard to solid waste, it was informed that 500 MTD of solid waste is generated in Guwahati, land has been identified for proposed WtE facility at Byrnihat and for treatment of 15 lakh metric tonnes of legacy waste, Ahmedabad model is proposed to be replicated.

Principal Secretary (Environment), Assam informed that for remaining areas other than Guwahati, land for STP at Mangaldai and Tezpur has been allotted and DPR is under preparation and shall be submitted in 10 days and for other 3 sites land shall be allocated in another 10 days. In rural areas, preventive measures are being taken up to improve the water quality of the rivers and timelines submitted in the MPR are being adhered to.

12. Himachal Pradesh

Director (Technical), NMCG informed that the status of sewage generation and management remains same as informed in the previous meeting of CMC. With regards to solid waste

management, it was informed that around 140 MTD of solid waste is being generated along the polluted river stretches and for bridging the gap in the treatment facility, a 40 MTD common treatment facility at Baddi is under construction and a 4-6 MTD RDF plant at Kala Amb is proposed. However, timeline of the project is not provided and State needs to provide city wise solid waste generation and existing and proposed treatment facilities.

Member Secretary, Himachal Pradesh Pollution Control Board informed that 90% of the work of solid waste processing facility at Baddi has been completed and is expected to be completed by the end of October 2020, and agreed to provide city-wise details of solid waste management.

13. <u>Jammu & Kashmir</u>

ED (Tech), NMCG informed that during the last CMC meeting, the UT was directed to submit detailed timeline with milestones to complete the Devika river project at Udhampur. However, the details have not been provided and the progress of the project seems to be very slow. Construction works with regard to the STPs have still not been started and needs to be expedited. With regard to the other projects, details in respect of location, capacity of STPs, sources of funding for construction, status of DPR preparation was requested to be provided, but the same has not been submitted in the MPR. The 10 MLD STP in Jammu along the catchment area of River Tawi is under refurbishment since long, timeline for its completion needs to be provided and the 30 MLD STP at Jammu is under-utilized and it is required to be make the plant operational at full capacity. For pollution abatement of river Banganga (Katra), STP of 3.25 MLD at Bhawan requires up-gradation and STP at Adhkumari is proposed. DPR for Katra town having 2 STPs of 1.3 MLD and 4.5 MLD has been received under NRCP. Status of up-gradation of STPs at Bhawan and Ardhkumari by SMVDB needs to be informed (not included in submitted DPR). As per the MPRs, under NBCC project about 50% work on house connection in Jammu has been completed and this needs to be expedited. Status of bio-remediation of dumped municipal solid waste at old dumping site on the banks of river Tawi in Jammu needs to be provided.

With regard to industrial pollution in the State, 9047 industries are operational having industrial discharge of 20 MLD, 227 industries are having ETPs and there are 4 CETPs existing. The UT generates 1518.91 TPD of municipal solid waste, for which 427.9 TPD of treatment facility is existing.

Member Secretary, Jammu & Kashmir Pollution Control Board informed that tenders have been floated and technically vetted for installation of bio-remediation projects for all the 9

polluted river stretches. With regard to Devika river, it was informed that works for establishment of 8 MLD STP have just began and shall be completed in time bound manner. With regard to Banganga river, it was informed that DPR has been submitted to NRCD recently. Sewer network connections in Jammu have been slow, with 6076 connections along the river Tawi have been made out of 12,000 connections. It was informed that 85% of works have been completed with regard to the under-construction CETP along the river Basanter. Further, CETP at Samba shall be completed by December 2020. It was informed that the UT generates around 1550 TPD (700 – Jammu and 850 – Kashmir) and in all 78 ULBs land has been identified for construction of landfill sites. 95% of the solid waste generated in Kashmir is being treated and bio-remediation of the waste is proposed, while in Jammu a processing plant of around 450 TPD is proposed, for which tender has been floated and shall be constructed by March 2021. Further a waste to energy plant for solid waste in Kashmir is proposed and shall be completed in March 2021. With regard to the 10 MLD STP being refurbished along river Tawi, it was informed that the work shall be completed within 6 months. Further, it was informed that the 30 and 27 MLD STP in Jammu remains under-utilized and total of 29 MLD of sewage is being treated. To increase the utilization capacity of the STPs, DPR has been prepared for I&D of 13 drains along river Tawi, which shall increase the flow reaching the STP by 20 MLD.

Secretary, Ministry of Jal Shakti raised concern over the condition of the 3 STPs in Jammu located along the river Tawi, as the 10 MLD STP remains non-operational and the other 2 STPs of 30 and 27 MLD remains under-utilized. Further, the UT was directed to submit utilization capacity of the 30 and 27 MLD STP separately. The UT was directed to take necessary action to increase the utilization capacity of the existing STPs. NRCD was directed to have a separate meeting with the State.

Member Secretary, JKPCB informed that the 27 MLD is under trial and treats around 5 MLD of sewage and the 30 MLD STP is treating 24 MLD of sewage. It was informed that the low utilization capacity of the STPs is also due to pending sewer network connections.

14. <u>Andhra Pradesh</u>

ED (Tech), NMCG informed that the urban pollution of the State generates around 1384 MLD of sewage for which treatment capacity of 515.45 MLD (41 STPs) exists and the utilization capacity of the STPs is 321.4 MLD. State needs to provide STP-wise utilization rate and details of house sewer network connections. With regards to industrial pollution in polluted river stretches, it has been informed that except for Godavari, there are no industries

in the other polluted river stretches. Further, it was informed that the State has 9941 operational industrial units discharging around 4494.33 MLD of effluent and 1069 industries have ETPs. 7 CETPs of 31 MLD exist in the State. The State generates 6766 TPD of municipal solid waste, and for establishment of treatment facilities sites have been identified in 110 ULBs.

Commissioner (Municipal Administration), Andhra Pradesh along with Member Secretary, Pollution Control Board and other officials attended the meeting. Engineer in Chief (UDD), Andhra Pradesh informed that not much progress have been achieved in the past month due to labour issues and heavy rains. Treated water from the STPs are being utilized in horticulture activities, recharging of rivers, in airport and industrial use as well as in landscapes.

Director General, NMCG suggested the State to provide the details of reuse of treated water in the MPR.

Member Secretary, Pollution Control Board informed that along the polluted river stretches, there are 5 main cities. For Vijayawada, the connection with the existing WtE plant is being tied up and shall be completed by December 2020 and for remaining 4 cities, work is in progress. Further, it was informed that the State generates around 6700 TPD of solid waste, for which 54 projects for establishment of processing plants are in process, out of which 27 plants are at running condition. With regards to bio-mining of the 83 lakh metric ton of legacy waste, a DPR for the entire State has been prepared and this work shall be completed in 4 years.

Senior Consultant, NMCG informed that as per the information submitted in MPR and State Dossier, the industrial discharge of the State is four times the sewage being generated. This needs to be reconciled by the State and verified data may be provided.

Director General, NMCG directed the State to verify the data being submitted and a separate meeting shall be convened by NRCD with the State.

15. <u>Delhi</u>

Director (Technical), NMCG informed that there are 28 Approved Industrial Areas in Delhi, wherein 1516 industries are water polluting and have installed captive ETPs. Total effluent generation is 36 MLD. 13 CETPs with total capacity of 212.3 MLD are existing and as per the monitoring reports of DPCC for August 2020, 1 CETP was found to be complying with norms and remaining 12 were found to be non-complying with discharge norms against

different parameters (persistent since many months). Online Monitoring System (OLMS) have been installed on all the 13 CETPs. DSIIDC has engaged NEERI for providing consultancy w.r.t various issues related to CETPs including up gradation of CETPs, and the interim report by NEERI is still awaited. It was also informed that there are 11 industrial clusters which do not have CETP. It is yet to be verified whether these industries are dry sectors and do not require a CETP.

Further, it was informed that the State generates 11144 TPD of municipal solid waste, having 100% collection with 51 % (5734 TPD) being processed and 49% (5410 TPD) being disposed off in landfill sites. Three Waste to Energy Plants of 5250 TPD capacity are operational at Okhla, Ghazipur and Bawana. There are 3 dumpsites at Ghazipur, Bhalaswa and Okhla and there is legacy waste of 28 Million Tons. There is one Integrated Solid Waste Management Facility at Bawana having Waste to Energy (WtE) Plant, Compost Plant and Engineered Sanitary Land Fill (ESLF). It is proposed to enhance the waste handling from existing 2000 TPD to 4000 TPD. One Engineered Sanitary Land Fill is proposed to be developed at Tehkhand for managing 2000 TPD by 2021. An Integrated Solid Waste Management Facility for 2000 TPD is proposed to be developed at Ghonda Gujran by June 2022 with 1800 TPD WtE Plant, and site at Sonia Vihar has been identified for development of ESLF of capacity 1000 TPD. Further, Government is in process of installation of Decentralized Waste Management Facilities in Delhi. With regard to the on-going STP projects, not much progress have been achieved. The STP at Coronation Pillar was supposed to be completed by October 2020 and is now scheduled to be completed by March 2021.

Senior Environment Engineer, DPCC informed that NEERI along with DSIIDC had visited all the CETPs and interim report of NEERI is awaited, which shall be submitted with the MPR.

Secretary, Ministry of Jal Shakti raised concern over non-attendance of higher officials in the meetings of CMC and that not much progress have been achieved in sewage as well as industrial management. There is lack of seriousness in the State officials with regards to the management of the issues and this shall be highlighted in the next submission to Hon'ble NGT.

Mrs. Shailaja Chandra, Member, Monitoring Committee of NGT (matter OA No. 06 of 2012) informed that major STP projects are lagging behind due to non-transmission of funds by the agency and since 2018 the projects have been delayed from months to years now. With regards to the tree cutting permission, maximum delay of 4-5 months occurred for a single case. It was informed that on query by the Monitoring Committee, many details are not being

reported by the State and only general statements are being submitted. While going through the submissions made by NMCG, the Committee observed that huge amount of funds provided by NMCG are available with DJB, so it is understood that the lag in STP projects are not due to funding issue.

CEO, Delhi Jal Board informed that all payments till June 2020 have been cleared and for the month of August and September 2020 shall be cleared shortly. Further, it was informed that the work was severely affected in the past 6 months due to riots, Delhi election and COVID-19. The issue with tree cutting was faced for the STPs at Kondli and Rithala, and this is being followed up by the State and details of the same are being regularly reported. Further, the STP projects were delayed in winter last year due to ban on construction activities in the State owing to high pollution levels in Delhi. With regard to 9+5 STPs proposed, the issues are being followed up. Further, it was requested to have a joint inspection in October for ascertaining the flow being trapped and being treated. The Board is following up with all the issues and shall adhere to complete the projects in a time bound manner.

Secretary, Ministry of Jal Shakti suggested that a detailed meeting shall be taken by him with the officials of Delhi, PMC and the Contractors of the on-going STP projects on the delay in these projects.

16. <u>Chhattisgarh</u>

Senior Environment Specialist, NMCG informed that the status of sewage management remains the same as informed in the previous meeting. In polluted river stretch, 238 MLD of STPs are under construction and State is reporting the progress in their MPRs. It was informed that the DPR for Korba has been prepared and is awaiting approval of NTPC, as the proposal is based on PPP model. In the entire State, Faecal sludge management has been adopted. However, at few locations, co-treatment with STP is proposed, but, the same can only be achieved after commissioning of the STPs. There are 1004 industries in the State having industrial discharge of 132.42 MLD. Effluent treatment plants have been provided and zero discharge condition outside plant premises is being maintained by the respective industries. There are 895 industries having ETPs, and for the remaining closure notices have been issued. There are no CETP existing in the State. The State generates municipal solid waste of 1650 TPD and has 100% processing capacity. Under Mission Clean City (MCC), 166 ULBs in the State are collecting segregated waste separately and transport the same on daily basis in compartmentalized tricycles and mini trippers. The dry fraction is being segregated at SLRM centres into various usable fractions and sold to waste recyclers. The wet

fraction is being converted to compost. For Kharoon river, sanitary landfill site is proposed for which approval has been received from MoEF&CC.

Secretary, Ministry of Jal Shakti, appreciated the efforts of the State, in terms of liquid and solid management. It was highlighted that as per the order of Ministry of Power, any Thermal Power Plant located within the 50 kms of a STP should utilize the treated water from the STP. Therefore, the State may intimate if any intervention is required from Ministry of Jal Shakti in this regard.

Principal Secretary (Housing & Environment), Chhattisgarh informed that issue of under-utilization of existing STPs in State is due to non-completion of sewer networks, which is being regularly reviewed. With regard to STP proposed at Korba, concessionaire agreement was provided to NTPC and few observations raised by NTPC are being rectified. For remaining 5 STP projects which are to be sanctioned, Administrative Approval has been received for 2 STP projects and for remaining 3 STP projects approval is awaited. The on-going projects of 238 MLD shall be completed by June 2021. It was informed that CPCB team had visited and have provided few observations with regards to the revised Action Plans for category III & IV PRS. The same shall be incorporated and revised Action Plan shall be submitted within next 10 days.

17. <u>Sikkim</u>

ED (Tech), NMCG informed that 6 STPs of 19 MLD are exiting in the State, 4 STP projects are under construction and are nearing completion, and 2 STPs are proposed which are having land issues. With regard to solid waste, it was informed that there is landfill site exiting in the State. However, there are no solid waste processing facilities in the State.

Secretary, Ministry of Jal Shakti, informed that the issues with regards to the on-going and proposed STP projects were also highlighted by him in the Jal Jeevan Mission meeting held with Chief Minister of Sikkim.

Principal Secretary (Environment), Sikkim informed that due to various interventions adopted by the State, 4 river stretches in Priority V have achieved BOD below 3 mg/l.

Secretary (PHED), Sikkim informed that the matter relating to land issues for 2 STPs proposed at Namchi and Jorethand is being pursued by the State. The on-going projects shall be completed by December 2020. Further, it was informed that for Zone-1 in Gangtok, a DPR was submitted to NRCD for approval in 2019.

18. <u>Tripura</u>

ED (Tech), NMCG informed that utilization of the existing 8 MLD STP at Agartala is very low and another 8 MLD is under construction, for which work have recently started. Further, for treatment of balance sewage, State is planning to adopt FSTPs in 15 ULBs, land identification for the sites shall be completed in one month and tenders shall be floated. It was informed that the State generates 337.3 TPD of municipal solid waste, for which a 250 TPD Compost plant is operational. Further, door to door waste collection, source segregation and processing etc are being done by other ULBs.

Secretary (Environment), Tripura informed that 8 MLD existing STP is treating 2 MLD of sewage due to limitations of sewer lines and network, for which work is in progress. Work has started on 8 MLD new STP and shall be completed in 2 years. Further, it was informed that 15 FSTPs of 600 KLD each has been proposed for other ULBs, site selection of 7 has been done and tender shall be issued and shall be completed in 16 months. With regard to bio-remediation, 210 drains have been identified, tenders have received for hiring consultants for conducting baseline surveys and number of drains on which bioremediation can be done shall be finalized. On pilot basis, 5 major drains in Agartala has been identified and work has begun in these drains. It was informed that the State is generating 82.4 MLD of sewage.

19. <u>Daman Diu, Dadra Nagar Haveli</u>

ED (Tech), NMCG informed that 13 MLD STP at Silvassa is under-utilized, 16 MLD STP at Nani Daman and 7 MLD STP at Diu are proposed.

Member Secretary, DDDNH Pollution Control Committee informed that for increasing the flow being received at 13 MLD STP at Silvassa, house hold connections are being made and out of 24105 households, 3500 house-holds have been connected. Further, 8 septage carrier vehicles have been engaged for transporting the septage from the remaining households in order to have co-treatment of the faecal sludge with STP. With regards to the 7 MLD STP proposed at Diu, it was informed that there has been a change in the design specifications, and accordingly technical sanction and tenders are being revised.

Secretary, Ministry of Jal Shakti appreciated the efforts being made for taking up co-treatment through septage management, as household connections remains a tedious and time consuming task.

20. <u>Puducherry</u>

ED (Tech), NMCG informed that utilization of the existing STPs remains an issue, plan for balance 28 MLD of sewage being generated in the UT is to be provided, 53 TPD of solid waste is treated against the 406 TPD of solid waste generated.

Secretary (Environment), Puducherry informed that the under-utilization of the existing STPs are due to pending house sewer connections, for which work is in progress and delay is attributed to reservations shown by the residents and labour issues. Tender has been opened for 2 STPs of 3 MLD each at Villianur and Karaikal, technical evaluation is in progress and as per PWD the STPs shall be completed by March 2021. For gap in treatment capacity, PWD has proposed an action plan. With regard to the legacy waste, tender has been floated and has been opened on 29th September, 2020, technical bid has been opened and financial bid will be opened shortly. With regards to solid waste in Puducherry and Mahi, integrated tender has been floated. All the municipal solid waste generated from Mahi is being treated and taken care by a firm in Bangalore, in Karaikal an NGO is taking care of the solid waste, wherein door to door collection, segregation and processing of the waste is being done. With regards to industrial waste, it was informed that inventorization of the industries located along the river stretch has been done and no industry is allowed to discharge untreated effluent into the rivers. Action is taken against defaulting industries.

21. <u>Telangana</u>

ED (Tech), NMCG informed that there is gap of 1532.9 MLD in sewage treatment capacity and for bridging the gap, the STPs are is proposal stage wherein DPR has been prepared and are awaiting sanction. 123 STPs are proposed for the polluted river stretches. State is taking up 'One City - One Operator' model and is adopting HAM for the 31 STPs proposed along the river stretch of Musi in Hyderabad. There are 2095 industries in the State, having industrial discharge of 603 MLD and 1319 industries are having ETPs. There are 7 CETPs (674 industries connected) with total capacity of 6.241 MLD. 400 KLD CETP with ZLD is under construction at Pashamylaram and is expected to be completed by December, 2020. The State generates 8993 TPD of municipal solid waste.1 ISWM plant of 6500-TPD at Jawaharnagar is operational and 53% of segregation is achieved. All 140 ULBs and 96 identified model Gram Panchayats have identified suitable sites for setting up of suitable processing facilities. In GHMC, one processing plant of capacity-500 TPD is commissioned and another of 500 TPD is under construction. It was also highlighted that in the NGT hearing held on 21.09.2020, NGT has pointed out the Telangana has sanctioned bio-

remediation projects worth Rs. 500 crores which will cater 1300 MLD, which seems to be on higher side.

Managing Director, HMWSSB informed that the State Government has accorded Administrative Sanction for 17 STPs with a total treatment capacity of 376.5 MLD under HAM model and tenders under are being called. Land has been identified for the STPs. For sanctioning of the remaining 14 STPs, matter is being pursued with the State Government. Co-treatment of faecal sludge is being done in 6 STPs and 2 more FSTPs shall be commissioned in one month. 100 sludge tankers have been empanelled. Another 5 FSTPs shall be made operational by December 2020. It was informed that NEERI is being employed for bio-remediation, for which they are quoting Rs. 30-40 lakhs per MLD and informed that they shall be discussing the matter with NMCG officials.

Secretary, Ministry of Jal Shakti directed NMCG to share the details and experiences of constructed wetlands adopted in Bihar with the States. Further, the State was directed to provide details of timeline of each activity with regard to the proposed STPs.

22. <u>Uttarakhand</u>

Director (Technical), NMCG informed that urban sewage generation in the State is 329.33 MLD, for which STP capacity of 355.13 MLD (61 STPs) is existing, which has a utilization capacity of 203.9 MLD (57%). Further, it was informed that out of 355.13 MLD STP capacity, 321 MLD of STPs are being regularly monitored by NMCG. STPs of 200 MLD are existing on river Ganga, which treats around of 150 MLD of sewage and 115 MLD of STPs in Dehradun are treating around 40 MLD of sewage. For increasing the utilization capacity of STPs at Dehradun by 30-40 MLD, a project of I&D for drains in Risparana and Bindal have been sanctioned by NMCG. It was informed that the status of industrial pollution management remains same as reported earlier and updated status may be provided along with timelines. With regards to STPs in polluted river stretches, proposals have been submitted to NMCG. It is reported that 810 TPD of municipal solid waste is generated in the State, of which 535 TPD waste is being treated at 2 common SWMP at Haridwar and Dehradun. However, littering/ solid waste dumps have been observed in Haridwar. Even complaints have been received with regard to waste dumping in rivers and illegal activities in Uttarkashi.

Chief Secretary, Uttarakhand informed that in Haridwar, the remaining 20 industrial units shall be connected to the CETP by October 2020 and in Pantnagar, 193 industries shall be connected to the CETP by 31st January 2021. 3 new CETPs are proposed at Kashipur and Sitarganj, for the industrial park under construction, and the CETPs are under designing

phase. Action Plan for rivers in Priority III to V have recently been approved by CPCB and the same shall be implemented by the State. With regards to solid waste, it was informed that door to door collections in all 99 ULBs have been achieved, 65% waste collected and 58% is being segregated. For treatment of legacy waste, Rs. 140 crore is required from State funds. 1272 industries have own ETPs/ are connected to CETPs. Water quality of all polluted river stretches are being monitored. Out of 9 polluted rivers, 6 rivers are non-perennial, hence flow is difficult to be maintained in lean season and to achieve required water quality standards. For treatment of the catchment area along the 9 rivers, works are proposed to be taken up through CAMPA/ MNREGA funds and Special Committee has been constituted and work shall commence from January 2021. City wise -STP wise monitoring shall be taken up. For maintaining the e-flow of the non-perennial rivers, data of the flow shall be collected in a year's time.

Director General, NMCG highlighted that for conservation of wetlands in the State, NMCG can provide support for rejuvenation of the same, which shall help in improving the flow in the rivers. Therefore, the State may intimate the same. Further, the DPRs submitted in NMCG are being reviewed. As some STPs proposed by the State are of very low capacity, therefore these may need to be re-considered. Accordingly, the concerned officials of NMCG shall be getting in touch with the State officials.

23. <u>West Bengal</u>

Director (Technical), NMCG informed that there are 17 polluted river stretches identified in the State and there are 56 major drains identified which have a flow of 10,257 MLD. Out of 56 drains, 34 drains having flow of 2276 MLD are covered under STP projects. Another 18 drains have cumulative flow of around 8000 MLD and State is exploring alternate technologies. Status of sewage management remains same as reported in last meeting of CMC. For, many of the proposed STP projects, timelines are not given. Incremental progress has been reported in the MPR for only river Ganga, the same may be provided for all the rivers. There are 16259 industries in the State having industrial discharge of 1360.60 MLD. 454 industries are having ETPs. 20 MLD CETP (4 modules each of 5 MLD) is existing and is found to be complying. Further, CETPs of 20 MLD (4 modules each of 5 MLD) is under-construction. It was informed that the State generates 13709 MTD of municipal solid waste and 1778 MTD of treatment facilities are existing.

Principal Secretary (Environment), West Bengal informed that covering 125 ULBs/ 3000 municipal wards in the State, 100% door to door collection shall be achieved by January

2021, waste segregation at source will be achieved by March 2021 and waste bins have been procured. For scientific disposal of waste, cluster approach has been adopted in 17 ULBs and for remaining, micro-level planning is being done, DPR has been prepared for treatment of legacy waste, composting and bio-methanation etc. Kolkata Municipal Corporation have installed 113 waste compaction stations across Kolkata. Bioremediation of 12.14 hectares have been completed. Industrial parks of the State Government have Effluent Treatment Plants or are in process of establishment of CETP/STP by 2021. Garment park in Howrah is to have CETP by March 2021, Boundary park in Howrah to have STP by March 2021, Rubber park in Howrah to have STP by June 2021 and Wazira park in Howrah to have STP by June 2021, which are being closely monitored by the State PCB. In the Haldia industrial growth centre, all the large industries have independent ETP/STPs in WBIIDC park and another park near Durgapur Chowk have 55 units operational, which are green and orange category, have individual septic tanks. In Banthar Leather Complex, 2 modules of the under construction CETP shall be completed by March 2022. 54 Grossly Polluted industries operational in the State have installed ETPs and OCEMs. Details with regards to re-use of treated water shall be submitted in the MPR. The progress achieved in STP projects remains same due to heavy rains in the State and the works shall be progressive in the upcoming months. With regards to coastal pollution, plan for waste management shall be prepared in consultation of CZMA and plan of CZMA shall be submitted by November 2020.

Director General, NMCG informed that details with regards the policy for reuse of treated water may be provided as a National Reuse of Treated Water Policy is being drafted.

ED (Tech), NMCG informed that utilization capacity and compliance of the existing STPs may be provided along with the MPR.

24. <u>Uttar Pradesh</u>

Senior Solid Waste Management Specialist, NMCG informed that the State generates 5500 MLD of sewage, which is being treated in 104 STPs of 3398.84 MLD capacity. There are 36 STPs of 914.06 MLD capacity under construction and 26 STPs of 608.10 MLD capacity are proposed. State has promulgated the Septage Policy for faecal sludge and septage management till the commissioning of new STPs to fill the gap of 679.00 MLD, of which 2 have been constructed, 6 are under construction and work has been awarded for 29 FSTPs. With regard to the 12 polluted river stretches, it was informed that 4293.8 MLD of sewage is being generated and 76 STPs of 2918.37 MLD are existing with utilization capacity of 71 %. On the basis of monitoring of July, 2020 as reported by the State, 52 STPs are complying and

24 STPs are non-complying and 8 STPs are found to be non-functional in the State. 47 STPs are proposed for treatment of 1796.75 MLD of sewage. Status of sewage management remains same as informed in the previous meeting, except that LOA has been awarded for 40 MLD STP for Gomti river. On-going STP projects along the catchment area of river Ganga need to be expedited. There are 1648 Grossly Polluting Industries in the State, having industrial discharge of approx. 850 MLD. There are 1404 industries having ETPs and 7 CETPs are existing. With regard to the polluted river stretches, there are 1699 industries, having industrial discharge of 263.66 MLD, 1128 industries are having ETPs and 06 CETPs are operational and are complying. 1 CETP is under construction and 2 CETPs are under upgradation.

Further, it was informed that the State generates 14000 TPD of municipal solid waste and have 15 waste processing plant of 5395 TPD capacity with gap in treatment capacity being 8605 TPD. It is reported by the State that lease agreement has been done for Waste to Energy Plant in 04 cities viz. Shahjahanpur, Moradabad, Muzaffarnagar and Ghaziabad. The total solid waste processing capacity in State is expected to be 10,470 TPD by March, 2021. 450 ULBs generating less than 10 TPD of solid waste shall have composting facility by December 2020. There are 652 ULBs in the State and 1 Material Recovery Facility is to be set up in each ULB by December, 2020 for which Rs. 619 Crore have been released to all the ULBs. Land issues for STPs proposed at Moradabad and Bareilly, and implementation issues with regard STPs at Jajmau, Sultanpur and Firozabad are yet to be resolved. Town-wise details with regard to the solid waste management in the State need to be provided.

Special Secretary (Department of Environment), Uttar Pradesh informed that notification with regards to the floodplain zone for Segment B Phase I of River Ganga (from Hardiwar downstream to Unnao) has been issued on 4th September 2020. Floodplain zone for intra State rivers – Sai, Gomti, Ramganga and Kali East have also been finalized by the Irrigation Department, UP. With regard to maintaining e-flow in the rivers Rapti, Saryu, Ghaggara, Ramganga have been finalized by Water Resource Department UP. With regards to industrial pollution, it was informed that during the Third Party Inspection it was noticed that water quality of the recipient drains needs to be monitored in order to understand long term compliance of the industry and therefore from this year onwards, water quality of the recipient drains shall be monitored. Further, it was informed that UPPCB is expanding their monitoring network to get weekly monitoring data. Installation of OCEMs in 70 STPs is in progress by UP Jal Nigam and tenders have been floated. Large scale management plan for rejuvenation of water bodies is being taken up in the State. Technologies for continuous

monitoring of the functioning of ETPs are being explored. Further, the regional river pollution control room is being set up by October 2020.

Director General, NMCG suggested that a more rigorous monitoring of industries is required to be carried out.

25. <u>Rajasthan</u>

Senior Solid Waste Management Specialist, NMCG informed that as reported by the State in the latest MPR, the State generates 1550.81 MLD of sewage and 70 STPs of 973.18 MLD capacity are existing. 72 STPs of 511.70 MLD are under construction and will be completed in next 2 years. 2 rivers are categorized in polluted river stretches – River Banas (Priority III) and River Chambal (Priority V). Along the catchment area of river Chambal, sewage generation in Kota is indicated to be 159.42 MLD (earlier was reported around 300 MLD) wherein 2 STPs of 30 MLD and 20 MLD are working having total utilization capacity of 42 MLD. Total 5 STPs are proposed under different schemes with the total capacity of 78 MLD in Kota. Out of this, 61 MLD STP work is under progress and will be completed by 2022. After completion of these STPs, total coverage will 80% in Kota. Sewerage Network of 369 Km is in progress out of which 67 Km length has been completed. In Keshoripatan, DPR has been prepared for 2 STPs of 1.5 MLD and 2.5 MLD, which is awaiting financial assistance from the State. With regards to industrial pollution, it was informed that there are 10797 industries in the State generating 470 MLD of industrial effluent. 1425 industries require ETP and 1428 industries are having ETPs, of which 1292 are complying. Out of 15 CETPs in the State, 13 are operational and 2 are non-operational. Out of 13 operational CETPs, 9 are non-complying and upgradation of these 9 CETPs is proposed.

The State needs to provide details of solid waste management of the whole State in the MPR. With regard to the polluted river stretches, at Keshoripatan, door to door collection is happening, construction of MRF work is complete and RDF is being made. For wet waste, pit composting is proposed and tender has been invited for construction of pits. At Kota, a 2 TPD Bio Methanation plant is proposed, for which tender has been floated. For bioremediation of legacy waste, tender has been invited with the total cost of Rs. 10 Crore. In Kota, 4 times tendering has been done for waste to energy processing facilities, but the tender was not finalized because first time EMD was forfeited and in remaining times no bidder turned up. 5th time, a waste to compost tender was floated but no bidder turned up. Again, Waste to Compost tender documents are under preparation along with viability check of waste to

compost and tender will be issued in a month. Timeline has been provided as 24 Months after tender invitation.

It was informed that the quality of MPR needs to be improved, and incremental progress achieved needs to be provided. As per the MPR, no progress has been achieved by the State and no update is provided with the regard to the industries in the State and the action taken against the non-complying industries.

Due to connectivity issues, the State Govt. representative could not respond. It was decided that a separate meeting may be held with the officials of the State.

26. <u>Madhya Pradesh</u>

Director (Technical), NMCG informed that the status of sewerage and industrial management in the State remains same as reported in the previous meeting. State has provided % of progress achieved in the ongoing STP projects. However, State needs to provide utilization capacity of each existing STP, status of I&D or house sewer connections with regard to on-going STP projects and status of DPR along with completion timeline with regard to the proposed STP projects. STP projects at Nagda and Mandipdeep are still to be sanctioned. It was informed that there are 21,873 industries existing in the State, of which 1209 industries are having ETPs and 2 CETPs are existing. With regards to the solid waste management, the State generates 7980 TPD of municipal solid waste. Of which 7193 TPD is collected, 6826 TPD is segregated/ transported, 6431 TPD is processed and 762 TPD is disposed in landfill site. It was informed that with regards to the observations made in the previous meeting regarding defects in STP construction at Gwalior and Bhopal, response has been received from the State and the same shall be reviewed.

Principal Secretary (Environment), Madhya Pradesh informed that utilization capacity could not be submitted in MPR as there were no separate columns available in the MPR and assured that details shall be submitted through mail. Further it was informed that for Nagda and Mandideep, tenders for bio-remediation have been received. In the 5 ULBs in the 22 polluted rivers stretches, STP works are going on. Water quality in 10 polluted river stretches have achieved bathing river standard.

Secretary, Ministry of Jal Shakti directed NMCG to modify the format of MPR accordingly. Further the State was suggested to regularly monitor the STPs which are at advanced stage of completion, so that the timelines are adhered to. With regards to the observations made regarding the under-construction STPs at Gwalior & Bhopal previously, it was informed that the issue was not with regard to the quality of construction, instead the issues were related to

the treatment process for which Director (Technical), NMCG shall be coordinating with the State officials. With regard to solid waste management, further details may be provided as informed in the beginning of the meeting.

Principal Secretary (Environment), Madhya Pradesh informed that detailed report shall be submitted. Further, it was informed that plastic waste collected is being used in cement industry.

27. <u>Meghalaya</u>

ED (Tech), NMCG informed that the State official in the previous meeting informed that 87 MLD of sewage is being generated in the urban areas of the State, for which no treatment facility is existing. Status of sewage pollution and infrastructure remains the same. With regards to rivers Umkhrah and Umshyrpi, a 50 KLD FSTP is existing, 115 KLD FSTP is expected to be completed by December 2020, draft NIT has been vetted by the Shillong Municipal Board for FSSM and 5 nos. of On-Site treatment system. Tender process is to be taken up by next month. Further, 4 STPs of total around 4 MLD capacity was proposed to be taken up, but no status has been provided in the MPR. For rivers Kyrhukhla, Nonbha, Umtrew and Lukha, survey for preparation of DPR for nallah in-situ treatment system has started and likely to be completed by November 2020. For River Myntdu, 7 STPs of varying capacity from 0.3 to 1.2 MLD are proposed, and they have been suggested to adopt alternate treatment technology.

There are 260 effluent generating industries in the State having industrial discharge of 3.5 MLD. 254 industries are having ETPs and no CETP is existing in the State. All the ETPs are complying. It was informed that the State generates 260 MTD of municipal solid waste and treatment capacity of 23.72 MTD exists. Further, a 170 TPD Compost Plant is under construction at Marten, Shillong and is expected to be commissioned by September 2020. An additional 8500 sqm sanitary landfill is also completed. Work is under progress for 4 decentralised compost plant under Swachh Bharat Mission (Urban) and the work is 90% complete.

Official from the State informed that out of the 5 proposed STPs for rivers Umkhrah and Umshyrpi, 3 STPs are proposed to be taken up and land has been identified for 3 STPs.

28. <u>Nagaland</u>

ED (Tech), NMCG informed that 25.43 MLD STP has been completed and there is a delay in sewer lines connections. In the previous meeting, State has informed that 47% of the sewer

lines connections have been completed and recent status needs to be provided. 2 units of Faecal Sludge Treatment Plant (20 KLD and 90 KLD) are in place and serviced by 13 cesspool vehicles. Phyto-remediation facilities are to be constructed in the river stretches after monsoon. There are 1050 industries located in the catchment areas of the polluted rivers having industrial discharge of 44 KLD. 3 ETPs are operational and no CETP existing in the State. It was informed that the State generates 339.5 TPD of municipal solid waste, for which Solid Waste Management Plant has been set up at Kohima. However, State needs to be provide further details in this regard. In rest of the ULBs, Material Recovery Facilities and Composting facilities are being proposed.

Secretary, Ministry of Jal Shakti raised concern over the non-completion of sewer network by the State as the STP is lying idle and directed State to confirm the commissioning of the STP and whether no other STP is required for the State. Functioning of the STP can only be ascertained after conducting trial runs.

Member Secretary, Nagaland Pollution Control Board informed that efforts are being put in to commission the STP by December 2020. It was informed that two major industries are discharging effluent for which ETPs are installed, remaining are ply wood industries. With regard to FSTPs, PHED is proposing to enhance the FSTPs capacity in Dimapur and 90 KLD FSTP is found to be sufficient for Kohima. Further, it was informed that a MRF is existing in Dimapur and a municipal solid waste processing plant is existing in Kohima, which is running at 5-15% of the capacity. Bailing machine has been provided to all districts for plastic waste management.

29. Karnataka

ED (Tech), NMCG informed that the State generates 3356.5 MLD of sewage and 146 STPs of 2561 MLD are existing, which are utilized at 66.53% (1704 MLD) and 151 STPs are proposed to be constructed. In the polluted river stretches, 8 large UGD projects are expected to be completed by March 2021. Further, it was informed that there are 16,955 industries in the State having sewage discharge of 442 MLD and industrial discharge of 663 MLD. 4158 (Red & orange category) industries in the State are having ETPs. There are 10 CETPs existing in the State and 3 CETPs are proposed – CETP at Bidar (under construction), CETP at Yadgir (under construction) and CETP at Peenya (EOI called). Likely date of completion of these CETPs needs to be provided by the State. With regard to the solid waste management, it was informed that the State generates 10916.1 TPD of municipal solid waste. 9824.5 TPD of solid waste is collected and 5106.3 TPD of solid waste is processed. There is a

gap in treatment of 5810 TPD. Further, to address the gap in MSW treatment, 4 major projects commencing under "Waste to Energy" initiative is being taken up by BBMP. Treated sewage water from Bengaluru is being used for filling of tanks in Kolar district (400 MLD) and Chikkaballapura (100 MLD) and watering the Bengaluru International Airport (BIA), golf courses and park premises (Lalbhag, Cubbon Park etc.)

Member Secretary, Karnataka Pollution Control Board informed that comprehensive solid waste management plans are being implemented in ULBs of Karnataka. There are 7 composting plants of 540 TPD and 13 bio-methanation plants of 6 TPD are existing in Bengaluru. 7 Waste to Energy plant of 3500 MTD are proposed, of which agreement has been signed for 3 plants, agreement is pending for 1 plant, land is yet to be procured for 1 plant, technical tender for 1 plant is to be called and tender for 1 plant is to be finalized. Ward wise micro-plant plans have been prepared for 180 ULBs and new tenders have been floated for collection and transportation of waste. Integrated Control Command Centre is developed for monitoring the collection and transportation of waste. Further, 50 TPD new bio-methanation plant and upgradation of 13 bio-methanation plants are proposed. The RDF waste are to be utilized in cement industry. Further, it was informed that a State policy for Urban Waste Water Policy for Reuse was notified in 2019 and a Committee headed by Chairman, UDD was constituted, which empanelled Pricewaterhouse for giving advice in utilization of treated water in different activities. With regards to industrial pollution management, it was informed that as per NGT order in other matter, details of 3436 effluent generating industries are to be provided to CPCB as per their Performa. Details of the same shall be submitted.

30. <u>Jharkhand</u>

Senior Environment Specialist, NMCG informed that the State generates 700 MLD of sewage for which STPs of 131 MLD are existing and STPs of 600 MLD capacity are proposed, of which 113 MLD STPs are under construction at present and DPR is under preparation for 487 MLD STPs. With regard to the river Garga, a 89 KLD septage management is under construction and expected to be completed by December 2021 and for treatment of 29 MLD sewage, in-situ bioremediation through NEERI is proposed for which DPR has been prepared and the same shall be completed by December 2022. With regards to river Subarnarekha, 10 MLD STP at Ranchi and 58 MLD STP at Jamshedpur are operational, 16 MLD STP with 14.44 km at Ranchi is under construction (progress not reported) and expected to be completed by December 2021 and 34 MLD STP under construction at Adityapur by May 2021 (50% progress). There are 3 proposals for treatment of 26 MLD at Ranchi, 32 MLD at

Jamshedpur and 33 MLD at Mango by insitu bioremediation. With regards to the river Damodar, DPR for Phusro (15 MLD) is being approved by NMCG, DPR for Dhanbad I&D with 144 MLD STP is under TPA and DPR has been submitted for Ramgarh I&D with 40 MLD STP at NMCG. With regard to the river Jumar, a 37 MLD STP is under construction for which contract was terminated, it has been re-tendered and bid submission is on 01.10.2020.

There are 24 Industrial estates in the State. 141 industries are having ETPs (4 are non-complying) and 2 CETPs of 25.5 KLD are existing and 3.5 MLD CETP at Tupudana Industrial Area is under construction. Details of industrial effluent generation need to be provided by the State. With regard to the solid waste management in polluted river stretches, 1548.65 TPD of municipal solid waste is generated, 716.6 TPD of waste is treated and 283 TPD of waste is recycled/ reused as per the MPR submitted by the State for September, 2020. Further, State has developed action plan for reuse of treated waste water from Sahibganj STP.

Director SUDA informed that proposal with regard to insitu remediation of drains has been received from NEERI and on nomination basis work shall be awarded to NEERI. It was informed that the State generates 1846 TPD of solid waste, and treatment facility of 50% exists which shall be enhanced to 70% in this financial year. Jharkhand Waste Water Policy has already been notified for reuse of treated water.

Secretary, Ministry of Jal Shakti highlighted that the on-going STP project at Rajmahal should be expedited and funding for other proposed STPs needs to be tied up from the PSUs/ large industries under CSR.

Director SUDA informed that 72% of work of the Rajmahal STP has been completed and is expected to be completed by December 2020.

31. <u>Bihar</u>

Senior Environment Specialist, NMCG informed that the State generates 651.5 MLD of sewage, for which treatment capacity of 90 MLD (old) and 80 MLD (new) exists. 25 STPs are proposed in State, of which 2 are completed, 13 are ongoing, 3 have been awarded, 1 is being awarded and 6 are under tendering. DPRs for I&D with STPs are under preparation for rivers Sirsiya, Parmar, Ramrekha, Sikrahna. Work has been awarded for river Punpun. STPs at Karmalichak and Beur have been completed and are under commissioning. Progress has been reported for the on-going STP projects and status of proposed STPs has also been provided in the MPR. With regard to solid waste generation, the States generates 2272 TPD

of municipal solid waste, of which 1226 TPD of waste is processed and 112 TPD of waste is landfilled. There is a gap in treatment capacity of 934 TPD.

Member Secretary, Bihar Pollution Control Board informed that at 5 locations CETPs are to be constructed by State funds. Harbaura River (Sikrahna) has been selected as model river, which shall be treated for achieving the bathing river quality standards.

Secretary, Ministry of Jal Shakti highlighted that the STP project proposed at Bhagalpur may be expedited.

Secretary (Urban Development Department), Bihar informed that Bhagalpur STP shall be awarded immediately after lifting of model code of conduct. Further, it was informed that clarifications with regard to the STP proposed at Buxar have been submitted to NMCG and post approval from NMCG, tender shall be floated. With regard, to the bioremediation projects, State funds have been tied up, work has been awarded and the work shall commence from 01.10.2020.

Director General, NMCG suggested that paper work with regards to tenders, etc can be completed within the period of imposition of model code of conduct in the State so that most of the proposed STP projects can be awarded by November 2020. With regard to the issues of tenders for the proposed CETPs, it was suggested that it needs to be re-visited by the State.

Secretary, Ministry of Jal Shakti concluded the meeting and requested the States/UTs to take up the recommendations made in the beginning of the session. He also stressed that State representatives of appropriate senior level should participate in the meeting to ensure meaningful discussions.

The meeting ended with thanks to the Chair.

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List of participants: **Annexure-I**

1. Shri U. P. Singh, Secretary, Ministry of Jal Shakti – *in Chair*
2. Shri Rajiv Ranjan Mishra, Director General, NMCG cum Project Director, NRCD
3. Shri D.P.Mathuria, Executive Director (Technical), NMCG
4. Shri Brijesh Sikka, Senior Consultant, NMCG
5. Shri. B.B. Barman, Advisor, NRCD
6. Dr. Pravin Kumar, Director Technical, NMCG
7. Shri A. Sudhakar, Scientist E, CPCB
8. Shri Ishwer Singh, Consultant (Legal) NMCG
9. Shri S.K. Srivastava, Director, NRCD
10. Shri S.K. Singh, Deputy Director, NRCD
11. Shri A.P. Singh, Scientist E, NRCD
12. Dr. Sabita Madhvi Singh, Joint Director, NRCD
13. Shri Rajat Gupta, Senior Solid Waste Management Specialist, NMCG
14. Shri Saumya Mukhopadhyay, Senior Environmental Specialist, NMCG
15. Dr. P.N.Rymbai, Scientist B, NRCD
16. Shri Manish Kumar, Sewage Treatment and Wastewater Expert, NMCG
17. Shri Vijay Kumar, Assistant Civil Engineer, NMCG
18. Shri Rachit Andley, Project Manager, NMCG
19. Shri Avshesh Chauhan, Assistant System Analyst, NMCG
20. Shri Kumar Ajitabh, Project Officer Legal, NMCG
21. Mrs. Ruby Raju, Project Engineer, NMCG
22. Shri Neeraj Gahlawat, Project Officer Technical, NMCG
23. Mrs. Kritika Kaushik, Project Officer Technical, NMCG
24. Shri Kallol Choudhary, Industrial Process Expert, NMCG
25. Shri Manish Kumar Bhandari, Solid Waste Management Expert, NMCG
26. Shri Rishabh Choudhary, Support Engineer, NMCG

Legal/OA673/2018/NMCG/2019
National Mission for Clean Ganga
Department of Water Resources, River Development
& Ganga Rejuvenation, Ministry of Jal Shakti

1st Floor,
Major Dhyan Chand National Stadium
India Gate, New Delhi-110002
Dated: 17th November 2020

OFFICE MEMORANDUM

Subject: **Minutes of the 7th meeting of Central Monitoring Committee in the NGT Matter OA No.673 of 2018 held on 09.11.2020 from 10.00 AM on-wards**

A copy of Minutes of the 7th Meeting of Central Monitoring Committee in the NGT matter O.A. No. 673 of 2018 held through Video Conferencing on 09.11.2020 from 10.00 AM on-wards, under the Chairmanship of Secretary, Ministry of Jal Shakti is forwarded herewith for information/ necessary action.

(D. P. Mathuria) 17.11.2020
Executive Director-Technical, NMCG

Encl: As above.

To,

1. Chief Secretary, Government of Andhra Pradesh, Ist Block, A.P Secretariat Office, Velagapudi – 522503
2. Chief Secretary, Government of Assam, Block- C, 3rd Floor, Assam Sachivalaya, Dispur - 781006, Guwahati
3. Chief Secretary, Government of Bihar, Main Secretariat, Patna – 800015
4. Chief Secretary, Government of Chhattisgarh, Mahanadi Bhawan, Mantralaya, Naya, Raipur – 492002
5. Chief Secretary, Government of Goa, Secretariat, Porvroim, Bardez, Goa – 403521
6. Chief Secretary, Government of Gujarat, 1st Block, 5th Floor, Sachivalaya, Gandhinagar – 382010
7. Chief Secretary, Government of Haryana, 4th Floor, Haryana Civil Secretariat, Sector-1, Chandigarh – 160019
8. Chief Secretary, Government of Himachal Pradesh, H P Secretariat, Shimla –171002
9. Chief Secretary, Government of Jammu & Kashmir, R. No. 2/7, 2nd Floor, Main Building, Civil Secretariat, Jammu -180001
10. Chief Secretary, Government of Jharkhand, 1st Floor, Project Building, Dhurwa, Ranchi-834004

11. Chief Secretary, Government of Karnataka, Room No. 320, 3rd Floor, Vidhana Soudha, Bengaluru -560001
12. Chief Secretary, Government of Kerala, Secretariat, Thiruvananthapuram -695001
13. Chief Secretary, Government of Madhya Pradesh, MP Mantralaya, Vallabh Bhavan, Bhopal – 462004
14. Chief Secretary, Government of Maharashtra, CS office main Building, Mantralaya, 6th floor, Madame Cama Road, Mumbai – 400032
15. Chief Secretary, Government of Manipur, South Block, Old Secretariat, Imphal – 795001
16. Chief Secretary, Government of Meghalaya, Main Secretariat Building, Room no 316, Shillong – 793001
17. Chief Secretary, Government of Mizoram, New Secretariat Complex, Aizwal – 796001
18. Chief Secretary, Government of Nagaland, Civil Secretariat, Kohima – 797004
19. Chief Secretary, Government of Odisha, General Administration Department, Odisha Secretariat, Bhubaneswar – 751001
20. Chief Secretary, Government of Punjab, Chandigarh – 160001
21. Chief Secretary, Government of Rajasthan, Secretariat, Jaipur – 302005
22. Chief Secretary, Government of Sikkim, New Secretariat, Gangtok – 737101
23. Chief Secretary, Government of Tamil Nadu, Secretariat, Chennai-600009
24. Chief Secretary, Government of Telangana, Block C, 3rd floor, Telangana Secretariat Khairatabad, Hyderabad, Telangana
25. Chief Secretary, Government of Tripura, New Secretariat Complex Secretariat – 799010, Agartala, West Tripura
26. Chief Secretary, Government of Uttar Pradesh, 1st floor, Room No. 110, Lal bahadur Sastri Bhawan, Uttar Pradesh Secretariat, Lucknow – 226001
27. Chief Secretary, Government of Uttarakhand, 4 Subhash Road, Uttarakhand, Secretariat Dehradun – 248001
28. Chief Secretary, Government of West Bengal, Nabanna, 13th Floor, 325, Sarat Chatterjee Road, Mandirtala, Shibpur, Howrah – 711102
29. Administrator, Daman & Diu and Dadra and Nagar Haveli, Secretariat, Moti, Daman -396220
30. Chief Secretary, Govt. of NCT of Delhi, Delhi Secretariat, IP Estate, New Delhi – 110002
31. Chief Secretary, Govt. of Puducherry, Main Building, Chief Secretariat, Puducherry-605001
32. Chief Secretary, Andaman & Nicobar, Secretariat, Port Blair
33. Administrator, Lakshadweep

Copy To:

1. Secretary, Department of Forest, Ecology & Environment, J&K, Room no. 2/33-34, Main Building, Civil Secretariat, J&K, Jammu.
2. Secretary, Department of Environment, Science and Technology Paryavaran Bhawan, Near US Club, Shimla, Himachal Pradesh-171001
3. Principal Secretary, MGSIPA Complex, Sector-26, adjacent Sacred Heart School, Chandigarh, 160019

4. Additional Chief Secretary to Govt. of Haryana, Environment Department of Environment & Climate Change, R.No. 108, 7th Floor, Main Secretariat Sec16, Chandigarh 160017
5. Principal Secretary, Department of Environment, U.P., Room No. 601, Bapu Bhawan Secretariat, Vidhan Sabha Marg, Lucknow – 226001.
6. Special Chief Secretary, Department of Environment, Forest, Science & technology, 4th Block, Ground Floor,Room No:268, A.P Secretariat Office, Velagapudi
7. Secretary, Department of Environment and Forest, H-Block, 2nd Floor Janata Bhawan, Dispur, Guwahati 781006, Assam
8. Principal Secretary, Department of Environment, Forest and Climate Change, Van Vibhag Rd, Nehru Nagar, Patliputra Colony, Patna, Bihar 800013
9. Additional Chief Secretary (Forests & Environment), Forests & Environment Department, Block 14, 8 th floor, Sachivalaya, Gandhinagar - 382 010 Gujarat.
10. Principal Secretary, Department of Environment, Room No. S-2/23, Mahanadi bhawan, Mantralaya, Nava Raipur, Atal Nagar, Raipur - 492001
11. Additional Chief Secretary to Government, Forest, Environment and Ecology, Department, Karnataka Government Secretariat, Room No. 447, 4th Floor, Gate no. 2, Multi-storey Building, Bangalore-560001.
12. Principal Secretary, Department of Environment, Room No. 406 4th Floor Annex II, Secretariat, Kerala Thiruvananthapuram, Kerala, PIN- 695001
13. Principal Secretary, Department of Housing and Environment, Government of Madhya Pradesh, Paryavaran Parisar, E- 5, Arera Colony, Bhopal, Madhya Pradesh, 462016
14. Principal Secretary, Environment Department, Maharashtra 15th Floor, New Administrative Building, Madam Cama Road, Mantralaya, Mumbai – 400032
15. Additional Secretary, Forests & Environment Deptt, Secretariat Building, North Range, Forest Colony, Khasi Hills, Shillong, Meghalaya 793001
16. Deputy Conservator of Forest (Headquarters) Environment, Forests & Climate Change Department Tuikhuahtlang, Aizawl Mizoram.
17. Principal Secretary, Department of Environment, Forest & Climate Change, New Secretariat, Kohima, Nagaland Tel.- 0370-2243025
18. Additional Chief Secretary, State Silvicultural garden, Khandagiri, Bhubaneswar, Odisha 751003
19. Principal Secretary, Forest and Environment Department, Rajasthan 4, Jhalana Institutional Area, Jhalana Doongri, Jaipur, Rajasthan 302004
20. Principal Secretary, Chief Project Director (SBFP-JICA), Forests, Environment & Wildlife Management Department, Government of Sikkim
21. Principal Secretary, Namakkal Kavignar Maaligai, Fort St. George, Chennai 600 009
22. Secretary, Department of Science, Technology & Environment, Vigyan Prajukti O Paribesh Bhawan, P.N. Complex, Gorkhabasti, Agartala,West Tripura, PIN-799006
23. Special. Chief Secretary, TSCOST, 4th Floor, Aranya Bhavan, Saifabad, Hyderabad, Telangana State, Pin – 500004
24. Deputy Conservator of Forests, (Territorial Division), Department of Environment & Forest Office of the Deputy Conservator of Forest, Daman, Fort Area, Post Office Moti Daman Daman & Diu (U.T.)

25. Deputy Conservator of Forests, (Territorial Division), Van Bhavan, Dadra and Nagar Haveli
26. Secretary, Department of Environment, Govt. of NCT of Delhi, 6th Floor, Delhi Secretariat, IP Estate, New Delhi 110002
27. Secretary, Environment & Forest, Govt. of Uttarakhand, 4 Subhash Road, Secretariat, Forth Floor, New Building Dehradun, Pin code-248001
28. Joint Secretary, Department of Science, Technology & Environment, 1st Floor, Pandit Deendayal Upadhay Bhavan, Behind Pundalik Devasthan, Near Sanjay School, Porvorim, Bardez - Goa
29. Secretary, Environment, Office of Environment, Chief Secretariat, Goubert Avenue, Puducherry 605001
30. Principal Secretary, Department of Environment, 5th Floor, Pranisampad Bhawan, Block LB-II, Salt Lake, Sector III, Bidhannagar, Kolkata – 700 106
31. Additional Chief Secretary Forest, Environment & Climate Change Deptt., Nepal House, Doranda, Ranchi-834002, Jharkhand
32. Additional Chief Secretary, Forest and Environment Department, Government of Manipur, Secretariat, Imphal- 705001
33. The Member Secretary, Assam Pollution Control Board, Bamunimaidam, Guwahati – 781021
34. The Member Secretary, Andhra Pradesh Pollution Control Board D.No. 33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre, Chalamalavari Street, Kasturibaipet, Vijayawada – 520 010
35. The Member Secretary, Bihar State Pollution Control Board, Parivesh Bhawan, Plot No. NS-B/2 Paliputra Industrial Area, Patliputra, Patna (Bihar) - 800 010
36. The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhavan, North Block Sector-19, Atal Nagar Dist- Raipur (C.G.) 492002
37. The Member Secretary, Delhi Pollution Control Committee, Government of N.C.T. Delhi 4th Floor, ISBT Building, Kashmere Gate, Delhi-110006
38. The Member Secretary, Daman, Diu & Dadra Nagar Haveli Pollution Control Committee, Office of the Deputy Conservator of Forests, Fort Area, Court Compound, Moti Daman, Daman – 396220
39. The Member Secretary, Goa State Pollution Control Board, 1st Floor, Dempo Tower, EDC Patto Plaza, Panaji, Goa-403 001
40. The Member Secretary, Gujarat Pollution Control Board Paryavan Bhavan, Sector 10- A, Gandhinagar – 382 043
41. The Member Secretary, Haryana State Pollution Control Board, C-11, Sector-6, Panchkula-134109, Haryana
42. The Member Secretary, Himachal Pradesh Pollution Control Board, Him Parivesh, Phase-III, New Shimla, Himachal Pradesh 171009
43. The Member Secretary, Jammu & Kashmir State Pollution Control Board, Parivesh Bhawan, Forest Complex, Gladni, Narwal, transport Nagar, Jammu, Jammu and Kashmir 180004
44. The Member Secretary, Jammu & Kashmir State Pollution Control Board, Shiekh-ul-Campus, behind Govt. Silk Factory, Raj Bagh, Srinagar (J&K)

45. The Member Secretary, Jharkhand Pollution Control Board, T.A Building, HEC, P.O. Dhurwa, Ranchi – 834004
46. The Member Secretary, Karnataka State Pollution Control Board, Parisara Bhavan, 4th & 5th Floor, # 49, Church St., Bengaluru-560 001
47. The Member Secretary, Kerala State Pollution Control Board, Plamoodu Jn., Pattom Palace P.O. Thiruvananthapuram - 695 004
48. The Member Secretary, Manipur Pollution Control Board, Lamphelpat, Imphal West D.C. Office Complex Imphal– 795004
49. The Member Secretary, Meghalaya Pollution Control Board Arden- Lumpyngngad Shillong: 793014
50. The Member Secretary, Nagaland Pollution Control Board, Signal Point, Dimapur Nagaland – 797112
51. The Member Secretary, Madhya Pradesh Pollution Control Board, E-5, Arera Colony, Paryavaran Parisar, Bhopal - 462 016, Madhya Pradesh
52. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 2nd – 4th Floor Opp. Cine Planet Cinema, Nr. Sion Circle, Sion (E) Mumbai – 400 022
53. The Member Secretary, Mizoram Pollution Control Board, New Secretariat Complex, Khatla Thlanmual Peng, Khatla, Aizawl, Mizoram: 796001
54. The Member Secretary, Puducherry Pollution Control Committee, Housing Board Complex, Anna Nagar, Puducherry -600 005
55. The Member Secretary, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala, Punjab 147001
56. The Member Secretary, Odisha Pollution Control Board, A-118, Nilakanta Nagar, Unit – VIII, Bhubaneshwar – 751012
57. The Member Secretary, Rajasthan Pollution Control Board, 4, Jhalana Institutional Area, Jhalana Doongri, Jaipur (Rajasthan) - 302 004
58. The Member Secretary, Sikkim State Pollution Control Board, Department of Forest, Environment & Wildlife Management Government of Sikkim, Deorali, Gangtok, - 737102
59. The Member Secretary, Telangana State Pollution Control Board, Paryavaran Bhawan, A-3, I.E. Sanath Nagar, Hyderabad-500 018
60. The Member Secretary, Tripura Pollution Control Board, Vigyan Bhawan, Pandit Nehru Complex, Gorkhabasti, PO: Kunjaban Agartala – 799006
61. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600 032
62. The Member Secretary, Uttarakhand Environmental Protection & Pollution Control Board, 29/20, Nemi Road, Dehradun, Uttarakhand – 248001
63. The Member Secretary, Uttar Pradesh Pollution Control Board, Building.No. TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow-226 010
64. The Member Secretary, West Bengal Pollution Control Board, Paribesh Bhavan, 10A, Block-L.A., Sector III, Salt Lake City, Kolkata - 700 106
65. The Member Secretary, Andaman & Nicobar Islands Pollution Control Committee, Department of Science & Technology, Dollygunj Van Sadan, Haddo P.O., Port Blair – 744102

66. The Member Secretary, Lakshadweep Pollution Control Committee, Department of Science, Technology & Environment, Kavarati-682555

Copy for kind information:

1. PPS to Secretary, Department of Water Resources, RD&GR, Ministry of Jal Shakti, Shram Shakti Bhavan, Rafi Marg, Sansad Marg Area, New Delhi- 110001
2. PS to Director General, NMCG cum Project Director NRCD
3. Additional Secretary, Ministry of Housing and Urban Affairs, Nirman Bhawan, Maulana Azad Road, New Delhi – 110011.
4. Joint Secretary, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhavan, Jorbagh Road, New Delhi – 110003
5. Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032
6. PS to ED (/Project/ Finance), NMCG
7. Adviser, NRCD

Minutes of the 7th meeting of the Central Monitoring Committee held on 09.11.2020 through Video Conferencing regarding 351 polluted river stretches based on the directions of Hon'ble NGT in the matter OA No. 673 of 2018

The 7th meeting of the Central Monitoring Committee (CMC) constituted by Hon'ble NGT in the matter OA No. 673 of 2018 was held through video conferencing with the States on 09.11.2020 from 10.00 AM onwards in Conference Room, NMCG under the Chairmanship of Secretary, Ministry of Jal Shakti. The list of participants of NMCG, NRCD, MoHUA and CPCB present at the meeting is at ***Annexure-I.***

II. Director General, NMCG welcomed all participants. It was informed that in compliance to the 6th meeting of CMC, separate review meetings were held under his Chairmanship with the States/ UT of J&K and Rajasthan. Further, NMCG had organized a webinar on '*Municipal Solid Waste Management*' on 06.11.2020, for informing the State Governments/ UT Administrations on different successful approaches and models that can be adopted for management of municipal solid waste. In the webinar, presentations were made by MoEF&CC with regard to the Solid Waste Management Rules'2016 and MoHUA on the status of various initiatives being undertaken in India and the success of *Swach Bharat Mission*. States of Odisha, Chhattisgarh and Goa shared their experiences with regard to some of the successful approaches being adopted by them.

Secretary, Ministry of Jal Shakti remarked that during the earlier meetings of CMC, it has been observed that not much progress is being made by States in a months-time. For realistic discussions of the progress in respect of various initiatives take by States, it needs to be seen whether the meetings for discussions on a particular subject could be held after a gap of more than a month. However, since monthly monitoring framework has been as per directions of NGT, it would make better sense if from next meeting onwards, specific focus on incremental progress is maintained. Further, since general sewerage profile of State is now available and repetition of same may not make much sense, therefore, henceforth STP wise discussions underlining bottlenecks, specific areas to catalyze progress, as well as utilization of existing assets should remain the core of discussions. States should accordingly prepare for these points and keep the Secretariat of CMC informed of the status well in advance.

III. Subsequently, State-wise discussions held are as follows:

Executive Director Technical (ED Tech), NMCG through a presentation briefed about the issues related to sewage, industrial and solid waste management in the States, as per the information submitted in MPR. **It was also informed that a revised format has been circulated with the minutes of the 6th meeting of CMC (attached with the mail) and States/ UTs must ensure submission in the new format, clearly indicating the incremental progress made by the States in the respective month against each component.**

1. Delhi

Secretary, Ministry of Jal Shakti highlighted that a review meeting was held under the Chairmanship of Hon'ble Minister of Jal Shakti with Chief Minister of Delhi, in first week of October 2020, wherein the projects were reviewed in detail and the issues were flagged at highest level.

ED Tech, NMCG informed that 35 STPs of 597 MGD are operational in Delhi, of which only 8 STPs are reported to be complying and remaining 27 STPs are reported to be non-complying with the discharge norms of BOD - 10mg/l, TSS - 10 mg/l and COD-50mg/l, based on the monthly monitoring of STPs carried out by DPCC. Of the 13 CETPs operational in Delhi, only 3 CETPs are complying with the norms. With regard to the Solid Waste Management, it was informed that Delhi generates 11144 TPD of solid waste, have processing facility of 5497.175 TPD, of which 5259 TPD is processed and 5885 TPD is disposed in landfill site. Compliance of the existing STPs and CETPs and slow progress of the on-going STP projects remains major issue. It was highlighted that in the latest MPR, completion timeline of STP at Coronation Pillar has been extended from March 2021 to June 2021.

Additional Chief Secretary (Urban Development), Delhi attended the meeting along with other State government officials. CEO, Delhi Jal Board informed that 70 MGD of treated water from the STPs are achieving the discharge norms of BOD – 10mg/l, TSS - 10 mg/l and COD-50mg/l and the remaining operational STPs which are old, and have been designed for old discharge norms, may not be able to achieve the stringent norms. Further, it was informed that upgradation/

rehabilitation of the existing STPs of 279 MGD are under progress and shall be completed as per timeline indicated in the MPR. Further for 348 MGD of existing STPs, rehabilitation is yet to be commenced and funding is being tied out. 98% of the Interceptor Sewer Project (ISP) has been completed and the drains shall be trapped by December 2020. 158 MGD of the trapped flow is being treated in the STPs. The treatment capacity for ISP shall be completed in phased manner by 2022. With regard to Coronation Pillar, it was informed that 50% of the project shall be completed by December 2020 and remaining 50% of the project shall be completed by June 2021. It was informed that payments for all the projects are being made regularly. With regard to tree cutting permission for the STPs at Kondli (Phase-I & III), it was informed that permissions have been obtained for 492 trees and the STP shall be completed by September 2021. For Kondli Phase-II, application for tree cutting has been submitted and lands for compensatory afforestation have been approved by DDA.

Secretary, Ministry of Jal Shakti suggested that it may be ensured that Coronation Pillar is made 50% operational by March 2021. It was suggested to conduct joint inspection of the 13 CETPs in Delhi, flow being intercepted as well as the STPs which are receiving flow from the Interceptor Sewer Projects to verify the flow, status of treatment and the amount of effluent being treated. Further, the State was requested to resolve the tree cutting issue at the earliest as the project timelines are being inordinately delayed.

Principal Secretary, Environment & Forest, Delhi informed that permission for tree cutting was given in December 2019 and also in September 2020. For Rithala (Phase-II) and Okhla, recommendations have been made to the Minister and early clearance shall be given to these projects. For compensatory forestation at Kondli Phase-II, land available is insufficient and the same has been intimated. For Maharani Bagh, response has been received and the same shall be put up before the Minister.

ED Tech, NMCG informed that status with regard to the 2000 TPD Integrated Solid Waste Management Plant proposed at Ghonda Gujran may also be apprised as the plant is being built on active floodplain of the River Yamuna, which was previously deferred by the Principal Committee of NGT considering the environment impacts on the River. Further, it was informed

that DDA has demarcated active floodplain of the River Yamuna by physical markings both on left and right bank.

Official from EDMC informed that as per the reports of DDA, the location of the plant is outside floodplain of River Yamuna. The ISWM facility is being implemented by EDMC and NTPC, tenders have been received and approval from Environment Ministry is under process.

2. <u>Punjab:</u>

ED Tech, NMCG informed that the State generates 2111 MLD of sewage, for which 116 STPs of 1628.5 MLD capacity exists. Out of 116 STPs, 115 are operational and has utilization capacity of 80%. 79 STPs are reported to be complying with the norms. There are 1764 ETPs of 418 MLD existing in industrial area, of which 1654 are complying. 4 CETPs of 20.535 MLD are existing, of which 2 CETPs are complying, 1 CETP is closed down and 1 CETP is non-complying. The State generates municipal solid waste of 4100 TPD and has processing facility of 2800 TPD. Further State was requested to provide status with regard to the issues highlighted in the previous meeting viz., progress of two ongoing CETPs in Ludhiana for textile cluster, implementation of work under Buddha Nala project for I&D of 14 drains as well as shifting of dairy complexes.

Chief Secretary, Punjab attended the meeting along with other State government officials. Principal Secretary, (Science, Technology & Environment), Punjab informed that work is in progress with regard to the two CETPs at Ludhiana, 50 MLD CETP has achieved 72% of physical progress and 40 MLD CETP has achieved 83% progress. Only electrical and mechanical works are remaining and the both CETP shall be completed by end of December'2020. Regarding Buddha Nala project, it was informed that tenders for STPs have been received and technical & financial evaluation for the same has been completed. The work shall be awarded by end of November, 2020.

With regard to the shifting of dairies, it was informed that installation of 2 ETPs of 5 MLD and 10 MLD capacities for dairy complexes are part of the comprehensive Buddha nala project for which tenders have already been invited and work will be allotted after completion of tendering process. For utilization of solid waste from dairy complexes, one bio-gas plant of 1 MW is

existing for Habowal dairy complex and Tajpur dairy complex. Punjab Energy Development Agency has been given 2.5 acre of land to install a plant for energy generation from cow-dung and shall be completed in next 30 months.

For long term solution for pollution abatement of Buddha nala, State is working on shifting of dairy complex and for which consultation at District level with all stake holders is going on. Government is also identifying the suitable land for shifting of dairy complexes. There is a gap of 650 MLD in sewage treatment capacity for which a number of STPs are proposed by the State Government and a detailed time line has already been submitted to the Ministry. The work is in progress and being monitored by the Sate Apex Committee chaired by Chief Secretary. Work for 5 STPs have been allotted and will start soon on site. There were land issues in 7 towns along the polluted river stretches. Out of 7 places, land issues at 2 places have been resolved and for rest 5 places, efforts are being made to resolve the issue.

Secretary, Ministry of Jal Shakti appreciated the efforts of State Government in implementation of Action Plan. He requested the State official to rigorously monitor the implementation of Buddha nala project, especially the CETP work for which December, 2020 is the scheduled completion date.

Member Secretary, Punjab Pollution Control Board informed that Central Share for the 40 MLD CETP has not been received.

With regard to the Ghaggar River pollution and recent orders of NGT, Secretary, Ministry of Jal Shakti, directed NMCG to collect the status from the States, before conveying a separate meeting with the States.

3. Haryana

ED Tech, NMCG informed that the State has more sewage treatment capacity than its sewage generation. As reported by the State, trapping of 110 drains in Leg-I, II and III were expected to be completed by December 2020. However, as per the latest MPR, drain diversion works shall be completed by December 2021. Out of the 59 STPs of 514 MLD capacity in Ghaggar basin, 58 STPs are not-complying with Faecal Coliform norms. Similarly, out of 58 STPs of 1052.2 MLD

capacity in Yamuna basin, only 9 STPs are complying with the norms. In Ghaggar basin, most of the STP projects are due for completion, therefore the State must ensure that the projects are completed within the committed timeframe.

Additional Chief Secretary (Environment), Haryana informed that a meeting under the Chairmanship of Chief Secretary Haryana is scheduled to sort out the issues of non-compliance of the STPs with regard to the Faecal Coliform norms and sought assistance, if necessary, from the Ministry. Review meeting of Ghaggar Monitoring Committee of NGT is regularly being conducted with concerned departments and updated report shall be submitted to the Ministry also. Sewer network laying works are in progress. Out of 2138 kms, 1502 kms of sewer lines have been laid and with commissioning of the networks, the utilization capacity of the existing STPs shall improve. In Faridabad, there is a sewage treatment gap of 165 MLD, for which work of 2 new STPs of 100 and 80 MLD has started and shall be completed within 18 months. Further for bridging the gap, a 50 MLD CETP and a 65 MLD WWTP has been proposed for which administrative approval has been granted and tender will be floated immediately. For, solid waste management, 14 clusters are to be developed for which 13 sites have been identified.

Secretary, Ministry of Jal Shakti directed NMCG officials to discuss with the State with regard to non-compliance of the STPs with regard to fecal coliform. Further, NMCG officials may visit the STP sites at Faridabad. State was directed to ensure improvement in water quality of the rivers and better utilization of the capacity of the STPs.

4. <u>Himachal Pradesh</u>

ED Tech, NMCG informed that the State needs to submit MPR in the revised format.

Joint Secretary (Environment) Himachal Pradesh informed that Chief Secretary, Himachal Pradesh is regularly monitoring the progress and information is being compiled with respect to the revised MPR format. Chief Engineer informed that 5 new STPs (of 8.14 MLD) are under construction and 5 existing STPs are under upgradation (5.42 MLD). These STPs shall be completed by September 2021 and the State has applied for extension of completion timelines. Member Secretary, HPPCB informed that up-gradation works of Baddi CETP is in progress and 3 new CETPs at Ponta Sahib, Kala Amb (5 MLD) and Kangda are planned. Special Purpose

Vehicle has been constituted for Kala Amb, tenders have been awarded for first phase of the project (2.5 MLD), discharge norms shall be finalized shortly and the project is expected to be completed within March 2021. Environment Clearance for the CETPs at Ponta Sahib and Kangda have been obtained and are in initial stages of proposals.

Secretary, Ministry of Jal Shakti suggested that as the 10 STPs are of small capacity therefore the State must ensure early completion of the projects and not to extend the projects beyond June 2021. NMCG was directed to obtain physical and financial progress of the 10 STPs under construction/ upgradation from the State.

5. <u>Jammu & Kashmir</u>

ED Tech, NMCG raised the issue of under-utilization of STPs in Jammu. It was informed that against the present treatment capacity of 67 MLD only 29 MLD of wastewater is being treated. This is attributed to the slow progress in house connection works. State may provide progress of all the bioremediation projects and status of treatment of legacy waste at Jammu. The issue of non-submission of comments from Jammu & Kashmir to IIT Roorkee's observation on DPR for project of pollution abatement of river Banganga at Katra was also highlighted.

Secretary, Ministry of Jal Shakti expressed serious concern over the response of the UT with regard to solid and liquid waste management, poor utilization of the existing infrastructure and the slow progress of Devika river project sanctioned under NRCP. It was requested that UT must give clear status of sewage generation and treatment at Jammu as well as future plans for other towns.

Director General, NMCG informed that review meeting with the officials of J&K was held on 16th October 2020, which was attended by Principal Secretary (Housing and Urban Development Department) Jammu & Kashmir. It was informed that J&K was requested to resolve the issue of design and land acquisition of 2 STPs in Devika river project at the earliest.

Principal Secretary (HUDD), J&K informed that after the review meeting with DG, NMCG a detailed note on sewage and solid waste management has been prepared, the deficiencies pointed out shall be taken care in consultation with Pollution Control Board and the same shall be

submitted. It was informed that comments on the queries made by IIT Roorkee on the Banganga River proposed under NRCP shall be submitted by the UT to NRCD shortly and that the land issues have been resolved. DPRs amounting to about Rs. 760 crore for other 7 polluted river stretches (excluding river Devika and Banganga) have been prepared. It was further informed that 81 MLD of sewage is generated in Jammu, for which treatment facility of 67 MLD exists. For treatment of remaining 14 MLD sewage, proposal has already been prepared. Presently only 27 MLD of sewage is being treated in Jammu, which is attributed to various issues including the non-availability of house sewer connections, design issues etc. The project being implemented by NBCC is expected to be over by March, 2021. Tenders for intercepting 13 nalas will be awarded soon and work shall be completed within one year. Other issues related to under utilization shall also be resolved in consultation with NBCC. Bioremediation projects could not be awarded and efforts are being put in to award the work by November'2020 end.

6. Sikkim

ED Tech, NMCG informed that there are 7 STPs of 20.5 MLD in the State and their capacity utilization is 16 MLD. 3 STPs of 6.25 MLD capacity are under construction while 2 STPs of 5.53 MLD capacity are also proposed. There is no CETP in the State. State generates total solid waste generation of 74.9 TPD against which 50.8 TPD treatment facilities exists. It was informed that the 3 under construction STPS are almost complete and are to be commissioned and State has to resolve the land issues for proposed STPs at Jorthang and Namchi.

Secretary, Ministry of Jal Shakti informed that these issues have also been highlighted during the meeting Hon'ble Minister of MoJS and Hon'ble C.M. of Sikkim held on subject of Jal Jeevan Mission. It was informed that one project for Gangtok has recently been sanctioned under NRCP and requested State to provide updated status.

Secretary (PHED), Sikkim informed that with the sanction of new project under NRCP, left out area of Gangtok will now be covered with sewer lines and all the sewage generated in Gangtok will be reaching the existing STPs. With regard to the land issues for Jorthang and Namchi, it was informed that land has been identified for STPs at both the places and negotiation process has been initiated. STPs at Rangpo and Zone–II Gangtok shall be completed by end of

December, 2020. It was further informed that the State shall install online effluent monitoring system within next 2 months in STPs at Gangtok.

Secretary (UDD), Sikkim informed that total solid waste generation is 74.7 TPD out of which 12.56% of waste is being processed and 30% of the recyclable waste is recovered and is being sent for recycling.

7. Telangana

Secretary, Ministry of Jal Shakti highlighted that there is a huge gap in sewage generation and treatment in the State.

ED Tech, NMCG informed that comparative analysis for the higher cost of in-situ remediation of drains as reported in the previous meeting of the Committee is to be provided by the State. It was informed that tenders for 17 STPs in 3 packages for Musi river have been invited under HAM in September 2020, 12 STPs of 367 MLD capacity are to be sanctioned for River Nakkavagu and Manjeera, DPRs have been prepared for other river reaches of Maneru, Karakavagu, Kinnerasani, Godavari and Krishna. As per the directions of the NGT, State needs to identify model river to be adopted by the State. State to provide operational details and compliance status of existing STPs and CETPs. State was requested to provide further progress.

Managing Director, Hyderabad Metropolitan Board informed that DPR has been prepared for the gap in sewage treatment of 1178 MLD for Hyderabad. Tenders have been floated for Package 3 (drainage into Hussain Sagar Lake) and the river front development, which is likely to be started upon completion of tendering within 25 days. Other two packages of 883 MLD STP capacity are under sanction stage. Capacity utilization of the existing STPs is 772.3 MLD (about 90%) and the decrease in utilization capacity is due to heavy rain and damage to the pipe. The OCEMs will be tendered with revised tender qualifications. The cost of bio-remediation is high as per the 5 DPRs submitted by NEERI for the 5 drains and tendering is likely to be completed by this month. For intermediate treatment processes, 3 FSTPs are likely to be completed by January, 2021.

Secretary, Ministry of Jal Shakti, appreciated State for adopting HAM model for STPs, as it will ensure better performance of the STPs. With regard to bioremediation projects, it was suggested

that for interim measures cost effective treatment measures should be adopted as bio-remediation are not permanent measures and therefore funds may be utilized for permanent works.

Member Secretary, Telangana Pollution Control Board informed that for other river stretches, 72 STPs of 315 MLD capacity are proposed. DPRs have been prepared for 59 STPs and are submitted to Municipal Administration for approval and sanction of funds. DPRs for 13 STPs are under preparation. It was informed that after commissioning of new STPs, improvement in the water quality and flow in the Rivers Godavari and Krishna has been observed and accordingly State is planning to revise the number of STPs proposed for these rivers.

Secretary, Ministry of Jal Shakti, suggested that before revising the actions proposed for these rivers, water flow and quality of the rivers in the non-monsoon season may also be considered. Further, the State was directed to submit the update status to the Ministry and a separate detailed meeting may be convened by NRCD in this regard.

8. <u>Assam:</u>

ED Tech, NMCG informed that at present there is no STP existing in the State and for the proposed sewerage project at Guwahati assistance from JICA has been finalized and land for 14 STPs has also been finalized. As an interim measure, the work for desiltation and cleaning of beels/ water bodies has also been started by the State Governments and State was requested to provide the latest status of the work. State was also requested to provide status of DPR preparation as well as availability of land in other towns for polluted river stretches of Bega, Barak, Kolong, Bhogdoi and Mora Bhoroli. The latest status of funding for setting up of Integrated Solid Waste Management Plant at Byarnihat and the removal of legacy waste at Boragaon dumping site in the catchment area of Deepor Beel (Ramsar Site) was also requested. It was informed that there are 22 industries operating without consent in Bharalu river catchment and 13 industries operating in Borosola catchment. Repetitive information has been observed in the MPR and concerned officials may ensure that the reports are duly checked before submission to CMC.

Secretary, Ministry of Jal Shakti emphasized that State should also explore the other low cost effective sewage treatment options.

Principal Secretary (Environment and Forests), Assam informed that bio-remediation as well as cleaning and de-silting of water bodies in and around Guwahati is regularly being carried out by GMC and GMDA. It was informed that land for all 14 decentralized STPs in Guwahati has been secured and DPR is being revised with help of consultant and the DPR shall be finalized within 4 months. With regard to 5 STPs proposed outside Guwahati, it was informed that land for 3 STPs at Mangaldhoi, Jorhat and Tezpur has already been identified, DPRs have been finalized and administrative approval is being issued. It was informed that tenders for these 3 shall be floated within 15 days. Land for STP in Naugaon has been identified and due to some problems at Mizoram- Silchar border, land acquisition for STP at Silchar is taking time. It was assured that in next 30-40 days, tenders for STPs in these 2 towns shall also be floated.

Director General, NMCG requested State officials to revise the Action Plan based on the changes proposed by the State Government and NRCD to review the same.

9. <u>Manipur:</u>

ED Tech, NMCG informed that the State generates 115.05 MLD of sewage, 1 STP of 27 MLD is existing, which is treating only 9 MLD of sewage. There are 2 STPs of 17 MLD under construction, 1 STP of 49 MLD is proposed and State plans to treat 16.75 MLD of sewage through bioremediation and FSSM for which DPR is under preparation. As reported by the State, there are 989 industries operational in the State, however these are non-water polluting industries and State has adopted Nambul River as the model river for treatment.

Secretary, Ministry of Jal Shakti highlighted that the State may also indicate efforts put in to increase the utilization capacity of the existing 27 MLD STP, the status of the 2 on-going STPs of 17 MLD and the estimated project cost of the new proposed 49 MLD STP, which seemed be at higher side.

Additional Chief Secretary (Environment & Forest) Manipur informed that the under-utilization of the existing 27 MLD STP is due to incomplete house service connection which have been delayed on account of funding issues. The issue has now been resolved and the remaining connections shall be completed by January 2021. With regard to 49 MLD STP, it was informed

that the proposal is being reviewed and suggestion to split the proposal into two parts, one to be funded under EAP and the other under NRCP is under consideration.

With regard to the existing 125 TPD waste processing plant at Lamdeng, it was informed that currently utilization of the plant is 30 TPD, which shall be gradually increased in next year and the plant shall be fully utilized by December 2021. For treatment of Bio-medical waste, DPR has been submitted to the Union Government to avail financial assistance in the 75:25 ratio funding pattern.

10. <u>Andhra Pradesh:</u>

ED Tech, NMCG informed that the details of each existing STPs installed in the stated locations of the State in MPR to be provided. All the STPs are said to be operational in MPR, yet the capacity utilization is 321.81 MLD against 515.85 MLD of existing capacity. Total effluent discharged by industries is 4494.33 MLD and seems to be high. Treatment capacity of 1069 ETPs has not been provided. Capacity utilization of the 7 installed CETPs is found to be poor, which is only 10 MLD against the installed capacity of 31 MLD (only 32%). It is mentioned in the MPR that 63 solid waste processing plants are in progress while 54 more are proposed, however capacity of these proposed/ in progress facilities is not mentioned. Model river adopted by the State is to be specified in the MPR.

Secretary, Ministry of Jal Shakti expressed his displeasure over absence of designated State officials in the meeting, which reflects lack of seriousness on part of State in following up directions of NGT. The State should be represented by the nodal Principal Secretary appointed by the Chief Secretary or at least the Member Secretary of the Pollution Control Board. It was remarked that it is incomprehensible why designated officials from State cannot spare an hour for such an important issue when Secretary, Ministry of Jal Shakti can spare full day for the same. Accordingly, State officials were directed to convey the direction to Chief Secretary of State and declined permission to submit their views.

11. <u>Daman Diu Dadra Nagar Haveli:</u>

Secretary, Ministry of Jal Shakti requested UT to provide status of sewer line connections for the 13 MLD STP at Silavassa and the status of 2 new proposed STPs at Nani Daman and Diu.

Member Secretary, Pollution Control Committee informed that 13.5% of the house service connections have been completed and the same is being monitored regularly. The progress of work in the last 4-5 months has been affected due to election and Covid-19 pandemic. However, the UT Administration has deployed 8 cesspool vehicles to collect the septage from the remaining households for treatment in the STP. The proposed 7 MLD STP at Diu was reported to be taken under SMART city and tenders will be floated in 10-15 days. It was also informed that the 16 MLD STP proposed at Nani Daman under World Bank ENCORE Project, has been submitted to GOI for approval.

12. <u>Goa:</u>

ED Tech, NMCG highlighted the issues of the State with regard to the poor capacity utilization of the existing 9 STPs which is only 37%, the considerable delay in the initiation of the household connections and the delay with regard to the on-going STP works. Status of the DPRs as reported by the State in the 6th CMC of meeting, was not found in the MPR. State has to provide the status of the STPs and the information regarding drains discharging into the river stretches and status of in-situ bioremediation project as an interim measure. There is considerable gap in treatment of municipal solid waste with only 100 TPD of SWM facility existing against 766 TPD generation. State has proposed increment of 250 TPD in processing facility, the action proposed for treatment of the gap of around 450 TPD of solid waste needs to be worked out and status to be provided.

Principal Secretary (Environment), Goa informed that sewage generation of 112.5 MLD is based on the census figures of the urban towns. Out of 5 under construction STPs, 2 STPs have made considerable progress and remaining 3 STPs are under JICA assistance, which are also progressing. There is an issue of higher water table in Goa due to which construction works related to sewer networks are facing difficulties, however it was assured that all pending

connection works shall be completed by next year. With regard to solid waste management, it was informed that works are in progress and State shall ensure that the targets are met as per the timelines provided.

Secretary, Ministry of Jal Shakti recommended that Goa should become ideal State, wherein no untreated sewage is discharged into the rivers and should ensure proper management of municipal solid waste in urban as well as in rural areas.

13. <u>Karnataka:</u>

ED Tech, NMCG informed that the State needs to provide incremental progress made and compliance status of CETPs/ STPs in the MPR. As reported in the MPR, 72 MLD STP at Chikkodi Taluk is under-repair and present status of the STP is to be provided in the MPR. Land issues are to be resolved at the earliest for the proposed 4.14 MLD STP at Kamaje and 0.22 MLD STP at Kaikunje. Large number of projects are under DPR preparation, which needs to be expedited and detailed completion timeline to be provided. Action proposed for enhancing the treatment capacity with regard to the solid waste needs to be provided. 16 drains have been identified and monitored along the polluted river stretches from Thippagondanahalli reservoir to Kanakapura town. The effluent in the drains are having high BOD & TC count, therefore in-situ treatments proposed for these drains needs to be provided.

Member Secretary, Karnataka Pollution Control Board informed that the State generates 3356.5 MLD of sewage, there are 146 STPs of 2561 MLD and there exists a gap of 795 MLD. To bridge the gap in treatment, 151 different projects are proposed in the State including STP and 48 FSTPs, details of which have been provided in the MPR. It was informed that 17000 industries exist in the State having industrial discharge of 663 MLD, 4158 industries have ETPs and 733 industries are connected to the 10 existing CETPs. Inflow and outflow monitoring data of the CETPs are now being uploaded on daily basis, which helps in monitoring the performance of the plants. GPS are installed in vehicles for transportation of hazardous industrial waste and biomedical waste and control command centres have been installed. 44 industries were found to be non-complying against which directions have been issued and legal charges have been insisted against 2 industries.

It was informed that the State generates 12,258.2 TPD of solid waste, 9824.5 TPD is collected and 5106.3 TPD is processed. It was informed that various initiatives have been proposed in the State such as two decentralized plants of 50 TPD which have been planned by BBM, which shall be completed by 31st December 2021. Similarly, 40 TPD capacity wet waste processing plants (within 6 months) and setting up of Bio-CNG units for processing waste at Kalika Kendra (within 3 months) shall be completed. There are 13 bio – methanation plants existing in the State, of which 7 plants are non-functional. Actions have been taken to upgrade these 7 by 31st March 2021. 7 Waste to Energy plants have been proposed and under Shubra Bengaluru, two aggregator centres of 50 TPD have been planned. These centres will help to stack all the non-reusable, non-recyclable, RDF material, which would be further sent to waste to energy plants or to cement factories to be used as fuel. 100 TPD C&D waste processing plant of M/S. Rock Crystals at Chikkajala has been established and another 750 TPD C & D waste processing plant of M/s. Rubble Revival Pvt. Ltd is coming up.

Secretary, Ministry of Jal Shakti appreciated the State of Art Centre established by the State to monitor the effluent treatment and directed the State to share the details with the Ministry for incorporation in the report being submitted to NGT as a part of the best practices being adopted in the States.

14. <u>Kerala:</u>

ED Tech NMCG informed that as reported by the State in the latest MPR, estimated sewage generation in the State is 3759 MLD and Urban Local Bodies generates 1058 MLD of the sewage. There exists 12 STPs of 124 MLD in the State. State is to provide MPRs in revised format from next submission onwards. Conveyance system proposed in Thiruvanthapuram for 107 MLD has shown no progress. The details of non-functional FSTPs are not being reported. Most of the STP projects have been re-tendered. There is a huge gap in solid waste generation and treatment and the data related to generation appears to be very high. State was directed to review and verify the same.

Member Secretary, Kerala Pollution Control Board informed that as per the Dossier prepared by the State, the total sewage generation in the State is 1192 MLD. The sewage generated in the urban area is 317 MLD. For treatment of the sewage generation, 310 STPs are functioning. The industrial effluent generation in the State is 213 MLD for which ETPs have been installed. With regard to the 21 polluted river stretches, it was informed that 3 STPs of 10 KLD each have been completed, work has been awarded for 2 STPs, 3 STPs have been tendered and 2 STPs are at DPR stage. With regard to the solid waste, it was informed that the State generates 11,499 TPD of solid waste, treatment capacity of 8,468 exists and 8 Waste to Energy plants have been planned, of which 2 have been constructed. Bio-mining activities is in progress for the legacy waste. State has bio-medical waste generation of 43 TPD, CBMWTF of 55 TPD is existing and 2 CBMWTF have been planned for 16 and 14 TPD respectively.

Director General NMCG directed State to prepare ULB wise details of sewage generation and treatment in the State.

Secretary, Ministry of Jal Shakti remarked that sewage generation in urban areas appears to be too low and needs separate review. It was suggested that a separate meeting may be convened by DG, NMCG with the State to sort out the discrepancies in the data being reported by the State.

15. <u>Maharashtra:</u>

ED Tech, NMCG informed that total sewage generation of the State is 9757 ML. However, the same seems to be on the higher side compared to the urban population provided in the MPR. Further, the existing and ongoing capacities of STPs with respect to capacity utilization is inconsistent. The compliance/ non-compliance status and details of the existing STP are still pending from State. The status of incremental progress of all works (I&D Works, STP projects under construction, completion schedule, timelines etc., have not been indicated in the MPR) are also pending from State as per the last discussion during the 6th CMC meeting. The compliance and non-compliance status of the CETPs needs to be indicated in the MPR. There exists inconsistency in the number of the CETPs provided in the MPR and in the Annexure.

Performance evaluation of the 13 FSTPs in terms of reduction in pollution load has not been included in the MPR as per decision taken in last CMC meeting.

Secretary, Ministry of Jal Shakti highlighted that Maharashtra is an important State, in terms of population, large number of cities with high figures of sewage generation and also highest number of treatment plants.

Member Secretary, Maharashtra Pollution Control Board informed that sewage generation of 9757 MLD for the State is verified figure, majority (around 35% to 40%) of the sewage generation of the State is attributed to the Mumbai city which generates 2500 MLD of sewage. There are 137 STPs of 7747 MLD existing of which capacity utilization is 4123 MLD, which is mainly due to connectivity issues. The connectivity issues are being addressed by the ULBs and thereafter the STPs shall be utilized to the fullest capacities. With regard to the polluted river stretches, it was informed that the sewage generation is 2728 MLD, of which 1961 MLD is being treated and the gap in treatment is 767 MLD. To bridge the gap in treatment in polluted river stretches, State has proposed 77 new STPs of 1300 MLD capacity, which are at different stages of execution. 15 STPs of 245 MLD are under construction, few are at tender stages, for 10 STPs funds have been sanctioned, 19 STPs are at DPR preparation stage, 5 STP projects are at technical sanction stage and administrative approval for additional 14 STPs are awaited.

Further, it was informed that there is a gap of about 2000 MLD in sewage treatment in the State, out of which 700 MLD is in Mumbai. Capacity augmentation of the sewage treatment capacity for the Mumbai city has been initiated. Out of 137 STPs operational in the State, 19 are non-complying and the State is taking initiatives to make the STPs comply with the prescribed norms. It was informed that State generates 23000 TPD of solid waste, of which 16000 TPD is being treated by different methods. Out of 398 ULBs, 337 do have a composting plants and waste processing facilities and 82 ULBs have vermi-composting facilities, 62 ULBs have bio-methanation plant, 1 Waste to Energy plant and 26 RDF plants are installed. In 4 cities, the processing facilities shall be augmented. State has taken *Namami Chandrabhaga* mission to maintain minimum continuous flow of water in the river, construct weirs in the river bed to maintain the water level and set up STPs in the cities along the banks of Chandrabhaga. State has also launched Mazi Vasundhara Abhiyan for Urban and rural areas on 2nd October and the

program shall be completed by 31st May 2021. The program emphasized to increase the green cover, bio-diversity, SWM and other management initiatives etc. Promotion of the use of renewable energy sources, solar lamps/ LED lamps, bio-gas resources, solar pumps installation in the agriculture sectors, increasing number of green building and promotion of electric mobility has been included. With respect to water conservation, rain water harvesting has been taken up in Municipal councils and Gram panchayat and with respect to air quality, State has incorporated air quality monitoring standards by augmenting different techniques. Further, it was informed that efforts are being made to make the non-operational STPs and CETPs functional.

Director General NMCG directed the State to resolve the land issue with regard to the Mula-Mutha STP project at the earliest due to which floating of tenders of the project is held up.

16. <u>Odisha:</u>

ED Tech, NMCG informed that the State has issue regarding the amount of sewage generation for the State. CPCB has reported 1273 MLD of sewage generation, whereas State has provided a figure of 4200 MLD and it was agreed that this will be reviewed by State with respect to sewage generation and septage treatment facility. 9 STPs of 288 MLD are under construction and the progress needs to be expedited. The compliance status with regard to the operational FSTPs and ETPs needs to be provided. State is requested to provide all the details along with the information with reference to CEQMS and adoption of ZLDs. Model River being adopted by the State to be identified and specified in the MPR.

Principal Secretary (Urban Development Department), Odisha informed that the STPs under construction are in progress and all the plants will be commissioned between the period from March 2021 to June 2021. Apart from the 10 functional septage plant, State has shortlisted 30 Septage Treatment Plant across 30 cities and these plants will be completed before March 2021. Further, 52 Septage Treatment plants are under various stages of development and all will be completed between June 2021 to December 2021. Every city will have minimum one number Septage treatment plant. STPs at Bhubaneshwar will be completed by June 2021. STP at Cuttack plant has already been commissioned and is operational. With regard to SWM, it was informed that out of 242 targeted plants, 112 solid waste treatment plants are already in function

and out of 235 targeted material recovery facility, 84 recovery facilities have already started functioning, remaining balance will be completed before 31st December 2020. Management of Plastic waste is going on in all the ULBs. With regard to the industrial pollution, it was informed that there are 6972 industries in State, of which the water polluting industries are 1030. The total waste generated from the industries is 886 MLD. All the 1030 industries have their own ETPs and no CETP exits. 10 industries were found to be non-complying and show-cause notices have been issued to them. The total biomedical waste generation in State is about 14.5 TPD, from 3398 health care units and there are 4 common biomedical treatment and waste disposal facility with a treatment capacity of 14TPD.

17. <u>Puducherry:</u>

ED Tech, NMCG informed that there are 5 STPs of 56 MLD existing and operational, which have utilization capacity of 35 MLD. There are 2 new STPs of 3 MLD each in tendering stage. State has adopted River Sankarabarani as the model river. All the 5 existing STPs are indicated as non-complying to the discharge norms. State has to provide individual capacity of each of the 5 STPs. Against 93 existing ETPs, 86 ETPs are compliant while remaining 7 are non-complying. State has to provide details of action taken towards non-complying ETPs. Details of MSW treatment facilities, dumpsites and sanitary landfills needs are to be provided. As per the MPR, total MSW generated in 5 ULBs is 406 TPD against which only 61 TPD is processed. Action plan for the gap in MSW processing facilities is to be provided.

Secretary (Environment), Puducherry informed that the issues are being regularly monitored by Chief Secretary of UT to bridge the gap in treatment, progress in house sewer connections works. Notices have been issued to all the 5 non-complying STPs. With respect to competitive bidding for installation of 3 MLD STP by PWD in Villianur along Chunnambar river and Arasalar in Karaikal, financial bid has been opened on 19.10.2020. After the approval of the Government, work order will be issued to the selected bidder. With respect to legacy waste, financial bid was opened on 29.10.2020 and its under finalization.

18. <u>Tamil Nadu:</u>

Additional Chief Secretary (Environment), Tamil Nadu informed that the ULBs in the State generates sewage of 2542.7 MLD. There are 76 STPs of 1639.96 MLD existing out of which 66 STPs are operational and 2 of which are reported as non-complying. For bridging the gap in treatment capacity, 39 STPs are under construction and 80 STPs are proposed, which have combined capacity of 471.1 MLD. Efforts are being put in to increase the utilization capacity of the existing STPs including house sewer line connections. In the 6 polluted river stretches, sewage generation is 260.8 MLD, 12 STPs of 115.7 MLD exists, 9 STPs under construction shall be completed by March 2021 and 31 STPs are proposed. There are 36 CETPs existing in the State with a capacity of 1497 MLD. Out of these 36 CETPs, 33 CETPs are in operation, 1 has been closed and 2 are non-complying for which the notice has been issued. Along the polluted river stretches no CETP is existing. However, 10 CETPs of 41 MLD are proposed for dyeing units which will be completed by 2024 as it is under proposal stage.

13,726 TPD of solid waste is generated in the State, of which about 12,000 TPD is treated through various means. There is a gap of 1726 TPD. Along the polluted river stretches, solid waste generation is 1531.75 TPD and 1379 TPD (roughly 90%) is treated, there is a plan for treatment of 152 TPD gap. Bio mining is being taken up in 15 ULBs, in 2 ULBS work have been completed and work is in progress in 13 ULBs, which will be completed by June 2021. 24573 health care units in the State generates 71 TPD of biomedical waste, for which 12 bio-medical waste treatment facilities are operational, wherein 100% of the biomedical waste is treated and disposed. Hazardous waste of 1947 TPD is generated in the polluted river stretches, 100% of which is treated. There is plastic waste generation of 1182 TPD in the State and action is being taken for 100% treatment. Bhavani River is the model river stretch taken for consideration. With regard to the coastal pollution, as per the directions in the NGT order dated 22nd September 2020, 46 nos of stretches have been identified in 14 district along the coastal stretch as polluted, for which action plan is under preparation and will be completed within 2 months. An app for daily capacity utilization of STPs and monitoring the performance of the plant is under development. A 50 acre biodiversity park is under proposal stage near Nangmanglam. State

Wetland Authority is preparing action plan on the polluted water bodies and the same will be shared subsequently for approval.

Additional Chief Secretary (Municipal Administration), Tamil Nadu informed that all the new STP projects include house sewer connections in order to keep the utilization capacity of the STP optimum. Further. it was informed that in 144 ULBs, bio-mining projects have been sanctioned to clear the legacy waste laying in the dumping sites. This will help in recovering 800 acres of land area. Decentralized micro compost centres are being developed in the State, 700 micro compost centres have already been developed, each micro compost centres can handle 5 tons of waste every day, where waste is accordingly segregated. Wet waste is converted to compost and is sold to the farmers so there is a gap of 1700 MT for which 250 micro compost centres are to be constructed which will be handling 1200 MT of wet waste and for the remaining 500 MT of wet waste it will get covered in 6 to 9 months. 60 FSTPs are to be constructed all over the State, mainly in smaller ULBs, where the sludge will be brought to existing STPs via lorries/ pipelines. Tamil Nadu has come up with 'Reuse of Treated Water Policy', 2 Tertiary Treatment plants of 90 MLD have been installed and the treated water is supplied to the industries.

Director General, NMCG appreciated the initiatives adopted by the State and further requested to share the documents with regard to innovative best practices of monitoring, bio-mining and reuse of treated water policy being adopted by the State.

19. <u>Gujarat:</u>

Member Secretary, Gujarat Pollution Control Board informed that not much progress has been made by the State since the last meeting of CMC and the status of land allotment remains the same. However, it was assured, the same shall be resolved at the earliest as per the directions of Chief Secretary of the State. With regard to the deep sea disposal pipeline project, it was informed that tenders for the pipelines for Jetpur & Ahmedabad have been already floated and requested Ministry to take the matter with CPCB for finalization of norms so that the project can be expedited.

ED Tech, NMCG wanted the State to upgrade the existing STPs which are not meeting with the norms. Director General NMCG directed the State to resolve the land issues for the STPs under Tapi Suddhikaran Projects as per plans conveyed during last meeting of CMC.

20. <u>West Bengal</u>

ED Tech, NMCG informed that 2758 MLD of sewage is being generated, 43 STPs of 671 MLD are existing with capacity utilization of 526 MLD. 30 STPs are operational of which 7 are reported to be complying with the norms. River Karola has been adopted as the Model River. As reported in the MPR, tenders for rejuvenation of STPs at Baidyabati, Bhadreswar, Konnagar Champadani and Serampore has been invited (Bid due date 02/11/2020). It was corrected that these are contracts and not tenders, this may be corrected in the next submissions. Hon'ble High Court, Calcutta has passed the order dated. 21.10.2020 to stay the cancellation of the work order. NMCG has already sought the action taken report from WBSPMG/KMDA. This entire process was done without informing to NMCG, despite the 100% funding by NMCG. NMCG has provided support for preparation of DPR for KMC area only under EAP funding. Final DPR is yet to be prepared by KMC's consultant. Once DPR is finalised, KMC has to explore funding sources for these. NMCG has not committed any funds for the works proposed in these DPR as these are primarily sewer network DPR. This has been informed many times but the status in MPR of the State remains same. State government has sanctioned a sewerage project for rejuvenating the Churni river at Ranaghat municipal area. The status of the project is not given in the MPR.

Principal Secretary (Environment), West Bengal informed that the work order for the renovation of the STP at Hooghly was cancelled immediately without due intimation/ permission of NMCG due to irregularities of the concerned Superintended Engineer and huge gap in scope of work. It was assured that permission from NMCG shall be sought from next time onwards. It was informed that in principle approval for draft DPR for wastewater treatment plant under KMC has been given by NMCG and DPR for the same shall be prepared by February 2021. In Kolkata, bid opening for Tolly's Nallah project has been extended to 18th November 2020. Rejuvenation of oxidation pond at Jiaganj, civil work estimates have been submitted and estimates for electro-

mechanical works are to be finalized. With regard to installation of OCEMS and labs in the STPs, KMDA has prepared a plan, which is yet to be approved by the Committee. Model River Karola is to be rejuvenated by December 2020. The State RRC has approved action plans for 8 Priority-V Rivers. There are 2 units of FSTP of 50 MLD each planned, of which 1 is functional and 1 shall be functional by January 2021. For treatment of legacy waste, plants are already operational, further work order have been given for 5 tenders and 12 tenders have been matured. With regard to solid waste management in 125 ULBs, tenders for 32 projects to be revised and are to be floated again, tenders for 37 are to be floated after Diwali and for 40 projects RFP completed, land yet to be finalized. About 11,930 TPD of processing waste capacity is proposed to be developed. With regard to the industries, it was informed that 16259 industries are existing in the State of which 454 are water polluting industries, having industrial discharge of 1360.64 MLD. All 454 have individual ETPs, 20 MLD CETP is operational in leather complex and another 20 MLD CETP is under construction, which shall be completed by late 2021- mid 2022.

Executive Director Project NMCG clarified that NMCG has given in principle approval for the cost of preparation of DPR and not the project.

Director General NMCG emphasized some old STPs constructed in GAP-I, are not complying at present and the water quality in the stretch is poor, projects were sanctioned in 2019 by NMCG and works have not gained much momentum, therefore it was directed that the works should be taken up priority. If not, regulatory actions will be taken up against the non-complying STPs as environment laws are being violated.

21. <u>Uttarakhand</u>

ED Tech, NMCG informed that 329.33 MLD of sewage is generated in the State and 61 STPs of 379 MLD capacity are existing, which have utilization capacity of 227.5 MLD. All the 61 STPs are operational and complying. There are 9 STPs of 60.775 MLD under construction and 17 new STPs are proposed. 3 CETPs of 13.2 MLD are existing and all 3 are complying, 3 new CETPs of 18 MLD are proposed. 1639.005 MTPD of municipal solid waste is generated and 2 CSWTF of 550 MTD operational. State needs to identify the Model River. It was highlighted that all new 17 STPs proposed are for the polluted river stretches except River Ganga. Proposals for the STPs

have been reviewed at NMCG and observations have been intimated to the State. Proposal for bio-remediation of 42 drains in these river stretches have also been submitted. The State to re-ascertain the flow for the proposed STPs.

Secretary, Ministry of Jal Shakti suggested that State should emphasis on utilization of their own funds as a number of projects have already been funded by NMCG. State should consider whether installation of STPs are required for these river stretches accounting the utilization of the river and should explore alternate treatment technology. It was suggested that Urban Local Bodies in the State should ensure O&M of the STP through collection of sewerage charges. With regard to CETPs, construction and operation & maintenance of the plant should be responsibility of the industries based on the Polluter Pay Principle.

Principal Secretary (Forest & Environment), Uttarakhand informed that SOP for septage management is in progress. It was informed that CETPs are under proposal stage as industrial estate yet to be developed. With regard to solid waste management in polluted river stretches, it was informed that 3 projects have been approved by the State and the same have been submitted to Swachh Bharat Mission for approval.

22. <u>Uttar Pradesh</u>

Senior Solid Waste Management Specialist NMCG informed that there are 106 STPs of 3370.87 MLD capacity which have utilization capacity of 2630.58 MLD. Of this, 100 STPs are operational and only 77 are reported to be complying with the norms. 38 STPs having 954 MLD are under construction and 24 STPs with 568.10 MLD capacity. For 32 FSTPs, tenders have been awarded. There are 1648 water polluting industries in the State, having industrial discharge of 850.5 MLD, 7 CETPs of 58.55 MLD are existing and are reported to be complying. 3 CETPs of 26.65 MLD are under construction. State generates 14000 TPD of solid waste and 15 waste processing plant having capacity 5395 TPD (38.53% of waste generation) are functional.

Secretary, Ministry of Jal Shakti raised concern over the non-functional 6 STPs in the State and directed State to provide status of 23 non-complying STPs and the status of on-going STP projects in UP. The State was directed to provide details of capacity utilization of the existing solid waste management plants and initiatives proposed to bridge the gap in treatment capacity.

Secretary (Urban Development) Uttar Pradesh informed that 6 STPs at Loni, Banda, Firozabad, Moradabad and Ghaziabad are non-operational due to financial constraints of the respective ULBs to which the STPs were handed over for maintenance. State has tied up funds for these STPs and these shall be made operational at the earliest possible. For bridging the gap in solid waste management, detailed gap analysis has been made, DPR has been prepared, sites have been identified, funding has been tied up and work are to be awarded for solid waste processing plants, which shall be completed by March 2021. Through this 60 processing plants shall be made functional including 37 new plants. It was also informed that the SW processing plant existing at Kanpur has been improved. The State has sanctioned a total of 55 FSTP projects, to manage the liquid waste, which shall be completed within 6-9 months. It was also informed that the State is finding it difficult to arrange funds for the bio-remediation projects and is trying to sort the issue.

Managing Director, UP Jal Nigam informed that 5 MLD STP at Kanpur reported as non-functional is functional and is under-rehabilitation, 4 MLD STP at Banda and 30 MLD STP at Loni shall be made operational within 4-5 months, 67 MLD STP at Firozabad has been completed and is under testing and is yet to be commissioned, 20 MLD STP at Moradabad and 56 MLD STP at Ghaziabad are under Development Authority. Further, it was informed that out of the 23 non-complying STPs, 13 STPs are now complying with the norms, 8 are under rehabilitation and shall be complying with the norms by February- April 2021 and 2 STPs are under Development Authority. It was informed that 32 STPs are under construction, of which 2 STP projects are not progressing as per the timeline of Namami Gange. Bids have been opened for STPs at Mirzapur and Ghazipur, these are under tendering, for Bareilly STPs land issue has been resolved and is under tendering, for STPs at Agra and Meerut, tender document yet to be received from World Bank, decisions yet to be taken for Farrukhabad - Fathepur regarding revised AA&ES.

23. <u>Rajasthan</u>

Senior Solid Waste Management Specialist NMCG informed that there is lag in communication with the State and no proper information is being received from the State. State dossier is still

awaited from the State of Rajasthan. Issues of Poor capacity utilization and compliance status of the existing STPs were highlighted. 2 STPs have been completed and made operational which sums up the existing STPs in the State to 72. It was informed that even during the review meeting held under the Chairmanship of Director General, NMCG, proper representation from the State was not made. State needs to provide MPR in revised format, clearly indicating incremental progress made by the State.

Chief Engineer, Rajasthan Pollution Control Board informed that there are 13 CETPs operational in the State, of which 7 CETPs are being upgraded into ZLD and the remaining CETPs shall also be upgraded to ZLD. Out of 13 CETPs, 11 are complying with norms.

Chief Engineer, Local Self Group, Rajasthan informed that there are 72 STPs of 979.18 MLD existing in the State and 72 STPs of 522.70 MLD are under construction. With regard to the non-compliance of the STPs, 14 existing STPs are being upgraded and have applied for CTO. To monitoring the inlet and outlet flow and parameters, an online system is being developed by the State, which shall be functional within 2-3 months.

Secretary, Ministry of Jal Shakti took serious concern of no proper representation at senior level officials from the State for the meeting and non-submission of State profile to the Ministry.

Director General NMCG directed that one nodal officer not below the rank of Principal Secretary well versed with the information should attend the next meetings of the Committee. The State was directed to submit State profiles at the earliest, if required a separate meeting shall be convened by NMCG with the State to resolve the issues.

24. <u>Madhya Pradesh</u>

ED Tech, NMCG informed that bio-remediation projects were proposed for River Chambal at Nagda (from Nagda to Rajgarh, stretch) and for River Betwa (from Mandideep to Vidisha stretch), the status of the projects are same as being reported since February 2020 and the projects are yet to be sanctioned. As reported in the MPR, some STP projects have been completed, however completion dates have not been indicated. Few completed projects shown as completed in the MPR (eg. Burhanpur STP, annexure-A point no. 7 of MPR) but the same STP is reported as non-functional. Such completed but non-functional STPs may help in justifying the

gap in STP capacity but doesn't help in river rejuvenation. Further, the State needs to provide MPR in revised format, clearly indicating incremental progress made by the State.

Principal Secretary (Urban Development), Madhya Pradesh informed that 24 STPs are existing in the State, of which 20 STPs are operational at present and efforts are being put in to make the remaining 4 non-functional STPs, functional. There are 80 STPs under construction in the State, details have been provided to NMCG and 13 STPs are under tendering and the tender shall be approved within 2 months. In polluted river stretches, 5 STPs are under construction, 2 STPs are about to be completed and commissioned, remaining 3 STPs shall be completed between March – June 2021. With regard to the bioremediation projects, it was informed that work has been awarded for Nagda stretch and work is to be awarded for Mandideep stretch. STPs have been proposed for rivers in Priority V, however, implementation of cost effective treatment technologies are being explored for these stretches.

Secretary, Ministry of Jal Shakti highlighted that large number of STPs are under construction, therefore State should closely monitor the on-going projects so that they are completed within proposed timeframe. Further, it was suggested that online monitoring system be installed for monitoring the operational status and performance of the existing STPs and CETPs in the State.

Principal Secretary (Environment), Madhya Pradesh informed that utilization capacity of the existing STPs are being closely monitored by the State.

25. <u>Meghalaya</u>

ED Tech, NMCG informed that as reported by the State estimated sewage generation for urban areas is 75 MLD against which 6 STPs of 1.77 MLD exists, having utilization capacity of 1.3 MLD. Against the total sewage generation of 49 MLD in Shillong city, there is only one existing STP of 0.05 MLD capacity which is yet to be commissioned and a septage treatment plant of 0.115 MLD is under construction which is expected to be commissioned in March, 2021. Similarly, 7 STPs of capacity varying from 0.3 to 1.2 MLD are proposed for Myntdu River. It was informed that the State generates 245 TPD of municipal solid waste, 257 TPD of processing facilities are existing in the State, however capacity utilization of the processing facility is low,

8.27 TPD only, State needs to enhance the utilization capacity. Further, 9 plants of 166 TPD are proposed.

Joint Director, Urban Development Department, Meghalaya informed that 5 STPs of 13.24 MLD are proposed for Shillong, of which 2 STPs are to be tendered by end of November 2020 and land for remaining 3 STPs are yet to be finalized. As an interim measure, bio-remediation works are being taken up and DPR for the same has been approved by State-RRC. A FSSM plant of 0.35 MLD is to be tendered with the 2 STPs by November end. 115 KLD Seepage plant is expected to be completed soon. Due to land allotment issues for the 7 proposed STPs for Myntdu River, the department is seeking permission from the State government for approving FSSM plants instead. With regard to the solid waste, it was informed that 170 TPD plant shall be commissioned by end of December 2020.

26. <u>Nagaland</u>

ED Tech, NMCG informed that as reported by the State previously the 25.43 MLD STP at Dimapur was 100% complete, the same was communicated to NGT, however in the latest MPR it has been reported that the STP is 95% complete. The sewer network connection works is 54% complete and the works are expected to be completed by June 2021. It was informed that 304.3 TPD of municipal solid waste is being generated in the State, of which 132.05 TPD of waste is being processed, 50 TPD capacity processing plant and a plastic recycling unit is also installed at the same site. State proposes to develop Chathe River as the Model River. Status of bio-remediation works proposed to be provided.

Official from State informed that in the 25.43 MLD STP, screen chamber, grit chamber, parshal flume and security fencing works which are associated with the ponds are yet to be completed, hence it was now reported to be 95% completed and the laying of sewer is 54% completed.

Director General NMCG directed NRCD official to have discussions with the State and clarify the issues.

27. Mizoram

ED Tech, NMCG informed that against the estimated sewage generation of 104 MLD in the State, no sewage treatment facility exists in the State. 10 MLD STP at Aizawl was reported to be complete; however, it could not be made operational as yet due to pending sewer lines and house service connections. State plans to set up bio-digesters in rural areas. All the industries are equipped with ETPs and there are no CETP in the State yet. 28% progress has been achieved in the insitu grey water management plan being taken for urban and rural areas under Swachh Bharat Mission 2.

Secretary (Irrigation & Water Resource), Mizoram informed that work of sewer network connections is in progress and the STP is expected to be operational by end of December, 2020. Work is in progress in 309 villages for grey water management system under Swachh Bharat Mission and 430 units of bio digesters have been set up. It was informed that water quality in all the 9 rivers in Mizoram have improved and the rivers are achieving bathing quality standards.

Director General, NMCG emphasized that the 10 MLD STP should be made operational at the earliest and the sewage being brought by the already placed sewer network should be treated in the STPs. Further, it was informed that de-listing of river stretches is being taken up by CPCB and the State needs to provide details to CPCB.

28. Tripura

ED Tech, NMCG informed that as reported the State generates 82.4 MLD of sewage, one STP of 8 MLD capacity is existing, which is operating at 3 MLD and is complying with the norms, co-treatment of 0.72 MLD Faecal sludge is being taken up and there is a gap of 74.4 MLD in sewage treatment. A 8 MLD STP is under construction with completion by 2022. 15 ULBs shall be adopting FSTPs in their jurisdiction and in-situ bio-remediation shall be done. 1 CETP of 500 KLD in Agartala has been installed for the industries and there are 18 water polluted industries, which generates 14.4 MLD of effluent. Solid waste generation of 411.32 TPD have been indicated with existing processing capacity of 250 TPD and 6 TPD and decentralized processing capacity of SW for 17 ULBs. State to expedite the progress of the proposed 15 FSTPs of 600

KLD and 8 MLD under construction STP and status of the bio-remediation of the 210 drains to be provided by the State.

Secretary (Urban Development) Tripura informed that only 12000 sewerage connections completed however, State is in progress to utilize the full capacity of the existing STP by connecting the north zone and central zone. One more STP is under construction and work order has been provided and with respect to Fecal Sludge management, State has already identified the sites in 19 urban local bodies and tendering process shall be initiated. With respect to Bio-remediation, five major drains have been identified in Agartala, and technology selection for the process have already been identified and is in the process of tendering. State intimated that by mid of December the work order of the Bio-remediation for the five drains shall be completed. Other 210 drains in the other local bodies are in the process of surveying. Tendering process pertaining new technologies for 210 drains shall be done in December 2020. With regard to the solid waste management, it was informed that tendering work for the SWM works has been initiated. 450 door to door collection SWM system is there in Agartala and the same is streamlined at present, secondary centres for segregation, two are mainly functional in Agartala, all the secondary processing centres of SWM shall be functional in December 2020. For tertiary treatment SWM, sites have been identified and the process is under tendering and State indicated that by March 2021, all the Tertiary centres will be made operational.

Secretary (Urban Development) Tripura informed that Chief Secretary is regularly monitoring the progress and all the 6 stretches are in Priority – V and as per the one year water quality monitoring data, BOD levels in these rivers have come down from 3 mg/l and the same has been intimated to CPCB for exclusion of the river stretches.

Director General, NMCG appreciated the efforts made by State to improve the water quality in the rivers, however it was highlighted that NGT has also directed to maintain the river water quality, therefore consistent efforts to maintain the quality should also be put in by the State. Further, it was recommended the State should identify one river as Model River which should be rejuvenated in first instance and works in other rivers should follow.

29. Chhattisgarh

Senior Environment Specialist, NMCG informed that in Chhattisgarh the estimated sewage generation is 600 MLD, 73.1 MLD of treatment capacity is existing, 620 MLD of STPs are proposed. In the polluted river stretches, 272 is sewage generation, 238 MLD of STPs are under construction and DPR is under preparation for 75.58 MLD. Effluent treatment plant has been provided and zero discharge condition outside plant premises is being maintained by the respective industries. All the municipal solid waste generated in the State is being processed. Further, it was informed that the status of approval of DPR for Korba town from NTPC is to be provided by the State, previously it was informed that the observations raised by NTPC have been rectified by the State Government. State to provide status of the revised action plan for the priority III and IV river stretches from CPCB to be provided, status of administrative approval and expenditure sanction for the rest of 3 DPRs namely Kanker , Dhamtiri and Simga, tendering status of the 2 DPRs namely Nawapara and Rajim. MPR needs to be provided in revised format indicating the incremental progress made.

Special Secretary (Housing & Environment) Chhattisgarh informed that approvals have been received from CPCB with regard to the Action Plans for Priority III and IV rivers. Further, it was informed that for 3 DPRs, bid is to be awarded this month. With regard to the Korba STP, it was informed that discussions are going on with NTPC as the DPR is being revised with regard to the tertiary treatment component and as per the policy of Power Ministry, incentives to be provided for utilization of treated water by the Thermal Power. Further, it was informed that State is seeking for time extension for the 5 new projects for which bids have been opened recently and may not be completed within June 2021.

Director General NMCG directed State to provide one page note on the issue with the STP proposed at Korba. If required discussion with NTPC shall be taken up at NMCG level. Further, with regard to extension of timeline it was suggested that affidavit may be filed in Hon'ble NGT by the State.

30. Jharkhand

Senior Environment Specialist, NMCG informed that I&D with STP scheme for Phusro has been approved in the 30th EC of NMCG held on 29th October 2020. With regard to the proposed STPs at Dhanbad and Ramgarh, State was suggested to explore other funding options from Coal India Limited or DVC Bokaro and status of tendering for the bio-remediation projects are to be provided. As reported by the State, River Swarnrekha is being adopted as Model River.

Director, SUDA informed that 14 STPs are operational with utilization capacity of 74%. 4 STPs are under construction, Rajmahal STP to be completed by December 2020, Ranchi and Adityapur STP to be completed by December 2021. Fund for STP at Bokaro is being tied up under DMFT fund and funding for STP at Jamshedpur is being sought from Tata Steel under CSR. For ULBs having population below 50000, it has been decided to adopted FSTPs for treatment of liquid waste, work has been awarded for 2 FSTPs. With regard to solid waste management, it was informed that the State generates 2188 TPD of solid waste, 1132 TPD is being treated, 11 projects are under construction and projects are under tendering of 25 ULBs for managing the gap in treatment.

Director General, NMCG appreciated the efforts put in by the State during Ganga Utsav held in 1st week of November 2020, which also helped in sensitizing the public with regard to the rivers.

31. Bihar

Senior Environment Specialist, NMCG informed that out of the 25 STP projects proposed for Bihar, 2 STPs have been completed, 13 projects are ongoing, 3 projects have been awarded, 1 project is being awarded and 6 projects are under tendering. State to provide details as per revised MPR format. Further, it was informed that the State has awarded work for insitu bioremediation. There are 213 water polluting industries in the State having 211 ETPs and there are no CETPs. In polluted river stretches other than River Ganga and Fathua, DPRs are yet to be sanctioned and funds are to be tied up by State government. Out of the 4 remaining towns along River Ganga, DPRs for FSSM have been received for 3 namely Dighwara, Manihari and Teghra, Quality of DPR is an issue which needs to be sorted out by the State, the same is being reviewed by CSE and initial observation has been forwarded to State for consideration. Status of

submission of Technical Bid Evaluation report for Munger is pending for more than two month, handing over of land is pending for some of the STP projects and SPS due to issue of NOC.

Secretary, Ministry of Jal Shakti highlighted that 651.5 MLD of sewage generation indicated in the State is incorrect and the same would be sewage generation of the Ganga town. This may be verified. A number of projects have been sanctioned by NMCG for the main Ganga stretches, for other river stretches State may explore other funding options. The STP projects shall be completed however the State must put in efforts to make these STPs functional by ensuring that the sewer network works are being completed timely.

Secretary (Urban Development Department) Bihar informed that regular weekly review meeting has helped in resolving the issues arising in the STP projects. State has sanctioned bio-remediation projects with its own funds and is exploring funds for STP projects in remaining river stretches.

Managing Director BUDICO informed that sewer network projects are in progress and Saidpur STP shall be completed within a month. Work was held up for some time as road cutting permission was not received due to pandemic, flooding and State elections but the work has now been revived. All STP projects in Patna except Digha and Kankarbagh shall be completed by March 2021. Digha and Kankarbagh STP works are yet to be started. Project for Bhagalpur STP is excepted to be approved in the Board meeting scheduled for 12.11.2020. Timelines have been revised as per NGT's orders. Bids have been received for Barahiya and Kahalgaon STP projects, and for STP at Khagaria no bid was received and the same shall be re-tendered. For Buxar STP project, some clarification is to be received from NMCG. A report has been submitted to SPMG Bihar for NOC from World Bank.

Secretary, Ministry of Jal Shakti suggested that BUDICO should closely monitor the progress of the projects. It was directed to ensure that the Bhagalpur project is approved by the Board in the upcoming meeting. Further, it was directed that the issues of proposed STP projects of Munger and Buxar be resolved at the earliest, as these towns are located on the banks of the river Ganga. Bids received for Barahiya and Kahalgaon STP projects may also be finalized at the earliest. For non-Ganga rivers, State to decide whether STPs or low cost treatment technology are to be adopted.

32. Andaman & Nicobar

ED Tech, NMCG presented UT's profile as reported by CPCB in its report dated 11.03.2020 submitted in the NGT Matter OA No. 829/2019. Andaman & Nicobar generates 14.17 MLD of sewage, there are 86 STPs of 1.7 MLD in coastal areas and 12.45 MLD of gap is present in treatment capacity. Utilization capacity of the 86 STPs is 100%, 22 STPs are complying with the norms, 3 STPs are under construction. There are 491 industries existing in the UT with negligible effluent generation and 17 industries have ETPs. 43,800 MTA of solid waste is generated, for which 5 compost yards and 2 dry waste resources centres for segregation and transportation to mainland for mixing are existing. The UT was requested to provide details of the UT in the MPR format being circulated with the minutes of the meeting. As per the directions of NGT, Action Plan for addressing the coastal zone pollution of the UT needs to be prepared and submitted to CPCB. Further, implementation of the Action Plan shall be monitored by CMC.

Secretary (Environment), Andaman & Nicobar informed that there are 4 rivers in the notified forest area and no industry is polluting in the rivers. Solid and liquid waste management is being taken up under Swachh Bharat Mission, in rural areas treatment through septic tanks is being done, in urban areas, door to door collection of solid waste is being carried out, the UT is adopting zero waste concept, 42 KLD FSTP is under construction and the same shall be completed by March 2021, a 10 MLD STP is proposed. There is a complete ban of single use and manufacturing of plastic waste in the UT. 21 water ATMs have been installed. The biggest problem of the UT was highlighted to be the floating garbage being received through South East Asian countries at the islands from the international waters. Huge chunks of waste of foreign origin are being washed off and piled up degrading the biosphere, as the UT does not have expertise in treating and managing the waste.

Director General, NMCG suggested that the issues may be communicated to NMCG in writing so that the matter could be taken up with MoEF&CC or any other institution.

33. Lakshadweep

ED Tech, NMCG presented UT's profile as reported by CPCB in its report dated 11.03.2020 submitted in the NGT Matter OA No. 829/2019. Lakshadweep generates 7 MLD of sewage,

there is 1 STP of 0.008 MLD and 6.99 MLD of gap is present in treatment capacity. The STP is complying with the norms and has 100% utilization. No STP is under construction. There are no industries existing in the UT. 12,00 MTA of solid waste is generated, for which 1 Count leaf Shredder, 1 Bio Composter machine and 36 Bio gas plants are existing and the non-biodegradable waste are collected, segregated and transported to mainland for treatment.

Official from Lakshadweep informed that there is one STP existing in the UT, no industry is operational, water level is high, no rivers are there, household sewer connections cannot be taken up due to gradient issue, treatment of household waste through FSTP is under consideration, RFP has been called and technical work given to NIT Calicut and tender have been called for bio-toilets to be established in individual households.

The UT was requested to provide details of the UT in the MPR format being circulated with the minutes of the meeting. As per the directions of NGT, Action Plan for addressing the coastal zone pollution of the UT needs to be prepared and submitted to CPCB. Further, implementation of the Action Plan shall be monitored by CMC.

The meeting ended with thanks to the Chair.

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List of participants: **Annexure-I**

1. Shri U. P. Singh, Secretary, Ministry of Jal Shakti – *in Chair*
2. Shri Rajiv Ranjan Mishra, Director General, NMCG cum Project Director, NRCD
3. Shri Ashok Kumar Singh, Executive Director (Projects), NMCG
4. Shri D.P.Mathuria, Executive Director (Technical), NMCG
5. Shri Rohit Kakkar, Deputy Adviser, MoHUA
6. Shri J B Ravinder, Joint Adviser, MoHUA
7. Shri Brijesh Sikka, Senior Consultant, NMCG
8. Shri. B.B. Barman, Advisor, NRCD
9. Shri A. Sudhakar, Scientist E, CPCB
10. Shri Ishwer Singh, Consultant (Legal) NMCG
11. Shri S.K. Srivastava, Director, NRCD
12. Shri S.K. Singh, Deputy Director, NRCD
13. Shri A.P. Singh, Scientist E, NRCD
14. Dr. Sabita Madhvi Singh, Joint Director, NRCD
15. Shri Rajat Gupta, Senior Solid Waste Management Specialist, NMCG
16. Shri Saumya Mukhopadhyay, Senior Environmental Specialist, NMCG
17. Dr. P.N.Rymbai, Scientist B, NRCD
18. Shri Manish Kumar, Sewage Treatment and Wastewater Expert, NMCG
19. Shri Vijay Kumar, Assistant Civil Engineer, NMCG
20. Shri Rachit Andley, Project Manager, NMCG
21. Shri Avshesh Chauhan, Assistant System Analyst, NMCG
22. Shri Kumar Ajitabh, Project Officer Legal, NMCG
23. Mrs. Ruby Raju, Project Engineer, NMCG
24. Shri Kallol Choudhary, Industrial Process Expert, NMCG

Legal/OA673/2018/NMCG/2019
National Mission for Clean Ganga
Department of Water Resources, River Development
& Ganga Rejuvenation, Ministry of Jal Shakti

1st Floor,
Major Dhyan Chand National Stadium
India Gate, New Delhi-110002
Dated: 14th January 2021

OFFICE MEMORANDUM

Subject: **Minutes of the 8th meeting of Central Monitoring Committee in the NGT Matter OA No.673 of 2018 held on 05.01.2021 from 10.00 AM on-wards**

A copy of Minutes of the 8th Meeting of Central Monitoring Committee in the NGT matter O.A. No. 673 of 2018 held through Video Conferencing on 05.01.2021 from 10.00 AM on-wards, under the Chairmanship of Secretary, Ministry of Jal Shakti is forwarded herewith for information/ necessary action.

(D. P. Mathuria) 14.1.2021
Executive Director-Technical, NMCG
uyrb-mowr@nic.in

Encl: As above.

To,

1. Chief Secretary, Government of Andhra Pradesh, Ist Block, A.P Secretariat Office, Velagapudi – 522503
2. Chief Secretary, Government of Assam, Block- C, 3rd Floor, Assam Sachivalaya, Dispur - 781006, Guwahati
3. Chief Secretary, Government of Bihar, Main Secretariat, Patna – 800015
4. Chief Secretary, Government of Chhattisgarh, Mahanadi Bhawan, Mantralaya, Naya, Raipur – 492002
5. Chief Secretary, Government of Goa, Secretariat, Porvroim, Bardez, Goa – 403521
6. Chief Secretary, Government of Gujarat, 1st Block, 5th Floor, Sachivalaya, Gandhinagar – 382010
7. Chief Secretary, Government of Haryana, 4th Floor, Haryana Civil Secretariat, Sector-1, Chandigarh – 160019
8. Chief Secretary, Government of Himachal Pradesh, H P Secretariat, Shimla –171002
9. Chief Secretary, Government of Jammu & Kashmir, R. No. 2/7, 2nd Floor, Main Building, Civil Secretariat, Jammu -180001
10. Chief Secretary, Government of Jharkhand, 1st Floor, Project Building, Dhurwa, Ranchi-834004

11. Chief Secretary, Government of Karnataka, Room No. 320, 3rd Floor, Vidhana Soudha, Bengaluru -560001
12. Chief Secretary, Government of Kerala, Secretariat, Thiruvananthapuram -695001
13. Chief Secretary, Government of Madhya Pradesh, MP Mantralaya, Vallabh Bhavan, Bhopal – 462004
14. Chief Secretary, Government of Maharashtra, CS office main Building, Mantralaya, 6th floor, Madame Cama Road, Mumbai – 400032
15. Chief Secretary, Government of Manipur, South Block, Old Secretariat, Imphal – 795001
16. Chief Secretary, Government of Meghalaya, Main Secretariat Building, Room no 316, Shillong – 793001
17. Chief Secretary, Government of Mizoram, New Secretariat Complex, Aizwal – 796001
18. Chief Secretary, Government of Nagaland, Civil Secretariat, Kohima – 797004
19. Chief Secretary, Government of Odisha, General Administration Department, Odisha Secretariat, Bhubaneswar – 751001
20. Chief Secretary, Government of Punjab, Chandigarh – 160001
21. Chief Secretary, Government of Rajasthan, Secretariat, Jaipur – 302005
22. Chief Secretary, Government of Sikkim, New Secretariat, Gangtok – 737101
23. Chief Secretary, Government of Tamil Nadu, Secretariat, Chennai-600009
24. Chief Secretary, Government of Telangana, Block C, 3rd floor, Telangana Secretariat Khairatabad, Hyderabad, Telangana
25. Chief Secretary, Government of Tripura, New Secretariat Complex Secretariat – 799010, Agartala, West Tripura
26. Chief Secretary, Government of Uttar Pradesh, 1st floor, Room No. 110, Lal bahadur Sastri Bhawan, Uttar Pradesh Secretariat, Lucknow – 226001
27. Chief Secretary, Government of Uttarakhand, 4 Subhash Road, Uttarakhand, Secretariat Dehradun – 248001
28. Chief Secretary, Government of West Bengal, Nabanna, 13th Floor, 325, Sarat Chatterjee Road, Mandirtala, Shibpur, Howrah – 711102
29. Administrator, Daman & Diu and Dadra and Nagar Haveli, Secretariat, Moti, Daman -396220
30. Chief Secretary, Govt. of NCT of Delhi, Delhi Secretariat, IP Estate, New Delhi – 110002
31. Chief Secretary, Govt. of Puducherry, Main Building, Chief Secretariat, Puducherry-605001
32. Chief Secretary, Andaman & Nicobar, Secretariat, Port Blair
33. Administrator, Lakshadweep

Copy To:

1. Secretary, Department of Forest, Ecology & Environment, J&K, Room no. 2/33-34, Main Building, Civil Secretariat, J&K, Jammu.
2. Secretary, Department of Environment, Science and Technology Paryavaran Bhawan, Near US Club, Shimla, Himachal Pradesh-171001
3. Principal Secretary, MGSIPA Complex, Sector-26, adjacent Sacred Heart School, Chandigarh, 160019

4. Additional Chief Secretary to Govt. of Haryana, Environment Department of Environment & Climate Change, R.No. 108, 7th Floor, Main Secretariat Sec16, Chandigarh 160017
5. Principal Secretary, Department of Environment, U.P., Room No. 601, Bapu Bhawan Secretariat, Vidhan Sabha Marg, Lucknow – 226001.
6. Special Chief Secretary, Department of Environment, Forest, Science & technology, 4th Block, Ground Floor,Room No:268, A.P Secretariat Office, Velagapudi
7. Secretary, Department of Environment and Forest, H-Block, 2nd Floor Janata Bhawan, Dispur, Guwahati 781006, Assam
8. Principal Secretary, Department of Environment, Forest and Climate Change, Van Vibhag Rd, Nehru Nagar, Patliputra Colony, Patna, Bihar 800013
9. Additional Chief Secretary (Forests & Environment), Forests & Environment Department, Block 14, 8 th floor, Sachivalaya, Gandhinagar - 382 010 Gujarat.
10. Principal Secretary, Department of Environment, Room No. S-2/23, Mahanadi bhawan, Mantralaya, Nava Raipur, Atal Nagar, Raipur - 492001
11. Additional Chief Secretary to Government, Forest, Environment and Ecology, Department, Karnataka Government Secretariat, Room No. 447, 4th Floor, Gate no. 2, Multi-storey Building, Bangalore-560001.
12. Principal Secretary, Department of Environment, Room No. 406 4th Floor Annex II, Secretariat, Kerala Thiruvananthapuram, Kerala, PIN- 695001
13. Principal Secretary, Department of Housing and Environment, Government of Madhya Pradesh, Paryavaran Parisar, E- 5, Arera Colony, Bhopal, Madhya Pradesh, 462016
14. Principal Secretary, Environment Department, Maharashtra 15th Floor, New Administrative Building, Madam Cama Road, Mantralaya, Mumbai – 400032
15. Additional Secretary, Forests & Environment Deptt, Secretariat Building, North Range, Forest Colony, Khasi Hills, Shillong, Meghalaya 793001
16. Deputy Conservator of Forest (Headquarters) Environment, Forests & Climate Change Department Tuikhuahtlang, Aizawl Mizoram.
17. Principal Secretary, Department of Environment, Forest & Climate Change, New Secretariat, Kohima, Nagaland Tel.- 0370-2243025
18. Additional Chief Secretary, State Silvicultural garden, Khandagiri, Bhubaneswar, Odisha 751003
19. Principal Secretary, Forest and Environment Department, Rajasthan 4, Jhalana Institutional Area, Jhalana Doongri, Jaipur, Rajasthan 302004
20. Principal Secretary, Chief Project Director (SBFP-JICA), Forests, Environment & Wildlife Management Department, Government of Sikkim
21. Principal Secretary, Namakkal Kavignar Maaligai, Fort St. George, Chennai 600 009
22. Secretary, Department of Science, Technology & Environment, Vigyan Prajukti O Paribesh Bhawan, P.N. Complex, Gorkhabasti, Agartala,West Tripura, PIN-799006
23. Special. Chief Secretary, TSCOST, 4th Floor, Aranya Bhavan, Saifabad, Hyderabad, Telangana State, Pin – 500004
24. Deputy Conservator of Forests, (Territorial Division), Department of Environment & Forest Office of the Deputy Conservator of Forest, Daman, Fort Area, Post Office Moti Daman Daman cz

25. Deputy Conservator of Forests, (Territorial Division), Van Bhavan, Dadra and Nagar Haveli
26. Secretary, Department of Environment, Govt. of NCT of Delhi, 6th Floor, Delhi Secretariat, IP Estate, New Delhi 110002
27. Secretary, Environment & Forest, Govt. of Uttarakhand, 4 Subhash Road, Secretariat, Forth Floor, New Building Dehradun, Pin code-248001
28. Joint Secretary, Department of Science, Technology & Environment, 1st Floor, Pandit Deendayal Upadhay Bhavan, Behind Pundalik Devasthan, Near Sanjay School, Porvorim, Bardez - Goa
29. Secretary, Environment, Office of Environment, Chief Secretariat, Goubert Avenue, Puducherry 605001
30. Principal Secretary, Department of Environment, 5th Floor, Pranisampad Bhawan, Block LB-II, Salt Lake, Sector III, Bidhannagar, Kolkata – 700 106
31. Additional Chief Secretary Forest, Environment & Climate Change Deptt., Nepal House, Doranda, Ranchi-834002, Jharkhand
32. Additional Chief Secretary, Forest and Environment Department, Government of Manipur, Secretariat, Imphal- 705001
33. The Member Secretary, Assam Pollution Control Board, Bamunimaidam, Guwahati – 781021
34. The Member Secretary, Andhra Pradesh Pollution Control Board D.No. 33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre, Chalamalavari Street, Kasturibaipet, Vijayawada – 520 010
35. The Member Secretary, Bihar State Pollution Control Board, Parivesh Bhawan, Plot No. NS-B/2 Paliputra Industrial Area, Patliputra, Patna (Bihar) - 800 010
36. The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhavan, North Block Sector-19, Atal Nagar Dist- Raipur (C.G.) 492002
37. The Member Secretary, Delhi Pollution Control Committee, Government of N.C.T. Delhi 4th Floor, ISBT Building, Kashmere Gate, Delhi-110006
38. The Member Secretary, Daman, Diu & Dadra Nagar Haveli Pollution Control Committee, Office of the Deputy Conservator of Forests, Fort Area, Court Compound, Moti Daman, Daman – 396220
39. The Member Secretary, Goa State Pollution Control Board, 1st Floor, Dempo Tower, EDC Patto Plaza, Panaji, Goa-403 001
40. The Member Secretary, Gujarat Pollution Control Board Paryavan Bhavan, Sector 10- A, Gandhinagar – 382 043
41. The Member Secretary, Haryana State Pollution Control Board, C-11, Sector-6, Panchkula-134109, Haryana
42. The Member Secretary, Himachal Pradesh Pollution Control Board, Him Parivesh, Phase-III, New Shimla, Himachal Pradesh 171009
43. The Member Secretary, Jammu & Kashmir State Pollution Control Board, Parivesh Bhawan, Forest Complex, Gladni, Narwal, transport Nagar, Jammu, Jammu and Kashmir 180004
44. The Member Secretary, Jammu & Kashmir State Pollution Control Board, Shiekh-ul-Campus, behind Govt. Silk Factory, Raj Bagh, Srinagar (J&K)

45. The Member Secretary, Jharkhand Pollution Control Board, T.A Building, HEC, P.O. Dhurwa, Ranchi – 834004
46. The Member Secretary, Karnataka State Pollution Control Board, Parisara Bhavan, 4th & 5th Floor, # 49, Church St., Bengaluru-560 001
47. The Member Secretary, Kerala State Pollution Control Board, Plamoodu Jn., Pattom Palace P.O. Thiruvananthapuram - 695 004
48. The Member Secretary, Manipur Pollution Control Board, Lamphelpat, Imphal West D.C. Office Complex Imphal– 795004
49. The Member Secretary, Meghalaya Pollution Control Board Arden- Lumpyngngad Shillong: 793014
50. The Member Secretary, Nagaland Pollution Control Board, Signal Point, Dimapur Nagaland – 797112
51. The Member Secretary, Madhya Pradesh Pollution Control Board, E-5, Arera Colony, Paryavaran Parisar, Bhopal - 462 016, Madhya Pradesh
52. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 2nd – 4th Floor Opp. Cine Planet Cinema, Nr. Sion Circle, Sion (E) Mumbai – 400 022
53. The Member Secretary, Mizoram Pollution Control Board, New Secretariat Complex, Khatla Thlanmual Peng, Khatla, Aizawl, Mizoram: 796001
54. The Member Secretary, Puducherry Pollution Control Committee, Housing Board Complex, Anna Nagar, Puducherry -600 005
55. The Member Secretary, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala, Punjab 147001
56. The Member Secretary, Odisha Pollution Control Board, A-118, Nilakanta Nagar, Unit – VIII, Bhubaneshwar – 751012
57. The Member Secretary, Rajasthan Pollution Control Board, 4, Jhalana Institutional Area, Jhalana Doongri, Jaipur (Rajasthan) - 302 004
58. The Member Secretary, Sikkim State Pollution Control Board, Department of Forest, Environment & Wildlife Management Government of Sikkim, Deorali, Gangtok, - 737102
59. The Member Secretary, Telangana State Pollution Control Board, Paryavaran Bhawan, A-3, I.E. Sanath Nagar, Hyderabad-500 018
60. The Member Secretary, Tripura Pollution Control Board, Vigyan Bhawan, Pandit Nehru Complex, Gorkhabasti, PO: Kunjaban Agartala – 799006
61. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600 032
62. The Member Secretary, Uttarakhand Environmental Protection & Pollution Control Board, 29/20, Nemi Road, Dehradun, Uttarakhand – 248001
63. The Member Secretary, Uttar Pradesh Pollution Control Board, Building.No. TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow-226 010
64. The Member Secretary, West Bengal Pollution Control Board, Paribesh Bhavan, 10A, Block-L.A., Sector III, Salt Lake City, Kolkata - 700 106
65. The Member Secretary, Andaman & Nicobar Islands Pollution Control Committee, Department of Science & Technology, Dollygunj Van Sadan, Haddo P.O., Port Blair – 744102

66. The Member Secretary, Lakshadweep Pollution Control Committee, Department of Science, Technology & Environment, Kavarati-682555

Copy for kind information:

1. PPS to Secretary, Department of Water Resources, RD&GR, Ministry of Jal Shakti, Shram Shakti Bhavan, Rafi Marg, Sansad Marg Area, New Delhi- 110001
2. PS to Director General, NMCG cum Project Director NRCD
3. PS to Additional Secretary, Ministry of Housing and Urban Affairs, Nirman Bhawan, Maulana Azad Road, New Delhi – 110011.
4. Joint Secretary, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhavan, Jorbagh Road, New Delhi – 110003
5. Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032
6. PS to ED (Project/ Finance), NMCG
7. Adviser, NRCD

Minutes of the 8th meeting of the Central Monitoring Committee held on 05.01.2021 through Video Conferencing regarding 351 polluted river stretches based on the directions of Hon'ble NGT in the matter OA No. 673 of 2018

The 8th meeting of the Central Monitoring Committee (CMC) constituted by Hon'ble NGT in the matter OA No. 673 of 2018 was held through video conferencing with the States on 05.01.2021 from 10.00 AM onwards in Conference Room, NMCG under the Chairmanship of Secretary, Ministry of Jal Shakti. The list of participants of NMCG, NRCD, MoHUA and CPCB present at the meeting is at ***Annexure-I.***

II. Secretary, Ministry of Jal Shakti welcomed all participants and highlighted that it has been observed that not much progress is being made by States since the last meeting of CMC. The States need to provide correct and adequate details in their MPR, as it may not be possible to discuss the progress made on all the actionable points in the meetings. Further, based on the information provided by the States, the 3rd Quarterly Report is to be submitted to NGT by end of January, 2021. Incremental progress made by the State needs to be highlighted in the MPRs. Secretary also directed that the presentation made by the Ministry may be shared with the States for submission of inputs for incorporation in the Quarterly Report.

III. Subsequently, State-wise discussions held are as follows:

Executive Director Technical (ED Tech), NMCG through a presentation briefed about the progress made by the States and highlighted the issues related to sewage, industrial and solid waste management in the States based on the information submitted in MPR. It was informed that in compliance to NGT's order dated 26.09.2020, 13 Coastal States were supposed to submit Action Plan with regard to Coastal Pollution Management to CPCB by November, 2020 and as informed by CPCB, Action Plan has only been submitted by Andhra Pradesh recently. Therefore, the remaining Coastal States were directed to ensure compliance to NGT orders.

1. **<u>Punjab</u>**

ED Tech, NMCG informed that State has 116 STPs existing, of which 37 STPs were reported to be non-complying previously, but as per the latest reports 42 STPs are now reported to be non-complying. However, as reasons for non-compliance and proposed measures taken for correcting

the defects have only been provided for 28 STPs, the State may provide details for the remaining 14 STPs. Out of 28 non-complying STPs, 14 have major technological issues and rest are non-compliant w.r.t. faecal coliform. Similarly, there is 1 CETP which is constantly non- compliant. It was flagged that as per the MPR, the progress of the 2 CETPs of 40 and 50 MLD at Ludhiana remains stagnant and 1 STP of 48 MLD at Ludhiana is found to be non-operational. It was further informed that 36 STPs of 339 MLD are under construction, of which 5 STPs of 84.5 MLD have been recently completed and are under stabilization and 6 STPs of 28 MLD are to be completed by March, 2021. There are 96 STPs proposed and work orders for none of them have been issued so far. The State needs to provide status of award of the works for Budha Nallah project which was scheduled in November / December, 2020 and also to provide the status of under construction STPs for Ghaggar river. On comparing the progress made by the State in the on-going STP projects from September-November 2020, it was found that progress have only been made in only 2 projects out of 36 indicating that either not much progress has been made by the State or the same has not been reflected in the MPR.

Chief Secretary, Punjab informed that work for Budha Nallah has already been awarded. Further, Principal Secretary, Department of Local Government, Punjab informed that 25 STPs were found to be non-complying in the month of November, 2020, out of which 15 STPs are based on old technology and 10 are based on SBR/MBBR technology for which efforts are being made to achieve the prescribed standards. It was informed that work for Budha Nallah project in Ludhiana has already been awarded on 02.12.2020 to M/s KIPL-GVPR (JV) for Rs. 839.79 crore, which includes capital works and 10 years of O&M. The capital works includes construction of STPs having total treatment capacity of 285 MLD (225+60), these works will replace the defunct 48 MLD STP at Jamalpur. The STPs at Ferozpur and Jaito as well as STPs in non-river towns of Barnala, Sahkot, Tarantaran and Amritsar (South) have been completed. Works on other ongoing STPs is progressing and is expected to be completed on scheduled timelines. Regarding land issues, it was informed that presently there are only 3 cases in PRS towns, out of which cases of Dhuri and Bassi Pathana have been resolved and are in final stage of acquisition. Land issue only at Sangrur is pending for which efforts are being made by the State.

Secretary, Environment, Punjab informed that work of 40 MLD CETP has been completed and trial run is in progress and the plant expected to be fully operational by end of February, 2021. The work of 50 MLD CETP got delayed due to non-availability of some mechanical equipment, which is expected to arrive shortly and it is scheduled to start the trial run of this CETP by end of February, 2021. 15 MLD existing CETP is non-complying as the same is under stabilization and efforts are being put in to improve the plant.

Secretary, Ministry of Jal Shakti stated that there are discrepancies in the data presented during the meeting by the Ministry based on the MPRs and data given in the response by the State, which needs to be reconciled. It was directed that henceforth, copy of the issues to be discussed during the CMC meeting should be provided to all the States / UTs in advance so that they can respond properly during the discussions.

2. <u>Assam</u>

ED Tech, NMCG informed that total sewage generation in the State is reported to be about 824.07 KLD, which appears to be incorrect and needs to be reconciled. In the MPR, details of implementation of works in Guwahati have not been provided. He also informed that tenders for 5 STPs at Naugaon, Silchar, Mangaldoi, Jorhat and Tezpur were scheduled to be floated in November / December, 2020 and the State needs to provide the latest status on award of these works. 10 industries in catchment area of Bharalu river and 12 in catchment of Borsola Beel are reported to be operating without consent and State is to provide updated status on the above issues. Hazardous waste of 43 TPD is generated with no treatment facility/ TSDF existing. Status of operation of 50 TPD existing trommel plant for segregation of legacy waste at Boragaon along with status of Integrated Solid Waste Management Plant at Byarnihat needs to be provided. Model River needs to be identified. Inadequate information has been provided in the DPR with regard to ground water regulation, RWH, floodplain and e-flow management, reuse of treated water and development of Biodiversity Parks.

Principal Secretary, Guwahati Development Department (GDD) informed that for JICA assisted sewerage project at Guwahati, survey for revision of DPR is already under progress and inception report shall be submitted shortly by the Consultants. Design work for sewerage network shall also be commenced from mid-January and DPR will be completed by 9th March,

2021. Advertisement to fill up the requisite post in project implementation unit for the sewerage project has already been published by the GDD and will be filled up shortly after interviews on 21st January, 2021. It was informed that the tenders for Boragaon dumping site has already been issued and trommels have already arrived in Guwahati and the work shall commence from 7th January, 2021. There is land issue in respect to setting up of Integrated Solid Waste Management Plant at Byarnihat. However, State has now identified another land at Sonaguli for setting up of the integrated solid waste management plant.

Secretary, UDD, Assam informed that DPR has been prepared for STPs at Naugaon, Mangaldoi, Jorhat and Tezpur, and administrative approval is to be issued. Land has been finalized and DPR is under preparation for STP at Silchar.

Official from Assam Pollution Control Board informed that EOI has been received for establishment of TSDF in Assam and RFP is to be issued.

Principal Secretary, GDD, informed that as per information from State Pollution Control Board all the industries which are not complying have been shut down by them.

Regarding discrepancy in the figure of total sewage generation in the State reported to be 824.07 KLD, a message was received from the State on 6th January, 2021 clarifying that the figure of sewage generation of 824.07 KLD is correct and relates to sewage generation from catchment area of 3 polluted river stretches falling under the jurisdiction of P&RD Department of the State. The figure does not account for total sewage generation of the State. The State was requested to provide the total sewage generation in the State and not separate figures under the jurisdiction of different departments.

Secretary, Ministry of Jal Shakti directed that the presentation made during the CMC meeting should be shared with the States for their response and requested the States to send their response in writing on the issues raised during the meeting.

3. Jammu & Kashmir

ED Tech, NMCG informed that presently J&K has 15 STPs having total treatment capacity of 139.40 MLD, out of which 11 STPs are operational with a treatment capacity of 120 MLD and

having utilization capacity of only 82.9 MLD. It was informed that 27 MLD STP at Jammu is under testing and commissioning since long. Similarly, 10 MLD STP at Jammu is under refurbishment. Efforts are needed to operationalize it on full capacity. STPs at Badami Bagh in Kashmir and Ardhkuwari in Katra are not in operation. Progress of Devika river project is still very slow, and the detailed time line to complete the project by the completion date of March, 2021 has not been provided inspite of repeated requests. Similarly, progress in providing house connections in Jammu is also not progressing well and progress of 4MLD STP is also negligible. Out of 450 water polluting industries, only 239 units are having ETPs and only 199 ETPs are compliant. Incremental progress with regard to on-going STP projects appears to be NIL, State needs to provide the latest status of the progress and also to reconcile the figures of water polluting industries reported in the MPR.

Secretary, Ministry of Jal Shakti expressed serious concern over the slow progress in implementation of works, especially Devika river project which was scheduled to be completed by March, 2021, as well as not taking seriously O&M of the existing assets including lower capacity utilization of available treatment capacity. During the discussions on non-utilization of existing treatment capacity, use of online monitoring system at all the STPs for better monitoring was emphasized. Further, it was directed to provide action plan for bridging the gap to treat about 383 MLD of sewage balance from total sewage generation of 583 MLD in the U.T of J&K.

Principal Secretary, (HUDD), Jammu & Kashmir informed that about 1500 MT/day of MSW is being generated in the U.T, out of which 550 MT is being treated and tenders for treatment of legacy waste of 1.2 lakh MT in Jammu has already awarded in August, 2020 and shall be completed by December, 2021. In addition, work has been awarded to NAFED in January, 2021 to treat 3.0 lakh MT of legacy waste at Kotbhalwal in Jammu and it shall be completed in the next 18 months. For treatment of legacy waste of 8.5 lakh MT in Srinagar, contract is being finalized and is expected to be awarded in January, 2021. It was informed that door to door collection of MSW in UT is about 85% and segregation is about 50%, and efforts are being made to increase it. Regarding waste processing for Jammu, agreement has being finalized with NAFED for bio-gasification of waste and by March, 2022 all the 76 ULBs of UT shall be equipped with the bio- disposal facility for MSW.

Further, it was informed that efforts are being made by the UT Government to operationalize the existing STPs on optimum capacity. Regarding non-operation of STP at Bhagwati Nagar in Jammu, it was acknowledged that there were issues with contractor for which the contract has been amended & the matter has now been resolved and the plant shall be made fully operational by March, 2021. In addition to the house connections in NBCC project in Jammu which are expected to be completed by June 2021, and to further augment the flow to the STPs, a DPR for Jammu has also been submitted to MoJS for funding under NRCP along with other DPRs. Similarly, respective authorities have been requested to operationalize the STPs at Ardhkwari and Badami bagh. DPRs for bio-remediation has been prepared and submitted to U.T. Government for funding. With regard to Devika river project, it was informed that due to Covid-19 as well as other issues like NOC from NHAI, BRO and land issues, works got delayed. All the issues has now been resolved and the sewerage work shall be completed by December, 2021 with works related to ghat development completed by March, 2021.

State was directed to submit details to the Ministry for incorporation in the Quarterly Report for onward submission to Hon'ble NGT.

4. <u>Sikkim</u>

ED Tech, NMCG that there are 7 STPs of 19.5 MLD in the State and their capacity utilization is about 60%, which has been reduced from earlier reported utilization of 84%. 3 STPs of 6.25 MLD capacity are under construction and 7 more STPs of 11.33 MLD capacity are proposed. Total solid waste generation in the State is 77 TPD against which 50.8 TPD treatment facilities is available. Maney Khola is being adopted as Model River. 3 STPs (at Gangtok zone II, Melli and Rangpo) are almost complete but not made operational for quite sometime. State needs to provide latest status on these 3 STPs and also on the issue related to preparation of DPRs for STPs at Namchi, Jorethang, Geyzing, Rabong, Soreng and Mangan, except Chungthang for which DPR was already submitted.

PCE-cum-Secretary, PHED, Govt. of Sikkim informed that the STP at Zone –II shall be commissioned by end of January, 2021 and STP at Rangpo is complete. However, some sewer lines need to be realigned, and therefore the STP shall be commissioned by March, 2021.

Similarly, the STP at Melli will also be made operational by March, 2021. Land acquisition process for Namchi STP is under process and for Jorethang STP, process for land acquisition is also underway, as this land requires diversion from forest land. It was informed that most of the DPRs have been prepared and shall be submitted for funding. Ministry of Jal Shakti was requested to reconsider the funding of Chungthang DPR under NRCP funds.

Secretary, Ministry of Jal Shakti highlighted that State should complete verification and finalize the DPRs first, as the projects are turning to be very costly. Further, as the STPs proposed are in the range of 1-3 MLD capacity, the State was suggested to explore alternate treatment technology such as Faceal Sludge Management.

5. <u>Tripura</u>

ED Tech, NMCG informed that the State generates around 82.4 MLD of sewage with existing treatment capacity of only 8.72 MLD (8 MLD STP & 720 KLD FSTP at Agartala), thus leaving a huge gap in sewage treatment which needs to be addressed urgently by the State. The capacity utilization of the existing STP is low i.e. 3 MLD. House sewer connections to the existing 8 MLD STP, 15 FSTPs of 600 KLD and 8 MLD under construction STP needs to be expedited. Status of the proposed STPs (4 MLD at Bishalgarh, 8 MLD at Udaipur, 8 MLD at middle point between Dharmanagar and Kailasahar) needs to be provided. Status of the in-situ bio-remediation for all identified drains (210 nos) discharging into polluted river stretches needs to be updated. Municipal solid waste processing facility exists for 256 TPD (250 TPD composting plant at Agartala & 6 TPD at District Dhalai) against total waste generation of 411.32 TPD. Compliance with the provisions of the Solid Waste Management Rules, 2016 needs to be made. Request for revising details of polluted river stretches based on water quality monitoring carried out during recent periods has been made to CPCB for their consideration.

Additional Secretary, Science, Technology & Environment, Tripura, informed that Haora river stretch has been identified as a model river. It was informed that to increase the utilization capacity of the 8 MLD STP at Agartala, expansion of sewer network and house service connections are in progress, and are likely to be completed in 18 months. Work has started on 8 MLD STP at Akhaora. For in-situ bio-remediation, survey work is going on for preparation of

baseline information for pollution abatement of 205 drains and tender evaluation for bio-remediation on 5 drains on pilot basis at Agartala has been completed. With regard to bio-remediation of legacy waste, 50% of the work has been completed. To bridge the gap in solid waste management, setting up of 17 Tertiary Processing Plants has been started and all of them shall be made functional by March, 2021. Land has been identified and tendering process has been initiated by the ULBs for the 15 FSTPs of 600 KLD.

Secretary, Ministry of Jal Shakti directed the State to expedite the on-going and proposed projects.

6. <u>Manipur</u>

ED Tech, NMCG informed that the MPR submitted in December, 2020 is a repetition of the MPR submitted for October, 2020. The report does not provide much information on rainwater harvesting, groundwater regulation and flood plain management and other issues. The State has 1 STP of 27 MLD with capacity utilization is only 9 MLD, thus, having a huge gap in treatment. The State has 2 STPs under construction, a 1 MLD STP with hardly any progress and a 16 MLD STP with 10% progress. 1 STP of 49 MLD is proposed at Imphal and the State has plans for bio-remediation and Faecal Sludge and Septage Management (FSSM) of 16.75 MLD for which DPR is being prepared. The State also reported that there are 989 non-polluting industries and 5 industrial units are connected to CETP of 400 KLD which is non-operational. Industries remain non-compliant as per CPCB norms where the CETP is non-operational, and the State needs to take urgent action on the same. There are about 334 automobile industries that produce 1 TPD of hazardous waste, for which the State does not have any treatment facility.

The State official informed that the CETP is operational and requires minor repairs for proper functioning of the plant.

Secretary, Ministry of Jal Shakti highlighted that sewage management is a major concern as the 27 MLD existing STP in the State is being utilized at only 9MLD capacity. Not much progress has been achieved in the under construction STPs of 17 MLD. Also, the cost of proposed 49 MLD STP seems to be very high and suggested that State should reconsider the project and submit details to the Ministry urgently.

7. Meghalaya

ED Tech, NMCG informed that the MPR submitted in December, 2020 is a repetition of the MPR submitted for October, 2020. As reported, the State generates 75 MLD of sewage, against which 8 STPs of 1.85 MLD capacity are existing and about 22.8 MLD of sewage is being treated through septic tank. There is still a gap in treatment of 50.37 MLD. All the STPs are reported to be complying and one septage treatment plant of 115 KLD is under construction with 75% of work having been completed. 245 industries are having ETPs, all of which are complying. State has identified River Nonbah as Model River. With regard to solid waste management, 8 TPD plant remains functional and 65 TPD plant was to be commissioned by December 2020. The State has proposed 10 plants of 166 TPD capacity.

Secretary Ministry of Jal Shakti, highlighted the issue of sewage management as treatment of sewage only through septic tank is not adequate. It was suggested that there should be a plan of either septage management/ Faecal Sludge Treatment Plant or Sewage Treatment Plant. However, this kind of planning remains unclear for Meghalaya. Therefore, the State was directed to submit the detailed plan for sewage management envisaged for the State.

Officials from Meghalaya informed that apart from the one septage treatment plant under construction, tender has been floated for 0.35 MLD FSSM plant and land has been identified for 5 onsite treatment plant of 13.45 MLD.

8. Nagaland

ED Tech, NMCG informed that against the estimated sewage generation of 44.3 MLD in the State, no sewage treatment facility exists. One STP of 25.43 MLD capacity is under construction with 95% progress and 55% progress in case of related sewer network. It is due for completion for June, 2021. In the 7th CMC meeting, State informed that for other areas they are planning for bioremediation as well as septage treatment. However, 2 units of Faecal Sludge Treatment Plant (20 KLD and 90 KLD) are in place and serviced by 13 cesspool vehicles at Dimapur and Kohima respectively. The State has 5 water polluting industries and no CETP, 3 ETPs are operational and complying the norms, while 2 ETPs are under process. With regard to municipal

solid waste, against the generation of 304 TPD, 132 TPD of waste is treated and 50 TPD processing plant is being installed.

Secretary, Ministry of Jal Shakti raised concern over the slow progress of on-going STP and sewerage works which were sanctioned around 15 years ago. State was directed to ensure that rivers in the State are not polluted by adopting appropriate treatment technologies.

9. Mizoram

ED Tech, NMCG informed that the State has 68 MLD of sewage generation. One STP of 10 MLD capacity at Aizwal is under construction, which is 99% complete, while the progress of sewage network is 75%. Earlier State has informed that they will be completing this STP by October, 2020. However the status remains the same from last 6-7 months. State needs to provide updated status in the MPRs as the information will be included in the report and affidavit to be filed in NGT.

Secretary, Ministry of Jal Shakti directed the State to provide updated information in writing to the Ministry immediately.

10. Telangana

ED Tech, NMCG informed that the State has 31 existing STPs of total capacity 888 MLD with utilization of 735 MLD and gap in treatment of 1724 MLD. 31 STPs are operational, although it has been stated in the annexure of MPR that 2 STPs of 3 MLD capacity are non-functional. 29 STPs are complying and 17 STPs of 210 MLD capacity are under construction, with 11 STPs (144 MLD capacity) out of these 17 STPs are yet to be started. 1 STP of Miryalguda was proposed to be completed by December, 2020, and its status of commissioning needs to be provided. 175 STPs of 1574 MLD capacity are proposed, out of which the Package 3 comprising of 17 STPs of 376 MLD (proposed under HAM model) in Hyderabad are under tendering, the date of which has been extended to mid of January due to no response from agencies. There are 2 other packages; Package I and Package II, which are yet to be sanctioned. For all proposed STPs, the projects are yet to be grounded. As reported by the State, out of 2178 water polluting industries, 2110 industries are complying and for remaining non-complying industries, notices/

closure directions have been issued. 4 CETPs of 7 MLD capacity are operational and a 0.5 MLD CETP is under construction. It was further informed that 3720 TPD of solid waste is generated in the State and there exists treatment facilities of 1451 TPD. For the bioremediation works, the State has involved NEERI for conducting pilot project on one of the drains at Kuttapallynala and for the other 4 drains DPRs has been prepared and is under sanctioning stage. It was highlighted that on comparing the progress of on-going projects, the progress reported in December MPR remains same as reported in the October MPR. With regard to the on-going CETP, completion timeline in October MPR was indicated to be March, 2021 and in the December MPR, this has been shifted to June, 2021.

Managing Director, HMWSSB informed that the tenders were called for under 60:40 ratio HAM model. EOI was called for by the State for the 17 smaller STPs and 14 agencies had showed interest, but when the tender called for none of the parties responded. Further, a discussion with the parties was held again and Minister along with Chief Secretary had taken review on the issue. It was highlighted that the agencies were interested in taking up the bigger STP projects of 100 MLD/ 120 MLD on Musi River, which are included in two other packages. As the STP projects shall take 2 more years to be implemented, the State is focusing on setting up of 6 FSTPs on the land identified for STPs. Out of the 6 FSTPs, 2 plants will be completed by the end of January 2021, 1 FSTP under CSR funding is expected to be completed by February, 2021. Further, it was informed that GPS is being put up on the tankers collecting septage from the septic tanks to ensure no pollution is discharged into the water bodies. Decentralized STPs are being put up near to Hussain Sagar lake to address the pollution reaching through one big nallah. Installation of Flow meters and OCEMs is in progress and are expected to be placed by January, 2021.

Secretary, Ministry of Jal Shakti highlighted that though the State fairs pretty well in capacity utilization of the existing STPs still there is a large gap in sewage treatment in the State. For bridging the gap, the State appears to have a plan for establishment of large capacity of STPs. However, an area of concern is that for sanctioned package no company has submitted tender. Therefore, it was suggested that marketing consultation/ discussion with all the companies may be carried out by the State. Further it was suggested that Director General, NMCG may obtain

details of the companies that showed interest in the EOIs floated by the State and clarifications may be sought from the agencies for not responding to the tenders.

Director General, NMCG suggested that it is likely that the companies may consider the other unsanctioned packages which may contain less number of STPs of higher capacity as compared to the sanctioned package. Therefore, the queries raised by the companies needs to be looked upon and the same may be forwarded for a conclusive meeting.

Managing Director, HMWSSB responded that the State followed Namami Gange model wherein 40% of the project cost was to be paid on completion and 60% of the project cost was to be paid in 15 years annuities and O& M was also proposed to be kept for 15 years. The next two packages are also proposed to be sanctioned shortly.

Secretary, Ministry of Jal Shakti highlighted that the HAM model based STPs are seen to have better performance as compared to other STPs. Further, concern was raised with regard to on-going STPs having NIL progress being reported in the MPRs and State was directed to expedite the ongoing STP projects.

11. <u>Daman Diu and Dadra Nagar Haveli</u>

ED Tech, NMCG informed that there are two existing STPs of 4.2 and 13 MLD capacity at Daman and DNH respectively. The STP at Daman is operational to its full capacity, whereas the STP at DNH is being utilized at only 2 MLD. A STP of 16 MLD at Nani Daman is proposed and 7 MLD STP at Diu has been approved and is under implementation. There are no CETPs and all the industries have ETPs and 100% solid waste generated is processed. Phyto-remediation and bioremediation proposal for the identified drain has been received from NEERI and the same is under process. The drain near Rajiv Gandhi Setu, Daman is being taken up for in-situ treatment on pilot basis. Integrated Coastal Zone Management plan for Daman & Diu is proposed under ENCORE project funded by World Bank and MoEF&CC.

Member Secretary, Pollution Control Committee informed that with regard to Silvasa, number of household connections have increased marginally and work is going on to increase the flow to the STP. Tender will be floated for 7 MLD STP at Diu by January, 2021. For 16 MLD STP proposed at Daman under World Bank ENCORE Project, sanction order is awaited and

accordingly tender will be floated. With regards to preparation of Coastal Management plan, the State has already tied-up with National Centre for Coastal Research, Chennai to take up the study as advised by CPCB after which State will be submitting the plan at the earliest. All the polluting industries have installed the ETPs, and in these ETPs energy meters and flow meters have been installed and these are regularly monitored. For highly polluting industries, online monitoring facility is available where they directly upload the data and on day to day basis it is being monitored by CPCB and PCC.

12. <u>Andhra Pradesh</u>

ED Tech, NMCG informed that there are 43 STPs of 515.85 MLD capacity, and all are reported to be operational and complying. However, in 6 STPs of 36 MLD capacity, inflow is indicated as NIL as either these are under upgradation or rehabilitation. Therefore, State needs to ascertain whether all the STPs are operational. On comparing the progress made in the on-going STP projects from September-November, significant progress has only been made in the STP at Srikakulam and progress in rest of the STPs remains same. Compliance of the existing CETPs needs to be provided by the State. Data with regard to Solid Waste Management needs to be verified by the State. Details on other action plans such as – Action Plan for coastal areas, ground water regulation, RHW, floodplain & eflow management, plantation, biodiversity, mining activity regulation, adoption of Model River and action against defaulters has not been provided in the MPR.

Secretary, Ministry of Jal Shakti expressed serious concern over the absence of senior level officers in the meetings, especially the nodal Principal Secretary, which reflects the lack of seriousness on the part of the State. This has been observed in the previous meetings of CMC as well and has also been highlighted at highest level. On continuation of such behavior, the State shall not be taken up henceforth. If all the STPs are operational and complying, still the utilization capacity is 63%. It was suggested that the nodal department should analyze each and every STP in terms of capacity utilization of individual STPs and this could clarify the reason for lower capacity utilization. Almost no progress of the on-going STP projects in the non-monsoon period is also a matter of serious concern.

Chief Engineer, Andhra Pradesh informed that 75 MLD STP at Nellore has been recently commissioned and flow is yet to be received at the STP, post completion of sewer line connections. It was informed that Commissioner has been requested for HSCs in mass scale and several works of HSCs are in progress. It is expected that within 2 to 3 months all HSCs shall be completed. Other STP works are delayed due to Nivar cyclone in the State. As most of the contractors are from outside State, and due to Covid19 the workforce was demobilized. However, the work is pacing up now and rapid progress is expected to be achieved in 2 to 3 months. Regarding future projects, plan to take up STP works through HAM model for all 16 Municipal corporations in First Phase are being envisaged.

Director General, NMCG suggested detailed briefing is necessary for the matter stated above. For completed STPs, capacity and utilization and action plan for enhancing capacity utilization is to be sent along with strategy for HSCs. For under construction STPs, as per the report it appears all construction work has paused in the State due to COVID19, which is unacceptable. The State's response has been poor in view of the meeting held and needs to be improved. For projects to be sanctioned, detailed specified information STP wise and under which grant it is to be sanctioned is to be reported. It was suggested that if required guidance with regard to HAM model can be provided to the State.

13. <u>Kerala</u>

ED Tech, NMCG informed that a detailed meeting with the State was held under Chairmanship of Director General, NMCG on 21st December, 2020 wherein all the issues were discussed. The State had elaborated on the plans and committed to provide the action plans for coastal zones conservation. However, written information is still awaited. Further, it was informed that the sewage generation in the State remains 1192 MLD including 875 MLD from rural areas, there are 13 common STPs of 124 MLD with capacity utilization of 91 MLD (73%). Out of 3 common FSTPs of 0.21 MLD, 1 FSTP is being made functional shortly. Work has been awarded for 9 STPs of 32.18 MLD and 4 FSTPs/ Septage plants of 0.4 MLD. Further, 26 STPs of 58.26 MLD and 8 FSTPs/ Septage plants of 0.97 MLD are proposed. Many of the projects have been retendered because of various reasons. State had informed that 1 STP of at Muthathara of 107

MLD capacity is operational at 70-80 %. For increasing the utilization capacity of the STP, 116 short term works are being implemented, out of which 72 have been completed and balance are to be completed soon. The State has a larger plan to handle solid waste and liquid waste through FSTP and smaller STPs. Therefore, State was requested to provide the written submissions at the earliest for incorporation in the quarterly report.

Principal Secretaries of Environment, Urban Development and Water Resources Department, Kerala attended the meeting along with other State officials. Member Secretary, Kerala Pollution Control Board informed that a Dossier has been prepared, wherein sewage and sullage in the State have been separately highlighted. It was informed that 13 proposals are in DPR stage, 10 proposals have been tendered, works have been awarded for 5 projects, work has started in 4 projects, technical sanction is yet to be issued for 1 proposal and remaining 6 projects are to be re-tendered. For a large number of residential areas in the State, septic tank and soak pit arrangements have been made and for 69 residential complexes, individual STPs have been installed. Incremental progress have been achieved in 5 STPs. With regard to coastal management action plan, discussions have been held, survey in 6 districts have been completed and is in progress in 10 districts. State has committed to submit the action plan by the week end. With regard to solid waste management, 8 Waste to Energy Plants are planned, there is complete ban on single use plastic and inventories have been made for biomedical waste and hazardous waste. For non-complying industries, directions and penalties have been imposed.

Chief Engineer, Kerala Water Authority reported that sewerage plan for the State is being prepared and after administrative approval is granted for the plan, the remaining gap in sewage treatment shall be taken care of.

Secretary, Ministry of Jal Shakti suggested that the prime focus is river rejuvenation and tackling sewage that is reaching river and water bodies. Focus on capacity utilization of existing plants, early completion of under construction works and the fulfillment of gap is of prime importance.

14. <u>Puducherry</u>

ED Tech, NMCG informed that UT has 5 STPs of 56 MLD capacity having utilization of 35 MLD. As reported by the UT, 3 STPs of 51 MLD are operational and non-compliant due to high

BOD levels in effluent, 2 existing STPs of 5 MLD are non-operational as the STPs are not receiving the minimum flow required to run the STPs. Further, 2 new STPs of total 6 MLD are in tendering stage. Out of 96 industries, 95 industries are having ETPs and 87 ETPs are complying.

Secretary, Ministry of Jal Shakti, directed that nodal officers of the Ministry should regularly interact with the State/UTs allocated to them and get details of reasons of STPs not in operation, not complying with the discharge norms, reasons for delay in on-going and proposed STPs.

Secretary (Environment), Puducherry informed that 2 STPs are non-operational due to lack of sewerage connections. Directions have been issued to defaulting industries. Not much progress has been made with regard to solid waste management and municipalities have been issued directions and Environmental Compensation shall be collected from the defaulting industries.

Chief Engineer, PWD, Puducherry informed that house connections are expected to be completed by March, 2021 and the 3 STPs shall be fully functional by June, 2021.

Secretary, Ministry of Jal Shakti directed the UT to provide the requisite details in writing and also highlighted the key issue, which is the low capacity utilization of operational plants. Information regarding tenders for proposed works was sought to which the UT responded that WAPCOS is being perused for providing the Consultancy services.

15. <u>Gujarat</u>

ED Tech, NMCG informed that as reported in the MPR, out of the 73 existing STPs of 3485 MLD, 22 STPs of 1271.46 MLD are non-complying. Further, out 34 existing CETPs, 11 CETPs have been reported to be non-complying. A 53 MLD STP at Surat Gavier commissioned in 2016, is having utilization capacity of only 5.37 MLD. No significant progress has been made with regard to bioremediation of drains. On comparing the progress made in the on-going STP projects in October and November MPR, it was noted that no progress was made in two consecutive months. State was directed to provide details of land issues for the Tapi Shuddhikaran project.

Secretary, Ministry of Jal Shakti pointed out that the officers of appropriate level/rank of the concerned implementing departments/ authorities should remain present along with the Gujarat

Pollution Control Board, a co-coordinating body. Further, the State was directed to provide information only on the issues highlighted. Concern was raised over the slow progress of the on-going 97 STPs in the State and low utilization of the 53 MLD STP at Surat.

Dy. Chief Environment Engineer, GPCB informed that the officers from Gujarat Urban Development Mission, Gujarat Water Supply & Sewerage Board, Surat Municipal Corporation, Ahmedabad Municipal Corporation, Vadodara Municipal Corporation and Panchayats, Rural Housing and Rural Development Department were attending the meeting. With regard to Tapi Shuddhikaran project, it was informed that out of 53 STPs, land issues in 16 STPs have been sorted out, and in 3 STPs work is in progress.

Additional City Engineer, Ahmedabad Municipal Corporation reported that short & long term planning is under process for up-gradation of existing STPs and to rectify the issues of non-compliance of the STPs.

State was directed to provide the details of the issues highlighted in the meeting in writing to the Ministry for incorporation in the Quarterly report.

16. <u>Karnataka</u>

ED Tech, NMCG informed that the number of existing STPs in the State is reported as 125 of 2242 MLD capacity, whereas earlier it was reported to be 146 STPs. Such type of discrepancies in submission of data creates a problem while submitting the reports to Hon'ble NGT. Compliance status of STPs is yet to be provided and as reported by the State, status is yet to be compiled. There are 10 existing CETPs of 5.8 MLD capacity, of which 1 CETP is non-operational and 6 CETPs are non-compliant, for which the State has initiated actions. With regard to the solid waste management, 11800 TPD is generated and 10198 TPD is collected and 50-58 % is being processed in the State. DPRs for adding 9159 TPD capacity have been approved. State is yet to submit the Action Plan for coastal pollution management. Furthermore, land issues were highlighted for 2 STPs at Kamaje and Kaikunje. The action plan for the Ramdurga Malaprabha River, where 14.51 TPD of waste was dumped and washed away due to floods, is to be made a part of the report.

Secretary, Ministry of Jal Shakti highlighted that the State Pollution Control Board should regularly monitor the STPs and should have data readily available with regard to the compliance status of the existing STPs. Online monitoring of the STPs and CETPs was emphasized. It was directed that progress made by the State with regard to on-going and proposed projects be clearly indicated in the presentation being made in the meeting.

Member Secretary, Karnataka State Pollution Control Board informed that compliance status of CETPs along with action taken by PCB has been provided in the MPR. With regard to compliance status of the existing STPs, status has only been received from 2 regional offices of the KSPCB and further a State level meeting is scheduled for 16th January, 2021 to obtain the status report of all the STPs. The same shall be submitted along with the next MPR. At Chikkodi, while there are 2 STPs of 3.72 MLD STP at Sadalaga village and 5.8 MLD STP in Chikkodi, the STPs are hardly receiving 2 MLD of sewage as UGD is still to be completed. The land procurement issue is yet to be sorted out at Kamaje, and the same is being pursued with the Deputy Commissioner, while the work of UGD at Bantwala in Mangalaru is progressing.

In the 17 polluted river stretches, there are 39 ULBs. In the 33 ULBs managed by KUWSB, STPs have already been commissioned in 5 ULBs, STPs works are ongoing in 5 ULBs, DPRs have been submitted to State Government for 19 ULBs and DPRs for STPs are under preparation for the remaining 4 ULBs. In the 4 ULBs managed by KUID, there are 7 STPs, out of which 3 STPs have been commissioned and 4 STPs are under construction. 2 ULBs are under DMA. With regard to the Solid waste management, the State acknowledged the huge gap of 5810 TPD, and stated out that of 286 ULBs, 219 ULBs have finalized the SWM DPRs with total design capacity of 9159 TPD at an estimated cost of Rs. 1501 crore. For the remaining 67 ULBs, DPR preparation is pending. 14.51 TPD of waste dumped along the Ramdurga Malaprabha River has been cleared.

Further, it was informed that all the CETPs have been equipped with flow meters at inflow and outflow outlet, which are connected with an online database integrated with AI setup to monitor the CETPs. 35 vehicles that carry effluents of CETPs and 26 hazardous waste carrying vehicles have installed GPS to ensure proper disposal of the waste. The data is being displayed on KSPCB website. It was reported that the action plan for coastal pollution management is under consideration at the State head office.

There are 7 Waste to Energy plant in pipeline and recently the State has inaugurated an 11.5 MW WTE plant at Bidabi which has been made operational. Further, a 6 MLD STP has been commissioned in the last one month. With regard the issue of dumping of illegal waste into the Vrishabhavathi Valley, the State has engaged marshals for patrolling to prevent any illegal dumping of sewage/ septage waste. The State assured that strict monitoring of SWM is in track.

Director General, NMCG acknowledging the State's brief on the initiatives taken up and requested the State to send a comprehensive report with details of real time monitoring of CETPs along with other initiatives provided by the State.

17. <u>Tamil Nadu</u>

ED Tech, NMCG informed that there are 66 STPs of 1616 MLD capacity existing, out of these 3 STPs are reported to be non-complying. 40 STPs of capacity 971 MLD are under construction and 37 STPs are proposed. 49 FSTPs are proposed, of which 5 have been completed. River Bhavani has been adopted as the Model River. Out of 36 CETPs, 4 are non-complying and further 10 CETPs of 41 MLD are proposed. 15,666 TPD of municipal solid waste is generated, for which 3229 processing facilities are existing wih 7859.2 TPD installed capacity. On comparing the progress of the on-going 40 STPs for the months from September-November 2020, progress appears to be stagnant except for 6 STPs at Sriperumbudur, Vellore, Trichirapalli-STP1, Mettupalayam, Velankanni and Thiruporur. With regard to proposed STPs, it was informed that all projects are in DPR preparation stage or are in approval stage.

Secretary, Ministry of Jal Shakti raised concern over low utilization capacity of the existing STPs and the progress of on-going STP projects.

DG, NMCG mentioned that there is a huge gap between the sewage generation and total capacity created. However, STPs which are under construction and at proposal stage would bridge the large gap between sewage generation and capacity created to a large extent. However, it was observed that capacity utilization of 919 MLD against the installed capacity of 1616 MLD means average utilization of about only 57%, which is not satisfactory. It shouldn't be less than 80%, as these STPs were created 5-10 years back and by this time the corresponding conveyance system should have been completed.

Additional Chief Secretary (Environment), Tamil Nadu informed that the biggest problem in the State is the conveyance system from households to the STP not being strong due which the STPs are not being optimally utilized. Therefore, the State is emphasizing on the improving the conveyance system. With regard to the non-complying 4 CETPs, it was informed that notices have been issued to the concerned CETPs. The slow progress in the on-going projects was attributed to the retreating monsoon and huge rainfall received in the last 2 months. It was informed that the software (OCEMS) is working properly and the entire data is collected from the local bodies which include baseline data, what have been proposed and how they are progressing i.e planning stage, utilization capacity and execution. With the help of this data, the State is able to identify the gap to improve utilization capacity. The Action Plan for Coastal Pollution Management shall be completed by January 2021. PWD has made a very comprehensive plan for rejuvenation of the river Cauvery called Nadanthai Vaazhi-Cauvery, which will also improve the e-flow in the river. Details have been already shared with Ministry of Jal Shakti in this regard. Biomedical Waste and Hazardous waste is being 100% complied with. Plastic waste disposal is also very closely followed up. Plantation activities have been taken up in all the polluted river stretches. Forest Department is doing plantation in those reaches where there is reserve forest, while on other places local bodies & PWD are doing plantation work.

18. <u>Maharashtra</u>

ED Tech, NMCG informed that of the 139 STPs of 7747 MLD existing in the State, 37 STPs of 2538.5 MLD are reported to be non-complying (three STPs of 757 MLD, 240 MLD and 386 MLD in Mumbai are non-complying aggregating to 54% of total non-compliant capacity). State needs to provide the status of 4 STPs of total capacity 83.76 MLD in Ulhasnagar & Akola due for completion by December, 2020. 9 STPs are non-operational, out of which 3 STPs of 112.76 MLD are under commissioning, 2 STPs of 62.02 MLD are awaiting sewer network connections, 2 STPs shall be dismantled and new STPs shall be created, maintenance of 1 STPs is under progress and 1 STP is non-operational. There are 26 CETPs with capacity of 244.85 MLD, of which 2 CETPs are non-complying and 1 CETP is closed. Commissioning of the proposed CETPs (4 nos) needs to be expedited. None of the 81 drains (56 of P-I & 25 of P-II) discharging

untreated sewage into identified river stretches have been provided with in-situ bio-remediation. Out of 14 on-going STP projects, progress of only 4 STP projects due for completion in December, 2020 have been provided. State needs to provide progress of the remaining projects.

Member Secretary, Maharashtra Pollution Control Board (MPCB) confirmed that the total estimated sewage generation in the State is 9757 MLD, which includes nearly 2500 MLD of sewage from Mumbai city. It was informed that in December 2020, 8 MLD STP at Wasim and 20.5 MLD STP at Ulhasnagar was completed. Out of 139 existing STPs, 133 STPs have been made operational. The compliance status of the STPs has also been increased and 121 STPs are now complying. 11 STPs of 1549 MLD are yet to be made compliant. With regard to land issues for STPs, it was informed that land issues will be resolved shortly for STPs at Baner and Warje. It was agreed to provide details of all the proposed STPs. In gram panchayats along the polluted river stretches, funds have been sanctioned for preparation of DPR for abatement of pollution.

Secretary, Ministry of Jal Shakti highlighted that details of low utilization of the STPs should be collected and raised concern over the large number of non-complying STPs in the State. Further, it was directed to provide action being taken by the State to increase the utilization capacity of the existing STPs, and to make non-complying STPs complying. It was suggested that higher officials of State's Urban Development Department or concerned agency dealing with the STPs in the State should attend the meeting henceforth along with Member Secretary PCB for clarifications.

19. <u>Odisha</u>

ED Tech, NMCG informed that 6 STPs of 131 MLD are existing and 7 STPs of 240 MLD are under construction. There are 10 Septage Treatment Plants of 440 KLD, 1 plant of 12 KLD is under trial, 30 plants of 555 KLD are under construction with completion timeline of March, 2021 and 58 plants of 776 KLD are expected to be completed by December, 2021. State needs to provide plans for bioremediation projects and status of preparation of Action Plan for the Coastal Pollution Management.

Principal Secretary, Housing & Urban Development Department, Odisha informed that works of all balance Septage Treatment Plants shall be completed by December, 2021. With regard to

STPs, it was informed that 4 STPs at Bhubaneswar have been successfully tested and formal commissioning of these plants shall be completed by March, 2021. STPs at Cuttack, Sambalpur and Rourkela are also progressing satisfactorily and shall be completed by June, 2021. Further, efforts are being put in to complete the house sewer connections. With regard to solid waste generation, 159 micro composting plants have been completed by December, 2020 in 110 ULBs and remaining 57 sites are in different stages of implementation.

Secretary, Ministry of Jal Shakti suggested that the State needs to improve the utilization capacity of the existing STPs.

20. <u>Goa</u>

ED (Tech), NMCG informed that against total sewage generation of 112.53 MLD, State has 9 exising STPs of 78.35 MLD. All the STPs are reported to be operational and complying. The utilization capacity of the STP remains 29 MLD due to low number of house sewer connections. 5 STPs of 35.5 MLD are under construction, 1-2% increase in progress has been reported from September – November 2020. 3 STPs of 43 MLD are proposed but STP work could not be started due to local issues. State has adopted Septic Tank-Soak Pit arrangement for treatment of the waste. Sal River has been adopted as the Model River. State needs to provide details of preparation of Action Plan with regard to Coastal Pollution Management.

Secretary, Environment, Goa informed that efforts are being made to manage the solid and liquid waste. It was informed that of the 5 STPs under construction, 5.6 MLD STP at Baga Calangute and 7.5 STP at Colva have been completed and trial run is going on. With regard to solid waste management, 150 TPD existing plant is being upgraded to 250 TPD and 600 TPD plants are under various stages of implementation. Action Plan for Coastal Pollution Management is being prepared.

Director General NMCG suggested the State to submit completion timeline for on-going projects and proposed projects.

21. Andaman & Nicobar

ED (Tech), NMCG informed that Monthly Progress Report has not been received from the UT. With regard to the letter received from UT flagging the issue of floating garbage of foreign origin being received at the UT, it was informed that the issue has been communicated to MoEF&CC and Ministry of External Affairs for necessary action. Further, MoEF&CC has directed NCSCM to inspect the site and to look into the matter. UT also needs to provide the status of preparation of Action Plan for Coastal Pollution Management.

Secretary (Environment), Andaman & Nicobar informed that the UT generates estimated sewage of 14.17 MLD and 1.7 MLD is treated and tenders have been called for STPs of 10 MLD. Faceal Sludge Treatment Plants are also being constructed and shall be completed within 3 months.

Due to issues in the audio, Director General, NMCG directed the UT to provide details in the Monthly Progress Report at the earliest, format of which is being circulated with the minutes as the same needs to be incorporated in the Quarterly Report being submitted to NGT.

22. Lakshadweep

ED (Tech), NMCG informed that Monthly Progress Report has not been received from the UT. Further, UT needs to provide the status of preparation of Action Plan for Coastal Pollution Management.

Secretary (Environment), Lakshadweep joined by Secretary (PWD), Lakshadweep informed that 2.8 MLD of sewage is generated and due to high water table STPs are not technically feasible in the UT. 1 STP has been installed in a private resort and 1 STP is existing in Navy area. Lakshadweep is Open Defecation Free and sewage is being managed through septic tanks and bio-toilets. Septage Treatment Plant option is being explored as a pilot project. NCSCM is preparing the Action Plan for Coastal Pollution Management and it shall be submitted shortly. Further, Integrated Island Management Plan has already been prepared and notified by Lakshadweep.

Director General, NMCG directed the UT to provide details in the Monthly Progress Report at the earliest, format of which is being circulated with the minutes as the same needs to be incorporated in the Quarterly Report being submitted to NGT.

23. <u>Delhi</u>

Director Technical, NMCG informed that out of 35 operational STPs, 11 STPs are complying with the standards of BOD -10mg/l, COD -50mg/l & TSS - 10mg/l. Out of 13 CETPs, only 2 CETPs are complying. With regard to on-going STP projects under YAP-III, not much progress has been reported in the last two months and the release of funds to the contractor remains a concern.

Secretary, Ministry of Jal Shakti highlighted that until the adoption of new measures, STPs designed for treating water up to BOD 30 mg/l, would not be able to treat water to the BOD level of 10mg/l. Therefore the remaining 24 STPs may be complying with its design capacity. It was suggested that joint inspection of the CETPs and Interception Projects may be carried out. State was directed to provide status of liquidity to contractors and tree plantation/ cutting permission.

Member Drainage, DJB informed that payment as on 18th December, 2020 has been made to all the contractors. Further, it was informed that 8 STPs were designed for BOD-10 mg/L parameter, 12 STPs are being upgraded and for remaining 15 STPs, budget for upgradation is being sought from the Government. Tree cutting permission for STPs at Okhla and Rithala is pending with the Minister. Further, it was informed that ISP project has been completed and STP at Coronation Pillar shall be completed by June 2021.

Secretary (Environment), Delhi informed that approval for tree cutting permission for 2 STPs from Minister is awaited.

Director Technical, NMCG informed that joint inspection of STPs and drains were planned, but the same could not be conducted and discussions with the contractors were done telephonically. It was informed that delay in projects is attributed to non-release of payment to the contractors by the DJB.

24. Uttar Pradesh

Senior Solid Waste Management Specialist, NMCG informed that as per September, 2020 MPR, there were 9 STPs which were expected to be completed by December, 2020. Out of these 9 STPs only 1 STP at Firozabad is under trial run and remaining 8 STPs (expected completion by December, 2020) and 23 other STPs are under construction. The LoA for Lucknow STP was issued on 17.09.2020 which has gone into sub-judice. The land issue for Moradabad STP is yet to be resolved. There are still 5 STPs which are non-operational, 19 STPs are non-complying to discharge standards (6-7 STPs are non-complying on BOD marginally above the discharge standards). For Farrukhabad project, NOC from NMCG has been given, however the State is to issue LoA. For 4 projects namely Balia, Pratapgarh, Jhansi & Kanpur (Baniyapurwa), no progress has been achieved since September, 2020. With respect to SWM facilities at Jaunpur & Fatehpur, the plants have still not been made operational as against the target date of 31.10.2020. There are land issues for 8 SWM plants at Bareily, Firozabad, Loni, Nazibabad, Bhadoi, Basti, Gorakhpur & Akbarpur. Noida construction & demolition (C&D) waste management facility has commenced its operation w.e.f. 05.10.2020 as scheduled. 4 C&D facilities at Lucknow, Agra, Varanasi & Prayagraj scheduled for commissioning by 31.12.2020 have not been achieved.

Secretary (Urban Development Department), Uttar Pradesh informed that out of 5 non-operational STPs, the STPs at Loni, Banda & Ghaziabad will be completed by 31.03.2021. With respect to non-compliance of STPs, it was informed that State is trying to bring O&M maintenance of STPs, which are not under the purview of UP Jal Nigam, under centralized agency. For increasing capacity utilization, it was informed that State is taking necessary steps such as increasing house service connections so as to ensure proper utilization of STP capacity. With respect to SWM facility at Jaunpur, it was informed that the construction is almost complete and it will be operational within a week. For Fatepur SWM facility, tenders have been floated. For the land issues for SWM facilities, it was informed that land issues have been resolved and either tenders have been floated or LoA has been issued. For processing of SW in rural & urban areas, State has finalized a policy and plants have been sanctioned. 37 new SW plants have been sanctioned, out of which tenders have been closed for 15, while the remaining are under tendering. State is planning to achieve 100% solid waste processing capacity by

December, 2021. With respect to C&D waste facility, it was informed that at Varanasi & Prayagraj the facilities are operational, Kanpur is under commissioning and for Lucknow bids have been invited thrice but to no success.

Secretary, Ministry of Jal Shakti requested State to indicate whether upgradation of existing STPs, if required, is a part of One City One Operator or not. With respect to Moradabad, it was indicated that 1 STP of 58 MLD has been sanctioned by NMCG in which sanction for laying of network was pending and another STP of 25 MLD capacity has been sanctioned by NMCG for which land issue is pending for long. Secretary (UDD), UP informed that the same has been sanctioned and works are under progress. Secretary, Jal Shakti further indicated that another STP of 20 MLD at Moradabad is non-operational and directed State to ensure that the same may be revived. He reiterated that efforts should be taken to complete the complete the projects at earliest and directed State to ensure proper utilization of STP. He raised his concerns over solid waste dumping during his recent visits to Etawah, Bulandshahr & Khurja indicating that large dumps of plastic waste are visible in both urban & rural areas, and directed the State to take necessary action at the earliest.

25. <u>Rajasthan</u>

Secretary, Ministry of Jal Shakti stated that in previous meetings no senior officers were present and indicated that a major concern is poor capacity utilization of the existing STPs. He also indicated about slow progress of Kota project funded by NMCG since last couple of years.

Director General, NMCG informed that a review meeting with the State was held under his Chairmanship with the State on 21.12.2020.

Senior Solid Waste Management Specialist, NMCG informed that the State has now sent the State dossier, households connected with sewer network has increased from 57% to 61%, 2 STPs have been completed & operationalized, 24 STPs are in advanced stages of completion with a progress of more than 90% and are expected to be completed by March 2021, capacity utilization has increased from 47% to 69%, for Kota project the clarifications received from the State have been sent for third party appraisal.

Some of the major issues include poor O&M of STPs & CETPs as 39 STPs out of 78 are non-complying and 11 CETPs out of 14 operational are reported to be non-complying. The State needs to develop a mechanism for daily assessment & reporting in terms of capacity utilization and compliance for all existing STPs and CETPs. In addition, municipal solid waste processing against the generation is very low (only 37%), incremental progress is not being provided as per directions of NMCG, legal issues for Hanumangarh STP & Bhiwadi STP need to be sorted out. 2 STPs at Mandiya and Nokha are completed since last 2 months, but are not yet operational. The action plan submitted by the State is very vague and needs to be specific indicating realistic timelines.

Secretary, LSG, Rajasthan informed that currently 67 STPs are under construction and the timelines have been provided in the MPR. It was further indicated that online monitoring of all STPs is being developed under Asian Development Bank funding and is likely to be completed soon. With respect to Kota project, it was informed that State has agreed for its increased share and is pending with Central Sanctioning Committee. With respect to household connections, it was informed that gradually number of connections are increasing and State is tying up funds under AMRUT and other schemes.

Secretary, Ministry of Jal Shakti indicated that it is the primary responsibility of the State to ensure that the STPs are working properly with proper capacity utilization.

26. <u>Haryana</u>

Director Technical, NMCG informed that out of 115 existing STPs in the State, 32 STPs are reported to be non-complying (7 in Ghaggar, 14 in Yamuna, 11 in others). The 7 non-complying STPs in River Ghaggar basin are not complying with the design standard of BOD 10 mg/l. As per the latest water quality reports, significant improvement in drains joining in River Ghaggar is being observed. The 14 non-complying STPs along River Yamuna basin are critical as these are having major impacts on the water quality of river upstream of Delhi and the quality in Najafgarh drain, Delhi. Compliance status of the existing CETPs needs to be provided.

Secretary, Ministry of Jal Shakti indicated that Haryana has fairly good treatment capacity, with Faridabad the only city having lesser treatment capacity in the State and work for STPs to bridge

the gap has begun. The issue of high concentration of ammonia in the river Yamuna was flagged. State needs to addresses the pollution in Drain no. 2, 6 and 8 and ensure compliance of the STPs and CETPs.

Additional Chief Secretary (Environment), Haryana attended the meeting along with other State officials. Member Secretary, Haryana Pollution Control Board informed that STPs are being monitored regularly and a centralized system is being installed for getting real time monitoring done. With regard to the issue of high ammonia concentration, monitoring has been conducted and ammonia level has been found to be within permissible levels. Further, illegal tankers discharging into the drains/rivers have also been addressed by conducting special drives. Online river monitoring station is being installed near Palla. With regard to issue of mixing of effluent water of DD-8 with DD-6, it was informed that Irrigation Department Haryana has started constructing a culvert pipe for segregating waste effluent and after completion of the work the issue shall be resolved. Large number illegal industrial units have been closed down in Panipat. Most of the non-complying STPs are having BOD more than 10 mg/L and the State agencies are upgrading the STPs either by altering the chemical dosing or by addressing the structural changes requirement. Only 1 CETP in Jind was found to be non-complying and the same is being upgraded.

Additional Chief Secretary (Irrigation), Haryana informed that to divert the effluent discharging from drain 6 to drain 8 in Haryana, a pipe has been planned to be constructed by 30.06.2021. As the STPs are constructed for 15 year design period, therefore all the STPs may not be able to achieve 100% of the utilization and works of untapped sewer is being expedited. With regard to STPs at Panipat, it was informed that the 20 and 25 MLD STP were monitored continuously for a week and it was found to be achieving the discharge norms of BOD level 10 mg/L, while on the remaining 2 STPs online monitoring systems are being installed. For increasing the utilization capacity of the STPs at Panipat, sewer lines are being laid in unapproved colonies.

ED Tech, NMCG suggested that the flow of Panipat drain running near to the 2 STPs of 60 MLD may be diverted to the STPs for treatment, in order to abate pollution and increase the utilization capacity. This suggestion of intercepting the Panipat drains to adjacent STP was also discussed during visit of Hon. Minister Sh Ratan Lal Katraia to Panipat-Sonepat. The characteristics of

drain have been found fit for treatment in STP by HSPCB. A D.O. letter to CS Haryana has also been written for this interception by DG, NMCG on 04th January, 2021. State was requested to complete this assignment on priority.

27. Himachal Pradesh

Director Technical, NMCG informed that MPR from the State was received on 04.01.2021 and as per the MPR, the State generates 163 MLD of sewage and there are 65 existing STPs of 120.5 MLD capacity of which 59 STPs are complying and there is a utilization capacity of 76.8 MLD, 28 STPs are under construction and 32 STPs are proposed. A 25 MLD CETP is existing at Baddi, which is reported to be non-complying, a 5 MLD CETP at Kala Amb is under construction, which was scheduled to be completed by 31.12.2020 and a 2 MLD CETP at Paonta Sahib is proposed.

Member Secretary, Himachal Pradesh Pollution Control Board informed that 25 MLD CETP existing at Baddi is non-complying with regard to FDS and Chloride, PCB has shut down the dyeing units of the defaulting industries till upgradation of the ETPs. 5 MLD CETP at Kala Amb is under progress and shall be completed by February 2021. 2 MLD CETP proposed at Paonta is awaiting funding.

Secretary, Ministry of Jal Shakti directed NMCG to get clearer picture of the State, as the figures provided are not reconciling with the information provided by the State official.

28. West Bengal

Director Technical, NMCG informed that 2758 MLD of sewage is being generated in the State, there are 41 existing STPs of 692 MLD with capacity utilization of 272 MLD. 26 STPs are operational of which only 8 are reported to be complying with the norms. Most of the partially complying STPs are under renovation while 9 STPs are non-operational. STPs of large capacity, operated by KMC are also non-complying at Bangur, Garden Reach (funding already sanctioned by NMCG and lying idle) and Keorapukur (recently upgraded under KEIIP). Status of STP at Churni (under tendering) is reported to be same since past 2 years. The report talks about many of the STPs as partially compliant but details of non-compliance parameter have not been given,

and thus it becomes difficult to understand from the report what sort of action is required to make those STPs complaint to design norms/ regulatory norms.

Secretary, Ministry of Jal Shakti raised serious concern over the status of STPs in the State.

CEO, KMDA informed that the work order for STP at Churni shall be issued shortly, but in the meanwhile phytoremediation works at the Churni River have begun. Principal Secretary (Environment), West Bengal informed that phytoremediation works have resulted in improvement in quality of the river. Further, it was informed that following the Odisha model, the State is planning to adopt decentralized faceal sludge plants across the State and one has already been constructed. OCEMS are being planned to be adopted for all the STPs and empanelment list of all the agencies by NMCG is being awaited. It was further informed that Finance Department, West Bengal has released funds for remediation of legacy waste and various solid waste management projects. 20 MLD CETP is operational at Kolkata Leather complex and another 20 MLD CETP shall be completed by 2022, after which there is no pollution into the rivers from the industry.

Secretary, Ministry of Jal Shakti highlighted that as laying sewer network takes good amount of time, therefore the Ministry has focused on interception and diversion of drains with STP projects in order to abate the pollution of rivers. Further, monitoring of the STPs also plays an important role in ensuring that existing infrastructure is in good position. It was suggested that State can take guidance from Odisha for adopting the Faceal Sludge and Septage Management. It was also highlighted that for operationalizing 2 STPs at Hoogly and North 24 Paraganas sanctioned under Namami Gange were cancelled after award of work. It was suggested that the State may indicate the compliance status of the STPs with regard to the standards notified by MoEF&CC and those not meeting the standards of NGT may be highlighted separately.

Executive Director Projects, NMCG informed that NMCG has proposed that an empanelment list of agencies who have successfully installed online monitoring systems on STPs shall be prepared and shared with the States.

With regard to Action Plan for Coastal Pollution Management, it was informed that the same shall be submitted to CPCB shortly. There were some legal issues in the works awarded for

upgradation of STPs in Hoogly district and work was on hold due the same. State official informed that all legal issues have been resolved and now work has started again.

NMCG has provided support for preparation of DPR for KMC area only under EAP funding. Final DPR is yet to be prepared by KMC's consultant. Once DPR is finalised, KMC has to explore funding sources for these. NMCG has not committed any funds for the works proposed in these DPR as these are primarily sewer network DPR. This has been informed many times but the status in MPR of the State remains same.

It was informed that, bid has been opened for Tolly's Nallah project and one bid has been received, and technical evaluation is under progress. For rejuvenation of oxidation pond at Jiaganj, civil work estimates have been submitted and estimates for electro- mechanical works are to be finalized. State RRC has approved action plans for 8 Priority-V Rivers. There are 2 units of FSTP of 50 MLD each planned, of which 1 is functional and 1 shall be functional by January, 2021. For treatment of legacy waste, plants are already operational, further work order have been given for 5 tenders and 12 tenders have been matured. With regard to solid waste management in 125 ULBs, tenders for 32 projects are to be revised and are to be floated again, tenders for 37 are to be floated shortly and for 40 projects RFP has been completed but land is yet to be finalized. About 11,930 TPD of processing waste capacity is proposed to be developed. With regard to the industries, it was informed that 16259 industries are existing in the State of which 454 are water polluting industries, having industrial discharge of 1360.64 MLD. All 454 have individual ETPs, 20 MLD CETP is operational in leather complex and another 20 MLD CETP is under construction, which shall be completed by late 2021- mid 2022. A team of NMCG will be visiting the State from 11th January to understand the ground realities of the STPs in the State and will provide guidance to State in resolving the pending issues in ongoing works to speed-up the progress of work.

29. <u>Uttarakhand</u>

Secretary, Ministry of Jal Shakti highlighted that there are not many issues in the State, therefore the State was directed to ensure compliance and operation status of the existing STPs. To increase the utilization capacity of 26 MLD at Rishikesh, works are to be expedited. 68 MLD

STP constructed at Dehardun is receiving only 8 MLD of sewage, for which I&D of drains have also been sanctioned, which shall lead to addition of about 20 MLD of sewage. State may explore the possibility to connect Sapera basti drain (about 5-8 MLD flow) also with existing STP of 68 MLD. This will improve the capacity utilization of STP in Dehradun. Similarly, a 30 MLD STP at Roorkee is constructed and is receiving only 4-5 MLD of sewage. State was directed to ensure optimum utilization capacity of these 2 STPs. Further, 3 STPs are reported to be non-complying at Nainital, Almora and Pithorgarh. Solid waste management is also a major concern in the State.

Principal Secretary (Environment), Uttarakhand informed that as the 3 non-complying STPs are old and of small capacity, possibility of upgradation of these STPs is being explored. For Joshimath, solid waste management facility is being planned.

30. <u>Madhya Pradesh</u>

Director Technical, NMCG informed that as reported by the State, Madhya Pradesh has developed an "Env Alert App" on Google play store and a Whatsapp group has also been created for monitoring the status of existing STPs. This has also helped in improving the utilization capacity of the STPs. Further, 11 STP projects have been completed by December, 2020 and are currently under trial run. State needs to provide incremental progress of the projects in the MPR.

Principal Secretary (Environment), Madhya Pradesh informed that App developed is in under testing and details of major STPs such as inflow, outflow and BOD level of treated effluent are being received on daily basis.

Principal Secretary (Urban Development Department), Madhya Pradesh informed that bio-remediation works of the Mandideep and Nagdwa are to be commissioned in January and March 2021 respectively. 2 non-operational plants have been made operational and 2 shall be made functional by March, 2021. Further, 15 STPs of 305 MLD are under trial and shall be commissioned by March, 2021. STPs of 55.4 MLD are under tendering and shall be awarded by March, 2021.

Secretary, Ministry of Jal Shakti praised the efforts made by MPPCB for monitoring the STPs and state of Madhya Pradesh for completing 15 more STPs of 305 MLD capacity. Secretary also advised state to remain focused on completion of more STPs as very good number of STPs are under advance stage of completion and with full attention more STPs could be completed shortly. Further, State needs to ensure optimum utilization of the 15 STPs to be commissioned by March 2021.

31. <u>Chhattisgarh</u>

Senior Environmental Specialist, NMCG informed that total sewage generation in Chhattisgarh is 600 MLD, against which at present the installed capacity is only 73.1 MLD. Issue of low capacity utilization is being addressed by the State. 238 MLD STPs are under construction and slight progress has been observed in the on-going projects. Matter regarding the purchase of treated waste water from the 35 MLD proposed STP at Korba needs to be sorted out with NTPC. For other STPs like Rajim (2.8 MLD), Simga (2.8 MLD), Kanker (7.88 MLD), Dhamtiri (19.6 MLD) and Nawapara (7.5 MLD), DPRs are ready. However, it was informed that funding for these schemes are not yet finalized and NMCG has been requested to provide financial assistance. Further, State has a number of FSTPs for addressing the pollution.

Additional Chief Secretary (Housing & Environment), Chhattisgarh informed that the STP at Korba was proposed to be taken up on PPP mode and NTPC was supposed to provide partial financial assistance. Tender floated has not been finalized by the NTPC, due which the progress has been delayed.

Senior Environmental Specialist, NMCG informed that as reported by the State earlier, it is a PP project, in which NTPC was bound to purchase the treated waste water from the STP and agreement in this regard and the quality of water has not been made yet.

Additional Chief Secretary (Housing & Environment), Chhattisgarh informed that pipeline and a tertiary treatment plant are to be established by NTPC Korba and the Municipal Corporation of Korba shall provide treated waste water at the rate of Rs.25/cubic metre after finalization of the bid subjected to slight changes in the rate quoted. NTPC is currently purchasing water from

Water Resource Department at the cost of Rs. 12/cubic metre. The rates to be further negotiated at the State level.

Secretary, Ministry of Jal Shakti suggested that the works of on-going projects may be expedited. Further, the notification of Ministry of Power with regard to utilization of treated water by NTPC located in the 50 kms vicinity of the STP was stressed.

32. Jharkhand

Senior Environmental Specialist, NMCG informed that the State reported sewage generation of 452 MLD in the State. There are 14 STPs of 108 MLD existing with utilization capacity of 74%. 4 STPs of 92.5 MLD STP are under construction and STPs of 242 MLD are proposed. It was informed that updated MPR from the State was not received. Trial run of the STP at Rajmahal has started and work is in progress for sewer network.

Secretary (Housing & Urban Development Department), Jharkhand informed that STP at Phusro has been sanctioned by NMCG. Industrial associations are being approached for providing financial assistance for the STP projects at Dhanbad and Ramgarh. For Chas, Ranchi and Mango, STPs will take time for implementation, and phytoremediation based STPs by NEERI are proposed. For Chas, a FSTP is being planned. On-going STP projects at Adityapur shall be by completed 2021 and at Ranchi by 2022.

Secretary, Ministry of Jal Shakti suggested that primarily NMCG funded projects on mainstream of River Ganga and therefore based on polluters pay principle, industries should be approached for financial assistance.

33. Bihar

Senior Environmental Specialist, NMCG informed that the State generates 1100 MLD of sewage, of which 651 MLD of sewage is being generated in the polluted river stretches. There exists old STPs of 90 MLD treatment capacity and new 3 STPs of 140 MLD have been completed. Utilization Capacity of the STPs is around 90-100 MLD and there are 22 STPs proposed which are at various stages of implementation (15 ongoing/awarded, 1being awarded, 6

under tendering). 604.50 km of the sewer length has been laid as reported in December, 2020 MPR. There are STPs of 362 MLD under construction and 129 MLD STPs are to be tendered out. It was informed that land NOC has been received for Digha (STP), Sultanganj (2 IPS), Chhapra (3 IPS), Barh (1 IPS), Bakhtiyarpur (STP) and Land NOC is still pending for STP and IPS for Maner I&D and STP scheme, and for the 2 IPS in Bakhtiyarpur. Land for the IPS-1 in Kankarbagh and IPS-B in Digha is pending. Land for the Begusarai STP is cleared and the compensation issue has been resolved. RCD and NHAI permission is still pending for 39km from RCD and 5.62km from NH is pending in Patna. Outside of Patna, 30.22km from RCD, 8.66km from NHAI (Naugachia and Begusarai, Chhapra), Railway crossings at Mokama, Begusarai and Sonepur is pending.

Secretary, Ministry of Jal Shakti suggested that officials from Ministry should regularly visit the States to take note of the progress and based on the site visits, issues may be flagged to the State. Further, the State needs to resolve the issues with regards to delay in tendering of the sanctioned projects. It was also directed that State Mission for Clean Ganga needs to be strengthened.

Principal Secretary (Urban Development Department), Bihar informed that the recent visit of officials from NMCG was beneficial in clearing the bottlenecks in a number of projects. Further, LoA has been issued for Bhagalpur STP, STP at Beur are expected to be completed by January 2021, 5 STP projects to be completed by March 2021, 4 STPs to be completed by May 2021. Land issue has been resolved and work is about to start for STP at Bhaktiyapur and land issue also resolved for STP at Munger. Further, issues with NOC from Railway have been resolved and tender has been issued for Buxar.

All the States were directed to urgently submit to NMCG information with regard to the issues highlighted and the presentation made in the meeting, for incorporation in the Quarterly Report for onward submission in Hon'ble NGT.

The meeting ended with thanks to the Chair.

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Annexure-I

List of participants:

1. Shri U. P. Singh, Secretary, Ministry of Jal Shakti – *in Chair*
2. Shri Rajiv Ranjan Mishra, Director General, NMCG cum Project Director, NRCD
3. Shri Ashok Kumar Singh, Executive Director (Projects), NMCG
4. Shri D.P.Mathuria, Executive Director (Technical), NMCG
5. Dr. Prashant Gargava, Member Secretary, CPCB
6. Shri Brijesh Sikka, Senior Consultant, NMCG
7. Shri. B.B. Barman, Advisor, NRCD
8. Shri J.C. Babu, Additional Director, CPCB
9. Dr. Pravin Kumar, Director Technical, NMCG
10. Shri Ankit Jain, Assistant Adviser, MoHUA
11. Shri Ishwer Singh, Consultant (Legal) NMCG
12. Shri S.K. Srivastava, Director, NRCD
13. Shri Sanjay K. Singh, Deputy Director, NRCD
14. Shri A.P. Singh, Scientist E, NRCD
15. Dr. Sabita Madhvi Singh, Joint Director, NRCD
16. Shri Rajat Gupta, Senior Solid Waste Management Specialist, NMCG
17. Shri Saumya Mukhopadhyay, Senior Environmental Specialist, NMCG
18. Shri G.K.Murty, Team Leader, NRCD
19. Shri Manish Kumar, Sewage Treatment and Wastewater Expert, NMCG
20. Shri Vijay Kumar, Assistant Civil Engineer, NMCG
21. Shri Rachit Andley, Project Manager, NMCG
22. Shri Avshesh Chauhan, Assistant System Analyst, NMCG
23. Shri Kumar Ajitabh, Project Officer Legal, NMCG
24. Mrs. Ruby Raju, Project Engineer, NMCG
25. Shri Kallol Choudhary, Industrial Process Expert, NMCG
26. Shri Rishabh Choudhary, Support Engineer, NMCG

ANNEXURE-III

STATE-WISE DETAILS OF ON-GOING PROJECTS

State	No.	Location	Capacity in MLD	Timeline
ANDHRA PRADESH	1	Vizianagaram	5	Mar-21
	2	GVMC	2	Mar-21
	3	Srikakulam	10	Dec-21
	4	GVMC	46	Dec-21
	5	Kakinada	5	Dec-21
	6	Rajamahendravaram	5	Dec-21
	7	Bhimavaram	5	Dec-21
	8	Tadepalligudem	5	Dec-21
	9	Eluru	5	Dec-21
	10	Machilipatnam	5	Dec-21
	11	Gudivada	5	Dec-21
	12	Vijayawada	20	Dec-21
	13	Tenali	10	Dec-21
	14	Tenali	2	Dec-21
	15	Ongole	15	Dec-21
	16	Chilakaluripet	5	Dec-21
	17	Kavali	15	Dec-21
	18	Nellore	34	Dec-21
	19	Tirupati	0.4	Dec-21
	20	Tirupati	25	Dec-21
	21	Srikalahasti	7	Dec-21
	22	Madanapalle	5	Dec-21
	23	Kadapa	20	Dec-21
	24	Anantapuram	10	Dec-21
	25	Dharmavaram	15	Dec-21
	26	Guntakal	8	Dec-21
	27	Kurnool	2	Dec-21
	28	Kurnool	10	Dec-21
	29	Nandyal	10	Dec-21
	30	Yemmiganur	19	Dec-21
	31	Adoni	5	Dec-21
	32	Guntur	123	Jun-22
	33	Pulivendula	15	Dec-22
BIHAR	1	Saidpur	60	
	2	Pahari	60	
	3	Sultanganj	10	
	4	Barh	11	
	5	Naugachhia	9	

	6	Sonepur	3.5	
	7	Mokama	8	
	8	Digha-Zone	100	
	9	Begusarai	17	
	10	Chapra	32	
	11	Fatua	7	
	12	Danapur	25	
	13	Phulwarisariff	7+6	
CHHATTISGARH	1	Bhatagaon	6	June 2021
	2	Chandandih	75	June 2021
	3	Kara	35	June 2021
	4	Nimora	90	June 2021
	5	Bade Atarmoda	25	June 2021
	6	Banjipali	7	June 2021
DELHI	1	Coronation Pillar	318	Jun-21
	2	Rithala-I	181.8	Dec-22
	3	Okhla	564	Dec-22
	4	Kondli - I,II,III	205	December 2021-2022
GOA	1	Kavlem, Ponda	15	Dec-21
	2	Colva	7.5	Dec-21
	3	Patto, Panaji	2	Dec-21
	4	Mapusa	5.4	Dec-21
	5	Baga	5.6	Dec-21
	6	Undir, Bandora	15	Work to begin
	7	Curti, Ponda	8	Work to begin
	8	Porvorim	20	Work to begin
GUJARAT	1	Vadnagar	5.94	Feb-2021
	2	Jetpur	23.5	Jan-21
	3	Una	11.7	Feb-21
	4	Bantva	2.6	Feb-21
	5	Chhotaudepur	5	Feb-21
	6	Dhandhuka	7.5	Feb-21
	7	Bareja	3.1	Feb-21
	8	Dhangadhra	11.6	Feb-21
	9	Botad	32	Feb-21
	10	Ahmedabad Pirana	155	Mar-21
	11	Rajkot Kothariya, on NH bypass	15	Mar-21
	12	Idar	7.4	Mar-21
	13	Khedbrahma	5.8	Mar-21
	14	Prantij	3.7	Mar-21
	15	Bardoli	11.3	Mar-21

	16	Vyara	6.5	Mar-21
	17	Zalod	4.6	Mar-21
	18	Devgadhbariya	3.8	Mar-21
	19	Morbi-2	9.3	Mar-21
	20	Kalol	23.5	Mar-21
	21	Palanpur	21.3	Mar-21
	22	Deesa	17	Mar-21
	23	Bharuch	29.32	Mar-21
	24	Vapi-1	14	Mar-21
	25	Anand-3	6.5	Mar-21
	26	Porbandar-1	12.8	Mar-21
	27	SuratBamroli	115	Apr-21
	28	Chalala	2.8	Apr-21
	29	Visnagar-1	12	Apr-21
	30	Visnagar-2	5.3	Apr-21
	31	nogapur	4.1	Apr-21
	32	Borsad	9.8	Apr-21
	33	Mahuva	16.3	May-21
	34	Talaja	5.8	May-21
	35	Mansa	5	May-21
	36	Unjha	11.6	May-21
	37	Viramgam	4.5	May-21
	38	Amreli	18.2	May-21
	39	Ahmedabad Vinzol	100	Jun-21
	40	SuratSinganpore	100	Jun-21
	41	Vadodara Kapurai	60	Jun-21
	42	Vadodara Sayaji garden	7.5	Jun-21
	43	JunagadhBilkha Road, Near CBSE School	8.2	Jun-21
	44	Gondal	16.5	Jun-21
	45	SuratBhatar	115	Jul-21
	46	Rajula	5.7	Jul-21
	47	Bagasara	5.9	Jul-21
	48	Bhabhar	3.5	Jul-21
	49	Padra	5.6	Jul-21
	50	Barwala	2.9	Jul-21
	51	Umreth	6.1	Aug-21
	52	SuratAsarma	22.5	Sep-21
	53	SuratKhajod	30	Sep-21
	54	Kadi	12.8	Sep-21
	55	Santrampur	2.91	Sep-21
	56	Kalol (P)	4.77	Sep-21
	57	Shehra	2.8	Sep-21

	58	Chotila-1	2.3	Sep-21
	59	Ode	2.5	Sep-21
	60	Talod	3.6	Oct-21
	61	Vadali	3.8	Oct-21
	62	Jambusar	5.9	Oct-21
	63	Amod	3.1	Oct-21
	64	Gandevi	2.6	Oct-21
	65	Dhanera	4	Nov-21
	66	Thara	3.6	Nov-21
	67	Kheralu	2.9	Nov-21
	68	Vijapur	4.1	Nov-21
	69	Radhanpur	6	Nov-21
	70	Mehmdabad	5.6	Nov-21
	71	Kheda	5.2	Nov-21
	72	Bavla	5.8	Dec-21
	73	Kapadwanj	6.2	Dec-21
	74	Harij	3	Dec-21
	75	Karjan	5.2	Dec-21
	76	Vadodara Bhayli	45	Feb-22
	77	Damnagar	2.8	Feb-22
	78	Lathi	3.8	Feb-22
	79	Bilimora	8.3	Mar-22
	80	Bhavnagar Axcel Industries	50	May-22
	81	Keshod	13.3	May-22
	82	Ahmedabad Kotarpur	60	Sep-22
	83	Ahmedabad Maleksaban	30	Dec-22
	84	Ahmedabad saijpur lake	7	Dec-22
	85	Vadodara Chhani	50	Dec-22
	86	Chaklasi	4.9	After 15 months from possession of land
	87	Dakor	4.9	After 15 months from possession of land
	88	Chotila-2	1.7	After 15 months from possession of land
	89	Chanasma	2.5	After 15 months from possession of land
	90	Kanakpur Kansad	7.8	After 18 months from possession

				of land
HARYANA	1	Village Dabra	8	Jan-21
	2	Sarai Alawardi	1	Feb-21
	3	Gadoli Kalan	1	Feb-21
	4	Baliawas (against Gwalpahadi)	1	Feb-21
	5	Darbaripur	1	Feb-21
	6	Khagesara & Toka	0.5	Mar-21
	7	Khatoli	0.75	Mar-21
	8	Sukhdarshanapur	0.75	Mar-21
	9	Ambala	5	Mar-21
	10	Bhuna	8	Mar-21
	11	Garhi Bohar, Rohak	12	Mar-21
	12	Singhpura, Rohtak	10	Mar-21
	13	Mohmadpur Jharsa	2	Mar-21
	14	Bandwari(Shifted from Sihi/Khedki Daula)	1	Mar-21
	15	Faridabad	7.5	Mar-21
	16	12 Cross Road, Ambala	12	Jun-21
	17	Billa	0.75	Jun-21
	18	Khuda Khurd, Ambala	12	Jun-21
	19	Babyal	10	Jun-21
	20	Shahpur Machhonda	7.5	Jun-21
	21	Saketri-STP	1.5	Jun-21
	22	Shiv Colony, Karnal	8	Jun-21
	23	Phooshgarh, Karnal	20	Jun-21
	24	Kithwari	10	Jun-21
	25	Jodhpur Road, Palwal	15	Jun-21
	26	Ferozpur, Palwal	2.5	Jun-21
	27	Murthal Sonepat	3	Jun-21
	28	Dhankot, Gurugram	2	Sep-21
	29	Bajghera	2	Sep-21
	30	Sirsa	7.5	Dec-21
	31	Faridabad, sector- 21	10	Dec-21
	32	Sonepat (Aterna)	15	Dec-21
	33	Jhazgarh	20	Dec-21
	34	Rohtak	10	Dec-21
	35	Peer Bodhi, Rohak	15	Mar-22
	36	Faridabad	30	Jun-22
	37	Mirjapur, Faridabad	80	Nov-22
	38	Partapgarh,Faridabad	100	Nov-22
HIMACHAL PRADESH	1	STP Malyana (Upgradation)	5.23	Mar-21

	2	STP Lalpani (Upgradation)	14.2	Mar-21
	3	STP Totu	2	Mar-21
	4	Dhalli (Upgradation)	1.5	Mar-21
	5	STP Panthaghatti	3.1	Mar-21
	6	Trilokpur -Kheri Johron	1.5	Jun-21
	7	Paonta Sahib Zone -III (Jambu ka khala)	1.72	Jun-21
	8	Parwanoo Sector 5	1	Jun-21
	9	Tipra	1	Jun-21
	10	Mehatpur- Zone A,B & C -Basdhera	0.73	Jun-21
	11	Manali-Marhi	0.2	Sep-21
	12	Sewerage Kotkhai Town/ Hospital Kotkhai-Ram Bazar Kotkhai	Zone II-0.305	Sep-21
	13	Sewerage Kotkhai Town/ Hospital Kotkhai-Ram Bazar Kotkhai	Zone II-0.163	Sep-21
	14	Sewerage Scheme Hatkoti (Rural opp. Nandpur Kanch left bank of Pabbar River)	0.651	Oct-21
	15	Hamirpur- STP Ward No. 11	0.58	Dec-21
	16	Talai	1.65	Jun-22
	17	Dharamshala- Mela Ground Gamru	1.4	Jun-22
	18	Dharamshala-Chellian near nag mandir	0.165	Jun-22
	19	Dharamshala-Bhagsu near taxi stand	0.052	Jun-22
	20	Rewalsar (Chalahar)	0.35	Jun-22
	21	Santokgarh	2.5	Jun-22
	22	Dalhousie	2.15	Sep-22
	23	Chowari	1.45	Sep-22
	24	Sunni	0.65	Sep-22
	25	Gagret	3.14	Dec-22
	26	Chamba- Parel	0.87	Dec-22
JAMMU & KASHMIR	1	Patnitop, Distt. Udhampur	1.2	Mar-21
	2	Noor Bagh, Palpora	60	Mar-21
	3	Belicharana Distt.Jammu	4	Jun-21
	4	Baryal, Distt. Udhampur	8	Jun-21

	5	Omara, Distt. Udhampur	4	Jun-21
	6	Pitan, Distt. Udhampur	1.6	Jun-21
	7	Rajbagh, Srinagar	2.21	Mar-22
	8	Tengpora, Srinagar	6	Mar-22
	9	Charar-iSharief, Kashmir	2	Mar-22
	10	Baramulla	3	Mar-22
JHARKHAND	1	Ranchi	16	Dec, 2021
	2	Adityaur	36	Dec, 2021
	3	Ranchi MC	37	
KERALA	1	ETP in Fish Marketing Ponmundam GP ,Malappuram	0.01	Jan-21
	2	STP in Ragiv Gandhi Shopping Complex, Ponmundam GP, Malappuram	0.01	Jan-21
	3	STP at Pambad Housing Colony Malappuram	0.11	Feb-21
	4	STP at Chitumala Old Age Home.	0.015	Feb-21
	5	ETP for Kumali Slaughter House Kumali GP, Idukki	0.006	Mar-21
	6	STP at Kalpeatta Government Ayurveda Hospital DP, Wayanad	0.045	Mar-21
	7	Decentralized sullage Treatment plant at Uppala Town Mangalpadi, Kasaragod	0.135	Mar-21
	8	STP at CHC Cherpu BP, Thrissur	0.01	Jun-21
MADHYA PRADESH	1	Bhind	12	Mar-21
	2	Bhopal	3.5	Mar-21
	3	Bhopal	3.5	Mar-21
	4	Bhopal	9.5	Mar-21
	5	Bhopal	4.5	Mar-21
	6	Bhopal	6	Mar-21
	7	Bhopal	32	Mar-21
	8	Bhopal	20.5	Mar-21
	9	Bhopal	5	Mar-21
	10	Bhopal	2	Mar-21
	11	Burhanpur	21	Mar-21
	12	Datia	12	Mar-21

	13	Ratlam	16	Mar-21
	14	Ratlam	21.5	Mar-21
	15	Sagar	43	Mar-21
	16	Guna	7.6	Dec-21
	17	Guna	14.65	Dec-21
	18	Jabalpur	5	Mar-22
	19	Jabalpur	29	Mar-22
	20	Jabalpur	32	Mar-22
	21	Jabalpur	34	Mar-22
	22	Murawara	7.5	Mar-22
	23	Murawara	6	Mar-22
	24	Murawara	11	Mar-22
	25	Rewa	1	Mar-22
	26	Rewa	1	Mar-22
	27	Rewa	1	Mar-22
	28	Rewa	6.5	Mar-22
	29	Rewa	6.5	Mar-22
	30	Rewa	3	Mar-22
	31	Rewa	6	Mar-22
	32	Satna	15	Mar-22
	33	Satna	16	Mar-22
	34	Satna	11	Mar-22
	35	Singrauli	11	Mar-22
	36	Singrauli	10	Mar-22
MAHARASHTRA	1	Akola Municipal Corporation	30	Feb-21
	2	Akola Municipal Corporation	7	Feb-21
	3	Sangli Miraj Kupwad Municipal Corporation	22.5	Feb-21
	4	Kolhapur Municipal Corporation, Kolhapur	6	Mar-21
	5	Ichalkaranji Municipal Council	18	Mar-21
	6	Nashik Municipal Corporation	32	Mar-21
	7	Hinganghat Municipal Council	10	Mar-21
	8	Hinganghat Municipal Council	3	Mar-21
	9	Pachora Municipal Council	9	Mar-21
	10	Kolhapur Municipal	4	Mar-21

		Corporation, Kolhapur		
	11	Municipal Corporation of Greater Mumbai	8	May-21
	12	Jalgaon Municipal Corporation	48	Aug-21
	13	Ulhasnagar Municipal Corporation	15	Aug-21
	14	Ulhasnagar Municipal Corporation	31.26	Aug-21
	15	Ulhasnagar Municipal Corporation	8	Aug-21
	16	Roha Municipal Council	1	Mar-22
	17	Pimpri Chinchwad Municipal Corporation	12	Apr-22
MANIPUR	1	Maibal Leikai, Imphal West	16	Mar-22
	2	Iroisemba, Imphal West	1	Mar-22
MEGHALAYA	1	Septage Treatment plant, Shillong	0.115	Mar-21
ODISHA	1	Dhanupalli, Sambalpur	40	Mar-21
	2	Mattagajpur	16	Mar-21
	3	Rokat, Bhubaneswar	48	Jun-21
PUNJAB	1	Goindwal Sahib	1.3	Dec-20
	2	Kotakpura	8	Mar-21
	3	Kotakpura	6	Mar-21
	4	Baghapurana	4	Mar-21
	5	Boha	2	Mar-21
	6	Bathinda	4.5	Mar-21
	7	Shahkot	3	Mar-21
	8	Shermajra	15	Apr-21
	9	Guru Har Sahai	1	Jun-21
	10	Guru Har Sahai	4	Jun-21
	11	Sirhind	5	Sep-21
	12	Bahadurgarh	4	Sep-21
	13	FP, Pathankot	2	Sep-21
	14	Dhuri	5	Dec-21
	15	Sangrur	4	Dec-21
	16	BassiPathana	3	Dec-21
	17	BassiPathana	0.2	Dec-21
	18	Sirhind	2	Dec-21
	19	Sirhind	4	Dec-21
	20	Nabha	12	Mar-22
	21	Banur (BassiIsse Khan)	0.5	Mar-22
	22	Pholriwal	50	Jun-22

	23	Longowal	5	Jun-22
	24	Tappa	3	Sep-22
	25	Faridkot	14	Dec-22
	26	Dhuri	6	Dec-22
	27	Sangrur	11	Dec-22
	28	Barnala	20	Dec-22
	29	Batala	28	Dec-22
	30	Malerkotla	22	Dec-22
	31	Ahmedgarh	5	Dec-22
RAJASTHAN	1	Pilani Road (Chirawa)	2	Jan-21
	2	Near PHED campus (Gangapur City)	2.5	Jan-21
	3	Ragahv das Bagichi (Hindaun City)	5	Jan-21
	4	Near Basin Road Banjara Basti (Laxmangarh)	1	Jan-21
	5	TodhiKui (Laxmangarh)	3	Jan-21
	6	Near existing STP at Ikran Village (Bharatpur)	5	Jan-21
	7	Near Mangri road (Badi Sadari)	1.5	Jan-21
	8	Shamshan ghat (Ramgarh Shekhawati)	2	Jan-21
	9	Kasod Basti Nalah (Nimbahera)	1	Jan-21
	10	Changedi village (Fatehnagar Sanwar)	1	Jan-21
	11	Near subjail (Suratgarh)	2.5	Jan-21
	12	Adarsh Kalyan Bhumi near Anupgarh highway (Suratgarh)	2.5	Jan-21
	13	Near Bus stand (Nawalgarh)	3	Jan-21
	14	FCI godown (Udaipur)	10	Jan-21
	15	Baga Road (Jhunjhunu)	7	Jan-21
	16	TajusaTakiya (Churu)	2.5	Feb-21
	17	B/W Cremation ground andAgarsen Nagar (Churu)	1	Feb-21
	18	Kajrali house (Udaipur)	5	Feb-21
	19	Near Kushal Lake (Gangapur City)	1.5	Mar-21
	20	Near Aliganj Tiraha (Gangapur City)	1.5	Mar-21
	21	Karauli road (Hindaun City)	3	Mar-21
	22	Sugarmill (Sriganganagar)	15	Mar-21

	23	Vallabh garden (Bikaner)	20	Mar-21
	24	Near Kali Mata Mandir Sujendarsar (Bikaner)	20	Mar-21
	25	Gogamedi (Ramgarh Shekhawati)	1	Mar-21
	26	Gogamedi (Ramgarh Shekhawati)	1	Mar-21
	27	Mahipaloka Mohalla (Bhadra)	1	Mar-21
	28	Nathwana johad (Bhadra)	3.5	Mar-21
	29	Near Fire station (Nawalgarh)	1	Mar-21
	30	Devi pura Beed (Sikar)	5	May-21
	31	Gopalpura (Baran)	7	May-21
	32	Near Existing Sedimentation tank (Chittorgarh)	1	Jun-21
	33	Near Abhimanyu Park (Chittorgarh)	2	Jun-21
	34	Near Mukhyamantri Jan Awas Yojna (Chittorgarh)	1	Jun-21
	35	Near Railway Station (Chittorgarh)	1	Jun-21
	36	Idgah (Sriganganagar)	10	Sep-21
	37	Gopal Gaushala on Thardaa Village (Sujangarh)	5.5	Sep-21
	38	Gaushala on Salasar Road (Sujangarh)	1.5	Sep-21
	39	Chaptia pond near F.C.I. Godown (Sujangarh)	1.5	Sep-21
	40	Near Kalkanda (Sujangarh)	2	Sep-21
	41	Dulai Pond (Nagaur)	1.5	Oct-21
	42	Near Dashhera Maidan (Nimbahera)	4.5	Dec-21
	43	Basni Bainda (Jodhpur)	40	Dec-21
	44	Near Existing Jindal STP Kuwada (Bhilwara)	30	Dec-21
	45	Pushkar (Ajmer)	3.5	Mar-22
	46	Bhakto Ka Johad (Nawalgarh)	1	Mar-22
	47	Dhakar kheri (Kota)	40	Jun-22
	48	Kala Talab (Kota)	15	Jun-22
	49	Chaugan Stadium (Jaipur)	1	Sep-22
	50	IL Township (Kota)	2	Oct-22
	51	Balita (Kota)	15	Oct-22

	52	Molai Pura (Tonk)	16	Dec-22
	53	Dhaula Khera (Tonk)	4	Dec-22
	54	Dehlawas (Jaipur)	90	Mar-23
	55	South STP (Sardar Shahar)	2.3	Jun-23
	56	North STP (Sardar Shahar)	3.4	Jun-23
	57	Gandhi Vidhya Mandir (Sardar Shahar)	1.6	Jun-23
	58	Khanpura (Ajmer)	40	Payment issue with UIT, work with held due to financial crisis, JNNURM scheme closed in March 2017
	59	Near RIICCO Bypass (Hanumangarh)	4	Contract terminated. Matter is under arbitration.
	60	Near Railway bridge over Ghaggar river (Hanumangarh)	2	
	61	Kartarpura Nallah (Jaipur)	1.3	Land allotment is pending.
	62	Kartarpura Nallah (Jaipur)	2.4	
	63	Balitalad pura (Kota)	6	STP was partially constructed in 2016. Cost revision is under submission for approval. Matter is pending with GoI for revised A&F.
	64	Khanpura (Bhiwadi)	2	Under litigation with Hon'ble High Court. Next hearing date is yet to be alloted.
	65	Near Gandhi nagar (Chittorgarh)	2	Work is yet to be started.
SIKKIM	1	Gangtok Zone II, Lower Syari	1.6	Jan-21
	2	Rangpo	1.4	Jan-21
	3	Gangtok Zone III,	3.25	Dec-22

		Tathangchen		
TAMIL NADU	1	Manachanallur TP	6.41	Jan-21
	2	S.Kannanur TP		Jan-21
	3	Vallam TP	2.35	Jan-21
	4	Perundurai TP	3.14	Jan-21
	5	Sathiyamangalam	4.08	Feb-21
	6	Ulunderpettai TP	3.15	Feb-21
	7	Coimbatore - Nanjudapuram	40	Feb-21
	8	Nesapakkam TTUF	10	Mar-21
	9	Perungudi TTUF	10	Mar-21
	10	Pollachi	11.25	Mar-21
	11	Sriperumbudur TP	8.5	Mar-21
	12	Thiruporur TP	4.02	Mar-21
	13	Ponneri TP	6.52	Mar-21
	14	Avadi	36	Mar-21
	15	Karaikudi	16	Mar-21
	16	Saththur	4.65	Mar-21
	17	Tuticorin	28	Mar-21
	18	Vellore	50	Mar-21
	19	Nagercoil	17.66	May-21
	20	Melachokanathapuram TP	2	May-21
	21	Sholinganallur STP	54	Jun-21
	22	Tambaram	30	Jun-21
	23	Mettupalayam	8.65	Jun-21
	24	Trichirapalli-STP1	30	Jul-21
	25	Trichirapalli-STP2	37	Aug-21
	26	Rameshwaram	4.08	Dec’21
	27	Rajapalayam	21.85	Dec’21.
	28	Coimbatore – Kuruchi & kuniyamuthur	30.53	Jan-22
	29	Kodungaiyur STP Zone - I	120	Feb-22
	30	Kodungaiyur STP Zone - II	120	Feb-22
	31	Nesapakkam STP Zone - IV	50	Feb-22
	32	Perungudi STP Zone - V	60	Feb-22
	33	Tiruppur (3nos)	70	Mar-22
	34	Ambur	16.71	Oct-22
	35	CRRT – Modular STP’s at various location	15	
TELANGANA	1	Ramnagar Bandam	5.45	Dec-20
	2	Narsapur Cheruvu	11	Mar-21
	3	Bus Depot Backside	3.2	Jun-21
	4	Bus Depot Backside	2.3	Jun-21

	5	Bellamoni Kunta (Nainoni Kunta)	2	Jun-21
	6	Dhamsalapuram	20	Jul-21
	7	Nalla Cheruvu	10	Jul-21
	8	Pullareddy cheruvu	10	Jul-21
	9	Sheshammagudem	17.16	Nov-21
	10	Arjalabavi	2.55	Nov-21
	11	Rajareddy Pally	1.5	Dec-21
	12	Pidichedu Road	3.5	Dec-21
	13	Pragnapur (By-Pass Road)	1.25	Dec-21
	14	Pandavula Chervu	0.5	Dec-21
	15	Reddypuram	100	Mar-22
	16	Pragathinagar	15	Mar-22
	17	Ursugutta	5	Mar-22
TRIPURA	1	Akhaora ICP, Agartala	8	2022
UTTAR PRADESH	1	Etawah	21	Jan-21
	2	Jhansi	26	Mar-21
	3	Ramana	50	Mar-21
	4	Ramnagar	10	Mar-21
	5	Chunar	0.01	Mar-21
	6	Kanpur	15	Mar-21
	7	Mathura	30	Apr-21
	8	Etah	24	Apr-21
	9	Aligarh	45	May-21
	10	Modinagar	20	Jun-21
	11	Kasganj	15	Jul-21
	12	Naini, Fafamau, Jhunsi	3 STPs of 72 MLD	Sep-21
	13	Shuklaganj	5	Oct-21
	14	Unnao	15	Oct-21
	15	Kanpur	30	Oct-21
	16	Jaunpur	30	Oct-21
	17	Sultanpur	3 STPs of 17 MLD	Nov-21
	18	Baghpat	14	Dec-21
	19	Bulandshahar	40	Dec-21
	20	Rae Bareilly	18	Dec-21
	21	Ballia	19.6	Dec-21
	22	Pratapgarh	8.95	Dec-21
	23	Lucknow	120	Dec-21
	24	Muzaffarnagar	2 STPs of 54.5 MLD	Feb-22
	25	Budhana	10	Feb-22
	26	Moradabad	25	Mar-22
	27	Hapur	30	Mar-22

	28	Mirzapur	7	Mar-22
	29	Bareilly	35	Mar-22
	30	Lucknow	2 STPs of 40 MLD	Dec-22
	31	Shahjahanpur	40	Dec-22
UTTARAKHAND	1	Ramnagar District-Nainital	7	Mar-21
	2	Ramnagar District-Nainital	1.5	Mar-21
	3	Narayan Nagar, Nainital District-Nainital	0.45	Mar-21
	4	Marwari, Joshimalh District-Chamoli	2.7	Jun-21
	5	Kashipur District-US Nagar	18	Oct-21
	6	Kolagarth District-Dehradun	3	Dec-21
	7	Haldwani Indira Nagara District-Nainital	28	Jan-22
WEST BENGAL	1	New Town, Rajarhat Action Area-IIIE	24	Mar-21
	2	Tarapith	4.25	May-21
	3	Halisahar	16	May-21
	4	Nabadwip	9.5	Jun-21
	5	Kanchrapara	18	Nov-21
	6	Joka	45	Mar-22
	7	M.G. Road	40	Mar-22
	8	Ghusighata	170	May-22
	9	Baharampore	3.5	May-22
	10	Raghunathganj	5	May-22
	11	Jangipur	8	May-22
KARNATAKA	1	Kallukote grama	10.6	February 2021
	2	Chikkoppa	13.88	February 2021
	3	K&C Valley	150	March 2021
	4	Hebbal	100	March 2021
	5	Near Halagatti village	3.3	March 2021
	6	In padukote area of Ramdurga town	1	March 2021
	7	V.Valley	150	March 2021
	8	Parandahalli Tank	5.00	March 2021
	9	Jainapur	0.25	March 2021
	10	Near Mudnal MI pond	5.24	March 2021
	11	Theradahalli	5	March 2021
	12	Belagadu Village	27	March 2021
	13	Sukalpet	12	March 2021

	14	Kabettu	3	May- 2021
	15	Shiravala	9	June 2021
	16	Indiranagara near APMC yard	0.11	June 2021
	17	T.N Pura- Talkad road	5.5	August 2021
	18	Kaggadasapura	5	November 2021
	19	Chinnapura tank, Manighatta main Road, gandhi nagara kolar	8.00	December 2021
	20	Gutti Basavana canal	7.37	February 2022
	21	Goravinakallu village	3.3	Feb-22
	22	Kurlakunte Kere	4.3	March 2022
	23	Siddapura Sira road	0.08	March-2022
	24	Madiwala	4	March- 2022
	25	Sy.No 239/2 Sedam Village Taluka Sedam	9.00	March-2022
	26	Solid Waste Management Area	4	March-2022
	27	Lingenahalli Pavagada road	0.6	March-2022
	28	Near Hole Anjaneya Temple	2.5	April-2022
	30	Puttenahalli	7	May -2022
	31	Hesaraghatta	3	May -2022
	32	Kerwadi (Halmaddi village)	8	May - 2022
	33	Nirmal nagar Janata colony-	0.5	July-2022
	34	Venkatapura	3	July-2022
	35	Venkatapura	3	July-2022

ANNEXURE-IV

STPs IN TENDERING AND WORK TO BE AWARDED

State	No.	Location	Capacity in MLD	Status
ANDHRA PRADESH	1	Kanigiri	6	Under Tendering
	2	Sullurpet	9	Under Tendering
	3	Allagadda	5	Under Tendering
	4	Nandikotkur	5	Under Tendering
	5	Madakasira	5	Under Tendering
	6	Rayachoti	22.4	Under Tendering
BIHAR	1	Bhagalpur		Tendered
	2	Hajipur		Tendered
	3	Khagaria		Tendered
	4	Munger		Tendered
	5	Barahiya		Tendered
	6	Kahalgaon		Tendered
	7	Buxar		Tender to be floated
CHHATTISGARH	1	Kanker	7.8	Under Tendering
	2	Dhamtari	19.6	Under Tendering
	3	Simga	2.8	Under Tendering
	4	Nawapara	7.5	Under Tendering
	5	Rajim	2.8	Under Tendering
GUJARAT	1	Ahmedabad Dafnala	25	Work to be Awarded
	2	Bhavnagar Akwada	19.2	Work to be Awarded
	3	Balasinor	6.5	Under Tender evaluation
	4	Vallabhipur	2.3	Under Tender evaluation
	5	Bhanvad	3	Under Tender evaluation
	6	Savli	2.5	Under Tender evaluation
	7	Visavadar	3.4	Under Tender evaluation
	8	Rajpipla	5.02	Under Tender evaluation
	9	Khambhat-1	6.8	Under Tender evaluation
	10	Khambhat-2	4.5	Under Tender evaluation
	11	Anklav	3.6	Under Tender evaluation
	12	Boriavi	3.3	Under Tender evaluation
	13	Lunawada	5.6	Under Tender evaluation
	14	Kanjari	3.3	Under Tender evaluation
	15	Okha	10.1	Under Tender evaluation
	16	Beyt (near Okha)	1.2	Under Tender evaluation
	17	Khambhalia	5.5	Under Tender evaluation
	18	Salaya,	6.2	Under Tender evaluation

	Jamnagar		
19	Jamjodhpur	3.6	Under Tender evaluation
20	Wankaner	5.8	Tender to be invited
21	Chhaya	13.1	Under Tender evaluation
22	Palitana	10.81	Under Tender evaluation
23	Mandvi Surat	3.5	Under Tender evaluation
24	Thangadh	9	Under Tender evaluation
25	Vijalpor - Navsari	47	Under Tender evaluation
26	Veraval- Patan	33.9	Tender to be invited
27	Babra	4	Tender to be invited
28	Kodinar	5.6	Tender to be invited
29	Sutrapada	4	Tender to be invited
30	Talala	3.8	Tender to be invited
31	Chorvad	3.7	Tender to be invited
32	Halol	11.6	Tender to be invited
33	Thasra	2.3	Tender to be invited
34	Mandvi-2 (Salaya)	3.2	Tender to be invited
35	Mandvi-1 (JT Grounds)	5.3	Tender to be invited
36	Jamraval	2.6	Tender to be invited
37	Dhrol	3.6	Tender to be invited
38	Kalavad	3.6	Tender Online
39	Halvad	6.7	Under Tender evaluation
40	Maliya	2.5	Tender to be invited
41	Kutiyana	2.9	Tender to be invited
42	Ranavav-1 (Adityana)	3	Tender to be invited
43	Ranavav-2	4.5	Tender to be invited
44	Dhoraji	12.9	Tender to be invited
45	Bhayavadar	3.1	Tender to be invited
46	Manavadar	4.9	Under Tender evaluation
47	Pethapur	3.8	Under Tender evaluation
48	Ankleshwar	14	Under Tender evaluation
49	Umargam	6.48	Under Tender evaluation
50	Dabhoi	8.96	Under Tender evaluation
51	Sikka	2.9	Tender Online
52	Mahesana-1	23.18	Tender Online
53	Mahesana-2	18.46	Tender Online
54	Shihor	8.9	Tender to be invited
55	Songadh	4.5	Tender to be invited

	56	Pardi	4.6	Tender to be invited
	57	Karamsad	6	Tender to be invited
	58	Bhachau	1	Tender to be invited
	59	Rapar	5.2	Tender to be invited
HIMACHAL PRADESH	1	Hamirpur- Bajuri for left out area of MC Area Hamirpur	1.06	Work to be awarded
	2	Dharamshala - Naddi	0.15	DPR approved & T/S estimate under preparation
	3	Near Manali-Rangri	16.33	Under Tendering Process
	4	Banjar	0.55	T/S estimate under process
	5	Mandi - Raghunath ka Padhar	9.08	Tender under Process
	6	Mandi- Khaliyar	1.5	Tender under Process
	7	Rajgarh	1.5	T/S under preparation
	8	Mehatpur-Zone-E&F Basdhera	3.14	Under Tendering Process
JHARKHAND	1	Phusro	15	Project sanctioned
KERALA	1	STP at Thrissur Corporation	2.5	To be retendered –
	2	STP at Kochi Div-15	1.4	Tendered but not awarded-
	3	STP Kochi Corporation Div-16	1.1	Tendered but not awarded-
	4	STP at Kochi Corporation Div-17	1.4	Tendered but not Awarded-
	5	STP at Division 1-4 under Kochi Smart City Mission	6.5	Awarded not started
	6	5 STPs under the KMRL's Integrated Water transport System project	31	To be tendered
	7	FSTP at Andamukkam, Kollam Corporation (AMRUT)	0.1	Awarded but agreement not executed-
	8	FSTP at Karikkuzhi Ela, Kollam	0.1	To be retendered:

		Corporation		
	9	FSTP at Ramavarmapuram, Thrissur	0.1	Awarded but agreement not executed –
	10	FSTP at Yakkara, Palakkad Municipality	0.1	Awarded but agreement not executed -
	11	Mobile Septage Units- 2 nos, Alappuzha	0.01	Technical Sanction to be issued-
	12	STP at General Hospital, Alappuzha	0.24	Awarded but agreement not executed -
	13	STP at Shatabdhi Mandiram, Alappuzha	0.015	Technical Sanction to be issued-
	14	STP at Thottumadi Colony, Alappuzha	0.05	Technical Sanction to be issued-
	15	STP at General Hospital, Thrissur	0.36	Awarded but not Started-
	16	STP at Sundaram Colony, Palakkad	0.8	Tendered but not Awarded-
	17	STP at Sewerage system in Zone A, Package B, Kothi, Kozhikode	6	Tendered but not awarded -
	18	STP at Sewerage system in Zone A, Package A, Avikkal Thodu, Kozhikode	7	Tendered but not awarded
	19	STP at Kannur Municipal area, Kannur	1	Tendered but not awarded-
	20	STP at Ottappalam Municipality, Palakkad District	1.5	DPR approved
	21	STP at Kunnamkula m Municipality, Thrissur	1	DPR approved by KIIFB, Technical Sanction in progress
MADHYA	1	Bhedaghat	0.43	LOA Issued

PRADESH	2	Bhedaghat	0.22	LOA Issued
	3	Bhedaghat	0.06	LOA Issued
	4	Bhedaghat	0.06	LOA Issued
	5	Shahdol	17	Under tendering
	6	Khajuraho	4.45	Under tendering
	7	Rajnagar	2.45	Under tendering
	8	Maihar	14.45	Under tendering
	9	Sanchi	1.9	Under tendering
	10	Sanawad	5.58	Under tendering
	11	Dhamnod	6.8	Under tendering
PUDUCHERRY	1	Puducherry	3	Under tendering
	2	Karaikal	3	Under tendering
PUNJAB	1	Jamalpur	225	Tender Stage
	2	Balloke	50	Tender Stage
	3	Basti Peer Dad	15	Tender Stage
	4	Balachaur	4	Tender Stage
	5	Garhshankar	3	Tender Stage
	6	Kiratpur Sahib	2	Tender Stage
	7	Maluka	1	Tender Stage
	8	Rahon	3	Tender Stage
	9	Arniwala	2	Tender Stage
	10	Raikot	7	Tender Stage
	11	SultanpurLodhi	1.4	Tender Stage
	12	SultanpurLodhi	1	Tender Stage
	13	Kartarpur	4	Tender Stage
	14	Dhilwan	2.5	Tender Stage
	15	KothiPandita	2	Tender Stage
	16	Adarash Nagar	1.2	Tender Stage
	17	Hariana	2	Tender Stage
	18	Rawal & Colonies	3	Tender Stage
	19	FP,Goindwal Sahib	2	Tender Stage
	20	Cheema	2	Tender Stage
	21	Mirpur, Derabassi	2	Tender Stage
	22	Issapur, Derabassi	2	Tender Stage
	23	Dappar ,Lalru	1	Tender Stage
	24	Lalru	0.15	Tender Stage
	25	Ghanaur	2	Tender Stage
	26	Gholumajra (Lalru)	0.3	Tender Stage
	27	Chaundheri&Samalheri, (Lalru)	0.3	Tender Stage
	28	Banur (Fauji Colony)	0.15	Tender Stage

	29	Patiala	6	Tender Stage
	30	Ajnala	4	Tender Stage
	31	Jandiala Guru	5	Tender Stage
	32	Bhadaur	3	Tender Stage
	33	Handiaya	2	Tender Stage
	34	Rama Mandi	3	Tender Stage
	35	BudhaTheh	2.8	Tender Stage
	36	Ghuman	1.25	Tender Stage
	37	Dina Nagar	5	Tender Stage
	38	Gardhiwala	1	Tender Stage
	39	Adampur	3	Tender Stage
	40	Goraya	4	Tender Stage
	41	Samrala	3	Tender Stage
	42	Amargarh	1	Tender Stage
	43	Dirba	3	Tender Stage
TELANGANA	1	Ambar Cheruvu (Pragathi Nagar)	37	Govt. has accorded administrative sanction for construction of 17 STPs with a capacity of 376.5 MLD Vide G.O.Rt.No.374 MA&UD Dept. Dated:11.09.2020 Under Tender stage
	2	Chinna Maisamma	14.5	
	3	Nalla Cheruvu (Kukatpally)	15	
	4	Khajakunta	22	
	5	Yellammakunta Lake (Jaya Nagar)	13.5	
	6	Fathe Nagar	100	
	7	Vennelagadda	5	
	8	Gayatri Nagar (Chintal)	5	
	9	Fox Sagar Lake	14	
	10	Shivalaya Nagar Cheruvu	14	
	11	Pariki Cheruvu (Kandri Gutta)	28	
	12	Durgam Cheruvu	7	
	13	Khajaguda	21	
	14	Miyapur Patel Cheruvu	7	
	15	Gangaram Cheruvu	20	
	16	Mullakathuva Cheruvu	33.5	
	17	Kamuni Cheruvu	20	

UTTAR PRADESH	1	Fatehgarh	61.5	Administrative Approval and Expenditure Sanction (AA&ES) to be revised.
	2	Ghazipur	21	Revised AA&ES issued on 06.05.2020. Bids received and opened on 08.09.2020. Technical bid evaluation under process
	3	Mirzapur	17	AA&ES issued on 28.05.2020. Bids received and opened on 08.09.2020. Technical bid evaluation under process.
	4	Bareilly	63	Tender invited. Bids document will open on 14.12.2020. Land issue resolved.
	5	Agra	177.6	AA&ES issued on 06.05.2020. Bid document sent World Bank by NMCG for approval.
	6	Meerut	220	AA&ES issued on 06.05.2020. Bid document sent World Bank by NMCG for Approval.
	7	Azamgarh	8	Land issue
WEST BENGAL	1	Wireless Park	15.3	Bid opening
	2	Sukhapkur	5.06	Bid opening
	3	Birji Road	5.7	Bid opening
	4	Rania	23	Under Tendering
	5	Sreenathpur	4	Under Tendering
	6	Chaitanyaghat	5.2	Under Tendering
	7	Silver Jubliee Road	2.6	Under Tendering
	8	Maheshtala	35	Bid evaluation
	9	Hooghly-Chinsurah	26.5	Technical bid opening
KARNATAKA	1	Pillaganahally	4	Tendering
	2	Varthur	25	Tendering
	3	Nagasandra	9	Tendering
	4	Herohally	3	Tendering
	5	Karihobanahally	10	Tendering
	6	Chikkabanavara	4	Tendering
	7	Hosahally	6	Tendering
	8	Hemmigepura	13	Tendering
	9	Somapura	8	Tendering

	10	Talaghattapura	5	Tendering
	11	Bilishivale	17	Tendering
	12	Doddabetta hally	7	Tendering
	13	Jakkur	7	Tendering
	14	Yelahanka	6	Tendering
	15	Kamaje	4.14	Land acquisition
	16	Kaikunje	0.22	Land acquisition
	17	Kallapu Burdu	1.70	Land acquisition
	18	Pethanahalli kere	1.82	Land acquisition
	19	Gund, Shashihittal	4.6	Except STP other works are under progress
	20	Udhyam Nagar	2.6	Except STP other works are under progress
	21		1.2	Land acquisition
	22		1.3	Land acquisition
	23		2.5	Yet to start the work
	24	Near B K road	0.75	Work order issued
	25	Near Golf Ground, K Badaga Village	3	Land acquisition
	26	Savalahalla Tanda	0.25	Land acquisition
	27	Sy. No. 151, Narendra village, University of agricultural sciences premises, Dharwad	10	Land acquisition
	28	Dumping yard	0.30	DPR approved

STP PROJECTS AWAITING SANCTIONING OF THE DPR

State	No.	Location	Capacity in MLD	Status
ASSAM	1	Mangaldoi	2	DPR submitted for approval
	2	Tezpur	2	DPR submitted for approval
BIHAR	1	Dighwara		DPR submitted for approval
	2	Teghra		DPR submitted for approval
	3	Manihari		DPR submitted for approval
	4	Jamalpur		DPR submitted for approval

	5	Dehri		DPR prepared
	6	Arwal		DPR prepared
	7	Muzaffarpur		DPR prepared
	8	Supaul		DPR prepared
	9	Gopalganj		DPR prepared
CHHATTISGARH	1	Korba	35	DPR prepared, approval of NTPC awaited
DAMAN, DIU & DADRA NAGAR HAVELI	1	Diu	7	DPR under technical sanction
DELHI	1	14 STPs in Najafgarh	145	7 STPs sanctioned, awaiting sanction for remaining 7 STPs
HIMACHAL PRADESH	1	Baijnath Paprola	3.64	DPR submitted for approval
	2	Palampur	0.45	DPR submitted for approval
JAMMU & KASHMIR	1	Peerkho Jammu (For I&D of right bank 13 nos. Nallahs	10	DPR is being submitted to Govt . of India, Ministry of Jal Shakti
	2	Katra Town	4.5	DPR submitted to Jal Shakti
	3	Katra Town	1.3	DPR submitted to Jal Shakti
	4	Samba Town	3.5	DPR is being submitted to Ministry of Jal Shakti
	5	Akhnoor Town	5	DPR is being submitted to Ministry of Jal Shakti
	6	Kathua Town	19.1	DPR is being submitted to Ministry of Jal Shakti
	7	ChuntKol, Srinagar	5	DPR is being submitted to Ministry of Jal Shakti
	8	Gawkadal, Srinagar	3	DPR is being submitted to Ministry of Jal Shakti
	9	Ganderbal	8	DPR submitted to Dev. Commissioner Works
JHARKHAND	1	Dhanbad	144	DPR prepared and sent to NMCG for approval. Under TPA.
	2	Ramgarh	40	Draft DPR of I & D Scheme sent to NMCG for approval
KERALA	1	STP at Vadakara Municipality, Kozhikkode	0.5 MLD Sewage TP 20KLD Septage TP	DPR appraisal ongoing in KIIFB
	2	STP at Cherthala Municipality, Alappuzha	250KLD Septage TP	DPR preparation completed and submitted to KIIFB

	3	STP at Ottuppara Market, Wadakkanchery Municipality, Trissur	18 KLD	DPR submitted to KIIFB
	4	STP at Athani market, Wadakkanchery Municipality, Trissur	13.9 KLD STP	DPR submitted to KIIFB
MANIPUR	1	Imphal	49	Revised DPR submitted to DEA for External Aided Funding opportunities
SIKKIM	1	Chungthang	0.72	DPR submitted to Ministry for funding
TELANGANA	1	Bellampally	13	A/S awaited
	2	Mandamarri	14	
	3	Ramagundam	45	
	4	Jagtial	20.16	
	5	Metpally	9.6	
	6	Bhainsa	9.5	
	7	Korutla	12.71	
	8	Manuguru	6.2	
	9	Armoor	11.4	
	10	Gadwal	16.26	
	11	Kollapur	6.14	
	12	Ieeja	6.92	
	13	Palwancha	16.1	
	14	Huzurabad	6.45	
	15	Jammikunta	6.3	
	16	Parkal	6.6	
	17	Bhupalpally	8.83	
	18	New Alwal Lake	15.5	Proposals are under sanction stage at Government level.
	19	R K Puram Lake (Mukkiddi cheruvu)	5.5	
	20	Banda Cheruvu	15	
	21	Kapra Lake	20	
	22	Rama Cheruvu	30	
	23	Pedda Cheruvu	17.5	
	24	Nalla Cheruvu	86.5	
	25	Amberpet	212.5	
	26	Miralam Site 1	30	
	27	Miralam Site	11.5	

	28	Bapughat STP at Attapur Site	48	
	29	Kokapat Lake	15	
	30	Ibrahim Cheruvu	56	
	31	Nagole	320	
UTTARAKHAND	1	KashipurDistrict-US Nagar	10	DPR prepared and submitted to NMCG for approval
	2	Mukhandpur, KashipurDistrict-US Nagar	0.31	DPR prepared and submitted to NMCG for approval
	3	Gularia, KashipurDistrict-US Nagar	0.14	DPR prepared and submitted to NMCG for approval
	4	Jaspur Kurd, Kashipur, District-US Nagar	1.55	DPR prepared and submitted to NMCG for approval
	5	Hempurlsmile KashipurDistrict-US Nagar	0.14	DPR prepared and submitted to NMCG for approval
	6	Beljuri, Kashipur, District-US Nagar	0.31	DPR prepared and submitted to NMCG for approval
	7	Bazpur District-US Nagar	8.5	DPR prepared and submitted to NMCG for approval
	8	Rudrapur District-US Nagar	26	DPR prepared and submitted to NMCG for approval
	9	Rudrapur District-US nagar	18	DPR prepared and submitted to NMCG for approval
	10	Kichha, Rudrapur District-US Nagar	2	DPR prepared and submitted to NMCG for approval
KARNATAKA	1	Ganjam	2.4	DPR submitted
	2	Goluru village	0	DPR submitted
	3	Kalkunike	8	DPR submitted
	4	Back side of Subramanyeshwara college	2.6	DPR submitted
	5	Near Crematorium at Renkendaguttu	0.006	DPR submitted
	6	Near Bittgondanahalli	20	DPR submitted
	7	Near KSRTC Bus Stand (Channapatna tank bed)	10	DPR submitted
	8	Near Hunsinakere tank bed	5	DPR submitted
	9	Near Jayanagara	2	DPR submitted
	10	Near Gavenahalli	2	DPR submitted

11	Holle bidi	5	DPR submitted
12	Neheru Nagar	1	DPR submitted
13	Rayapura	1	DPR submitted
14	On Kudachi Road, west of Ainapur road near nala	1.2	DPR submitted
15	Police station training centre	0.5	DPR submitted
16	Belagavi - Panaji Road	0.5	DPR submitted
17	Near ISCON Temple	0.5	DPR submitted
18	Khanapur- MK Hubbalii bridge	0.5	DPR submitted
19	Neat Tahashildar Office	3.5	DPR submitted
20	Bailhongal road	0.5	DPR submitted
21	Katagyan Keri	0.25	DPR submitted
22	Near grave yard	1	DPR submitted
23	Near Panchalingeshwar Temple	0.25	DPR submitted
24	Adjecent to Gundawad Road	1.2	DPR submitted
25	South West of Basav Nagar & on Ainapur	1.2	DPR submitted
26	At North of Kumbar Nagar on Dharwad Road	1.2	DPR submitted
27	Opposite to UpparOni & west of Railway Track	1.2	DPR submitted
28	Alwewada	3	DPR submitted
29	Sy No. 21 of Jewargi B Village	5.83	DPR submitted
30	Malladevarakatte	1	DPR submitted
31		0	DPR submitted
32		0	DPR submitted
33	Vanakihal	7.5	DPR submitted
34	Venktapur	1	DPR submitted
35	Narsingpet (Behind Loddaset Rice mill)	0.75	DPR submitted
36	Talavargera	0.15	DPR submitted

		Chavani		
	37	Huvinahadagi, Kalaburagi Road, Deodurga	5	DPR submitted
	38		5.91	DPR submitted
	39		3.87	DPR submitted

STP PROJECTS IN PROPOSAL STAGE

State	No.	Location	Capacity in MLD	Status
ASSAM	1	Nagaon	2	DPR under preparation
	2	Jorhat	2	DPR under preparation
	3	Silchar	2	Land yet to be finalized, DPR to be prepared
	4	Betkuchi, Lokhra	45	DPR under preparation
	5	Borsola, Nepali Mandir	30	DPR under preparation
	6	Agriculture Colony,	1	DPR under preparation
	7	Near Ulubari Mazar, Ulubar	1.8	DPR under preparation
	8	Jonali	7.9	DPR under preparation
	9	Ulubari Part – 2	8	DPR under preparation
	10	Sahar Ulubari Part – 2	7.9	DPR under preparation
	11	Ulubari 3rd Part	8	DPR under preparation
	12	Bharulumukh Part – 1	7.56	DPR under preparation
	13	Bharulumukh Part – 1	8	DPR under preparation
	14	Ulubari Part – 2	8.46	DPR under preparation
	15	Ulubari Part – 1	7.38	DPR under preparation
	16	Fatasil Ambari	8	DPR under preparation
	17	Bharulumukh	8	DPR under preparation
BIHAR	1	Khagaul		DPR is under preparation
	2	Harinagar (Ramnagar)		DPR is under preparation
	3	Narkatiaganj		DPR is under preparation
	4	Jogbani		DPR is under preparation
	5	Raxual		DPR is under preparation
	6	Daudnagar		DPR is under preparation
	7	Samastipur		DPR is under preparation
	8	Motihari		DPR is under preparation
	9	Saharsa		DPR is under preparation
	10	Madhepur		DPR is under preparation
	11	Darbhanga		DPR is under preparation

	12	Bagha		DPR is under preparation
	13	Kishanganj		DPR is under preparation
	14	Lakhisarai		DPR is under preparation
	15	Jamui		DPR is under preparation
DAMAN, DIU & DADRA NAGAR HAVELI	1	Daman	16	At DPR stage
DELHI	1	42 Decentralized STPs	281.5	Land allotment is in process
	2	Mori gate		Land yet to be identified
GUJARAT	1	Vadodara Tarsali	48	DPR Stage
	2	Vadodara Atladara	83	DPR Stage
	3	Vadodara Gajarawadi	93	DPR Stage
	4	Gandhinagar Sargasan	50	DPR Stage
	5	Jamnagar NrRangmati River	40	DPR Stage
	6	Junagadh	15.5	DPR Stage
	7	Junagadh	11	DPR Stage
	8	Junagadh	29.5	DPR Stage
	9	Vapi-2	29.53	DPR/DTP stage
	10	Valsad-2	15	DPR/DTP stage
	11	Jafrabad	5.4	DPR/DTP stage
	12	Gariyadhar	7.1	DPR/DTP stage
	13	Mangrol	9.6	DPR/DTP stage
	14	Vanthli	2.2	DPR/DTP stage
	15	Modasa	12	DPR/DTP stage
	16	Tarsadi	5.8	DPR/DTP stage
	17	Limdi	7.4	DPR/DTP stage
	18	Upleta	8.9	DPR/DTP stage
	19	Kadodara	-	DPR/DTP stage
HARYANA	1	Sector-32, Ambala Cantt.	5	Proposed for future population. Almost no discharge at present.
	2	Naraingarh, Ambala	1	Work is likely to be started in Year 2023. Sewage is not sufficient to reach the outfall.
	3	Pinjore, Panchkula	8	Proposed for future population. Almost no discharge at present.
	4	Jind	5	
	5	Hansi	5	
	6	Hisar	10	
	7	Hisar	5	
	8	Manesar and Naharpur Kasan, Gurugram	25	DPR Stage

HIMACHAL PRADESH	1	Bilaspur - below Luxmi Narayan Temple (STP-1)	5	DPR proposed under AFD
	2	Bilaspur - Lower Lakhanpur (STP-2)	2	DPR proposed under AFD
	3	Bhota	1.5	DPR Stage
	4	Jawali Town	1.35	DPR Stage
	5	Shahpur Town	0.4	DPR Stage
	6	Anni	0.55	DPR Stage
	7	Nirmand	0.75	DPR Stage
	8	Nerchowk	3.36	DPR Stage
	9	Karsog	0.9	DPR Stage
	10	Nahan-Zone-I	1	DPR proposed under AFD
	11	Nahan –Zone-II	2.5	DPR proposed under AFD
	12	Nahan-Zone -III	1.6	DPR proposed under AFD
	13	Solan-Dadhog	2.5	DPR Stage
	14	Solan-Below Power house	1.6	DPR Stage
	15	Kandaghat	0.4	DPR Stage
	16	Tahliwal	1	DPR Stage
	17	Daulatpur	2	DPR Stage
	18	Amb	0.8	DPR Stage
	19	Chopal	0.2	DPR Stage
	20	Chirgaon	0.5	DPR Stage
	21	Nerwa	0.95	DPR Stage
	22	STP Dhalli-2	1	DPR Stage
JAMMU & KAHSMIR	1	Hiranagar Town	4	DPR Prepared under checking
	2	Vijaypur Town	7	Proposed SBR Technology
	3	Bari Brahmana	6	Proposed SBR Technology
	4	Arnia Town	4	Proposed SBR Technology
	5	R.S.Pura Town	6	Proposed SBR Technology
	6	Bishnah Town	4.5	Proposed SBR Technology
	7	Anantnag Town, Ph-II	9.1	DPR Prepared under checking
	8	Bijbehra, Town	3	DPR under preparation
	9	Awantipora	1.6	DPR under preparation
	10	Pampore	2.7	DPR under preparation
JHARKHAND	1	Mango	43	DPR under preparation.

KERALA	1	Taluk Hospital Thiruvalla , Thiruvalla Municipality, Pathanamthitta	0.09	At DPR Stage
	2	Taluk Hospital Pambady, Pambady Block panchayath , Kottayam	0.085	At DPR Stage
	3	Taluk Hospital Adimaly , Adimaly Block Panchayath, Idukki	0.06	At DPR Stage
	4	General Hospital, IrinjalakudaMunicipality , Thrissur (PRS)	0.15	At DPR Stage
	5	District Hospital Perunthalmanna , District Panchayath , Malappuram		At DPR Stage
	6	Taluk Hospital , Neelaswaram, Kasaragod	0.04	At DPR Stage
	7	CHC Alathoor, Alathoor Block Panchath , Palakkad	0.09	At DPR Stage
	8	CHC Kadayruppu , VadavukodebBlock Panchayath , Ernakulam		At DPR Stage
	9	CHC Sooranadu, Sasthancotta Block Panchath, Kollam		At DPR Stage
	10	CHC Kilimanoor, Kilimanoor Block Panchayath , Trivandrum	0.096	At DPR Stage
	11	CHC Mangalpadi, Manjeswar Block Panchayath, Kasragod	0.014	At DPR Stage
	12	CHC Konni, Konni Block Panchayath , Pathanamthitta		At DPR Stage
	13	Sewage Treatment plant at Private Bus stand,Thodupuzh a Thodupuzha Municipality , Idukki	0.03	At DPR Stage
	14	65 KLD Sewage Treatment Plant at Taluk Head Quarters Hospital	0.065	At DPR Stage

	Vithiri,Kalpetta BP, Wayanad		
15	10 KLD Sewage Treatment Plant at EMS Memorial Municipal Town Hall, Koyilandy Municipality, Kozhikkode	0.01	At DPR Stage
16	11 KLD effluent Treatment plant at Kuravilangad Fish Market, Kuravilangad Grama Panchayath , Kottayam	0.011	At DPR Stage
17	Eco Friendly waste water Treatment Plant (60 KLD) for Women and Children Hospital Ponnani Municipality, Malappuram	0.06	At DPR Stage
18	Waste water Treatment (90 KLD) System for coastal housing and Tsunmai resettlement facility at karikuzhi mayyanad Grama Panchayath, Kollam	0.09	At DPR Stage
19	STP for Convention Centre,Pinaryi Grama Panchayath, Kannur	0.02	At DPR Stage
20	STP at CHC Mullashery Block Panchayath, Thrissur	0.01	At DPR Stage
21	Eco Friendly waste water Treatment plant 10 KLD in vettam community Health centre, Tirur BP	0.01	At DPR Stage
22	Sewage Treatment Plant 20 KLD at Shopping Complex cum multiplex Theatre, Kallumutti, Irutti Payam, GramaPanchayath, Kannu	0.02	At DPR Stage

	23	Sewage Treatment Plant 50 KLD, Angal Block Panchayath , Kollam	0.05	At DPR Stage
	24	ETP 10 KLD Capacity, Nedumangad Municipality, Thiruvananthapuram	0.01	At DPR Stage
	25	ETP Karavaram Grama Panchayath, Thiruvananthapuram	0.01	At DPR Stage
	26	STP at Community Health Centre Payanoor Block Panchayath , Thirssur	0.025	At DPR Stage
	28	FSTP at Cherthala municipality, Alappuzha	0.25	DPR moficiation in progress
	62	STP at Wadakkanchery Municipality, Thrissur (IMPACT KERALA Ltd)	1.00MLD Co-treatment	DPR Preparation ongoing
	63	STP at Varkala Municipality, Thiruvanant ha puram (IMPACT	140KLD Septage	DPR Preparation ongoing
	64	STP at Mayyand GP, Kollam (IMPACT	590KLD Co-treatment	DPR Preparation ongoing
	67	STP at Fish market, Payyannur Municipality,Kannur	10 KLD STP	DPR modification is going on
MADHYA PRADESH	1	Nagda(Scheme II)		DPR Stage
MAHARASHTRA	1	Worli STP, MCGM, Mumbai	500	Proposed
	2	Bandra STP, MCGM, Mumbai	360	Proposed
	3	Dharavi STP, MCGM, Mumbai	418	Proposed
	4	Ghatkopar STP, MCGM, Mumbai	337	Proposed
	5	Versova	180	Proposed
	6	Bhandup	215	Proposed
	7	Malad STP, MCGM,	454	Proposed
	8	Bhayander West	8	Proposed
	9	Kharigaon	13	Proposed
	10	Chikhal dongri	13	Proposed

11	Nalla sopara (East)	30.5	Proposed
12	Nalla sopara (West)	49	Proposed
13	Navghar Manikpur	7.1	Proposed
14	Navghar Manikpur	33.85	Proposed
15	Vasai	11.57	Proposed
16	Bhadwad	9	Proposed
17	Stepping Garden	31	Proposed
18	Kulgaon Badalapur Municipal Council Proposed STP	12	Proposed
19	Kulgaon Badalapur Municipal Council Proposed STP	10	Proposed
20	CIDCO Taloja Phase-I	32	Proposed
21	CIDCO Pushpak Nagar	45	Proposed
22	Kundalika River Left Bank, at Survy No. 211/1/2/3/4/8/9/10/11 (0.43A) at Roha.	4	Proposed
23	Ahmednagar, Tal & Dist- Ahmednagar	57	Proposed
24	Botanical Garden,	10	Proposed
25	Pune Municipal Corporation, Baner, 18.564744 /	25	Proposed
26	Pune Municipal Corporation, Warje, Pune	28	Proposed
27	Pune Municipal Corporation, Vadgaon, Pune 18.4616 / 73.8169	26	Proposed
28	Pune Municipal Corporation, Tanaji Wadi,	15	Proposed
29	Pune Municipal Corporation,Naidu, 18.5329 / 73.8686	127	Proposed
30	Pune Municipal Corporation, Dhanori, Pune 18.5968 / 73.8969	33	Proposed
31	Pune Municipal Corporation, Bhairoba, Pune 18.538394 /	75	Proposed

32	Pune Municipal Corporation, Mundhva, Pune 18.547650	20	Proposed
33	Pune Municipal Corporation, Kharadi, Pune	30	Proposed
34	Pune Municipal Corporation, Matsyabij Kendra, Pune 18.5235 /	7	Proposed
35	Proposed STP	12	Proposed
36	Bhatnagar	15	Proposed
37	Alandi Municipal Council STP	4	Proposed
38	Satara Municipal Council STP	17.5	Proposed
39	Wai Municipal Council STP	6	Proposed
40	Ashta Municipal Council STP	5.5	Proposed
41	Islampur Municipal Council STP	7	Proposed
42	Islampur Municipal Council STP	5	Proposed
43	Malvan Council	4	Proposed
44	Banewadi	10	Proposed
45	Paithan Municipal Council STP	8.8	Proposed
46	Beed Municipal Council, STP	35	Proposed
47	Latur Municipal Corporation	40	Proposed
48	Latur Municipal Corporation	32	Proposed
49	Chunal Nalla STP	10	Proposed
50	Kamptee Municipal Council STP	12.5	Proposed
51	Bhandara Municipal Council STP	15	Proposed
52	Pauni Municipal Council STP	7	Proposed
53	Amravati Municipal Corporation	16	Proposed
54	Amravati Municipal Corporation	12	Proposed
55	Bramhapuri Municipal Council STP	7	Proposed
56	Rajura Municipal Council STP	5.5	Proposed

	57	Dhule Municipal Corporation STP	17	Proposed
	58	Dhule Municipal Corporation STP	40	Proposed
MEGHALAYA	1	STP, Eastern Air Command, Shillong	0.105	Proposed
PUNJAB	1	Ferozepur	1	DPR Stage
	2	Patti	8	DPR Stage
	3	Barriwala	2	DPR Stage
	4	BhagtaBhaike	3	DPR Stage
	5	Bhai Roopa	4	DPR Stage
	6	Kotha Guru	3	DPR Stage
	7	Mahilpur	2	DPR Stage
	8	Mallanwala	3	DPR Stage
	9	Mamdot	3	DPR Stage
	10	Mudki	3	DPR Stage
	11	Nihal Singh Wala	3	DPR Stage
	12	Muktsar Sahib	15	DPR Stage
	13	Nawanshahr	4	DPR Stage
	14	Sujanpur	5.5	DPR Stage
	15	Talwara	4	DPR Stage
	16	Bhadson	3	DPR Stage
	17	Amloh	3	DPR Stage
	18	Lalru Mandi	1.5	DPR Stage
	19	Sanour	4	DPR Stage
	20	Zirakpur	17	DPR Stage
	21	Majitha	2	DPR Stage
	22	Raja Sansi	2	DPR Stage
	23	Ramdass	1.5	DPR Stage
	24	Rayya	3.5	DPR Stage
	25	Dhanaula	3	DPR Stage
	26	Mehraj	3	DPR Stage
	27	BallainWali	1	DPR Stage
	28	Chauke	1.5	DPR Stage
	29	Kotshair	1.5	DPR Stage
	30	LehraMohabat	1.5	DPR Stage
	31	Mandi Kalan	1.5	DPR Stage
	32	Nathana	1	DPR Stage
	33	Rampura	1	DPR Stage
	34	Khamano	2	DPR Stage
	35	Dhariwal	3	DPR Stage
	36	FatehgarhChurrian	3.5	DPR Stage
	37	Gurdaspur	20	DPR Stage
	38	Quadian	4	DPR Stage
	39	Alawalpur	1	DPR Stage
	40	Bhogpur	2.5	DPR Stage

	41	Lohian	2	DPR Stage
	42	Mahitpur	3	DPR Stage
	43	Bilga	2	DPR Stage
	44	Nadala	1	DPR Stage
	45	Joga	0.5	DPR Stage
	46	Badhni Kalan	2	DPR Stage
	47	FatehgarhPanjtaur	1	DPR Stage
	48	Kot Ise Khan	3	DPR Stage
	49	Ghagga	2	DPR Stage
	50	NarotJaimal Singh	3	DPR Stage
	51	Nayan Gaon	8	DPR Stage
	52	Bhikhiwind	2	DPR Stage
	53	Khem Karan	2	DPR Stage
SIKKIM	1	Namchi	3.63	Joint Inspection conducted.
	2	Jorethang	1.7	Process initiated for land diversion under FCA, Forest & Environment Department
	3	Geyzing	1.8	Preparation of DPR
	4	Rabong	1.5	Survey & investigation
	5	Soreng	1	Survey & investigation
	6	Mangan	0.98	Survey & investigation
TAMIL NADU	1	Sathiyamangalam	1.13	DPR Prepared
	2	Tirunelveli	34	Under DPR stage
	3	Mangadu		DPR stage-Comprehensive UGSS in Poonamallee cluster A
	4	Chitlapakkam		Detailed project Report prepared under TNUISFL for Sembakkam cluster basis
	5	Madampakkam		Detailed project Report prepared under TNUISFL for Sembakkam cluster basis
	6	Peerkankaranai		DPR is to be prepared through TNUISFL on cluster basis
	7	Perungalathur		DPR is to be prepared through TNUISFL on cluster basis
	8	Thiruneermalai		DPR is to be prepared through TNUISSL on cluster basis
TELANGANA	1	Dharmapuri	3.7	DPR under preparation
	2	Chennur	5.5	

	3	Kyathanpally	7.2	
	4	Luxettipet	5	
	5	Mancherial	16.5	
	6	Naspur	18	
	7	Khanapur	4.8	
	8	Nirmal	20	
	9	Manthani	3.75	
	10	Alampur	3.1	
	11	Makthal	5.2	
	12	Kothapalli	2.6	
	13	Sultanabad	4.5	
UTTARAKHAND	1	Mussoorie, District-Dehradun	0.7	DPR not submitted at government level due to non-availability of fund
	2	Mussoorie, District-Dehradun	1.1	
	3	Mussoorie, District-Dehradun	0.7	
	4	Mussoorie, District-Dehradun	0.7	
	5	Mussoorie, District-Dehradun	0.05	
	6	Nainital, District-Nainital	18	DPR under preparation
	7	RusiPond, District-Nainital	18	DPR under preparation
WEST BENGAL	1	L.S.10	16	Draft DPR for consultancy work submitted for approval
	2	Dhankheti	25	
	3	Bhanga Khal, Garden Reach	35	
	4	Borough-XII	70	Not yet finalized
	5	North- Barrackpore	11.25	Under DPR stage
	6	North- Barrackpore	6.5	Under DPR stage
	7	Dhuliyan	5.68	DPR to be prepared
	8	Kalna	2.99	DPR to be prepared
	9	Santipur	16.6	DPR to be prepared
	10	Chakdah	5.06	DPR to be prepared
	11	Haldia	24.29	DPR to be prepared
	12	Raiganj	10.52	DPR to be prepared
KARNATAKA	1	Yet to be finalized	7	DPR preparation
	2	Yet to be finalised	2	DPR preparation
	3	LB Nagar	0.62	DPR preparation

Annexure-V

Municipal Solid Waste Management

Name	State/ PRS	No. of ULBs	Current MSW Generation (TPD)	Processing Capacity (TPD)	No. of ULBs having Sanitary Landfill
Assam	State	96	1211	468	NA
Uttar Pradesh	State	652	14110	**Existing –** 15 Plants operating 5395 TPD capacity; **In pipeline –** 37 major towns (3170 TPD, already sanctioned to completed by March 2021); 450 smaller ULBs generating <10PTD waste to have composting facility by December 2020	NA
Uttarakhand	State	91	1551	827.39	2
	PRS	11	810.7	**Existing** – NA (Collected – 805, Processed – 535 TPD, only exists in Haridwar and Dehradun) **Sanctioned** – Capacity NA; 3 Projects for 5 ULBs (Ramnagar, Sitarganj, and Kiccha, Lalkuwa, Rudrapur of Haldwani Cluster) **Proposed –** Capacity NA; For 4 ULBs (Kashipur, Bajpur, Sultanpur, and Doiwala)	2
Rajasthan	State	196	6500	**Processed – 1052 Dumped unplanned – 674**	NA

Name	State/ PRS	No. of ULBs	Current MSW Generation (TPD)	Processing Capacity (TPD)	No. of ULBs having Sanitary Landfill
				Under Pipeline - 20 plants with total capacity of 2337 TPD. Expected to start by Dec 2020. **Under Tendering:** 760 TPD	
Sikkim	State	7	77	**Processed**: 12.56 **Existing** – 51TPD (2 compost plants of 50 and 1 TPD capacity respectively) at Gangtok Municipal Corporation)	
DDDNH	UT/PRS	3	89	**Existing** – 2 Nos. (100 and 150 TPD)	NA
Madhya Pradesh	State	378	7,980	6430	-
Manipur	State	27	309.45 MT	**Existing** – 275.5 TPD	-
Meghalaya	State	10	245	73	NA
Mizoram	State	1	348.19	80.178	NA
Nagaland	State	32	304.3	132.05	1 at Kohima
Punjab	State	167	4100	3053	SLF in 5 ULBs and under construction in 13 ULBs
Andhra Pradesh	State	120	6850	Processed - 2344 TPD Existing - 105 plants Under construction – 59 plants Proposed – 54 plants	NA
Kerala	State	93	3452	2844.48	NIL. Landfill under-construction
Telangana	State	141	3720 TPD &	1451	NA

Name	State/ PRS	No. of ULBs	Current MSW Generation (TPD)	Processing Capacity (TPD)	No. of ULBs having Sanitary Landfill
			9285 TPD (As per Annual Report 2019- 20)		
Puducherry	State	5	406	**Existing –** 3 facilities **Processed**: 61 TPD **Proposed:** 2	NA
Goa	State	28	760	**Existing:**150 **Proposed:** 700 TPD(100 +100+250+250)	NA
Himachal Pradesh	State	54	374	357	NA
Jammu & Kashmir	State	76	1519	179	1
Maharashtra	State	392	22945	17420 Facilities of 1750 TPD in progress	-
Odisha	State	114	1685	**Existing:**800 **Under Construction:**1010 **Proposed:** 3385	Nil
Tripura	State	20	411.32	367.6	NA
Karnataka	State	288	11085	5838	52
Tamil Nadu	State	644	15666	Installed Capacity 7859.2 TPD. Utilization Capacity: 6166.2 TPD	
	PRS	48	1430.43	Installed Capacity 1298 TPD Utilization Capacity: 1001 TPD	NA
Gujarat	State	170	10798	15395.18 (installed processing capacity)	-
Delhi	UT	5	11022	**Total Processed:** 5682 TPD **Existing –** 3 WTE	1 at Bawana (NDMC)

Name	State/ PRS	No. of ULBs	Current MSW Generation (TPD)	Processing Capacity (TPD)	No. of ULBs having Sanitary Landfill
				plants of 4550 TPD 2 Compost Plant of 200 and 750 TPD. 7 Bio-methanation plant of 35 TPD, 19 Decentralized composter Plants of 17.175 TPD **Proposed-** 2 x 2000TPD W2E Plant, 21 decentralized compost plants (16+ TPD) and 6 small Biomethanation plants (30TPD)	and 1 proposed
Haryana	State	88	5387	**Existing –**2375 TPD through 14 nos. Solid Waste Composting Facilities, 10 nos. Vermi Composting Facilities and 03 nos. RDF Facilities. **Proposed -** 13 ISWM clusters having capacity 5630 TPD.	NA
Bihar	State	142	2272	**Current Processing** – 1226TPD **Under Construction/Proposed** - Decentralised Compost Plants (<5TPD) 126 nos. in 79 ULBs. 67 MRFs in 50 ULB.	NIL
Jharkhand	State	51	2132.45	1132.10 36 plants proposed by March 2024	1 under construction
West Bengal	State	125	13709.4	1778.2. Setting up of 1000 TPD is in progress. Setting up of	107 (garbage dumpsite and

Name	State/ PRS	No. of ULBs	Current MSW Generation (TPD)	Processing Capacity (TPD)	No. of ULBs having Sanitary Landfill
				Compost plant/ biomethanation/MRF /SLF as per SWM Rules, 2016 are in progress and expected completion timeline is December 2021.	sanitary landfills)
Chhattisgarh	State	166	1650	1650	NA

Hazardous Waste Management

State Name	State/PRS	No. of Industries generating Hazardous waste	Avg. Qty of Hazardous Waste Generated (TPD)	Treatment Capacity of all TSDFs within the Catchment (TPD)	Avg. Qty of Hazardous waste Processed (TPD)
Assam	State	2	43 MTPD	NIL. TSDF - Proposed	Treated and disposed by the industries itself.
Uttar Pradesh	State	2597	402336.478 MT/Annum 1102.29 (MTD)	NA	402336.478 MT/Annum 1102.29 (MTD)
Uttarakhand	State	4016	6407 MTPA (17.65 MTD)	Incineration-12000 MTPA and Land filling-8000 MT	4016 MTPA (11.00 MTD)
Rajasthan	State	1633	562463.96 MT	760481 MTA (2083.51 MTD)	150462.41 MT
Sikkim	State	49	1722.42 TPA(2019-20 annual report) (4.72 TPD)	Nil	1842.875 MT
DDDNH	UT/PRS	370	3876.72 MT	Capacity of landfill site: 2	3313.199

State Name	State/PRS	No. of Industries generating Hazardous waste	Avg. Qty of Hazardous Waste Generated (TPD)	Treatment Capacity of all TSDFs within the Catchment (TPD)	Avg. Qty of Hazardous waste Processed (TPD)
				lakhs M/annum Capacity of Incinerator: 2.5 Mkcal/hr	
Madhya Pradesh	State	2863	249760.27 MTA (684.274 MTD)	245.54 TPD + 5500000 KCAL/KG	245.54 TPD + 5500000 KCAL/KG
Manipur	State	334	0.99	-	-
Meghalaya	State	19	498.443 KL/A	NA	NA
	PRS	17	1.3105	NA	1.2755
Mizoram	State	40	20.374 MTA (0.0557 MTD)	Proposed	NA
Nagaland	State	3	29.03 MTA (0.07748 MTD)	-	-
Punjab	State	3427	Landfillable = 28113.7822 MT • Incinerable = 4581.297 MT • Recyclable = 23721.974 MT • Utilizable = 31974.2 M	One treatment facility namely Punjab Waste Management Project (Unit - Ramky Enviro Engineers Limited) The capacity of the unit to cater the HW generation is 5.4 lac Ton.	2083 MT/MONTH (663.55 MTD)
Telangana	State	2377	351992 TPA (964.36 TPD)	: 1 No of Common TSDF with capacity 25 million tons for 25 years and Common incinerator of	115000 TPA (315.06 TPD)

State Name	State/PRS	No. of Industries generating Hazardous waste	Avg. Qty of Hazardous Waste Generated (TPD)	Treatment Capacity of all TSDFs within the Catchment (TPD)	Avg. Qty of Hazardous waste Processed (TPD)
				capacity 1.5 TPH.	
Pudducherry	State	136	34052 TPA (93.293 TPD)	NA	Landfillable waste : (248+488.64)= 736.64 MT, Incinerable: (97.56+416.62) = 514.18 MT
Kerala	State	1617	314488.2 Metric Tonne/year (861.611 MTD)	90 MT	43.732 MT
Goa	State	1628	77,056.58 TPA (211.14 TPD)	16,846 MTA (46.122 MTD)	25000 TPA secured landfill & 1.5 ton/hr incinerators
Himachal Pradesh	State	2436	27725 MT per Annum (75.90 MTD)	1000000 MT (2737.9 TPD)	100%
Jammu & Kashmir	State	238	0.333 TPD (1212.526 MTA)	TSDF under construction at IGC Samba	Hazardous waste is disposed off through TSDFs located outside from J&K
Maharashtra	State	7257	999565.96 MT	03 Nos of Incinerator (MT/Hour) - 9.0 04 Nos of Secured Landfill (MT/A)- 2,61,600	360505.3 MT
Odisha	State	360	6,79,656 TPA (1862.07 TPD)	SLF Capacity : 75,000 TPA, Treatment	60000 TPA (164.38 TPD)

State Name	State/PRS	No. of Industries generating Hazardous waste	Avg. Qty of Hazardous Waste Generated (TPD)	Treatment Capacity of all TSDFs within the Catchment (TPD)	Avg. Qty of Hazardous waste Processed (TPD)
				Capacity : 12,000 TPA	
Tripura	State	172	360.14 MTA (0.986 MTD)	-	-
Karnataka	State	3451	994.25	3 TSDF	NA
Tamil Nadu	State	3961	964000 TPA (2641.09)	2 TSDF a.TSDF Gummidipoondi – 100000 TPA, b.TSDF Viruthunagar – 240000 TPA = Total 931.506 TPD	Land fillable hazardous waste- 90296 T/A, Incinerable hazardous waste- 7312 T/A = 2513.99 TPD (Total)
	PRS	NA	807.8	Existing Capacity – NA however 100% HW generated is being treated	807.8
Gujarat	State	19683	2.5 – 2.7 MMT	10 TSDF of capacity 8626332 MT	1.3 MMT
Delhi	UT/PRS	1912	2683.46 MTA (7.35 MTD)	Not at present. Plant proposed to be developed.	Incinerable waste is treated in TSDF at Rajasthan & UP
Haryana	State	4849	220987.09 Tones	Incinerators (Kcal)- 2.5 Million, Landfill (MTA)- 32 years	Reaching TSDFs- 29522.8 MT, Treated- 14372 MT
Bihar	State	166	7629 MTA (20.88 MTD)	Establishment of TSDF in progress.	24.367
Jharkhand	State	566	409279.23 MTA (1121.3 MTD)	(Land Fill) 17400 TPA and Incineration	7389.592MT (Land Fill), 213.677 MT

State Name	State/PRS	No. of Industries generating Hazardous waste	Avg. Qty of Hazardous Waste Generated (TPD)	Treatment Capacity of all TSDFs within the Catchment (TPD)	Avg. Qty of Hazardous waste Processed (TPD)
				capacity of 500 kg/hr Co-processing – 33250 MT/month (Incineration) TOTAL = 1169.2 MTD	(Incineration)
West Bengal	State	809	157846.80 MTA (432.45 MTD)	420000 MTA (1150.68 MTD)	35684.48 MT, 41630.79 MT
Chhattisgarh	State	413	172437.78 MT	TSDF being established	Nil
Andhra Pradesh	State	2648	621337 TPA (1702.29 TPD)	2 TSDF existing	158364.459 TPA (1689.49 TPD). After segregation of recyclables.

Biomedical Waste Management

State Name	State/PRS	Qty of Biomedical Waste Generated (KGD)	Status of Treatment facility available/ CBWTF (KGD)	Status of Treatment facility available	No. of Hospitals and Health care units
Assam	State	1062.6	-	1 operational and 4 proposed	27
Uttar Pradesh	State	33756.344	NA	20	25206
Uttarakhand	State	3456.37	3454.49	2	3185
Rajasthan	State	20685.65	NA	Operational - 8, Proposed- 7 (November MPR)	8584

State Name	State/PRS	Qty of Biomedical Waste Generated (KGD)	Status of Treatment facility available/ CBWTF (KGD)	Status of Treatment facility available	No. of Hospitals and Health care units
Sikkim	State	482.651	NA	captive treatment in all facilities	287
DDDNH	UT/PRS	350	Nil	Treated at CBWMF at Surat	209
Madhya Pradesh	State	16147.89	NA	12	7677
Manipur	State	780	NA	CBMWTF = 1 No Captive Facility = 2 No. Deep Burial = 391 Nos	528
Meghalaya	State	1276.29	NA	Incinerator: 100 kg/hr, Autoclave: 100 kg/hr, Shredder: 100 kg/hr	554
	PRS	1.51	1.51	Incinerator of 100kg/hour capacity ¬ Continuous stack monitoring device ¬ Autoclave of 100kg/hour capacity ¬ Shredder of 100kg/hour capacity	12
Mizoram	State	936.37	NA	68	NA
Nagaland	State	645	-	3 captive plants	726
Punjab	State	16000	NA	1	13702
Telangana	State	20472	NA	11	6542

State Name	State/PRS	Qty of Biomedical Waste Generated (KGD)	Status of Treatment facility available/ CBWTF (KGD)	Status of Treatment facility available	No. of Hospitals and Health care units
Puducherry	State	4391	NA	1	255
Kerala	State	42932	36852.931	1	13869
Goa	State	Biomedical waste: 2992 KGD Sanitary waste: 17179 KGD	4800	200 kgs. Per. hour incinerators being developed	167
Himachal Pradesh	State	3407	NA	2	8983
Jammu & Kashmir	State	5902.62	NA	3	6606
Maharashtra	State	62254.62	NA	30	63642
Odisha	State	14564	13951		3398
Tripura	State	1401.5	NA	Nil	158
Karnataka	State	59511.3	59511.3		35869
Tamil Nadu	State	63502.9	NA	12	25006
	PRS	12537.239	NA	2	5571
Gujarat	State	36420	126000 (including proposed treatment facility)	Existing- 21 Proposed- 1	31286
Delhi	UT	28785	63000	2	10277
Haryana	State	14810	NA	11	5526
Bihar	State	34812	33600	4	24996
Jharkhand	State	7256.957	7671 TPD 7671000 kg/day	4	3009
West Bengal	State	41571.41	NA	6	8509
Chhattisgarh	State	20148.20	20148.20	CBMWTF existing and 4 proposed	4582

State Name	State/PRS	Qty of Biomedical Waste Generated (KGD)	Status of Treatment facility available/ CBWTF (KGD)	Status of Treatment facility available	No. of Hospitals and Health care units
Andhra Pradesh	State	13607.8		12	10225

Plastic Waste Management

State Name	State/ PRS	Qty of Plastic Waste Generated (TPD)	Treatment facility capacity (TPD)	Status of use of polybags (whether allowed/banned fully or partially)	Details of Initiatives to reduce/recuse/ recycle Plastic
Assam	State	91	NA	Single use plastic has been banned in the city	Plastic waste managed through Recyclers/rag pickers, MRFs Cement Plants and construction of roads.
Uttar Pradesh	State	696.99	NA	Use of Polybags < 50micron thickness banned	•Out of 254402 TPA of plastic waste 105000 is being processed. •Implementation of EPR has been started. •Plastic waste processing/waste to oil facility of 2700TPA has been setup in Mathura •In the State 23 Recyclers have been inventoried out of which 16 have obtained registration under Rule 13.
Uttarakhand	State	501.37	NA	NA	NA
Sikkim	State	5.87 TPM (0.1956 TPD)	NA	Ban on sale and use of plastic having less than 50 micron	Fine mechanism is notified under state bye-laws and The Sikkim Non

State Name	State/ PRS	Qty of Plastic Waste Generated (TPD)	Treatment facility capacity (TPD)	Status of use of polybags (whether allowed/banned fully or partially)	Details of Initiatives to reduce/recuse/ recycle Plastic
					Biodegradable Garbage (Control) Act, 1991
DDDNH	UT/PRS	1947.7	NA	Banned	Recyclers
Madhya Pradesh	State	198	NA	NA	Utilization in road construction
Manipur	State	22.7	NA	NA	recycling
Meghalaya	State	9.16	NA	NA	NA
	PRS	0.230	NA	Banned on packaged drinking water & AMC has imposed complete ban on plastic carry bags below 50 micron within its jurisdiction with effect from 1st August 2019	PWD, has initiated a program for utilization of plastic wastes in road construction
Mizoram	State	21.66	NA	The Govt. of Nagaland vide gazette notification no. dated 17th June 2019 notified " Total ban on all single-use plastics in Nagaland"	PWD, has initiated a program for utilization of plastic wastes in road construction
Nagaland	State	1.55	NA	Banned	NA
Punjab	State	327	NA	Banned	There are 34 registered plastic waste recyclers in Telangana with a capacity of 136.08 TPD. 5500 tons of plastic waste is utilised by recycling units.
Telangana	State	640.15	NA	Government of Puducherry has imposed total ban on	There are 34 registered plastic waste recyclers in Telangana with a

State Name	State/ PRS	Qty of Plastic Waste Generated (TPD)	Treatment facility capacity (TPD)	Status of use of polybags (whether allowed/banned fully or partially)	Details of Initiatives to reduce/recuse/ recycle Plastic
				single use plastics with effect from 02/08/2019	capacity of 136.08 TPD. 5500 tons of plastic waste is utilised by recycling units.
Pudducherry	State	32.2	NA	Single use Plastic has been banned in the U.T	Utilization in road construction
Kerala	State	360	NA	Complete ban on manufacturing, storage, transportation, and sale of single use plastic items.	Recyclable plastics (hard and soft plastics) are taken by rag pickers for recycling in the State and outside the State
Goa	State	80.66	NA	NA	Establishment of Material Recovery facility (MRF) as well as Baling facilities (03nos.).
Himachal Pradesh	State	37.48	NA	NA	Used for road construction, sent to Cement Plant as RDF, Buy Back Policies and EPR Implementation adopted by State
Jammu & Kashmir	State	205.0	NA	Banned	NA
Maharashtra	State	4.43 lakhs MT	-	-	Plastic waste recyclers- 88 Nos. Issued the GR to use waste plastic in to the construction of the road at the tune of 7%
Odisha	State	101.3	NA		The segregated and stored plastic waste at

State Name	State/ PRS	Qty of Plastic Waste Generated (TPD)	Treatment facility capacity (TPD)	Status of use of polybags (whether allowed/banned fully or partially)	Details of Initiatives to reduce/recuse/ recycle Plastic
					Materials Recovery Facilities are sold off to registered plastic recyclers for further processing and recycling.
Tripura	State	32.1 TPA (0.0879 TPD)	NA	NA	There are 17 registered Recyclers in the State.
Karnataka	State	627.4	NA	NA	Projects commencing under "waste to energy" initiative by BBMP to address the gap in MSW treatment. MSW treatment gap in northern part Karnataka is addressed by instructing all the cement industries to efficiently utilize the dry waste for Co-generation.
Tamilnadu	State	637	NA	NA	Recyclable/ Saleable plastics are sold to authorized vendors.
	PRS	124	NA	Single use plastic irrespective of thickness is banned since Jan-2019	1364 tonnes has been seized and 663 lakhs has been collected.
Gujarat	State	1118.36	Through co processing 109157.435 MT, Recycler : 11,13,526.56 MT/Y,	NA	Co-processing: 109157.435 MT, Recycler: Capacity of recycling plastic waste: 11,13,526.56

State Name	State/ PRS	Qty of Plastic Waste Generated (TPD)	Treatment facility capacity (TPD)	Status of use of polybags (whether allowed/banned fully or partially)	Details of Initiatives to reduce/recuse/ recycle Plastic
			Refuse Derived Fuel: 129,575 MT/Annum, Pyrolysis: 5075 TPA		MT/Y
Delhi	UT	1500	NA	Banned	315 plastic waste reprocessing and recycling units
Haryana	State	520	NA	Banned	•283.06 TPD out of total 525.121 TPD plastic waste is being processed. •373 Material Recovery Facilities have been established. •22 nos. Of Plastic Waste recyclers are registered. •At present plastic waste is being channelized through MRF centres.
Jharkhand	State	118.718	NA	plastic carry bags were seized from traders and fine has been imposed on them	waste plastic has been used for construction of road and reused by M/s ACC Limited Chaibasa Cement Works
West Bengal	State	822.56	NA	Banned	Recycling of plastic waste
Chhattisgarh	State	130	All treated	NA	Recyclable plastic waste is sent to authorized recycles and non-recyclables are sent to cement

State Name	State/ PRS	Qty of Plastic Waste Generated (TPD)	Treatment facility capacity (TPD)	Status of use of polybags (whether allowed/banned fully or partially)	Details of Initiatives to reduce/recuse/ recycle Plastic
					industries.
Andhra Pradesh	State	126.63	NA	Strict action taken against those using plastic with more than 50 micron thickness.	Recyclable waste is being sent to recycling units. Non-recyclable waste is being sent to cement industries for construction of roads.

STATUS OF GROUND WATER AUGMENTATION, AFFORESTATION, FLOOD PLAIN AND E-FLOW MANAGEMENT AS PROVIDED BY THE STATES

1. Andhra Pradesh

Ground water regulation & water conservation:

Ground water quality is being regularly monitored by Ground water Department. Rain water harvesting structures are constructed in all Municipal Schools and Municipal and Govt. Buildings and municipal open spaces. Further the Town planning staffs are insisting for construction of rain water Harvesting structures in all Apartments

Protection and management of Flood Plain Zones (FPZ):

No erosion of flood plain or flood banks is observed. Encroachments are being removed in flood plain areas regularly.

Plantation activities and Setting up biodiversity parks:

Part of river stretches, Kurnool Municipal Corporation is implementing greenery and avenue plantation. The river bed plantation is proposed on both sides of the polluted river stretches with 10mt width.

2. Assam

Ground water regulation & water conservation:

The Assam Ground Water Control and Regulation Act, 2012 was passed on 14th May, 2012 and ‘Assam State Ground Water Authority’ was constituted under Section 3 of the ‘AGWC &

R Act 2012' with Secretary Irrigation Department as the Ex Officio Chairman and Director, Geology and Mining as Ex Officio Member Secretary. The State ground Water Authority to exercise points conferred on as per section 5 to 15 & 19 to 23 of the Act & also to perform functions assigned to the State Authority.
As the Assam State Authority is yet to be functional CGWB, NER is looking after matters related to Ground Water management and regulation for the State of Assam.

Provisions for rain water harvesting are incorporated in the Guwahati Building Byelaws and in the proposed Byelaws all the Urban Local Bodies of Assam also. Rain Water Harvesting is being carried out by the Departments of Soil Conservation Department and P&RD Departments by constructing RCC Check Dams, Construction of Farm, Ponds and Drainage, Channels, River Bank Protection etc.
Rain Water Harvesting in some Gaon Panchayat is being taken by P & RD Department by excavating and renovating the natural water bodies for catchment ponds for irrigation and agricultural needs.

Good irrigation practices such as Lift Irrigation Scheme, Deep Tube Well, Flow Irrigation scheme, LIS, FIS, DTW, Gully Control, RCC Check Dam, Drainage Channel Construction are adopted and promoted by Irrigation, Soil Conservation, P&RD Department in the state.

Protection and management of Flood Plain Zones (FPZ):

The Guwahati Metropolitan Development Authority has constructed guard/flood wall from Bhangagarh upto ASEB Colony. As regards Bharalu and Bahini river basin in Greater Guwahati area the following areas are vulnerable to water level in Bharalu and Bahini: Zoo-Road, Anil Nagar, Tarun Nagar, Nabin Nagar, Lachit Nagar areas etc. As the areas are thickly populated so the flood plain zone management is not feasible at this stage. Various protection and management measures like Spur Bandh, Guide Bandh Erosion protection and Plantation are adopted by P & RD Department and Water Resources Department also.

Maintaining minimum environmental flow of river:

It is contemplated to establish gauge discharge stations of Bahini/Bharalu river. Namely one at Hengrabari RCC bridge, one at Jonali RCC bridge and one at Santipur Sluice gate. Gauge reading are being taken regularly and records are kept in the concerned division.
Earlier an attempt was made to induct fresh water into Bahini river by diverting a part discharge of Basistha river through a sluice gate a Basistha Natun Bazaar area. A scheme was taken up having nomenclature, "Re-sectioning and regarding of river Bharalu, Mora Bharalu, Bahini, Basistha, Lakhimijan channel including re-opening of Bahini sluice gate at Natunbazaar', which was Administratively approved by the Secretary to the Govt. of Assam, Water Resources Department. Being maintained by P & RD Department

Plantation activities and Setting up biodiversity parks on flood plains:

Plantation is regularly being carried by Department of Forest on the side slopes of embankments and berms of rivers which help in checking erosion of embankments and river berms/edges. Environment & Forest Department is taking some proposal for plantation like

200 hectares plantation for protection of erosion at Bogi Beel near Dehing Mukh Reserve Forest. The State Govt. taking some schemes under MGNREGA. The matter of encroachment in river Bharalu has been taken up by GMC with the D.C., Kamrup (M) and D.C., Kamrup(M) will sort out the matter very shortly. In Tinsukia ZP, dfferent types of tree planataion are done in the GPs like Na-Sadia, Nagaon, Amorpur and Shantipur GP areas. However, in Kamrup 4 nos. of plantation scheme has got administrative approval under MGNREGA, amounting to Rs. 11,39,034/-.

3. Bihar

Ground water regulation & water conservation:

- State Government has initiated drives for recharging of ground water by providing roof top hair water harvesting structures and soak pits/ recharge pits near public well, hand pump and other water bodies under Jal Jeevan Haryali Abhiyan
- State Government of Bihar has notified The Bihar Ground Water (Regulation & Control of Development & Management) Act, 2006 for regulating and management of ground water.
- Conditions for providing roof top rain water harvesting structures in the building plan in an area of the 1000 Sqm or more while according approval for construction has been imposed.
- In order to enhance water use efficiency in water intensive crop, assistance is given for promotion of water saving tools/ technologies like sprinkler and drip irrigation, creation of farm ponds, efficient delivery and distribution system and adoption of agronomic practices like alternate row/ furrow irrigation, mulching, etc.
- Pradhan Mantri Krishi Sinchai Yojana also focuses on creating protective irrigation by harnessing rain water at micro level through 'Jal Sanchay' and 'Jal Sinchan' to insure 'Per Drop More Crop'.

Protection and management of Flood Plain Zones (FPZ):

The issue of demarcation of flood plain zone/buffer zone is not applicable in case of Bihar due to densely populated northern plain terrain and mostly embanked river.

Maintaining minimum environmental flow of river:

Water Resource Department has taken steps for installation of new gauge stations and making arrangements for the discharge measurement throughout the year. It hopes that the data will be available from October 2020 onwards.

Plantation activities and Setting up biodiversity parks on flood plains:

Plantation is being done under Namami Gange Scheme and Krishi Road Map wherein the polluted river stretches will be prioritized.

- The Bihar state has successfully achieved the total tree cover target of 15% for the Phase-I of Bihar Agriculture Road Map. For the Phase-II of Bihar Agriculture Road Map for the period 2017-18 to 2021-22 a target of 17% total tree cover has to be achieved by 2022.
- A team from the State Government had visited Yamuna Biodiversity Park in Delhi and at present are exploring possibilities of developing the replication of the same in the State.

4. Chhattisgarh

Ground water regulation & water conservation:

- State Water Resource Department has proposed various structures on small and big nallahs of all the 146 blocks of the state for recharging ground water.
- Installation of rain water harvesting structure is under progress by industries and other establishments in the State. In addition, it has been decided to keep space (5% of total areas / minimum 05 plots) for rain water harvesting in future industrial areas.
- WRD is encouraging practices for optimum utilization of irrigation schemes resulting in more crop per drop as per available resources.
- Drip irrigation / sprinkler irrigation under micro irrigation scheme have been increased in the past 3 years. Presently, 66.30 hectare area is covered by drip and 257.21 hectare area is covered by sprinkler system for different crops.

Protection and management of Flood Plain Zones (FPZ):

Identification of flood prone zones has been done by urban local bodies and plantation has also been done in co-ordination with forest department as per the direction of district administration.

Maintaining minimum environmental flow of river:

As per the MPR, Water Resource Department had prepared standard operating procedures (SOP) for the five rivers Seonath, Mahanadi, Kharun, Kelo and Hasdeo for maintaining e-flow in the rivers and the same is being followed.

Plantation activities and Setting up biodiversity parks on flood plains:

Plantation in 03 out of 05 been completed. Plantation in the remaining 02 stretches i.e. Sihawa to Aarang and Bemta to Simga will be done in next monsoon. Total 286440 plants have been planted along the river stretches.Process of identification and removal of encroachment from the floodplain is under-progress. The process of complete removal of complete encroachment shall be completed before 31.03.2021. 30 nos of areas have been identified along the rivers for removal of encroachment and 12535 plantation activities have been done by ULBs.

5. Dadra Nagar Haveli &Daman Diu

Ground water regulation & water conservation:

- In industrial area, for extraction of groundwater all the industries were directed to obtain No Objection Certificate (NOC) from Central Ground Water Authority (CGWA).
- 7 Conventional rain water harvesting structures were built in Gram Panchayat. Rain water harvesting was implemented with 67 number of rooftop recharge of bore well and 33 Nos. of open wells in 14 Panchayats of Daman district. Rain water harvesting for 8 nos. of Borewell, 16 nos. of open well recharge and 02 nos. of rooftop through injection well system at Mandoni and Sindoni Panchayat installed under Jal Shakti Abhiyan.
- 2 Ponds have been successfully recharged during Jal Shakti Abhiyan in 2019.

- All the upcoming industrial and construction projects shall be issued strict instruction for providing a suitable rainwater harvesting system to reduce dependency over ground water resource or to recharge the ground water table.
- Farm ponds have been created for ground water rejuvenation. Terrace cultivation in the undulating fields of DNH is likely follows.
- Farm ponds have been maintained to check and reduce runoff.
- Training programme for awareness on Jal Shakti Abhiyan and micro irrigation projects for farmers was conducted on 15th October, 2019.
- Silvassa Municipal Council (SMC) have constructed Rooftop rain water harvesting systems in 15 schools & 45 Govt. buildings in SMC area to recharge ground water table.
- Gram Panchayats have undertaken the Rain Water Harvesting / Recharge work under their respective Action Plan. All the government premises located in Panchayat areas are being implemented RWH systems in their premises.

Protection and management of Flood Plain Zones (FPZ):

8 check dams in the catchment area of Damanganga River and 3 percolation ponds have been constructed. - All the check dams constructed in the previous year are maintained.

Maintaining minimum environmental flow of river:

As per the MPR, minimum environmental flow for the river is maintained at various locations.

Plantation activities and Setting up biodiversity parks on flood plains:

- Tree plantations were carried out along the nallah and inlets in upstream area and along the river. - 36 Ha of Mangroves in Diu and 4Ha in Daman along Damanganga river near Moti Daman have been taken up. - Total 7500 nos. of trees are planted under Jal Shakti Abhiyan.
- 4 bio-diversity parks – Nakshatra Van, City Park, Precedent Garden and Butterfly Garden had been setup in the Damanganga River catchment area.

6. Delhi

Ground water regulation & water conservation:

- As per the MPR, for extraction of groundwater, all the industries were directed to obtain No Objection Certificate from Central Ground Water Authority.
- As per the MPR, Ground water extraction and management in NCT of Delhi is regulated as per the provisions of the Notification Dated 12.07.2010 issued by Environment Department, Govt. of NCT of Delhi.
- If the plot size of the building is more than 200 sq. meters, the permission to draw groundwater through bore / tube well is subject to the condition that the occupier or owner of the said plot or building shall install rain water harvesting system in such building. 7731 RWH system have been installed.
- For conservation of water, farmers are advised to adopt inter-cropping and multiple-cropping to get maximum returns per unit of area and per unit of time with optimum use of water, to grow crop which require less water, to adopt sprinkler and drip irrigation system

to irrigate their crops, to use water, as per crop-wise prevailing package of practices and to conserve rain water, by adopting deep ploughing and bunding etc. of their fields.

Protection and management of Flood Plain Zones (FPZ):

- DDA has demolished 550 Nos. Jhuggis/chappers and an area of 5500 sqm has been freed from encroachment recently.
- In, all out of 1026 Jhuggis/structures existing on nearly 11.0 Acres of land in Okhla, Khijrabad and Jogabai 600 Jhuggis have been removed and 5.00 acres of land has been reclaimed, nearly 2.0 acres of land with 150 Jhuggis could not be removed due to stay by Courts. Balanced Jhuggis are proposed to be removed in due course.
- For monitoring of encroachments on vacant land using satellite imageries, MOU has been signed between ISRO and DDA.
- Demarcation of 1:25 years flood plain of river Yamuna from Wazirabad to Jaitpur on both banks is in progress and 90 % has been completed.
- Work for reinstallation of bollards along with Geo –reference was initiated / awarded to M/s M & G Associates on 29.08.2019.

Maintaining minimum environmental flow of river:

As per the MPR, to assess the minimum required environmental flow of river Yamuna for stretch between Hathinikund to Okhla, a comprehensive study has been assigned to National Institute of Hydrology (NIH), Roorkee by NMCG.

Plantation activities and Setting up biodiversity parks on flood plains:

- Department of Forests & Wildlife, GNCT of Delhi carried out plantation on Yamuna Flood Plains.
- Yamuna Biodiversity Park is existing and located in Jagatpur Khadar Yamuna Flood Plains in 9770 Hectares (upstream of Wazirabad).
- DDA is implementing the project Restoration and Rejuvenation of the floodplains of River Yamuna.
- South Biodiversity Park is being developed in 115 hectares area in Yamuna Flood Plains near Kalindi Colony. The project has been awarded to CEMDE on 13.12.2019. Water hyacinth and *Alternanthera* have been removed from wetlands covering an area of 25 Hectare.
- A small stretch of 500 m long and 10 m wide stripe along the Ashram Road has been planted with 300 plants.
- Two nature trails - one trail from Ashram Road to DND Flyover has been made; both sides of this nature trail would be developed into a greenway.
- About 20 Hectare of elevated portion beneath the DND flyover has been processed for planting 15000 saplings of native trees.
- Total 137.43 ha of land planted (162276 tree saplings) by DDA to Forest Department, Delhi
- 80.74 ha of land planted (105,247 tree saplings) by Forest Department, Delhi as Compensatory Afforestation against the Forest land diverted under Compensatory Afforestation Act (FCA), 1980.

7. Goa

Ground water regulation & water conservation:

- State of Goa declared entire Goa as Scheduled area. The Goa Ground Water Regulation Act, 2002and Rules, 2005 are in force and Ground Water Officers are appointed Taluka-wise.
- For better irrigation practices, the Goa Irrigation Act, 1973 is enforced. The Canal irrigation is partly handed-over to Water Users Association (WUA). The micro-irrigation aspects are being addressed. For maintaining the irrigation canal, structures, WRD has well networked offices. Also Goa Command Area Development (CAD) Act, 1997 & Rules, 1999 is adopted for the purpose.
- Rain Harvesting Policy is adopted since 2008 and for the purpose of encouragement among stakeholders, incentives are given to individual households / residential houses / residential complexes and apartment buildings. For commercial complexes and hospitality businesses as well as subsidies, *as fixed*, are granted only on a reimbursement basis.

Maintaining minimum environmental flow of river:

Water Resources Department (WRD) has informed that in all the rivers of Goa the demand water being a small percentage of the available yield, apparent e-flows were always maintained. Rivers are perennial. There is no issue of e-flow in major rivers.

Protection and management of Flood Plain Zones (FPZ):

The matter pertaining to illegal encroachment, if any, is being addressed by District Collector / Revenue Department from time-to-time.

Plantation activities and Biodiversity Park:

Major stretches of lower-reaches of major rivers (i.e. downstream regions) are flanked by mangroves while, along upper-reached (i.e. upstream regions), there is either coconut plantation or no space for any plantation.

8. Gujarat

Ground water regulation & water conservation:

As per the MPR, draft bill titled "Conservation, Protection, Regulation and Management of Ground Water in Gujarat State" is in process.

To reduce demand of Ground water extraction and to promote treated waste water as an Economic Resource, Gujarat Government has framed Policy for Reuse of "Treated Wastewater TWW" by maximizing the collection and treatment of sewage generated and reusing the treated wastewater on a sustainable basis. Objectives of the revised action plan is to reuse 70% of treated wastewater (Sewage) by 2025 and 100% of treated wastewater (Sewage) by 2030.

Maintaining minimum environmental flow of river:

- As per the MPR, Tapi River – Approximately 1700 Cusecs water inflow in Tapi river from Kakrapur weir to Surat from small tributaries (Khadi) and during Dec to May additional average 339 Cusecs water flows from Kakrapur weir to maintain potable water.
- There is no existing storage dam on Mindhola river. But during winter and summer season water from command area of Uka-Karapar project flows during irrigation rotation period.

Plantation activities and Setting up biodiversity parks on flood plains:

As per the MPR, 6.10 lakhs of plants are proposed to be planted on both sides of the polluted river stretches in the FY 2020-21. It is proposed to develop a Biodiversity park at Khari. 11000 trees have been planted along the stretch of Amlakhadi (limed to Dadhal) 43.00 km

9. <u>Haryana</u>

Ground water regulation & water conservation:

- As per the MPR, for extraction of groundwater all the industries were directed to obtain No Objection Certificate from Central Ground Water Authority.
- On 31.10.2001, a notification regarding making roof rain water harvesting, conversation & Artificial recharge of ground water is compulsory in Govt. buildings/HSVP Buildings, including all the private houses/buildings to be constructed in Urban Estates, in future having roof top surface area in excess of 100 Sqm.
- To avoid exploitation of ground water, tertiary treated water is being used for irrigation/flushing purpose in some of Urban Estates of HSVP. Efforts are being made for its implementation in other Urban Estates also.
- Following schemes are being implemented by the State for reduce the fresh water demand in agriculture:
  a. Promotion of Crop Diversification in Haryana
  b. Climate resilience building in rural areas through crop residue management- for Haryana state for promotion of maize crop
  c. Installation of solar/ grid powered micro irrigation infrastructure on sewage treatment plants for utilizing treated water for Irrigation.
  d. Drip/Sprinkler irrigation sets through subsidies to farmers from the State Horticulture/Agriculture Departments
  e. Project of Recycle and Reuse of treated wastewater for irrigation purpose in Fatehabad, Hisar, Sirsa & Jind Districts of Haryana.

Protection and management of Flood Plain Zones (FPZ):

All construction activities on floodplain zone of both the rivers banned. Illegal encroachment of floodplain not allowed and is immediately removed.

Maintaining minimum environmental flow of river:

As per State, River Ghaggar is non-perennial, therefore maintaining e-flow not possible.

For River Yamuna, as per the MOU signed in 1994 between States of UP, Haryana, Rajasthan, Himachal Pradesh & NCT of Delhi, a minimum discharge of 352 cusec of water is released in River Yamuna from Hathnikund barrage.

Plantation activities and Setting up biodiversity parks on flood plains:

- As per the MPR, during the year 2018-2019, in 3 towns (Panchkula, Sirsa, Fatehabad) along River Ghaggar, 2853000 plants were planted over 3499 hectare of land. For the year 2019-20, 1728000 plants were proposed to be planted in 1883 hectare of land. 7 biodiversity parks of total 12611 acre are existing.
- During the year 2018-2019, in 6 towns (Yamuna Nagar, Karnal, Panipat, Sonipat, Faridabad, Palwal) along River Yamuna 3189000 plants were planted over 3556 hectare of land. For the year 2019-20, 3555000 plants were proposed to be planted in 4220 hectare of land.During the year 2019-20 upto 29.02.2020 26878 plantation has been done in the above 6 towns. In 5 towns, 8 biodiversity parks of total 253 acre are existing.

10. Himachal Pradesh

Ground water regulation & water conservation:

- As per the MPR, Drilling of new bore wells for extraction of ground water in Himachal Pradesh has been stopped as per order of the Hon'ble High Court of Himachal Pradesh.
- The Himachal Pradesh Ground Water Regulation & Control of Development & Management Act is under formulation will be notified after approval from the Government.
- Promotion of water use efficiency by providing piped irrigation network instead of open channel; micro irrigation through sprinklers and drip.
- As per Town & Country Planning Act, 1977 (Act No. 12 of 1977), it is mandatory for all the commercial buildings to have roof top rain water harvesting system and recharging pit.
- The use of irrigation water in the fields is optimized by extension services offered by Horticulture and Agriculture Department by micro irrigation methods.

Protection and management of Flood Plain Zones (FPZ):

As per the MPR, No flood plain zones have been identified in the State till date.

Maintaining minimum environmental flow of river:

The RTWQMS along with Radar system for water quality monitoring and flow measurement, respectively, have been installed in river Markanda near village Ogli, Kala Amb town and river Kaushalya near village Kamli. Further, Hydro-Electric Projects (HEP) located on the catchment of rivers are mandated to ensure minimum 15% discharge of lean season flow on the downstream of the HEP into river body.

Plantation activities and Setting up biodiversity parks on flood plains:

As per the MPR, total 2200 plants have been planted at Sukhna Nala at Parwanoo and 1600 plants have been planted at Kala Amb in river Markanda. Total 8800 plants have been planted along river Sirsa. Total 13200 plants have been planted in river Ashwani. Total 19,300 plants have been planted in River Beas. Total 3300 plants have been planted in Theog region in river Giri and In River Pabbar. Bio-diversity Park is proposed at Kala Amb and the work is in progress.Development of Eco-Park in Paonta Sahib, work is in progress.

11. Jammu & Kashmir

Ground water regulation & water conservation:

The regulation of ground water is mandated to the J&K Water Resources Regulatory Authority under the J&K Water Resource Regulation and Management Act, 2010. Various irrigation schemes are under execution with the objective of increasing the irrigation potential and its effective utilization. At present, 400 schemes are approved in the UT under PMKSY-AIBP out of which 153 have already been completed and 144 are targeted for completion during current financial year.

Rain water Harvesting:

A provision for rain water harvesting is being incorporated in building permissions issued by Srinagar Municipal Corporation. 170 Storage tanks have so far been constructed in Kupwara/Handwara and Budgam which arrest and store the surface run off during excessive precipitation.

Protection and management of Flood Plain Zones (FPZ):

As per the MPR, determination of Limits of Flood Basin and conducting of Mathematical Studies of River Chenab, the job has been assigned to Central Water and Power Research Station (CWRS), Pune. Removal of encroachments is a continuous process carried by the Jal Shakti (I&FC) Department.

Maintaining minimum environmental flow of river:

The Jal Shakti Department has a regulating structure on river Jhelum at Srinagar known as Chattabal Weir to ensure navigation during lean season.

Plantation activities and Setting up biodiversity parks on flood plains:

As per the MPR, Catchment Area treated with afforestation and soil conservation works by done in few stretches and being carried out in remaining stretches Forest Deptt. J&K under CAMPA.
Jammu Development Authority has developed a park in 5.6 hectare at the bank of river Tawi area of polluted river stretch recently.

12. Jharkhand

Ground water regulation & water conservation:

- Periodic assessment of 24 districts and 260 blocks of Jharkhand for ground water resources was conducted by Jharkhand in 2009, 2011, 2013 & 2017. As per report of CGWA, Dhanbad and Bermo are among the overexploited blocks, Patratu, Silli and Bermo are among semi critical blocks.
- CGWA is also preparing a policy for conservation of ground water with a robust institutional mechanism for surveillance and monitoring with a view to enhance the access to ground water for drinking purpose.

- Water Resource Department, Govt. of Jharkhand is framing Ground Water Development and Management (Control/ Regulation) Act which is under progress which shall be completed by 6 months and there after departments will complete the formalities for enactment of Ground Water Development and Management Control/Regulation) Act within One Year.
- Department of Agriculture is promoting and conducting workshops for the use of organic fertilizers. Promoting micro irrigation (drip & mini irrigation) system to save the quantity of water used during agriculture.
- Jharkhand Rain Water harvesting Regulation, 2017 Notified on 23.01.17 and implementation is ongoing. 54 nos. of RWH/ground water recharging structure have been constructed at Dhanbad by CGWB and 75 nos. of RGH structures have been constructed by the State Ground Water Directorate, Jharkhand. 214 nos. of water bodies has been sanctioned for Rs. 185.08 Cr. for restoration which is under progress and targeted to be completed by March, 2021.144 nos. of RWH structure has been sanctioned for Rs. 5.89 Cr. which is under progress.

Protection and management of Flood Plain Zones (FPZ):

- District Magistrate has been directed to ensure that no encroachments in the FPZ and necessary actions are taken. Action Plan for Protection and management of flood plain zone.
- Periodic drives carried out by Local Administration to remove encroachments.

Maintaining minimum environmental flow of river:

- E-Flow determination/gauging: Installation of Real Time Data Acquisition System along with Data Center which is to be established at Ranchi for analysis and information. The same shall be completed by 2024. Regulation of flow from barrages:
- As majority of the rivers are non- perennial in nature, resulting in almost no flow in these rivers. In order to maintain the E-flow, installation of instruments across the barrages shall be completed by March 2024.

13. <u>Karnataka</u>

Ground water regulation & water conservation:

Drilling new bores are restricted in the notified areas and prior permission has to be taken by the authority. Registration of the drilling rigs has been made compulsory. All commercial users of ground water must take the permission/NOC from Govt of Karnataka (GoK). Regarding Ground water regulations the authority of District Ground Water Department informed that there are no critical blocks in the district.

For the industries in the Polluted River Stretches (PRS) that are using the ground water for their industrial purpose, notice has been sent to take permission from the GoK.

Adoption of Micro irrigation practices for all the crops and making Micro irrigation technology easily accessible at the rural level

Rain Water Harvesting:

Rain water harvesting is made mandatory for new constructions.Directions given to agricultural/irrigation department to organize awareness programmes in farmers to conserve water and good irrigation practices to be adopted

Protection and management of Flood Plain Zones (FPZ):

The tahasildars of the concerned taluka have furnished replies that they are in the process of obtaining the details on encroachment of lands of flood plain and upon receipt of the same they would initiate further needful action.

Maintaining minimum environmental flow of river:

The Cauvery Neeravari Nigagam Ltd., is requested to submit the action plan as per MoEF & CC norms during monsoon seasons 30% of annual yield @ 75% dependability shall be require to be released in the D/S of each dam site for environment purpose & the same is yet to be submitted. However, the details of the same is incorporated and reviewed in the District Surveillance Committee within March 2021.

Plantation activities and Setting up biodiversity parks on flood plains:

The Forest Department has submitted action plan for plantation of saplings on the banks of polluted river stretch of Arkavathi which specifies the plantation of saplings and creation of eco park for that they have ear marked Rs.13.49 crores. This will be completed by them within time frame of March 2024.

14. <u>Kerala</u>

Ground water regulation & water conservation:

The State Government has enacted the Kerala Groundwater (Control and Regulation) act 2002 to provide for the conservation of groundwater and for the regulation and control for its extraction and its use in Kerala. Provisions of roof top rain water harvesting in Government buildings, commercial buildings, hotels and Houses is being emphasized. As the department is more focusing on effective utilization of available water for irrigation as well as for its efficient use, new types of irrigation methods like micro/community irrigation for cash crops and horti-crop are proposed.

Protection and management of Flood Plain Zones (FPZ):

Kerala receives about 90% of the annual rainfall during the monsoon. State Disaster Management plan 2016 was prepared by National Centre for Earth Science Studies in 1:50,000 scale using satellite images.

Plantation activities and Setting up biodiversity parks on flood plains:

Thick vegetation, paddy fields and coconut farms are present on both sides of the river Mogral and Uppala. Plantation works in progress along remaining river stretches.

96% of the work with regard to Bio-diversity park at Karamana II phase completed. Recovered 10.5 Acres of encroached land along River Keecheri, it is proposed to set up of bio-diversity Park.

15. <u>Madhya Pradesh</u>

Ground water regulation & water conservation:

As per the MPR, State claims to be regulating ground water, installing Rain water Harvesting systems and has adopted good irrigation practices. Under the State Action Plan "Akshay Jal Sanchay Yojana", 47564 nos of rainwater harvesting structures have been installed.

Protection and management of Flood Plain Zones (FPZ):

As per the MPR, the work is under process at the level of Water Resource Department. Municipal Councils and corporations are to take appropriate actions or the removal of illegal encroachments.

Maintaining minimum environmental flow of river:

As per the MPR, the State has informed that all the rivers are non- perennial hence maintaining of minimum environmental flow of river is difficult in present scenario.

Plantation activities and Setting up biodiversity parks on flood plains:

As per the MPR, during 2019-20, around 2.9 lakhs plants were planted along the 6 polluted river stretches. Establishment of Biodiversity Park is proposed. The Biodiversity parks are being developed in Sagar, Rewa, Ujjain, Indore, Shahdol, Dewas, Burhanpur and Hoshangabad through Forest Department.

16. <u>Maharashtra</u>

Ground water regulation & water conservation:

In Maharashtra State Ground Water is regulated under Maharashtra Groundwater (Development and Management) Act, 2009.

Groundwater Surveys and Development Agency (GSDA) is a Government of Maharashtra organization, concerned with groundwater surveys, exploration, assessment, monitoring, development, management and regulation of groundwater resources for irrigation, drinking and industrial needs.

It also undertakes periodic ground water assessment in order to regulate the ground water use and guide ground water developmental activities on scientific basis.

GSDA also works towards ensuring sustainability of ground water resources, on a long-term basis. It acts as a custodian, for the implementation of ground water legislation, within the State of Maharashtra.

Rain Water Harvesting:

RRC has already requested to Water Resource Dept, GoM water shed management. All concerned local bodies located along the riverbanks are mandated to implement Water shed management, rain water harvesting.

Protection and management of Flood Plain Zones (FPZ):

Water resource Department and Local Bodies ensure Demarcation of Floodplain and removal of illegal encroachments.

Maintaining minimum environmental flow of river:
RRC has already requested to Water Resource Dept, GoM for maintaining minimum E-flows.

Plantation activities and Setting up biodiversity parks on flood plains:

RRC has already requested to Water Resource Dept, GoM water shed management, plantation on both sides of the river and setting up of biodiversity parks. All concerned local bodies located along the riverbanks are mandated to implement Water shed management, rain water harvesting, Plantation at both sides of the river and setting up biodiversity parks in their jurisdiction.

17. <u>Meghalaya</u>

Ground water regulation & water conservation:

As per the MPR, provisions of roof top rain water harvesting have been incorporated in the bye laws and are being implemented. Rain water harvesting implemented for Schools and government buildings.Traditional Bamboo Drip Irrigation has been adopted by the State as good irrigation practice.

Protection and management of Flood Plain Zones (FPZ):

As per the MPR, there is no declared Floodplain zone. However, as per the Action Plan, notification with regard to floodplain zone is proposed to be notified within one year for Umkhrah and Umshypri Rivers.

Maintaining minimum environmental flow of river:

As per the MPR, all the rivers are perennial.

Plantation activities and Setting up biodiversity parks on flood plains:

As per the MPR, a proposal for plantation on both sides of the river at 9 identified locations has been prepared and sent for approval. A botanical garden under the Forest and Environment Department is present within the catchment area of the river Umkhrah. A Park under the Forest and Environment Department is present within the catchment area of the river Umshyrpi. Proposal have been submitted to CEO CAMPA for treatment of 48.58 ha (preliminary works for creation of plantations and creation of 94.5 polypot nursery beds for future plantations.

18. <u>Manipur(December)</u>

Ground water regulation & water conservation:

Rain water harvesting being adopted in the State

Maintaining minimum environmental flow of river:
Environmental flow of river has been maintained through afforestation at degraded catchment.

Protection and management of Flood Plain Zones (FPZ):
Protection and management of Flood Plain Zones (FPZ) has been enforced and removing all the illegal encroachers time to time by the Water Resources Department.

Plantation activities and Setting up biodiversity parks on flood plains:
Plantation on both sides of the river has been continuing time to time. No any biodiversity parks at river bank since not getting any land.

19. Mizoram

Ground water regulation & water conservation:

- In Mizoram, surface water serves as the main sources of water for drinking, domestic and industrial purposes. Ground water extraction is insignificant.
- Provisions are made by the concerned department, i.e Irrigation & Water resources Department to adopt good irrigation practices in the State. However, irrigation is not practiced in the polluted location of the Rivers.
- As per the Action Plan of the polluted rivers, Rainwater harvesting has been initiated. Survey for setting up of Rainwater harvesting System is underway by PHE Department, Govt. of Mizoram.

Protection and management of Flood Plain Zones (FPZ):

As per the MPR, there is no Flood Plain Zones in Mizoram as it is a hilly region.

Maintaining minimum environmental flow of river:

For e-flow assessment Identification and preparation of all the gauged catchments been completed. The ungauged catchment where the flow has to be assessed has been identified.

Plantation activities and Setting up biodiversity parks on flood plains:

As per the MPR, some of the rivers already have Riverine Reserved Forests of about 800 metres on either side of the river banks which are well protected. However, for enhancing tree and vegetation coverage, afforestation activities in suitable catchment areas have been proposed and plantation drives initiated and about 20% of the proposed areas for plantation have been covered so far.

20. Nagaland

Ground water regulation & water conservation:

- As per the MPR, Water Resources department under the State Plan carry out activity wherein wells are dug for ground water extraction. Sensitization programme for ground water is also under implementation.
- Water Resources Department has been carrying out activities under the Minor Irrigation Schemes wherein diversion, protection wall and line & unlined canals have been constructed under the Ministry of Water Resources.
- Rain water harvesting is very popular in the state, and it is available in almost every house.

Protection and management of Flood Plain Zones (FPZ)

As per the MPR, Dimapur Municipal Council will be implementing for the protection and management of Flood Plain Zones.

Maintaining minimum environmental flow of river

As per the MPR, Environment flow is being assessed by the Water Resources Department and is expected to be completed by June 2021.

Plantation activities and Setting up biodiversity parks on flood plains:

Tree plantation work done by Department of Environment, Forests and Climate Change and agri allied departments. As per the MPR, State proposes to develop green coverage/ parks adjacent to the banks of river Dhansiri, wherever feasible. The work is proposed to be completed by July 2020. Further, 10 community reserved forests existing (privately/community owned protected area) in Dimapur district, which falls in the catchment area of the River Dhansiri with a total area of 23.025 Sq. km has been declared and notified.

21. Odisha

Ground water regulation & water conservation:

- The Odisha Ground Water (Regulation, Development and Management) Act 2011 has been formulated by the State Government.
- CWGB and District Level Evaluation Committee strictly control the groundwater abstraction by the industries.
- Inflow from the catchment and outflow from the river of the basins are managed effectively for 11 nos of river basins of Odisha.
- 300 and 6000 Rooftop Rainwater Harvesting Structure (RRHS) are proposed to be installed on government and private buildings respectively in the FY 2020-21.

Protection and management of Flood Plain Zones (FPZ):

As per the MPR, the proposal for construction of cross regulator at the off taking point Gangua Nalla to divert the entire flood discharge of Chandaka catchment to Kuakhia river has been approved.

Maintaining minimum environmental flow of river:

As per the MPR, minimum environmental flow for the river is maintained at various locations.

Plantation activities and Setting up biodiversity parks on flood plains:

As per the MPR, 10,94,699 nos. of sapling and seedling have been planted during monsoon 2018 along the bank of the rivers, dam sites, barrage sites and canal sites, out of which 3,29,962 nos. of plants are alive. In 2020-21, green belts will be created on the identified vacant areas/ flood plains on the bank of the river stretches with the help of the Forest and Environment Department.

Setting up of Bio-diversity parks will be taken up with the help of Forest and Environment Department.

22. Punjab

Ground water regulation & water conservation:

- Government of Punjab notified Punjab Water Regulation and Development Authority in June, 2020 for the management and regulation of water resources to ensure judicious, equitable and sustainable utilization of water.
- State has set up Directorate of Ground Water Management with the prime objective of conserving and managing water resources.
- Govt. of Punjab signed an agreement to formulate Water Conservation and Management Master Plan (WCMMP) for the State of Punjab by October, 2020.
- Good irrigation practice such as drip irrigation, sprinkler irrigation, laser leveling, etc are being adopted and promoted in the State by Department of Agriculture and Department of Soil and Water Conservation.
- Rain water harvesting is being carried out by Department of Soil and Water Conservation in Kandi area of Punjab by constructing check dams, rain water harvesting structures, silt detention structures, stream bank protection, contour bunding, runoff check and drop structures etc.
- The State Government has made rainwater harvesting mandatory for all public and commercial establishments and all properties in plots covering more than 500 sq. m in urban areas.

Protection and management of Flood Plain Zones (FPZ):

As per the MPR, rivers are already channelized, therefore flood plain zoning is not technically feasible.

Maintaining minimum environmental flow of river:

As per the MPR, Minimum 15% of average lean season flow is being maintained in river Sutlej (640 cusecs) & Beas (370 cusec). There is no regulation point in the State for Ghaggar, which is not a perennial river.

Plantation activities and Setting up biodiversity parks on flood plains:

As per the MPR, Plantation is regularly being carried by Department of Forest on the side slopes of embankments and berms of rivers which help in checking erosion of embankments and river berms/edges. Municipal Corporation, Ludhiana planted 4270 saplings of various plants including Shady, Medicinal, Fruit and Flowering trees at various sites across the catchment area of Budha Nallah.

Municipal Corporation, Ludhiana selected 6 sites for development of Biodiversity Parks at Ludhiana. Matter is being taken up with Department of Forest to explore the feasibility of using CAMPA funds for setting up of Bio-diversity parks and plantation purposes in the catchment areas of the rivers to enhance the biodiversity.

23. <u>Puducherry</u>

Ground water regulation & water conservation:

- As per the MPR, U.T of Puducherry prepared a Water Policy in 2016 to develop, conserve and manage the water resources in the region in a sustainable manner guided by the national perspective.
- The Puducherry Building By-laws and Zoning Regulations mandates the building owners to take effective measures for rain water harvesting and necessary conditions are incorporated in the Building permits. Rain water harvesting structures have been provided in all Government buildings.
- The Puducherry Ground Water Authority has been constituted under the Pondicherry Ground Water (Control & Regulatipn) Act, 2002 to effectively and efficiently control and regulate the extraction of groundwater in the Union Territory.
- In the present budget, a subsidy of Rs. 5000/- has been proposed for cultivation of Millets / Minor Millets which would help in reducing water usage. It is proposed to cover more area under precision farming.
- To augment ground water recharge in the river basins the Public Works Department has constructed 26bed dams in Puducherry and Karaikal region.
- Attractive subsidy assistance is being extended to farmers for installation of Drip/ Sprinkler irrigation devices and laying underground pipelines for conveyance of irrigation water.
- Tanks and ponds play a vital role in recharging ground water resources. The task of rehabilitation of tanks was taken up by the Government of Puducherry under Tank Rehabilitation Project, Puducherry (TRPP).

Protection and management of Flood Plain Zones (FPZ):

As per MPR, Flood protection scheme works has been included under Flood Management and Border Area Program for an amount of Rs.50 Crore in the proposal for the period from 2020-2025 for getting approval from Government. The flood / excess water due to rainfall run off will be released and regulated by Tamil nadu Irrigation Division from the upper reaches through these seven distributaries.

Maintaining minimum environmental flow of river:

As per MPR, Prohibitory order imposed on lorries, vans, two wheelers, bullock carts and any similar load carrying vehicles in the floodplain in order to prevent illegal sand mining, which affects the e-flow in the rivers. Check dams have been constructed to regulate the flow.

Plantation activities and Setting up biodiversity parks on flood plains:

As per MPR,along the bank of river Arasalar, Forest Department has planted 7362 plants in the year 2019. Further, 4000 mangroves have been planted on the bank of Chunnambar river Proposal will be submitted by the Forest Department seeking fund for developing 25 acre of Mangrove plantation as Biodiversity Park in Karaikal.

24. <u>Rajasthan</u>

Ground water regulation & water conservation:

- As per the Action Plan, 171.53 Hectare area is covered by drip and 1949 Hectare area is covered by sprinkler system in Kota Area. 246.75 Hectare area is covered by drip and 112 Hectare area is covered by sprinkler system in Keshoraipatan, Area.
- 1172 water harvesting structures have been built in Jaipur district.
- Promoting drip and sprinkler irrigation system. Subsidy being given for installation of such system.
- RWH structures which had been constructed by WRD Department in Kota – Keshaoraipatan stretches have been handed over to Gram Panchayat. Maintenance of these structures is to be done by Panchayati Raj Department.

Protection and management of Flood Plain Zones (FPZ):

There is no flood prone zone in the area and therefore zoning has not been carried out. Construction activities close to river is being regulated.

Maintaining minimum environmental flow of river:

E-flow release system is in place at the Chambal Barrage. E-flow of 5000 cusec is released for 35 minutes from Kota Barrage every Monday during non-e-flow period only, i.e. all Mondays during January to onset of Monsoon.

Plantation activities and Setting up biodiversity parks on flood plains:

Planting activity taken in RIICO I/A and Kota. Development of Abheda Biological Park Kota is under progress and is likely to be completed by March 2021.

25. SIKKIM

Ground water regulation & water conservation:

Few industries are extracting ground water in Rangit, Ranichu & Teesta river stretches. These units are required to obtain necessary permission from CGWA. Water Resource Department is executing 156 Nos. of Surface Minor Irrigation (SMI) Schemes under PMKSY (AIBP)sanctioned under the Ministry of Water Resources, Ganga Rejuvenation and River Development Government of India. In case of RWH land survey have been conducted by CGWA officials but the installation of said system is delayed due to COVID 19 situation.

Protection and management of Flood Plain Zones (FPZ):

All areas fall in hilly terrain and no flood plain zone has been identified.

Maintaining minimum environmental flow of river:
As per the MPR, all Hydro Electric projects (HEPs) have been directed to install environmental flow meter. Accordingly, 7 HEPs have installed e-flow meter to maintain 15-20% flow of river.

Plantation activities and Setting up biodiversity parks on flood plains:

Plantation along with engineering works has been proposed for rejuvenation of the four polluted river stretches.

26. TAMIL NADU

Ground water regulation & water conservation:

- A comprehensive Ground Water (Management and Development) Act, to regulate and manage the extraction of Ground Water is under active consideration of the Government.
- Individual households & commercial buildings are being insisted to put up rain water harvesting structures within their premises. Total of 91 RWH structures are existing and 300 have been proposed further.
- Tamil Nadu has 34 River Basins consisting of 127 Sub Basins. Under World Bank assisted Tamil Nadu Irrigated Agriculture Management Project (TNIAMP), Basin Management activities are under progress in River stretches of Thirumanimutharu and Thamirabarani. For other rivers stretches the same will be taken up in phased manner under TNIAMP.

Protection and management of Flood Plain Zones (FPZ):

As per the MPR, identification of FPZ areas has been completed in coordination with Revenue Department in River Sarabanga, River Thirumanimutharu, River Vasista and River Thamirabarani. For other rivers work is in progress.

Under the Tamil Nadu Protection of Tanks and Eviction of Encroachment Act., 2007, identified encroachments are being evicted in coordination with Revenue Department. Moreover, evictions of encroachment and resettlement have been proposed in Nadanthai Vaazhi Cauvery Scheme also.

Maintaining minimum environmental flow of river:

As per the MPR, in Tamil Nadu, Cauvery is the major river and as per Cauvery Water Disputes Tribunal's Order, 2.5.TMC ft of water is released in the river to maintain E Flow. Flow is only in the rainy season in River Sarabanga, River Thirumanimutharu and River Vasista.

Plantation activities and Setting up biodiversity parks on flood plains:

As per the MPR, Green belt is being developed continuously in the State by various departments under afforestation programmes. Further developments are also proposed under the "Nadanthai Vaazhi Cauvery Scheme" also. Tree planting on the banks of the river stretches along with the Forest Department will be completed before March 2021.

27. <u>Telangana</u>

Ground water regulation & water conservation:

Status provided in the MPR:

a. The WALTA Act has been adopted by the State of Telangana. As per rule 13 every individual or institution has to take a permission to dig a new bore well from Mandal WALTA Authority for Agriculture, Industries and Drinking water purposes
b. For industries, Groundwater Department will give the approvals for extraction of Groundwater by recommending new bore wells sites abiding WALTA rules.
c. Ground Water Department has identified (1358) Villages as Over exploited, considering Ground Water Estimation Resources assessment for the base year 2012-13

d. As per TSWALTA ACT, no extraction of Groundwater is permitted in Over Exploited villages for agriculture and Industrial except for drinking purpose.
e. Rain water harvesting theme park is developed at Road No.51, Jubilee Hills, Hyderabad.
f. The technical specifications for the RWH systems and recharge purposes and indicative list of available service provider information is placed in the website: "Hyderabadwater.gov.in"
g. The ground water department while issuing approval to industries for withdrawal of ground water is recommending to construct a suitable rain water harvest structure as one of the terms and conditions which has to be complied by the industry mandatorily.

Protection and management of Flood Plain Zones (FPZ):

As per the MPR, a Committee for notification of flood plain zone to collect data of past history of flooding and mitigating measures taken and for identification of new areas for flood mitigation has been formed and meeting was held in July 2020.Along Musi River Cleaning and clearance of Juliflora, Shrubs etc. and removal of silt has been carried out for free flow of River. Development of Green walk-ways and removal of debris along the Musi Riverunder Ecological Restoration of River Musi is taken up.

Maintaining minimum environmental flow of river:

Rivers in Telangana are Rain fed non-perennial rivers hence maintenance of e-flow is practically not possible.

Plantation activities and Setting up biodiversity parks on flood plains:

As per the MPR, encroachments removed under Muslim jung Bridge & Salarjung bridge, and Nayapool bridge. Galvalume sheets erected to prevent further encroachments. Landscaping work at a stretch of 300 meters is completed near High Court rubber dam. The plantation program called Haritha Haram is executed under which every year massive plantation is being taken up in the entire state.

28. <u>Tripura</u>

Ground water regulation & water conservation:

- As per the MPR, directions have been issued to obtain the NOC from Central Ground Water Authority to all the Industrial units located in the catchment areas of the rivers. Many of the units have also submitted the declarations along with the NOC from Central Ground Water Authority.
- Generation of mass awareness to conserve water and also for good irrigation practices is being carried out by the farmers in the catchment areas of rivers.
- All the industries located in the catchment areas using ground water for industrial purpose have been directed to construct rain water harvesting plant and the compliance has been ensured, even the roof top Rain Water Harvesting systems have been included for all new building.

Protection and management of Flood Plain Zones (FPZ):

As per the MPR, check dam has been installed to maintain the E-flow of the rivers. Regular monitoring is going on to check illegal encroachment.

The PWD (Water Resource) Department, Government of Tripura prepared Flood Plan Zoning maps showing the flood plain area for the six identified river stretches.

Maintaining minimum environmental flow of river:

Tender has been invited for installation of digital e-flow meter to monitor the minimum discharge during lean period and records to be maintained monthly basis after installation.

Check dam has been installed to maintain the E-flow of the river.

Plantation activities and Setting up biodiversity parks on flood plains:

Extensive river side plantation has been carried out on both sides of the rivers.
Bamboo Plantation on sides of the river banks has been done in collaboration with Forest Department, Tripura. Target achieved 100%.

29. Uttarakhand

Protection and management of Flood Plain Zones (FPZ):

Out of 09 polluted river stretches, 05 stretches are not perennial hence no flood plain zoning is to be done. Out of remaining 04 stretches, River Ganga (Haridwar to Sultanpur) has been notified and remaining (Suswa,Kosi and Gola rivers) flood plain zoning work is taken up presently and work will be completed within 18 month after receiving administrative as well as financial approval.

Maintaining minimum environmental flow of river:
Govt.of Uttrakhand has designated Uttrakhand Jal Vidyut Nigam Ltd. (UJVNL) as the monitoring agency for the compliance of e-flow.

Plantation activities and Setting up biodiversity parks on flood plains:

The plantation activities are being carried out in the larger catchment area of Ganges. In the year 2020-2021 about 4151 ha of plantation activities have been completed under the various schemes of CAMPA.

30. Uttar Pradesh (November) details not furnished in MPR as per this report.

Ground water regulation & water conservation:

- As per the MPR, State Government has notified The Uttar Pradesh Ground Water (Management and Regulation) Act, 2019 (UP Act No.-13 of 2019) dated 9th August 2019 for protecting, conserving, controlling and regulating ground water to ensure its sustainable management in the State, both quantitatively and qualitatively, especially in stressed rural and urban areas.

- As per Ground Water Resource Estimation 2017, out of 820 blocks of Uttar Pradesh, 82 blocks have been categorized as 'Over Exploitation', 47 as critical, 151 as semi critical, 540 safe. Out of 10 Urban Agglomerates, 9 have been categorized as 'Over Exploited' and 1 as 'Critical'.
- The 'Rajya Bhoojal Sanrakshan Mission' started from year 2017-18 to cover the works of different departments in problematic areas so as to get significant effect on Ground Water. It also proposes Roof Top Rain Water Harvesting.
- State has taken up rejuvenation of small rivers and streams in the State by way of desiltation of rivers, streams and ponds under MNREGA. Works in 20 rivers have been started.
- As per the Action Plan, following measures are proposed to be adopted by State as good irrigation practices:

a. Massive awareness programme is required in the State to make people aware about importance of precious resources and to prevent misuse of Ground Water.
b. Micro Irrigation Systems should be introduced in place of flood irrigation to save Ground Water and increase the productivity.
c. The crop pattern/ type should also change in problematic areas.
d. The whole state should be demarcated w.r.t Poor Ground Water Quality Zone.
e. A regulation is required for protecting, conserving and regulating ground water.
f. State Water Resource department has been directed by the RRC to adopt good irrigation practices, maintain e-flows, implement water shed management and rain water harvesting, develop green cover and biodiversity parks along the banks.

Protection and management of Flood Plain Zones (FPZ)

As per the MPR River stretch wise steps under taken by State Government is mentioned in below table:

Name of River	**Introduce pillars at suitable locations in the river flood plain for demarcation of the flood plain boundary for effective enforcement on eliminating incidences/ practices of waste disposal encroachment in the river bed**	
	Activity	**Timeline**
Hindon	50m from both banks will be declared as no construction/ no development zones	3 months
	Detail survey is being conducted by IIT Delhi	6 months
	Demarcation of flood plain will be made at suitable location by planting a row of suitable plants through Forest Department	9 months
Kali East/ Varuna/ Gomti/ Ramganga/ Sai	50m from both banks will be declared as no construction/ no development zone	3 months
	For detailed survey	6 months
	Demarcation of flood plain will be made at suitable location by planting a row of suitable plants through Forest Department	9 months
Yamuna	100m from both banks will be declared as no construction/ no development zones till the notification of the above purpose is issued based on studies	6 months

	Demarcation of flood plain will be made at suitable location by planting a row of suitable plants through Forest Department	9 months
Ganga	Detailed report of flood plain zone has been presented by Special Committee in O.A. 200/2014 to Hon'ble NGT	3 months
	Demarcation of flood plain zone will be made at suitable location as per Central Water Commission (CWC) report, will be made by fixing pillars at suitable locations	9 months
Betwa/ Ghaghra/ Rapti/ Saryu	100m from both banks will be declared as no construction/ no development zone	3 months
	For detailed survey	6 months
	Demarcation of flood plain will be made at suitable location by planting a row of suitable plants through Forest Department	9 months

Maintaining minimum environmental flow of river:

Details provided in the MPR are as below:

Name of River	River Stretch	Possibility of maintaining E-flow	Timeline
Perennial River Flow			
Hindon	Saharanpur to Ghaziabad	E-flow study will be carried by IIT Delhi or other agency	9 months
Yamuna	Azgarpur to Etawah, Shahpur to Prayagraj	E-flow will be studied and decided by Central Water Commission	12 months
Ganga	Kannauj to Varanasi	E-flow from Kannauj to Unnao is maintained from Narora Barrage and Kanpur Barrage as per directions of Central Water Commission 24 cumec- Nov to May 48 cumec- June to Oct	-
		E-flow from Unnao to Varanasi will be studied and decided by Central Water Commission	
Ramganga	Moradabad to Kannauj	E-flow study will be carried out by IIT Delhi or other agency	9 months
Betwa	Hamirpur to Wagpura		
Ghaghra	Barhalganj to Deoria		
Rapti	Domingarh to Rajghat		
Saryu	Ayodhya to Elafatganj		
Non- perennial River Flow			
Kali Nadi East	Muzaffarnagar to Gulaothi	As these are non-perennial river, e-flow cannot be maintained	
Varuna	Rameshwar to Varanasi		
Gomti	Sitapur to Varanasi		
Sai	Unnao to Jaunpur		

Plantation activities and setting up of Bio-diversity parks:

As per the MPR, status of plantation activities undertaken and proposed:

River Stretch	No. of Sampling	
	Planted Year 2019-20	**Proposed for 2020-21**
Hindon	55.34	55.64
Kali	65.93	69.35
Varuna	25.62	14.79
Yamuna	175.68	252.00
Gomti	180.26	151.99
Ganga	183.24	226.39
Ramganga	77.28	68.97
Betwa	24.61	49.78
Ghaghara	39.72	26.22
Sai	77.20	71.36
Rapti	57.25	29.08
Saryu	35.29	34.13
Total	**997.42**	**1049.70**

As per the MPR, Uttar Pradesh has identified the sites for the development of Bio-diversity parks in 25 districts in the main stem of Ganga and 2 districts in Yamuna covering a total area of 3591.984 ha. The project proposals for development of Bio-diversity parks are prepared under the supervision of Prof. C R Babu, former Pro Vice Chancellor, University of Delhi/ Emeritus Professor, CEMDE/ Incharge, Yamuna Bio Diversity park and his scientific team.

31. West Bengal

Ground water regulation & water conservation:

- As per the MPR, groundwater in the area is regulated by SWID, GoWB.
- The installation of Water Meter with telemetry system at Industrial Tube Wells for monitoring of real-time GW withdrawal is in progress.
- Micro Irrigation with supplementary water management activities is under progress. Further, activities such as increasing water use efficiency through good irrigation practices, soil and water conservation, cultivation of low water demanding crops and propagation of eco-friendly agriculture is being undertaken.
- For installing RWH system, a project has been undertaken jointly by WBPCB and P& RD Dept. under MGNREGA.In Damodar Barakar, and Ganga RWH work is in progress. However, 2 RWH structure are exisiting in Diamond Harbour-I, II, Block-I, II.

Protection and management of Flood Plain Zones (FPZ):

As per the MPR, work for protection to the eroding right bank of the river Churni is in progress. Further, Protection to the left bank of River Ganga from Mangal Pandey ghat to Malancha Tourist lodge for a length of 135 metre including renovation of sluice under Barrackpore Municipality is in progress.

Maintaining minimum environmental flow of river:

River	Priority Level	Remarks
Mahananda	**II**	Average flow of about 15.00 cumes is being released from Mahananda Barrage throughout the days for maintaining the minimum e-flow of river.The stretch of the river is perennial and has flow round the year. Water in this stretch is used for fishing and abstraction for city supply after treatment and disinfection.
Churni	**III**	The river is non perennial. Hanskhali, Krishnaganj and Ranaghat - 0.5 KM bank protection work to prevent erosion of the right bank at Bapujinagar GP, Hanskhali Nadia which will help to maintain e-flow. Proposed timeline : 31-3-2021 (estimation stage)
Dwarka	**III**	The river is non perennial. The river Dwarka has no freshwater up-stream flow. It receives runoff during monsoon and base flow is maintained from ground water pool during lean months.
Ganga	**III**	The river is a perennial river. The environmental flow is maintained through the release from Farakka barrage throughout the year.
Jalangi	**IV**	The river Kansi has freshwater supply from the Kangsabari Dam at Mukutmanipur as up-stream flow. It receives runoff during monsoon and base flow is maintained from ground water pool during lean months including the up-stream flow. The Kangsabati dam authority may be instructed to release sufficient water so that the ecological flow in this river is maintained even in the lean season of the year.
Kansi	**IV**	
Barakar	**V**	T There is no regulatory structure.The river system Barakar-Damodar has freshwater up-stream flow from the reservoirs Maithon and Panchet respectively. Both rivers receive huge runoff during monsoon and base flow is maintained primarily from the reservoir discharge.Mayurakshi river regulates the flow through this river.
Mayurakshi	**V**	
Dwarakeshwar	**V**	During the lean season, not much freshwater supply from upstream source. It receives runoff during monsoon and base flow is maintained from ground water pool during lean months including the up-stream flow
Kaljani	**V**	
Karola	**V**	
Rupnarayan	**V**	The river Rupnarayan is perennial has sufficient freshwater supply from upstream source as well as tidal event..The flow is naturally maintained from the river flow which is a combination of surface flow and base flow.
Silabati	**V**	The river Silabati has no freshwater supply from upstream source. It receives runoff during monsoon and base flow is maintained from ground water pool during lean months including the up-stream flow
Teesta	**V**	The river Teesta has freshwater supply from upstream source. It receives runoff during monsoon and base flow is maintained from ground water pool during lean months including the up-stream flow.Depending on Water availability, down- stream release is

River	Priority Level	Remarks
		regulated.

Plantation activities and setting up of Bio-diversity parks:

- As per the MPR, Plantation has been done in a massive way on both sides of the river of River Churni and Dwarka. Work in progress or proposed in other river stretches.
- One biodiversity park called Eco-Park has already been developed in New Town, Kolkata area. Government of West Bengal is going to set up Biodiversity Park at every block from the next financial year.

Item Nos. 01&02 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 593/2017

(With report of CMC dated 12.02.2021,
reports of OC dated 12.02.21 & 13.02.21)

Paryavaran Suraksha Samiti & Anr. Applicant(s)

Versus

Union of India & Ors. Respondent(s)

WITH

Original Application No. 673/2018

In re: News item published in "The Hindu" authored by Shri Jacob Koshy titled "More river stretches are now critically polluted: CPCB

Date of hearing: 22.02.2021

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

Respondent(s): Mr. D.P. Mathuria, Executive Director, NMCG
Mr. Raj Kumar, Advocate for CPCB
Mr. Pradeep Misra and Mr. Daleep Dhyani, Advocates for UPPCB
Ms. Madhumita Bhattacharjee, Advocate for State of West Bengal
Mr. Avijit Roy, Advocate for Assam PCB

ORDER

1. These two matters are being dealt with together in continuation of order dated 21.9.2020. **The first matter is follow up of judgment of the Hon'ble Supreme Court dated 22.02.2017 in Paryavaran Suraksha Samiti Vs. Union of India**[1], which mandates establishment and functioning of requisite ETPs/CETPs/STPs by 31.3.2018 and in default,

[1] (2017) 5 SCC 326

to take coercive measures. The judgement also laid down rigid timelines, enforcement mechanism and sources of funding. Even in absence of the said judgement, doing so is the mandate of the Water (Prevention and Control of Pollution) Act, 1974. The said Act established Central and State Pollution Board for prevention, abatement and control of rivers and streams and to restore wholesomeness of watercourses and controlling discharge of domestic and industrial wastes. Penalties are provided for contravention of the provisions of the Act. The Constitution of India under Article 243 W read with 12th Schedule entrusts responsibility of *"public health, sanitation conservancy and solid waste management"* to Municipalities. The Hon'ble Supreme Court held that the States will provide necessary support to such local bodies. This is to be monitored by the PCBs and the Secretaries, Environment in States and thereafter by the NGT. This Tribunal has been accordingly monitoring compliance in the last four years but regretfully with little progress as will be shown by the statistics. We propose to direct further monitoring by the Executive authorities henceforth for the reasons in this order.

2. **The second matter relates to remedial action for rejuvenation of 351 identified polluted river stretches in the country**, for which major step is preventing discharge of industrial and domestic waste in rivers or drains connected thereto. On this aspect both the matter overlap. **Other steps include preventing dumping of solid waste, plastic, hazardous, bio-medical and electronic wastes, regulation of flood plain zones, by keeping catchment areas free from encroachments, maintaining environment flow by adopting appropriate water conservation practices and other steps, controlling extraction of ground water, afforestation etc.** The Tribunal required setting of River Rejuvenation Committees (RRCs) in all States for the purpose. They were

to prepare and execute action plans, with budgets and timelines to give effect to the mandate of law. The Chief Secretaries of all States/UTs are to monitor compliance at State level and the Central Monitoring Committee (CMC) headed by the Secretary Jal Shakti, GoI, with CPCB and NMCG is to monitor compliance at national level. The situation continues to be grim, as has been repeatedly observed by this Tribunal. The polluted river stretches include Ganga and Yamuna, which have been dealt with by separate orders, apart from some other rivers which have been dealt with by separate orders individually, to which reference will be made. **This is affecting aquatic life, safety of food chain on account of contamination of water and resulting in drinking water crisis in the country. There are also large number of deaths and diseases due to water contamination. Further monitoring is proposed to be by the authorities themselves in terms of directions at the end of the order.**

3. **We now proceed to give the procedural history of the two matters, the status reports filed and directions for future compliance.**

Original Application No. 593/2017

4. Since this matter is follow up of the judgement of the Hon'ble Supreme Court in **Paryavaran Suraksha Samiti Vs. Union of India**, supra, directions in the judgement are quoted below:

> "***7.*** *Having effectuated the directions recorded in the foregoing paragraphs, the next step would be, to set up common effluent treatment plants.* ***We are informed, that for the aforesaid purpose, the financial contribution of the Central Government is to the extent of 50%, that of the State Government concerned (including the Union Territory concerned) is 25%. The balance 25%, is to be arranged by way of loans from banks****. The above loans, are to be repaid, by the industrial areas, and/or industrial clusters.* ***We are also informed that the setting up of a common effluent treatment plant, would ordinarily take approximately two years (in cases where the process has yet to be commenced).***

The reason for the above prolonged period, for setting up "common effluent treatment plants", according to the learned counsel, is not only financial, but also, the requirement of land acquisition, for the same*.*

x……x……x……

10. ***Given the responsibility vested in municipalities under Article 243-W of the Constitution, as also, in Item 6 of Schedule XII, wherein the aforesaid obligation, pointedly extends to "public health, sanitation conservancy and solid waste management", we are of the view that the onus to operate the existing common effluent treatment plants, rests on municipalities (and/or local bodies). Given the aforesaid responsibility, the municipalities (and/or local bodies) concerned, cannot be permitted to shy away from discharging this onerous duty. In case there are further financial constraints, the remedy lies in Articles 243-X and 243-Y of the Constitution. It will be open to the municipalities (and/or local bodies) concerned, to evolve norms to recover funds, for the purpose of generating finances to install and run all the "common effluent treatment plants", within the purview of the provisions referred to hereinabove. Needless to mention that such norms as may be evolved for generating financial resources, may include all or any of the commercial, industrial and domestic beneficiaries, of the facility. The process of evolving the above norms, shall be supervised by the State Government (Union Territory) concerned, through the Secretaries, Urban Development and Local Bodies, respectively (depending on the location of the respective common effluent treatment plant). The norms for generating funds for setting up and/or operating the "common effluent treatment plant" shall be finalised, on or before 31-3-2017, so as to be implemented with effect from the next financial year. In case, such norms are not in place, before the commencement of the next financial year, the State Governments (or the Union Territories) concerned, shall cater to the financial requirements, of running the "common effluent treatment plants", which are presently dysfunctional, from their own financial resources.***

11. *Just in the manner suggested hereinabove, for the purpose of setting up of "common effluent treatment plants", the State Governments concerned (including, the Union Territories concerned) will prioritise such cities, towns and villages, which discharge* ***industrial pollutants and sewer, directly into rivers and water bodies.***

12. *We are of the view that in the manner suggested above,* ***the malady of sewer treatment, should also be dealt with simultaneously.*** *We, therefore, hereby direct that "sewage treatment plants" shall also be set up and made functional, within the timelines and the format, expressed hereinabove.*

13. We are of the view that mere directions are inconsequential, unless a rigid implementation mechanism is laid down. *We, therefore, hereby provide that the directions pertaining to continuation of industrial activity only when there is in place a functional "primary effluent treatment plants", and the setting up of functional "common effluent treatment plants" within the timelines, expressed above, shall be of the Member Secretaries of the Pollution Control Boards concerned.* ***The Secretary of the Department of Environment, of the State Government concerned (and the Union Territory concerned), shall be answerable in case of default. The Secretaries to the Government concerned shall be responsible for monitoring the progress and issuing necessary directions to the Pollution Control Board concerned, as may be required, for the implementation of the above directions.*** *They shall be also responsible for collecting and maintaining records of data, in respect of the directions contained in this order. The said data shall be furnished to the Central Ground Water Authority, which shall evaluate the data and shall furnish the same to the Bench of the jurisdictional* ***National Green Tribunal.***

14. To supervise complaints of non-implementation of the instant directions, the Benches concerned of the National Green Tribunal, will maintain running and numbered case files, by dividing the jurisdictional area into units. The abovementioned case files will be listed periodically. ***The Pollution Control Board concerned is also hereby directed to initiate such civil or criminal action, as may be permissible in law, against all or any of the defaulters.***

x……x……x…….

16. It however needs to be clarified, that the instant directions and time lines, shall not in any way dilute any time lines and directions issued by Courts or Benches of the National Green Tribunal, hitherto before, wherein the postulated time lines would expire before the ones expressed through the directions recorded above. ***It is clarified, that the time lines, expressed hereinabove will be relevant, only in situations where there are no prevalent time line(s), and also, where a longer period, has been provided for."***

(emphasis supplied)

5. The Tribunal issued notice to all States/UTs, PCBs/ PCCs, and sought status reports. It considered the status reports about the gaps in waste generation and setting up of requisite number of treatment plants. The CPCB was directed to prepare an action plan for compliance of the order of the Hon'ble Supreme Court and file quarterly reports before this

Tribunal and also upload the same on its website. Penal action was to be taken for failure in compliance of the orders of the Hon'ble Supreme Court by way of recovery of compensation and other coercive means. **Orders passed by this Tribunal earlier include those dated 25.05.2017, 03.08.2018, 19.02.2019, 28.08.2019, 21.05.2020 and 21.09.2020.**

6. By order of **28.08.2019 in OA 593/2017**, **the Tribunal set up a compensation regime for default.** The Tribunal considered the CPCB reports dated 30.05.2019, 19.07.2019 and 14.08.2019 with compiled status of setting up of ETPs/ CETPs/STPs and methodology for assessment of environmental compensation. The compensation regime discussed in the said order is quoted below:

> *"14. A report has also been prepared on the scale of environmental compensation to be recovered from individual/authorities for causing pollution or failure for preventing causing pollution, apart from illegal extraction of ground water, failure to implement Solid waste Management Rules, damage to environment by mining and steps taken to explore preparation of an annual environmental plan for the country. Extracts from the report which are considered significant for this order are:*
>
> > ***"I. Environment Compensation to be levied on Industrial Units***
> >
> > ***Recommendations***
> >
> > *The Committee made following recommendations:*
> >
> > *1.5.1 To begin with, Environmental Compensation may be levied by CPCB only when CPCB has issued the directions under the Environment (Protection) Act, 1986. In case of a, band c, Environmental Compensation may be calculated based on the formula "EC= Pl x N x Rx S x LF", wherein, Pl may be taken as 80, 50 and 30 for red, orange and green category of industries, respectively, and R may be taken as 250. Sand LF may be taken as prescribed in the preceding paragraphs*
> >
> > *1.5.2 In case of d, e and f, the Environmental Compensation may be levied based on the detailed investigations by Expert Institutions/Organizations.*
> >
> > *1.5.3 The Hon'ble Supreme Court in its order dated 22.02.2017 in the matter of Paryavaran Suraksha Samiti and another v/s Union of India and others {Writ*

Petition {Civil) No. 375 of 2012), directed that all running industrial units which require "consent to operate" from concerned State Pollution Control Board, have a primary effluent treatment plant in place. Therefore, no industry requiring ETP, shall be allowed to operate without ETP.

1.5.4 EC is not a substitute for taking actions under EP Act, Water Act or Air Act. In fact, units found polluting should be closed/prosecuted as per the Acts and Rules.

II. Environmental Compensation to be levied on all violations of Graded Response Action Plan (GRAP) in NCR.

Table No. 2.1: Environmental Compensation to be levied on all violations of Graded Response Action Plan (GRAP) in Delhi-NCR.

Activity	***State Of Air Quality***	***Environmental Compensation ()***
Industrial Emissions	*Severe +/Emergency*	*Rs 1.0 Crore*
	Severe	*Rs 50 Lakh*
	Very Poor	*Rs 25 Lakh*
	Moderate to Poor	*Rs 10 Lakh*
Vapour Recovery System (VRS) at Outlets of Oil Companies		
i. Not installed	*Target Date*	*Rs 1.0 Crore*
ii. Non functional	*Very poor to Severe +*	*Rs 50.0 Lakh*
	Moderate to Poor	*Rs 25.0 Lakh*
Construction sites (Offending plot more than 20,000 Sq.m.)	*Severe +/Emergency*	*Rs 1.0 Crore*
	Severe	*Rs 50 Lakh*
	Very Poor	*Rs 25 Lakh*
	Moderate to Poor	*Rs 10 Lakh*
Solid waste/ garbage dumping in Industrial Estates	*Very poor to Severe +*	*Rs 25.0 Lakh*
	Moderate to Poor	*Rs 10.0 Lakh*
Failure to water sprinkling on unpaved roads		
a) Hot-spots	*Very poor to Severe +*	*Rs 25.0 Lakh*
b) Other than Hot-spots	*Very poor to Severe +*	*Rs 10.0 Lakh*

III. Environmental Compensation to be levied in case of failure of preventing the pollutants being discharged in water bodies and failure to implement waste management rules:

Table No. 3.3: Minimum and Maximum EC to be levied for untreated/partially treated sewage discharge

Class of the City/Town	***Mega-City***	***Million-plus City***	***Class-I City/Town and others***

Minimum and Maximum values of EC (Total Capital Cost Component) recommended by the Committee (Lacs Rs.)	*Min. 2000 Max. 20000*	*Min. 1000 Max. 10000*	*Min. 100 Max. 1000*
Minimum and Maximum values of EC (O&M Cost Component) recommended by the Committee (Lacs Rs./day)	*Min. 2 Max. 20*	*Min. 1 Max. 10*	*Min. 0.5 Max. 5*

Table No. 3.4: Minimum and Maximum EC to be levied for improper municipal solid waste management

Class of the City/Town	***Mega-City***	***Million-plus City***	***Class-I City/Town and others***
Minimum and Maximum values of EC (Capital Cost Component) recommended by the Committee (Lacs Rs.)	*Min. 1000 Max. 10000*	*Min. 500 Max. 5000*	*Min. 100 Max. 1000*
Minimum and Maximum values of EC (O&M Cost Component) recommended by the Committee (Lacs Rs./day)	*Min. 1.0 Max. 10.0*	*Min. 0.5 Max. 5.0*	*Min. 0.1 Max. 1.0*

3.3 Environment Compensation for Discharge of Untreated/Partially Treated Sewage by Concerned Individual/ Authority:

BIS 15-1172:1993 suggests that for communities with population above 100,000, minimum of 150 to 200 lpcd of water demand is to be supplied. Further, 85% of return rate (CPHEEO Manual on Sewerage and Sewage Treatment Systems, 2013}, may be considered for calculation of total sewage generation in a city. CPCB Report on "Performance evaluation of sewage treatment plants under NRCD, 2013", describes that the capital cost for 1 MLD STP ranges from 0.63 Cr. to 3 Cr. and O&M cost is around Rs. 30,000 per month. After detail deliberations, the Committee suggested to assume capital cost for STPs as Rs. 1.75 Cr/MLD (marginal average cost). Further, expected cost for conveyance system is assumed as Rs. 5.55 Cr./MLD (marginal average cost) and annual O&M cost as 10% of the combined capital cost. Population of the city may be taken as per the latest Census of India. Based on these assumptions, Environmental Compensation to be levied on concerned ULB may be calculated with the following formula:

EC= Capital Cost Factor x [Marginal Average Capital Cost for Treatment Facility x (Total Generation-Installed Capacity) *+* ***Marginal Average Capital Cost for Conveyance Facility x (Total Generation -Operational Capacity)]+ O&M Cost Factor x Marginal Average O&M Cost***
x (Total Generation- Operational Capacity) x No. of Days for which facility was not available
+ Environmental Externality x No. of Days for which facility was not available

Alternatively;

EC (Lacs Rs.)= [17.S{Total Sewage Generation - Installed Treatment Capacity)+ 55.S{Total Sewage Generation-Operational Capacity)] *+* ***0.2(Sewage Generation-Operational Capacity) x N*** *+* ***Marginal Cost of Environmental Externality x (Total Sewage Generation-Operational Capacity) X N***

Where; N= Number of days from the date of direction of CPCB/SPCB/PCC till the required
capacity systems are provided by the concerned authority

Quantity of Sewage is in MLD

xxx ……. xxx ……xxx

3.4 Environment Compensation to be Levied on Concerned Individual/Authority for Improper Solid Waste Management:

Environmental Compensation to be levied on concerned ULB may be calculated with the following formula:
EC = Capital Cost Factor x Marginal Average Cost for Waste Management x (Per day waste generation-Per day waste disposed as per the Rules) + O&M Cost Factor x Marginal Average O&M Cost x (Per day waste generation-Per day waste disposed as per the Rules) x Number of days violation took place + Environmental Externality x N
Where;
Waste Quantity in tons per day (TPD)
N= Number of days from the date of direction of CPCB/SPCB/PCC till the required capacity systems are provided by the concerned authority
Simplifying;
EC (Lacs Rs.) = 2.4(Waste Generation - Waste Disposed as per the Rules) +0.02 (Waste Generation Waste Disposed as per the Rules) x N + Marginal Cost of Environmental Externality x

(Waste Generation - Waste Disposed as per the Rules) x N

xxx ……. xxx ……xxx

IV. Environmental Compensation in Case of Illegal Extraction of Ground Water

4.5 Formula for Environmental Compensation for illegal extraction of ground water

The committee decided that the formula should be based on water consumption (Pump Yield & Time duration) and rates for imposing Environmental Compensation for violation of illegal abstraction of ground water. The committee has proposed following formula for calculation of Environmental Compensation (EC_{Gw}):

EC_{GW} = Water Consumption per Day x No. of Days x Environmental Compensation Rate for illegal extraction of ground water {ECR_{Gw})

Where water Consumption is in m^3/day and ECRGw in Rs./m^3

Yield of the pump varies based on the capacity/power of pump, water head etc. For reference purpose, yield of the pump may be assumed as given in ***Annexure-VI.***

Time duration will be the period from which pump is operated illegally.

In case of illegal extraction of ground water, quantity of discharge as per the meter reading or as calculated with assumptions of yield and time may be used for calculation of EC_{Gw}.

4.6 Environmental Compensation Rate (ECRGw) for illegal use of Ground Water:

The committee decided that the Environmental Compensation Rate (ECR_{Gw}) for illegal extraction of ground water should increase with increase in water consumption as well as water scarcity in the area. Further, ECR_{Gw} are kept relaxed for drinking and domestic use as compared to other uses, considering the basic need of human being.

As per CGWB, safe, semi-critical, critical and over-exploited areas are categorized from the ground water resources point of view (CGWB, 2017). List of safe, semi-critical, critical and over-exploited areas are available on the website of CGWB and can be accessed from- http://cgwa-

noc.gov.in/LandingPage/NotifiedAreas/Categorization 0fAssessmentUnits.pdf#ZOOM=150.
Environmental Compensation Rates (ECR_GW) for illegal use of ground water (ECR_GW) for various purposes such as drinking/domestic use, packaging units, mining and industrial sectors as finalized by the committee are given in tables below:

4.6.1 ECRGw for Drinking and Domestic use:

Drinking and Domestic use means uses of ground water in households, institutional activity, hospitals, commercial complexes, townships etc.

SI. No.	***Area Category***	***Water Consumption (m^3/day)***			
		<2	***2 to <5***	***5 to <25***	***25 & above***
		Environmental Compensation Rate (ECRGw) in Rs./m^3			
1	*Safe*	*4*	*6*	*8*	*10*
2	*Semi Critical*	*12*	*14*	*16*	*20*
3	*Critical*	*22*	*24*	*26*	*30*
4	*Over-Exploited*	*32*	*34*	*36*	*40*
Minimum EC_GW=Rs 10,000/- (for households) and Rs. 50,000 (for institutional activity, commercial complexes, townships etc.)					

4.6.2 ECRGw for Packaged drinking water units:

SI. No.	***Area Category***	***Water Consumption (m^3/day)***			
		<200	***200 to <1000***	***1000 to <5000***	***5000 &***
		Environmental Compensation Rate (ECR_{Gw}) in Rs./m^3			
1	*Safe*	*12*	*18*	*24*	*30*
2	*Semi critical*	*24*	*36*	*48*	*60*
3	*Critical*	*36*	*48*	*66*	*90*
4	*Over-exploited*	*48*	*72*	*96*	*120*
Minimum EC_GW=Rs 1,00,000/-					

4.6.3 ECR_{Gw} for Mining, Infrastructure and Dewatering Projects

SI. No.	***Area Category***	***Water Consumption (m^3/day)***			
		<200	***200 to <1000***	***1000 to <5000***	***5000 & above***
		Environmental Compensation Rate (ECR_{Gw}) in Rs./m^3			
1	*Safe*	*15*	*21*	*30*	*40*
2	*Semi critical*	*30*	*45*	*60*	*75*
3	*Critical*	*45*	*60*	*85*	*115*
4	*Over-exploited*	*60*	*90*	*120*	*150*
Minimum EC_GW=Rs 1,00,000/-					

4.6.4 ECRGw for Industrial Units:

SI. No.	***Area Category***	***Water Consumption (m^3/day)***			
		<200	***200 to <1000***	***1000 to <5000***	***5000 & above***
		Environmental Compensation Rate (ECRGw) in			
1	*Safe*	*20*	*30*	*40*	*50*
2	*Semi critical*	*40*	*60*	*80*	*100*
3	*Critical*	*60*	*80*	*110*	*150*

4	*Over-exploited*	*80*	*120*	*160*	*200*
Minimum EC_{Gw} = Rs 1,00,000/-					

4.8 Recommendations

The committee has given following recommendations:

- *The minimum Environmental Compensation for illegal extraction of ground water for domestic purpose will be Rs. 10,000, for institutional/commercial use will be 50,000 and for other uses will be 1,00,000.*
- *In case of fixation of liability, it always lies with current owner of the premises where illegal extraction is taking place.*
- *Time duration may be assumed to be one year in case where no evidence for period of installation of bore well could be established.*
- *For Drinking and Domestic use, where metering is not present but storage tank facility is available, minimum water consumption per day may be assumed as similar to the storage capacity of the tank.*
- *For industrial ground water use, where metering is not available, water consumption may be assumed as per the consent conditions. Further, where in case industry is operating without consent, water consumption may be calculated based on the plant capacity (on the recommendation of SPCB/PCC, if required). SPCB/PCC may bring the issue of illegal extraction of ground water in industries in to the notice of CGWA for appropriate action by CGWA.*
- *Authorities assigned for levy EC and taking penal action are listed below:*

S. No.	***Actions***	***Authority***
1.	*To seal the illegal bore-well/tube-well to stop extraction of water and further closure of project*	*District Collector*
2.	*To levy EC_{Gw} as per prescribed method*	*District Collector,*
3.	*To levy EC on water pollution, as per the method prescribed in report of CPCB- "EC on industrial pollution"*	*CPCB/SPCB/PCC*
4.	*Prosecution of violator*	*CGWA under EP Act*
		SPCB/PCC under Air and Water Act

- *CGWA may maintain a separate account for collection and utilization of fund, collected through the prescribed methodology in this report."*

The Tribunal noted that **deficit in capacity of liquid waste treatment was 62 percent which was the major source of polluting rivers and water bodies**. In the said order, the following directions were issued:-

> ***"****21. We may now sum up our directions:*
>
> *(i)* ***The Environmental compensation regime fixed for industrial units, GRAP, solid waste, sewage and ground water in the report dated 30.05.2019 is accepted*** *and the same may be acted upon as an interim measure.*
>
> *(ii) SPCBs/PCCs may ensure remedial action against non-compliant CETPs or individual industries in terms of not having ETPs/fully compliant ETPs or operating without consent or in violation of consent conditions. This may be overseen by the CPCB. CPCB may continue to compile information on this subject and furnish quarterly reports to this Tribunal which may also be uploaded on its website.*
>
> ***(iii) All the Local Bodies and or the concerned departments of the State Government have to ensure 100% treatment of the generated sewage and in default to pay compensation which is to be recovered by the States/UTs, with effect from 01.04.2020. In default of such collection, the States/UTs are liable to pay such compensation. The CPCB is to collect the same and utilize for restoration of the environment.***
>
> *(iv) The CPCB needs to collate the available data base with regard to ETPs, CETPs, STPs, MSW facilities, Legacy Waste sites and prepare a river basin-wise macro picture in terms of gaps and needed interventions.*
>
> ***(v) The Chief Secretaries of all the States/UTs may furnish their respective compliance reports on this subject also in O.A. No. 606/2018.***
>
> *List for further consideration on 21.05.2020, unless required earlier. A copy of this order be placed on the file of O.A. No. 606/2018 relating to all States/UTs and be sent to Chief Secretaries of all States/UTs, Secretary MoEF&CC, Secretary Jal Shakti and Secretary, MoHUA.****"***
>
> ***(emphasis supplied)***

7. Thereafter on **21.05.2020**, **the Tribunal directed data collection by river basin; reduction of timelines; the Central Government to**

facilitate the State/UTs efforts; and CPCB to study extent of reduction of pollution load. The following directions were issued:-

> *"26. Summary of directions:*
>
> *i. All States/UTs through their concerned departments such as Urban/Rural Development, Irrigation & Public Health, Local Bodies, Environment, etc. may ensure formulation and execution of plans for sewage treatment and utilization of treated sewage effluent with respect to each city, town and village, adhering to the timeline as directed by Hon'ble Supreme Court. STPs must meet the prescribed standards, including faecal coliform.*
>
> ***CPCB may further continue efforts on compilation of River Basin-wise data**. Action plans be firmed up with Budgets/Financial tie up. Such plans be overseen by Chief Secretary and forwarded to CPCB before 30.6.2020. CPCB may consolidate all action plans and file a report accordingly.*
>
> ***Ministry of Jal Shakti and Ministry of Housing and Urban Affairs may facilitate States/UTs for ensuring that water quality of rivers, lakes, water bodies and ground water is maintained.***
>
> *As observed in para 13 above, 100% treatment of sewage/effluent must be ensured and strict coercive action taken for any violation to enforce rule of law. Any party is free to move the Hon'ble Supreme Court for continued violation of its order after the deadline of 31.3.2018. This order is without prejudice to the said remedy as direction of the Hon'ble Supreme Court cannot be diluted or relaxed by this Tribunal in the course of execution.* ***PCBs/PCCs are free to realise compensation for violations but from 1.7.2020, such compensation must be realised as per direction of this Tribunal failing which the erring State PCBs/PCCs will be accountable.***
>
> *ii.* ***The CPCB may study and analyse the extent of reduction of industrial and sewage pollution load on the environment, including industrial areas and rivers and other water bodies and submit its detailed report to the Tribunal.***
>
> *iii. During the lockdown period there are reports that the water quality of river has improved, the reasons for the same may be got studied and analysed by the CPCB and report submitted to this Tribunal. If the activities reopen, the compliance to standards must be maintained by ensuring full compliance of law by authorities statutorily responsible for the same.*

iv. *Accordingly, we direct that States which have not addressed all the action points with regard to the utilisation of sewage treated water may do so promptly latest before 30.06.2020, reducing the time lines in the action plans.* ***The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected.*** *The CPCB may compile further information on the subject accordingly.*

v. *Needless to say that since the issue of sources of funding has already been dealt with in the orders of the Hon'ble Supreme Court, the States may not put up any excuse on this pretext in violation of the judgment of the Hon'ble Supreme Court."*

8. The matter was last considered on 21.09.2020 in light of the CPCB report dated 16.09.2020 giving the river basin wise data and also the status of industrial and sewage pollution load. The consideration on this aspect in the order dated 21.09.2020 is as follows:-

"Review of Compliance Status Reports

CPCB Report dated 16.09.2020

7. In light of the order of 21.05.2020, CPCB filed a report dated 16.09.2020. In substance, the report states that 1831 industries are working without ETP, 1123 with non-compliant ETPs, there are 62 non-compliant CETPs, 530 non-compliant STPs, several projects are still at proposal/construction stage, OCEMS data for 11 PCBs/PCCs is not in public domain, there is a gap in waste generated and treated and large number of dump sites are not scientifically managed resulting in contamination of water. ***There is, thus, a need for more rigorous and continuous monitoring, including further steps for coercive measures to enforce rule of law and citizens' right to clean environment. The authorities must ensure reduction in pollution load for meaningful good governance.***

8. The findings in the report include:-

"A. 2.0 Compliance Status of ETPs, CETPs & STPs reported by SPCBs/PCCs

i. *As per the data received from SPCBs/PCCs, out of total 64,484 number of industries requiring ETPs, 62,653 industries are operating with functional ETPs and* ***1,831 industries are operating without ETPs.*** *Show-cause notices and closure directions have been issued to 856 and 824 industries,*

respectively for operating without ETPs. Legal cases have been filed against 6 industries and action is under process for 145 industries. Out of 62,653 operational industries, 61,530 industries are complying with environmental standards and ***1,123 industries are noncomplying****. Show-cause notices and closure directions have been issued to 613 and 135 industries, respectively, for non-compliance. Legal cases have been filed against 13 industries and action is under process for 362 industries.*

ii. *As per the data received from SPCBs/PCCs, there are total 191 CETPs, out of which 129 CETPs are complying with environmental standards and* ***62 CETPs are non-complying****. Show-cause notices and closure directions have been issued to 20 and 5 CETPs, respectively for noncompliance. Legal cases have been filed against 8 CETPs and action is under process for 29 CETPs.*

iii. *As per the data received from SPCBs/PCCs, there are total 15,730 STPs (including municipal and other than municipal (non-municipal/stand-alone) STPs), out of which, 15,200 STPs are complying with environmental standards and* ***530 STPs are non-complying****. Show-cause notices and closure directions have been issued to 262 and 28 STPs, respectively, for non-compliance. Legal cases have been filed against 17 STPs and action is under process for 223 STPs.*

iv. *As per the data received from SPCBs/PCCs, there are 84 CETPs in construction/proposal stage, whereas, for STPs, 1,081 projects (municipal and non-municipal) are under construction/proposal stage.*

v. *As per the data received from SPCBs/PCCs, 15 SPCBs/PCCs (namely- Andhra Pradesh, Assam, Bihar, Goa, Haryana, Himachal Pradesh, Jharkhand, Kerala, Madhya Pradesh, Maharashtra, Odisha, Puducherry, Tamil Nadu, Telangana and West Bengal) are displaying OCEMS data in public domain.* ***The links provided by Gujarat and Uttarakhand SPCBs are password protected and data is not available in public domain. The 4 SPCBs (namely, Chhattisgarh, Jammu & Kashmir, Punjab and Sikkim) have not provided appropriate web links. Further, Chandigarh PCC has clarified that OCEMS data will be displayed after upgradation of STPs. Karnataka SPCB has requested for time till 30.09.2020 to make the system operational.*** *Mizoram SPCB has informed that there is no industry*

requiring OCEMS connectivity. Lakshadweep PCC informed that there is no industry in the Union Territory of Lakshadweep.

OCEMS data of 11 SPCBs/PCCs (Andaman & Nicobar, Arunachal Pradesh, Daman & Diu, Dadra Nagar Haveli, Delhi, Manipur, Meghalaya, Nagaland, Rajasthan, Tripura and Uttar Pradesh) is not available in public domain.

B. 3.1 Sewage Management

3.1.1 Compliance status w.r.t. the directions under Para 24 and 26 (iv)

i. *CPCB requested all States/UTs vide email/letter dated 03.06.2020, 24.06.2020 and 24.08.2020 to submit action plans as per the format and compliance reports. Further, CPCB has also provided link of the report submitted to the Hon'ble NGT indicating observations/ shortcomings on action plans of reuse of treated sewage, to the SPCBs/PCCs. A copy of the correspondences is attached at* ***Annexure-II.***

ii. *Accordingly, action plan was received from the State of Punjab and revised action plans were received from Jammu and Kashmir (UT), Lakshadweep, Rajasthan (specific to Ajmer district), and Sikkim. Information is awaited from other States.* ***The gap analysis of action plans is attached*** *as* ***Annexure-III.***

iii. *4 States/UTs (Arunachal Pradesh, Manipur,* ***Uttar Pradesh, Uttarakhand) have not submitted any information*** *till date.*

3.1.2 Compliance w.r.t. directions under Para 26 (i)

i. *CPCB communicated to all SPCBs/PCCs to provide information on STPs inventory as per the format, vide letter dated 15/07/2020. A copy of letter is attached as Annexure-IV. Based on continuous follow-up, all SPCBs/PCCs have provided information on STPs and same is attached as Annexure-V.*
ii. *CPCB vide letter dated 24.08.2020 has requested all States/UTs to submit action plans through online portal of CPCB.*

C. 3.2 River basin-wise macro picture of ETPs, CETPs, STPs, MSW Facilities and Legacy Waste Sites

The Hon'ble NGT, in the matter of OA No. 593 of 2017, vide order 28.08.2019, directed CPCB to collect the data of ETPs, CETPs, STPs, MSW facilities and legacy waste sites

and prepare a river-basin-wise macro picture in terms of gaps.

In compliance of the Hon'ble NGT's directions, CPCB has developed an online portal for the collection of river-basin wise information. The details of the river basins associated with the concerned states, as adopted from River Basin Classification, 2019 of Central Water Commission, is given at ***Annexure-VI.*** *The portal, with modules for ETPs, CETPs and STPs, is operational and SPCBs/PCCs are in the process of using the same for submission of information.*

3.2.1. Status of ETPs:

CPCB has been collecting the industry specific information related to river basin, locational coordinates (latitude & longitude), disposal point for trade effluent, treatment capacity & actual treatment, environmental compliance status, action taken by concerned authority in case of non-compliance, etc. Further, provision for capturing information regarding pollution load of four major water quality parameters i.e. pH, BOD, COD and TSS are being also incorporated. SPCBs/PCCs have been reminded to expedite the work for data submission, vide letter dated 12.05.2020, 30.07.2020 and 25.08.2020 (email). Copy of the correspondences is given at ***Annexure-VII (a to c).***

So far, information from 6 SPCBs/PCCs (namely; Delhi, Haryana, Daman & Diu, Mizoram, Odisha and Tripura) have been received through CPCB portal. Rest of the SPCBs/PCCs are under the process of compilation and submission of data. The data submitted by Haryana, Daman & Diu, Delhi and Odisha SPCB/PCC has some shortcomings, which were communicated vide letter dated 07.09.2020 & 09.09.2020. A Copy of the correspondences to concerned SPCBs/PCCs is given at ***Annexure-VIII (a to d).***

Although, to have the complete and clear picture, data from all the States/UTs is required, however, preliminary analysis based on the information received from 04 SPCBs/PCCs, is as follows:

a. ***River basin-wise disposal point of industrial units for the discharge of trade effluent:***
   As per the river basin-wise information received from 04 SPCBs/PCCs (Delhi, Daman & Diu, Mizoram and Tripura), there are total 1,544 industrial units in these States/UTs.

The river basin-wise number of units with respect to their effluent discharge points is summarized in the following table:

Table No. 1: River basin-wise status of trade effluent generating units and their disposal points

SI. No.	River Basin	State/ UT	Number of units w.r.t. their effluent disposal points									Total
			CETP	Canal	Drain	Land/ Irrigation	River	Sewer	STP	ZLD	Others	
1	Ganga	Delhi	817	1	571	0	0	26	1	3	0	**1419**
2	West flowing rivers from Tapi to Tadri	Daman & Diu	0	0	0	2	1	0	0	20	21	**44**
3	Minor river basins drainage to Bangladesh & Burma	Mizoram	0	0	61	0	0	0	0	0	0	**61**
		Tripura	4	0	2	I	2	0	0	0	II	**20**
Total			**821**	**1**	**634**	**3**	**3**	**26**	**1**	**23**	**32**	**1544**

b. River basin-wise discharge of treated/partially treated effluents

Based on the information received from Delhi, Daman & Diu, Mizoram and Tripura SPCB/PCC, river basin-wise quantum of treated/partially treated industrial effluents, is summarized in the following table:

Table No. 2: River basin-wise status of discharge of treated/partially treated effluent at various disposal points

SI. No.	River Basin	State/UT	Discharge Volume at the				Particular discharge point (KLD)					Total
			CETP	Canal	Drain	Land/ irrigation	River	Sewer	STP	ZLD	Others	
I	Ganga	Delhi	6178	0	6721	0	0	177	195	6	0	13277
2	West flowing rivers from Tapi to Tadri	Daman & Diu	0	0	0	24	400	0	0	1210	233	1867
3	Minor river basins drainage to Banglad esh & Burma	Mizoram	0	0	43	0	0	0	0	0	0	43
		Tripura	545	0	2	18	1320	0	0	0	470	**2355**
Total			**6723**	0	**6766**	**42**	**1720**	**177**	**195**	**1216**	**703**	**17542**

c. River basin-wise discharge of untreated/partially treated industrial trade effluent

As per the available information for the 04 States/UTs, the Table No. 3 summarizes the river basin-wise status of the designed capacity of ETPs, daily average volume of effluent

generation and Discharge of untreated/partially treated effluent (KLD).

Table No. 3 River-basin wise industrial effluent generation and treatment

Sl. No.	***River Basin***	***State/UT***	***Designed capacity of ETPs (KLD)***	***Daily Average Volume of Effluent Generation***	***Daily average volume of treated effluent (KLD)***	***Discharge of untreated/ partially treated effluent (KLD)***
			(i)	***(ii)***	***(iii)***	***(iv) = (ii) — (iii)***
1	*Ganga*	*Delhi*	*32358*	*13417*	*13338*	*79*
2	*West flowing rivers from Tapi to Tari*	*Daman & Diu*	*4351*	*1867*	*1867*	*0*
3	*Minor river basins drainage to Bangladesh & Burma*	*Mizoram*	*95*	*44*	*43*	*1*
		Tripura	*13869*	*2359*	*2355*	*4*
Total			***50673***	***17687***	***17603***	***84***

3.2.2 River basin-wise status of CETPs:

So far, river basin-wise information of CETPs have been received from 6 SPCBs/PCCs (namely Chandigarh, Delhi, Mizoram and Tripura, Daman & Diu and Dadra Nagar Haveli). The Chandigarh, Mizoram Daman & Diu and Dadra Nagar Haveli, have informed that there is no CETP in their State/UT. The information from other SPCBs/PCCs is awaited.

3.2.3 River basin-wise status of STPs:

CPCB has developed a portal to facilitate submission of river basin-wise data for STPs. CPCB vide letter dated 24.08.2020 has requested all States/UTs to submit action plans and river basin-wise data through portal. The information from SPCBs/PCCs is awaited.

3.2.4 River basin-wise status of MSW Facilities and Legacy Waste Sites:

CPCB developed the formats for collection of information regarding Municipal solid Waste (MSW) processing facilities, landfill sites and dumpsites from all the States/UTs, to ensure compliance with Hon'ble NGT Directions. The formats circulated to all States/UTs vide letter dated July 31, 2020 ***Annexure-IX.*** *Information has been received from 10 States/UTs (namely; Kerala, Maharashtra, Jammu & Kashmir, Himachal Pradesh, Mizoram, Tamil Nadu, Delhi, West Bengal, Meghalaya & Pondicherry). Out of the 10 states, Tamil Nadu has provided*

information for only dumpsites. On the basis of information, as submitted by States/UTs, the status is as follow:

3.2.4.1 Status of MSW facilities and legacy waste sites

a) State wise distribution of the SWM facilities is given in Table No. 4. River basin-wise distribution of the SWM facilities is given in Table No. 5.

Table No. 4: State-wise Distribution of Solid Waste Management Facilities

Sl. No.	Name of the State	Waste Processing	Landfill Sites	Dumpsite
1.	Delhi	40	2	3
2.	Himachal	52	0	15
3.	Jammu &	3	7	53
4.	Kerala	20	-	39
5.	Maharashtra	103	19	62
6.	Meghalaya	2	**1**	5
7.	Mizoram	26	1	5
8.	Puducherry	4	3	3
9.	Tamil Nadu	Not Provided	Not Provided	136
10.	West Bengal	9	2	107
TOTAL		**259**	**35**	**428**

Table No. 5: River basin-wise Distribution of Solid Waste Management Facilities

Sl. No.	River basin	Name of the State	Waste Processing	Landfill	Dumpsite
1.	Alur	Kerala	0	0	1
2.	Amravati	Maharashtra	0	0	1
3.	Anchar	Jammu & Kashmir	1	**1**	**1**
4.	Beas	Himachal Pradesh	5	0	3
5.	Bharthpuza	Kerala	0	0	1
6.	Bhatsa	Maharashtra	0	0	1
7.	Bhawani	Tamil Nadu	0	0	1
8.	Bindusar	Maharashtra	1	0	1
9.	Binwa Khud	Himachal Pradesh	0	0	1
10.	Bori	Maharashtra	1	0	1
11.	Cauvery	Tamil Nadu	0	0	3
12.	Chalakudy	Kerala	1	0	0
13.	Chandrabhaga	Maharashtra	1	1	1
14.	Chitra Puzha	Kerala	1	0	2
15.	Darna	Maharashtra	1	0	1
16.	Devanathi	Tamil Nadu	0	0	1
17.	Gandhari	Maharashtra	1	1	0
18.	Ganga	West Bengal	4	0	0
19.	Ghodnadi	Maharashtra	1	0	1
20.	Girnna	Maharashtra	1	0	2
21.	Godavari	Maharashtra	5	1	5
22.	Gomai	Maharashtra	1	0	1
23.	Grad	Jammu & Kashmir	0	0	1

24.	*Haldi*	*West Bengal*	*2*	*2*	*0*
25.	*Hatheli Khud*	*Himachal Pradesh*	*1*	*0*	*1*
26.	*Hiwara*	*Maharashtra*	*1*	*0*	*1*
27.	*Indrayani*	*Maharashtra*	*2*	*1*	*2*
28.	*Jhelum*	*Jammu & Kashmir*	*0*	*2*	*2*
29.	*Kadalundi River*	*Kerala*	*1*	*0*	*2*
30.	*Kalam*	*Himachal Pradesh*	*1*	*0*	*0*
31.	*Kalyan creek*	*Maharashtra*	*3*	*1*	*1*
32.	*Kan*	*Maharashtra*	*0*	*0*	*1*
33.	*Kanhan*	*Maharashtra*	*3*	*0*	*2*
34.	*Karamana*	*Kerala*	*0*	*0*	*1*
35.	*Karuvannoor*	*Kerala*	*0*	*0*	*1*
36.	*Khir Ganga*	*Himachal Pradesh*	*1*	*0*	*0*
37.	*Kolar*	*Maharashtra*	*1*	*0*	*1*
38.	*Kora Puzha*	*Kerala*	*1*	*0*	*1*
39.	*Koringa*	*Puducherry*	*0*	*0*	*1*
40.	*Koyana*	*Maharashtra*	*1*	*1*	*1*
41.	*Krishna*	*Maharashtra*	*6*	*2*	*6*
42.	*Kundalika*	*Maharashtra*	*1*	*1*	*1*
43.	*Maharaza*	*Tamil Nadu*	*0*	*0*	*1*
44.	*Manjara*	*Maharashtra*	*1*	*1*	*1*
45.	*Markanda River*	*Himachal Pradesh*	*1*	*0*	*0*
46.	*Marna*	*Maharashtra*	*0*	*0*	*1*
47.	*Meenachil*	*Kerala*	*0*	*0*	*1*
48.	*Minkjai*	*Meghalaya*	*0*	*0*	*1*
49.	*Mithi*	*Maharashtra*	*0*	*0*	*1*
50.	*Mula*	*Maharashtra*	*38*	*0*	*1*
51.	*Nallathanni*	*Kerala*	*0*	*0*	*1*
52.	*Nira*	*Maharashtra*	*1*	*1*	*1*
53.	*Pabbar river*	*Himachal Pradesh*	*2*	*0*	*0*
54.	*Panchganga*	*Maharashtra*	*2*	*1*	*2*
55.	*Panzara*	*Maharashtra*	*1*	*0*	*1*
56.	*Patalganga*	*Maharashtra*	*2*	*0*	*2*
57.	*Pedhi*	*Maharashtra*	*0*	*0*	*1*
58.	*Pelhar*	*Maharashtra*	*1*	*0*	*1*
59.	*Penganga*	*Maharashtra*	*2*	*0*	*2*
60.	*Puzhakal*	*Kerala*	*0*	*0*	*1*
61.	*Rangavali*	*Maharashtra*	*1*	*0*	*1*
62.	*Ravi*	*Himachal Pradesh*	*1*	*0*	*1*
63.	*Ringre*	*Meghalaya*	*1*	*0*	*1*
64.	*Satluj*	*Himachal Pradesh*	*4*	*0*	*1*
65.	*Savitri*	*Maharashtra*	*0*	*0*	*1*
Sl.	*River basin*	*Name of the State*	*Waste*	*Landfill*	*Dumpsite*
66.	*SEER KHAD*	*Himachal Pradesh*	*1*	*0*	*0*
67.	*Sina*	*Maharashtra*	*1*	*0*	*1*
68.	*Sirsa*	*Himachal Pradesh*	*0*	*0*	*1*
69.	*Suketi Khad*	*Himachal Pradesh*	*1*	*0*	*0*
70.	*Swan river*	*Himachal Pradesh*	*1*	*0*	*0*
71.	*Tapi*	*Maharashtra*	*2*	*1*	*2*
72.	*Tawi*	*Jammu & Kashmir*	*0*	*0*	*1*
73.	*Tirur*	*Kerala*	*0*	*0*	*1*
74.	*Titur*	*Maharashtra*	*1*	*0*	*1*
75.	*Tuirial*	*Mizoram*	*1*	*1*	*0*
76.	*Ulhas*	*Maharashtra*	*3*	*0*	*3*
77.	*Umiam*	*Meghalaya*	*1*	*1*	*1*
78.	*Una Khad*	*Himachal Pradesh*	*1*	*0*	*0*

79.	*Uppanaru*	*Tamil Nadu*	*0*	*0*	*1*
80.	*Valapattanam*	*Kerala*	*0*	*0*	*1*
81.	*Wainganga*	*Maharashtra*	*5*	*3*	*5*
82.	*Wardha*	*Maharashtra*	*3*	*2*	*2*
83.	*Wena*	*Maharashtra*	*1*	*0*	*1*
84.	*Yamuna*	*Delhi*	*41*	*2*	*3*
85.	*NA*	*Break-up given*	*88*	*8*	*325*
		TOTAL	*259*	*35*	*428*

b) The SWM facilities located in the ten states are spread over 84 river basins, a majority of them are significantly small.

c) The information, regarding river basin in which a particular solid waste management facility is falling, has not been reported for 34% of the waste processing facilities, 22% of the landfills and 75% of the dumpsites. State wise number of states for which the river basin in which the waste management facility has not been provided is given in the Table No. 6.

Table No. 6: SWM facilities for which river basin has not been indicated

State/UT	***Waste processing facilities***	***Landfills***	***Dumpsites***
Himachal Pradesh	*31*	*No sanitary landfill site*	*7*
Jammu & Kashmir	*2*	*4*	*48*
Kerala	*16*	*Not provided*	*25*
Maharashtra	*7*	*1*	*1*
Meghalaya	*0*	*0*	*2*
Mizoram	*25*	*0*	*5*
Puducherry	*4*	*3*	*2*
Tamil Nadu	*Not provided*	*Not provided*	*128*
West Bengal	*3*	*0*	*107*
Total	***88***	***8***	***325***

d) The number of dumpsites (428) is substantially higher than the number of scientifically designed landfills (35). As no arrangement for collection and treatment of leachate is provided in these dumpsites, there is a high potential of contamination of surface and groundwater resources at these dumpsites.

e) Capacity of one landfill site in Maharashtra is exhausted.

f) Fresh waste is reported to be dumped at 224 out of 428 dumpsites.

g) Disposal of legacy waste is not under consideration in 46 out of 428 dumpsites

h) Bio-remediation in 72 out of 428 dumpsites is not being done in accordance with CPCB guidelines.

i) *Ground water analysis report is not available for 215 out of the 259 waste processing sites, 26 out of 35 landfill sites, 222 of the 428 dumpsites.*

j) *174 out of the 259 waste processing facilities, 16 out of 35 landfill sites and 422 out of 428 dumpsites have not provided leachate treatment facilities.*

k) *Only 22 out of the 259 waste processing facilities, 14 out 35 landfill sites and 109 out of 428 dumpsites have confirmed that the leachate complies with the stipulated norms.*

l) *Locational coordinates for waste processing facilities have not been provided for 60 out of 259 facilities and point of disposal for 214 out of 259 facilities; 8 out of 35 landfill sites and 20 out of 35 point of disposal of leacheates; 80 out of 428 dumpsites and 376 out of 428 point of disposal of leachates.*

Going Forward

11. ***The Tribunal has already issued directions vide orders dated 28.08.2019 and 21.05.2020 for ensuring that no untreated sewage/effluent is discharged into any water body and for any violation compensation is to be assessed and recovered by the CPCB so that the same can be utilized for restoration of the environment, complying with the principle of 'Polluter Pays' which has been held to be part of 'Sustainable Development' and part of right to life. Control of such pollution is crucial for environment, aquatic life, food safety and also human health. Since CMC headed by the Secretary, Ministry of Jal Shakti has taken over monitoring of abatement of pollution of polluted river stretches in the country in coordination with the Chief Secretaries who are heading the RRCs in the States, henceforth the monitoring of directions for ensuring requisite number of pollution control devices may also be monitored by the CMC with a view to enable compliance of mandate of law. The CMC may give a consolidated quarterly report covering the status of compliance with regard to adequate number of pollution control equipments as well as steps taken for rejuvenation of rivers in terms of orders already passed in OA 673/2018 and in the light of observations in paras 7 and 9 above."***

Original Application No. 673/2018

9. **The second matter being OA 673/2018 overlaps with the first on the subject of preventing water pollution. It relates to directions for abatement of pollution and rejuvenation of 351 polluted river stretches. The matter has been earlier dealt with mainly by orders dated 20.9.2018, 19.12.2018, 8.4.2019, 28.8.2019, 6.12.2019,**

29.6.2020 and lastly on 21.9.2020. We may first refer to order dated 6.12.2019 which also makes reference to earlier orders:

> *"3. Present proceedings were initiated based on a news item dated 17.09.2018 in 'The Hindu" under the heading "More river stretches are now critically polluted: CPCB"[2]. According to the news item, 351 polluted river stretches have been identified by the Central Pollution Control Board (CPCB). 117 such stretches are in the States of Assam, Gujarat, and Maharashtra. The CPCB has apprised the concerned States of the extent of pollution in the rivers.* ***Most polluted stretches are from Powai to Dharavi – with Biochemical Oxygen Demand (BOD) 250 mg/L; the Godavari - from Someshwar to Rahed – with BOD of 5.0-80 mg/L; the Sabarmati – Kheroj to Vautha – with BOD from 4.0-147 mg/L; and the Hindon – Saharanpur to Ghaziabad – with a BOD of 48-120 mg/L. The CPCB has a programme to monitor the quality of rivers by measuring BOD. BOD greater than or equal to 30mg/L is termed as 'Priority-I', while that between 3.1-6 mg/L is 'Priority-V'. The CPCB considers BOD less than 3mg/L an indicator of a healthy river. In its 2015 Report[3], the CPCB had identified 302 polluted stretches on 275 rivers, spanning 28 States and six Union Territories. The number of such stretches had now increased to 351 in 2018.***
>
> *4 to 5 xxx .....xxx.....xxx*
>
> *6. The Hon'ble Supreme Court noticed the level of degradation of rivers in India and apathy of the authorities as follows:*
>
> > ***"58. Rivers in India are drying up, groundwater is being rapidly depleted, and canals are polluted. Yamuna in Delhi looks like a black drain. Several perennial rivers like Ganga and Brahmaputra are rapidly becoming seasonal. Rivers are dying or declining, and aquifers are getting over pumped. Industries, hotels, etc. are pumping out groundwater at an alarming rate, causing sharp decline in the groundwater levels. Farmers are having a hard time finding groundwater for their crops e.g. in Punjab. In many places there are serpentine queues of exhausted housewives waiting for hours to fill their buckets of water. In this connection John Briscoe has authored a detailed World Bank Report, in which he has mentioned that despite this alarming situation there is widespread complacency on the part of the authorities in India.[4]***
> >
> > ***"4. We see Yamuna river virtually turned into a sullage. We take judicial notice of this situation. Similar is the position with Ganges. As it proceeds,***

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[2] https://www.thehindu.com/news/national/more-river-stretches-critically-polluted cpcb/article24962440.ece

[3] http://cpcb.nic.in/cpcbold/RESTORATION-OF-POLLUTED-RIVER-STRETCHES.pdf

[4] State of Orissa v. Govt. of India, (2009) 5 SCC 492

industrial effluents are being poured in rivers. Sewage is also being directly put in rivers contributing to the river water pollution. We direct the Pollution Control Boards of the various States as well as the Central Pollution Control Board and various Governments to place before us the data and material with respect to various rivers in the concerned States, and what steps they are taking to curb the pollution in such rivers and to management as to industrial effluents, sewage, garbage, waste and air pollution, including the water management. We club the ending case of water management with this matter.[5]

xxx ……xxx……xxx

11. In spite of above, in flagrant violation of law of the land, polluted water in the form of sewage, industrial effluents or otherwise has continued to be discharged in the water bodies including the rivers or the canals meeting the rivers. Violation of law is not only by private citizens but also statutory bodies including the local bodies and also failure of the regulatory authorities in taking adequate steps. ***There is no corresponding coercive action posing danger to rule of law when large scale violation of law is not being remedied. This leads to lawlessness.***

12. ***It will be appropriate to note the crisis situation in the country on the subject of availability of potable water. The matter has been considered in the report of Niti Aayog on Composite Water Management Index (CWMI).***[6] *Following further information also needs to be noted:*

(i) India is suffering from the worst water crisis in its history and millions of lives and livelihoods are under threat. Currently, ***600 million Indians face high to extreme water stress and about two lakh people die every year due to inadequate access to safe water[7]. The crisis is only going to get worse. By 2030, the country's water demand is projected to be twice the available supply, implying severe water scarcity for hundreds of millions of people and an eventual ~6% loss in the country's GDP[8]. As per the report of National Commission for Integrated Water Resource Development of MoWR, the water requirement by2050 in high use scenario is likely to be a milder 1,180 BCM, whereas the present-day availability is 695BCM. The total availability of water possible in country is still lower than this projected demand, at 1,137BCM. Thus, there is an imminent need to deepen our***

[5] M.C. Mehta Vs Union of India- W.P. (Civil) No. 13029/1985 dated 25.11.2019

[6] Niti Ayog on "Composite Water Management Index", June 2018, https://niti.gov.in/writereaddata/files/document_publication/2018-05-18-Water-Index-Report_vS8-compressed.pdf.

[7] Source: WRI Aqueduct; WHO Global Health Observatory

[8] Source: McKinsey & WRG, 'Charting our water future', 2009; World Bank; Times of India

understanding of our water resources and usage and put in place interventions that make our water use efficient and sustainable.

(ii) India is undergoing the worst water crisis in its history. Already, more than 600 million people[9] are facing acute water shortages. Critical groundwater resources – which account for 40% of our water supply – are being depleted at unsustainable rates.[10]

(iii) ***Most states have achieved less than 50% of the total score in the augmentation of groundwater resources, highlighting the growing national crisis—54% of India's groundwater wells are declining, and 21 major cities are expected to run out of groundwater as soon as 2020, affecting ~100 million people[11].***

(iv) ***With nearly 70% of water being contaminated, India is placed at 120th amongst 122 countries in the water quality index.***

13. ***As per statistics mentioned before the Lok Sabha on April 6, 2018, waterborne diseases such as cholera, acute diarrhoeal diseases, typhoid and viral hepatitis continue to be prevalent in India and have caused 10,738 deaths, over the last five years since 2017. Of this, acute diarrhoeal diseases caused maximum deaths followed by viral hepatitis, typhoid and cholera****.[12]*

14. As per 'National Health Profile' published by Central Bureau of Health Investigation, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, ***a total of 1535 Deaths due to Acute Diarrhoeal Diseases was reported during the year 2013****.[13]*

Main Causes of Pollution of Rivers

15. As already noted, ***well known causes of pollution of rivers are dumping of untreated sewage and industrial waste, garbage, plastic waste, e-waste, bio-medical waste, municipal solid waste, diversion of river waters for various purposes affecting e-flow, encroachment of catchment areas and floodplains, over drawl of groundwater, river bank erosion on account of illegal sand mining****. Inspite of directions to install Effluent Treatment Plants (ETPs), Common Effluent Treatment Plants (CETPs), Sewage Treatment Plants (STPs), and adopting other anti-pollution measures, satisfactory situation has not been*

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[9] Source: World Resource Institute
[10] Source: World Resource Institute
[11] Source: UN Water, 'Managing water under uncertainty and risk', 2010; World Bank (Hindustan Times, The Hindu).
[12] https://www.indiaspend.com/diarrhoea-took-more-lives-than-any-other-water-borne-disease-in-india-58143/
[13] http://pib.nic.in/newsite/PrintRelease.aspx?relid=106612

achieved. As per CPCB's report 2016[14], it has been estimated that 61,948 million liters per day (mld) sewage is generated from the urban areas of which treatment capacity of 23,277 mld is currently existent in India. ***Thereby the deficit in capacity of waste treatment is of 62%.*** *There is no data available with regard to generation of sewage in the rural areas.*

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18. Procedures for remedial action have to be shortened so that there is no delay to check pollution wherever found. The Tribunal vide Order dated 18.10.2019 in ***Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues- O.A. No. 606/2018*** *while dealing with the issue of procedures of DPRs and tendering process, observed:*

> *"8. Expeditious compliance of directions for clearance of legacy waste sites as well as stopping of discharge of untreated sewage and directions on associated subjects require immediate implementation for protection of environment and public health by curtailing undue delay. As suggested, necessary technologies need to be standardized with cost breakups for operation and maintenance, including procurement. Besides this, the service providers need to be identified and empaneled. This exercise may also require the concerned authorities to explore business models."*

The Tribunal has constituted a Committee headed by Niti Ayog on the subject to give a report within two months.

xxx ……xxx……xxx

21. ***In view of above, this Tribunal found it necessary to take up the matter and direct preparation and execution of river action plans to control pollution and restore water quality of the river as per norms within reasonable time.*** *Accordingly, vide order dated 20.09.2018 proceedings were initiated as already mentioned para 3 above. It may be noted that there have been successful river cleaning programmes in other countries such as relating to river Thames (England), Rhine (Germany) and Danube (France). There being no reason as to why our polluted river stretches also cannot be restored, the Tribunal issued following directions:*

> ***" i) All States and Union Territories are directed to prepare action plans within two months for bringing all the polluted river stretches to be fit at least for bathing purposes (i.e BOD < 3 mg/L and FC < 500 MPN/100 ml)***

[14] http://www.sulabhenvis.nic.in/Database/STST_wastewater_2090.aspx July 16, updated on December 6, 2016

within six months from the date of finalisation of the action plans.

ii) The action plans may be prepared by four-member Committee comprising, Director, Environment, Director, Urban Development., Director, Industries., Member Secretary, State Pollution Control Board of concerned State. This Committee will also be the Monitoring Committee for execution of the action plan. The Committee may be called ''River Rejuvenation Committee'' (RRC). The RRC will function under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory.

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

iv) The Action Plans may be subjected to a random scrutiny by a task team of the CPCB.

v) The Chief Secretaries of the State and Administrators/ Advisors to Administrators of the Union Territories will be personally accountable for failure to formulate action plan, as directed.

vi) All States and Union Territories are required to send a copy of Action Plan to CPCB especially w.r.t Priority I & Priority II stretches for approval.

vii) The States and the Union Territories concern are directed to set up Special Environment Surveillance Task Force, comprising nominees of District Magistrate, Superintendent of Police, Regional Officer of State Pollution Control Board and one person to be nominated by District Judge in his capacity as Chairman of Legal Services Authority on the pattern of direction of this Tribunal dated 07.08.2018, in Original Application No. 138/2016 (T_{NHRC}), "Stench Grips Mansa's Sacred Ghaggar River (Suo-Motu Case).

ix) The Task Force will also ensure that no illegal mining takes place in river beds of such polluted stretches.

x) The RRC will have a website inviting public participation from educational institutions, religious institutions and commercial establishments. Achievement and failure may also be published on such website. The Committee may consider suitably rewarding those contributing significantly to the success of the project."

xxx ……xxx……xxx

23. Table showing location and categories have been reproduced in the said order and reference to the same will also be made in the later part of this order. ***The action plans were directed to cover the following:-***

A) Source Control

Source control includes industrial pollution control and treatment and disposal of domestic sewage as detailed below:-

(a) Industrial pollution control

(i) Inventorisation of industries

(ii) Categories of industry and effluent quality

(iii) Treatment of effluents, compliance with standards and mode of disposal of effluents

(iv) Regulatory regime.

(b) Channelization, treatment, utilization and disposal of treated domestic sewage.

(i) Identification of towns in the catchment of river and estimation of quantity of sewage generated and existing sewage treatment capacities to arrive at the gap between the sewage generation and treatment capacities;

(ii) Storm water drains now carrying sewage and sullage joining river and interception and diversion of sewage to STPs,

(iii) Treatment and disposal of septage and controlling open defecation,

(iv) Identification of towns for installing sewerage system and sewage treatment plants.

(B) River catchment/Basin Management-Controlled ground water extraction and periodic quality assessment

(i) Periodic assessment of groundwater resources and regulation of ground water extraction by industries particularly in over exploited and critical zones/blocks.

(ii) Ground water re-charging / rain water harvesting

(iii) Periodic ground water quality assessment and remedial actions in case of contaminated groundwater tube wells/bore wells or hand pumps.

(iv) Assessment of the need for regulating use of ground water for irrigation purposes.

***(C) Flood Plain Zone**.*

(i) Regulating activities in flood plain zone.

(ii) Management of Municipal, Plastic, Hazardous, Bio-medical and Electrical and Electronic wastes.

(iii) Greenery development- Plantation plan.

(D) Ecological/Environmental Flow (E-Flow)

(a) Issues relating to E-Flow

(b) Irrigation practices

***(E)** Such other issues which may be found relevant for restoring water quality to the prescribed standards.*

Order dated 19.12.2018 reviewing the progress of execution of order dated 20.09.2018:

24. On review of the matter on 19.12.2018 to consider status of compliance of order dated 20.09.2018, we found that 16 States/UTs had prepared action plans, but the same were are not complete. Base line data was not been given. Preparation of action plans was assigned to third parties. Details of STPs etc. were not given. Timelines given were too long. Status of e-flow was not been given. Action plans were not proposed to be placed on websites to involve educational and other institutions and the public at large. The said States/ UTs were directed to give revised reports on or before 31.01.2019 to CPCB after complying with the deficiencies. The CPCB was to examine the action plans and, if they met the scientific and technical

yardstick, to approve the same and convey it to the respective States/UTs. The States/ UTs, after approval were to place/host these action plans on the respective websites giving clear timelines for execution indicating the agencies responsible for execution along with the matching budgetary provisions. ***By way of last opportunity, we extended the time for preparation of action plans till 31.01.2019 with the stipulation that for delay thereafter, compensation for damage to the environment would be payable by each of the States/ UTs at the rate of Rs. One Crore per month for each of the Priority- I and Priority- II stretches, Rs. 50 lacs per month for stretches in Priority- III and Rs. 25 lacs per month each for Priority- IV and Priority- V stretches. The payment was to be the responsibility of the Chief Secretaries of the States/Administrators of the UTs and the amount could be recovered from the erring officers. The CPCB was to prominently place the names of the defaulting States and UTs and a notice to this effect on its website.***

25. ***The SPCBs and Pollution Control Committees of UTs were to display the quality of the water of polluted river stretches on their respective websites within one month alongwith action taken, if any, which was to be revised every three months. The CPCB was also to display the water quality of the river stretches and action/inaction by such States on its websites. It was made clear that BOD will not be the sole criteria to determine whether a particular river stretch is a polluted river stretch but would also include Faecal Coliform (FC) bacteria as one of the criteria for such classification or otherwise****. CPCB was to devise within two weeks a mechanism for classification wherein two criteria pollutants, that is BOD and FC, shall henceforth be basis of classification in Priority Classes besides pH, D.O. and COD. Further direction in the order dated 19.12.2018 was that any incomplete action plan would be treated as non-compliance. It was made necessary to furnish Performance Guarantees to ensure implementation of action plans within the above stipulated time to the satisfaction of Central Pollution Control Board in the sum of:*

(i) Rs. 15 crore for each of Priority I & II stretches
(ii) Rs. 10 crore for each of Priority III stretches
(iii) Rs. 5 crore for each of Priority IV & V stretches.

Order dated 16.01.2019 in O.A. No. 606/2018 requiring Chief Secretaries of all the States/UTs to appear before this Tribunal after fully acquainting themselves on the subject of Polluted River Stretches, apart from other significant environmental issues and subsequent directions:

26. While noticing large scale violation of environmental norms particularly with regard to waste and sewage management in the country, ***this Tribunal directed the Chief Secretaries of all the States/UTs to appear before this***

Tribunal in person after acquainting themselves with the status of compliance of environmental laws on such issues and action plans for remedying the situation. Accordingly, all the Chief Secretaries appeared on various dates and this Tribunal directed further remedial action including with regard to the restoration of polluted river stretches in terms of the action plans of the States/UTs within six months*. The said period of six months is complete in respect of most of the States and Chief Secretaries are required to be present on the dates already fixed. Thus, all the States/UTs have had sufficient notice of their respective failures to comply with the statutory obligations and any further failure has to be viewed seriously and visited with requirement to pay compensation already stipulated.*

Order dated 08.04.2019 extending time for execution of action plans till 31.03.2021 and requiring Central Monitoring Committee (CMC) to prepare a National Plan for Rejuvenation of Polluted River Stretches as per prescribed timeline:

27. The matter was thereafter taken up on 08.04.2019 in light of consolidated and updated report filed by the CPCB on 05.04.2019 to the effect that 28 States and 3 Union Territories had constituted River Rejuvenation Committees (RRCs). The CPCB constituted a 'Task Team' for scrutiny of the action plans under the Chairmanship of Member Secretary, CPCB. ***CPCB received 41 out of 45 action plans with reference to P-I, 14 out of 16 action plans with reference to P-II and total 182 action plans were received with reference to P-III to P-V polluted river stretches. 6 out of 61 action plans in respect of P-I and P-II were not received from the States of Assam (P-I: 3 viz., Bharalu, Borsola, Silsako) and P-II:1 (Sorusola)), Manipur (P-II: 1 viz., Nambu) and Uttar Pradesh (P-I: viz., river Hindon).*** *It was submitted that the action plan in respect of River Hindon was required to be implemented by the Government of Uttar Pradesh in compliance of the NGT Orders in Original Application No. 231/2014 & Original Application No.66/2015.*

28. The Tribunal further observed:-

"

34. *As already noted, pollution of 351 river stretches has caused serious threat to safety of water and environment. On account of use of polluted water in irrigation, there is threat to food safety.* ***On account of consumption of polluted water in absence of any other source of drinking water being available and partly on account of ignorance of the persons consuming such water, health of human being is threatened, apart from the aquatic flora and fauna, animals wild and domestic who may consume such water. It is therefore, necessary to have regular hygienic survey of the rivers particularly with reference to pathogenic***

organisms having impact on human health directly or indirectly. It is also important to note that biological health of the rivers is an important aspect. Much of the important biodiversity is lost on account of severe pollution in the rivers. There has to be a regular study of the Indian rivers with regard to biological heath and its diversity. We understand that bio-mapping of rivers and setting biological goals/criteria is part of River Rejuvenation Programmes in some countries. There is threat to the environmental rule of law of the country.

35. *These are substantial questions relating to the environment. For enforcing legal right to clean environment, which is also a fundamental right, this Tribunal has to pass appropriate orders for relief to the victims of pollution and for restoration of the environment even in absence of an identified victim. All the States and UTs have been duly put to notice of the present case.*

36. *In this endeavor, this Tribunal directed constitution of RRCs by the concerned States/UTs by including Departments of Environment, Urban Development, Industries and the Pollution Control Boards/Pollution Control Committees and further directions to the Chief Secretaries of the States/UTs to monitor the progress. At the national level, CPCB has been required to assist the Tribunal by way of compiling the data and furnishing its views. A copy of order dated 29.09.2018 was directed to be forwarded to the Niti Ayog, Ministry of Water Resources, Ministry of Environment, Forest & Climate Change, Ministry of Housing and Urban Affairs, National Mission for Clean Ganga, apart from other authorities as the said authorities were represented in a chamber meeting before this Tribunal to consider the problem of pollution of rivers.*

41. We accept the proposal of CPCB to revise the scale of performance guarantee with regard to timeline. We also accept the suggestions of CPCB to extend the timeline for execution of action plans to the extent that upper limit for execution of the action plans will be two years from 01.04.2019 and the monitoring of the action plans may be done not only at the level of the Chief Secretaries of the States/UTs but also by the CPCB.

42. *We direct that CPCB with SPCBs and PCCs to launch nationwide programme on biodiversity monitoring and indexing of the rivers to assess the efficacy of river cleaning programme. Further, for safety of human health and maintaining sanctity of the rivers, regular hygienic surveys of the rivers should be carried out with reference to fecal coliform and fecal streptococci, as indicated in the*

primary water quality criteria for bathing waters. Nodal agency will be CPCB.

43. Having given due consideration to the serious issue and inadequacy of success achieved so far, we find it necessary to constitute a Central Monitoring Committee to undertake a national initiative by way of preparation and enforcement of a national plan to make river stretches pollution free comprising a senior representative of NITI Aayog, Secretaries Ministry of Water Resources, Ministry of Urban Development, Ministry of Environment, Forest and Climate Change, Director General, National Mission for Clean Ganga and Chairman CPCB. Chairman CPCB will be the nodal authority for coordination. Senior most among them will preside over the deliberations.

44. The Central Monitoring Committee will also co-ordinate with the RRCs of the States and oversee the execution of the action plans, taking into account the timelines, budgetary mechanism and other factors. Chief Secretaries of States will be the nodal agency at State level. The Chief Secretaries of the States may undertake review of progress of RRCs by involving concerned Secretaries of Department of Urban Development, Environment, Industries, Irrigation and Public Health, Health etc.

45. We also direct the MoEF& CC to consider a policy for giving environmental awards to outstanding persons (natural and juristic) and Institutions/States and introducing dis-incentives for non compliant states. Such scheme may be framed preferably before 30.06.2019.

xxx ……xxx……xxx

33. We may note the observations of the Hon'ble Supreme Court:

> ***"26. Enactment of a law, but tolerating its infringement, is worse than not enacting a law at all. The continued infringement of law, over a period of time, is made possible by adoption of such means which are best known to the violators of law. Continued tolerance of such violations of law not only renders legal provisions nugatory but such tolerance by the enforcement authorities encourages lawlessness and adoption of means which cannot, or ought not to, be tolerated in any civilized society****. Law should not only be meant for the law-abiding but is meant to be obeyed by all for whom it has been enacted. A law is usually enacted because the legislature feels that it is necessary. It is with a view to protect and preserve the environment*

and save it for the future generations and to ensure good quality of life that Parliament enacted the anti-pollution laws, namely, the Water Act, Air Act and the Environment (Protection) Act, 1986. These Acts and Rules framed and notification issued thereunder contain provisions which prohibit and/or regulate certain activities with a view to protect and preserve the environment. When a law is enacted containing some provisions which prohibit certain types of activities, then, it is of utmost importance that such legal provisions are effectively enforced. If a law is enacted but is not being voluntarily obeyed, then, it has to be enforced. Otherwise, infringement of law, which is actively or passively condoned for personal gain, will be encouraged which will in turn lead to a lawless society. ***Violation of anti-pollution laws not only adversely affects the existing quality of life but the non-enforcement of the legal provisions often results in ecological imbalance and degradation of environment, the adverse effect of which will have to be borne by the future generations***.[15]

"45……. The Government could not pass such orders of exemption having dangerous potential, unmindful of the fate of lakhs of citizens of the twin cities to whom drinking water is supplied from these lakes. Such an order of exemption carelessly passed, ignoring the "precautionary principle", could be catastrophic."[16]

"61. ….. If the laws are not enforced and the orders of the courts to enforce and implement the laws are ignored, the result can only be total lawlessness. It is, therefore, necessary to also identify and take appropriate action against officers responsible for this state of affairs. Such blatant misuse of properties at large-scale cannot take place without connivance of the officers concerned. It is also a source of corruption. Therefore, action is also necessary to check corruption, nepotism and total apathy towards the rights of the citizens.*"*[17]

"15. …. Time has come to require the State Governments to explain why they should not be asked to compensate the persons who are being affected by bad air quality. Obviously, the State is run by the administration, why liability should not be imposed for such a tort on the concerned machinery also of the various States which are failing to discharge their basic duties. This Court in Municipal Council, Ratlam Vs. Vardhichand & Ors., reported in (1980) 4 SCC 162 has held they have to take proper and positive action in this

[15] INDIAN COUNCIL FOR ENVIRO-LEGAL ACTION Vs. UNION OF INDIA AND OTHERS (1996) 5 SCC 281
[16] A.P. Pollution Control Board II v. Prof. M.V. Nayudu, (2001) 2 SCC 62
[17] M.C. Mehta v. Union of India, (2006) 3 SCC 399 – Public functionaries

direction. ***It is their bounden duty to provide civic amenities, and also to see that self-created bankruptcy does not come in the discharge of the statutory obligation which are necessary for existence of human life. We have seen during the course of the arguments that one State is passing the burden upon the Centre and then it is stated on behalf of the Central Government that they have framed scheme and it for the State Governments to implement it.*** *We expect not only the 'policy making' but also its 'implementation'. Let the States of Punjab, Haryana, Uttar Pradesh and the Government of NCT of Delhi respond, due to the air pollution, why the concerned Government and its concerned machinery, from top to bottom, should not be asked to compensate the citizens of Delhi and adjoining areas for various diseases which are being caused and sufferings and troubles which are being faced and the report indicates the life span is being shortened. Let show cause notice be issued to the various State Governments, and to the Chief Secretaries, to submit reply within six weeks. Let the matter be listed for consideration on 17.01.2020. The Chief Secretaries to the States of Punjab, Haryana, Uttar Pradesh and Government of NCT of Delhi be personally present on that date."*[18]

xxx ……xxx……xxx

35. Vide order dated 22.08.2019 in Original Application 200/2014, dealing with the pollution of river Ganga, the Tribunal issued directions and laid down coercive measures to be taken for discharge of untreated sewage in river Ganga:-

"16…….As already observed by this Tribunal including in the order dated 14.05.2019 that River Ganga being National River with distinct significance for the country, even a drop of pollution therein is a matter of concern. ***All the authorities have to be stringent and depict zero tolerance to the pollution of River Ganga. Wherever STPs are not operating, immediate bioremediation and/or phyto-remediation may be undertaken if feasible. To avoid procedural delay of tender processes, etc. specifications and norms for undertaking such activities may be specified in consultation with the CPCB as was earlier directed in our order dated 29.11.2018.*** *Performance guarantees may be required to be furnished for ensuring timely performance. It needs to be ensured that setting up of STPs and sewerage network to be completed and carried out so as to avoid any idle capacities being created. Performance guarantees may be taken for preventing such defaults.*

[18] M.C. Mehta Vs Union of India- W.P. (Civil) No. 13029/1985 dated 25.11.2019

17. ***Wherever the work has not commenced, it is necessary that no untreated sewage is discharged into the River Ganga. Bioremediation and/or phytoremediation or any other remediation measures may start as an interim measure positively from 01.11.2019, failing which the State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. This however, is not to be taken as an excuse to delay the installation of STPs.*** *For delay of the work, the Chief Secretary must identify the officers responsible and assign specific responsibilities.* ***Wherever there are violations, adverse entries in the ACRs must be made in respect of such identified officers. For delay in setting up of STPs and sewerage network beyond prescribed timelines, State may be liable to pay Rs. 10 Lakhs per month per STP and its network. It will be open to the State to recover the said amount from the erring officers/contractors.***

18. With regard to works under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries and Rs. 10 lakhs per month to CPCB per incomplete STP and its sewerage network will apply. Further with regard to the sectors where STP and sewerage network works have not yet started, the State has to pay an Environmental Compensation of Rs. 10 lakhs per month after 31.12.2020. The NMCG will also be equally liable for its failure to the extent of 50% of the amount to be paid. Till such compliance, bioremediation or any other appropriate interim measure may start from 01.11.2019."

Order dated 28.08.2019 in O.A. No. 593/2017, Paryavaran Suraksha Samiti Vs. Union of India, in pursuance of Hon'ble Supreme Court judgment in (2017) 5 SCC 326, for 100% treatment of sewage:

36. Vide order dated 28.08.2019, the Tribunal held:-
"

15. ***It is clear from the order of the Hon'ble Supreme Court[19] that the responsibility of operating STPs under Article 243W and item 6 of Schedule XII to the Constitution is of local bodies who have to evolve norms to recover funds for the purpose which is to be supervised by the States/UTs. The norms were to be finalized upto 31.03.2017 to be implemented from the next year, i.e 01.04.2018. In absence thereof, the States/UTs***

[19]Para 10-13 in *Paryavaran Suraksha Samiti Vs. Union of India, Supra*

have to cater to the financial requirement from its own resources. The States/UTs are to prioritize the cities, towns, villages discharging effluents/sewage directly into the water bodies. Industrial activity without proper treatment plants (ETPs and CETPs) is not to be allowed by the State PCBs and the Secretaries, Environment of the States/UTs are to be answerable. Thus, the source for financial resources for the STPs, stands finalized under the binding judgment of the Hon'ble Supreme Court. Authorities and persons accountable are identified. Rigid implementation has been laid down. This Tribunal has been required to monitor compliance of the directions and timelines.

16. It is in this background that the present report needs to be appraised and further directions given. As regards the Environmental compensation regime fixed for industrial units, GRAP, solid waste, sewage and ground water is accepted as an interim measure. With regard to setting up of STPs, while we appreciate the extensive work of the CPCB based on information furnished by States/UTs, the challenge remains about verification of the said data on the one hand and analysis of the steps taken and required on the other. There is already a database available with the CPCB with regard to ETPs, CETPs, STPs, MSW facilities, Legacy Waste sites. This needs to be collated and river basinwise macro picture needs to be prepared by the CPCB in terms of need for interventions, existing infrastructure and gaps therein. The States have given timelines which need to be effectively monitored both by the CPCB and the Chief Secretaries in terms of its execution.

17. ***As already noted, prevention of pollution of water is directly linked to access to potable water as well as food safety. Restoration of pristine glory of rivers is also of cultural and ecological significance. This necessitates effective steps to ensure that no pollution is discharged in water bodies. Doing so is a criminal offence under the Water Act and is harmful to the environment and public health. 'Precautionary' principle of environmental law is to be enforced. Thus, the mandate of law is that there must be 100% treatment of sewage as well as trade effluents. This Tribunal has already directed in the case of river Ganga that timelines laid down therein be adhered to for setting up of STPs and till then, interim measures be taken for treatment of sewage. There is no reason why this direction be not followed, so as to control pollution of all the river stretches in the country. The issue of ETPs/CETPs is being dealt with by an appropriate action against polluting industries. Setting up of STPs and MSW facilities is***

the responsibility of Local Bodies and in case of their default, of the States. Their failure on the subject has to be adequately monitored. Recovery of compensation on 'Polluter Pays' principle is a part of enforcement strategy but not a substitute for compliance. It is thus necessary to issue directions to all the States/UTs to enforce the compensation regime, latest with effect from 01.04.2020. We may not be taken to be condoning any past violations. The States/UTs have to enforce recovery of compensation from 01.04.2020 from the defaulting local bodies. On failure of the States/UTs, the States/UTs themselves have to pay the requisite amount of compensation to be deposited with the CPCB for restoration of environment. The Chief Secretaries of all the States may furnish their respective compliance reports as per directions already issued in O.A. No. 606/2018.

21. We may now sum up our directions:-

(iii) All the Local Bodies and or the concerned departments of the State Government have to ensure 100% treatment of the generated sewage and in default to pay compensation which is to be recovered by the States/UTs, with effect from 01.04.2020. In default of such collection, the States/UTs are liable to pay such compensation. The CPCB is to collect the same and utilize for restoration of the environment."

Order dated 11.09.2019 – Directions in pursuance of orders of Hon'ble Supreme Court in (2012) 13 SCC 736 and dated 24.04.2017 in W.P. No. 725/1994 "And Quite Flows Maily Yamuna" and earlier orders of this Tribunal regarding control of pollution of river Yamuna:

37. Vide the order dated 11.09.2019, in Original Application No. 06/2012, dealing with river Yamuna, the Tribunal observed as follows:

"12. One of the major concerns of this Tribunal is that repeated directions remain un-complied and inspite of largescale failures, no accountability is fixed. There is huge loss to public exchequer for which no action is taken. Timelines are conveniently and unilaterally changed. Officers indulge in blame game in shifting responsibility from one to another. There is failure at higher levels in monitoring and taking actions. If this continues, it is difficult to expect any positive change for long. This requires paradigm shift in approach adopted so far. The approach to be adopted is to have clear time- bound plan with flexibility and due to accountability for

failure by way of departmental action and monetary compensation. The rescheduled timelines have to be compressed so as to complete every action by December, 2020 except where shorter timelines are specified in this order or are otherwise possible. If any contract permits longer timeline, it is clearly in violation of binding orders of the Tribunal which has attained finality. Violation thereof is per se criminal offence. Such longer timeline has to be consistent with orders of the Tribunal and compressed within 31.12. 2020. Failing to do so may invite criminal prosecution NMCG may also monitor the compliance. The Chief Secretaries of Delhi, Haryana and U.P. have to personally see the compliance and have to set up Monitoring Cell directly under them. Vice Chairman, DDA can also monitor and coordinate with Chief Secretary, Delhi. All other departments can monitor subject to overall directions of the Chief Secretaries. This can avoid shifting of responsibilities once ownership is with highest authorities in the State. Monthly review reports may be shared with the Monitoring Committee and also placed on websites of concerned States. Failure and successes of the individual involved may be specifically recorded and reflected in service record of the concerned officer. Stock taking may be done by the Chief Secretaries of the failure and successes so far and appropriate actions be initiated against those who have been responsible for the failure. Nodal Officers may be identified in respect of different projects clearly defining the responsibilities. Wherever there is misappropriation of funds, criminal case has to be registered. Posting of Officers entrusted with the responsibility may be reviewed from time to time depending on their responsibility. Procedure for giving of contracts may be shortened and standardized at State level and if possible at National level by NMCG and CPCB. Giving of contracts should be based on successful credentials instead of mere lowest rates. Pollution load at entry and exist point of each concerned State may or at entry points of each drains need to be recorded periodically. The Chief Secretaries of Delhi, Haryana and U.P. may furnish action taken reports in this regard at the time of their personal appearance before this Tribunal in O.A. 606/2018.

13. Priorities need to be planned. The first step is to ensure that no pollutant is discharged into the river or drains connected thereto. ***Projects of setting up and upgradation of STPs including setting up of interceptors, laying of sewerage line network etc. have to be completed within strict timelines. Pending such action, immediate bioremediation***

and/or phytoremediation or any other alternative remediation measure may be undertaken as an interim measure. Pollution of river or water bodies is a criminal offence which needs to be checked by setting up ETPs/CETPs/STPs. *The Hon'ble Supreme Court has directed[20] that establishment and proper functioning of ETPs/CETPs/STPs in the country be ensured. This is to enforce the right of access to water. It has been noted by the Hon'ble Supreme Court that water pollution is the cause of various diseases and also affects food safety apart from affecting the environment as such. Following the said judgment, this Tribunal has directed[21] that "All the local bodies have to ensure 100% treatment of the generated sewage and in default to pay compensation which is to be recovered by the States/UTs, with effect from 01.04.2020. In default of such collection, the States/UTs are liable to pay such compensation. The CPCB is to collect the same and utilize for restoration of the environment." While dealing with the pollution of river Ganga, this Tribunal directed:*

> *"**Bioremediation and/or phytoremediation or any other remediation measures may start as an interim measure positively from 01.11.2019, failing which the State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. This however, is not to be taken as an excuse to delay the installation of STPs. For delay of the work, the Chief Secretary must identify the officers responsible and assign specific responsibilities. Wherever there are violations, adverse entries in the ACRs must be made in respect of such identified officers. For delay in setting up of STPs and sewerage network beyond prescribed timelines, State may be liable to pay Rs. 10 Lakhs per month per STP and its network. It will be open to the State to recover the said amount from the erring officers/contractors.***
>
> ***With regard to works under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Ganga or its tributaries and Rs. 10 lakhs per month to CPCB per incomplete STP and its sewerage network will apply. Further with regard to the sectors where STP and sewerage network works have not yet started, the State has to pay an Environmental Compensation of Rs.***

[20] (2017) 5 SCC 326

[21] Order dated 28.08.2019 in Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors., O.A No. 593/2017

10 lakhs per month after 31.12.2020. The NMCG will also be equally liable for its failure to the extent of 50% of the amount to be paid. Till such compliance, bioremediation or any other appropriate interim measure may start from 01.11.2019."[22]

"15. A. (iv):

e). DJB to complete the task of setting up of STPs by 31.12.2020.

g) Bioremediation and/or phytoremediation or any other remediation measures may start as an interim measure positively from 01.01.2020, failing which the Govt. of NCT of Delhi may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. This however, is not to be taken as an excuse to delay the installation of STPs, sewerage network and its connectivity. For delay of the work, the Chief Secretary, Govt. of NCT Delhi must identify the officers responsible and assign specific accountability. Wherever there are violations, adverse entries in the ACRs must be made in respect of such identified officers for delay in setting up of STPs, sewerage network and its connectivity by the concerned head of the department.

h) The Govt. of NCT, Delhi will be liable to pay Environment Compensation if defaults take place as under:

i. The operational deficiencies of the existing STPs must be rectified within three months failing which Environmental compensation of Rs. 5 Lacs per month for STP shall be deposited with CPCB.

ii. With regard to works under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per month to CPCB for discharging untreated sewage in any drain connected to river Yamuna and Rs. 10 lakhs per month to CPCB per incomplete STP, sewerage network and its connectivity will apply.

iii. With regard to the situation where works with regard to STP, sewerage network and its connectivity have not yet started, the Govt. of NCT, Delhi has to pay an Environmental Compensation at the rate of Rs. 10 lakhs per month per STP, Sewerage network and its connectivity after 31.12.2020 for the delay in setting up of the same. It will be open to Govt. of NCT of Delhi

[22]O.A No. 200/2014 order dated 22.08.2019

to recover the said amount from erring officers/contractors."

xxx……xxx……xxx……..

42. We may now refer to the report of the CPCB on the subject of 351 polluted river stretches. Extracts from the report are:

"i) Status on Approval of Action Plans for Restoration of Identified Polluted River Stretches: -

61 out of 61 total action plans were received as on 06.09.2019 and 60 action plans have been approved along with the conditions. ***Revised action plan for restoration of River Yamuna within Delhi State is awaited from Delhi State Government.*** *Minutes of all the eight Task Team meetings were also uploaded in CPCB website at https://cpco.nic.inimcngt-restoration/. Also, minutes of all the eight task team meetings were also communicated to the concerned authorities for further necessary action at their end. State-wise status of action plans received, action plans approved with conditions by CPCB Task Team w.r.t Priority I & Priority II Polluted River Stretches are annexed at* ***Annexure-V, Annexure-VI and Annexure-VII.*** *All the action plans already approved by CPCB Task Team also uploaded by the concerned States/UTs and web links have been provided in CPCB website at https://cpcb.nic.in/mcncit-restoration/ for having access to the general public.*

ii) Criteria for Prioritization of Polluted River Location

In pursuance to Hon'ble NGT order dated 19.12.2018 and to devise a mechanism for classification of polluted river stretch by considering two criteria pollutants such as Bio-chemical Oxygen Demand (BOD) and Faecal Coliform (FC), CPCB has prepared "draft criteria for prioritization of polluted river location". The draft criteria was circulated to all the concerned stakeholders mainly State Pollution Control Boards (SPCBs) and the Pollution Control Committees (PCCs) vide CPCB letter dated 09.01.2019, for providing comments or views by January 2019. Based on the comments received from stakeholders, the draft criterion has been finalised and appraised to Hon'ble NGT on 29.7.2019 (Copy enclosed as ***Annexure-VIII).*** *Afore-said finalised criteria also uploaded in CPCB website at https://cpcb.nic.in/wqm/Guidelines wqm-23.07.2019.*

iii) Submission of Performance Guarantee by the States/UTs for ensuring timely implementation of approved action plans for rejuvenation of identified polluted river stretches: -

As per Hon'ble NGT order dated 8.4.2019, States/ UTs are required to submit performance guarantee as per revised scale i.e. No. of Polluted River Stretches in a State/UT > 10, 5 to 10 &< 5, the performance guarantee

to be submitted in Rupees is 15 Crore, 10 Crore & 5 Crore respectively. ***Till date, 09 States (viz., Goa, Gujarat, Haryana, Jharkhand, Madhya Pradesh, Manipur, Odisha, Puducherry, West Bengal and 02 UTs (Viz., Daman, Diu and Dadra Nagar Haveli, Delhi) out of 31 States/UTs have submitted Performance/ Bank Guarantee to CPCB.*** *State-wise details of performance guarantee or bank guarantees submitted is annexed at* ***Annexure-IX.***

iv) Review meeting with 11 States/UTs for review of action plans falling under Priority III to V classes

As per Hon'ble NGT Order dated 20.09.2018, all States and Union Territories are required to send a copy of RRC approved action plan to CPCB especially w.r.to only Priority I & Priority II stretches for approval. The Action Plans may be subjected to a random scrutiny by a task team of the CPCB.

The States/UTs which are not required to submit action plans to CPCB seeking approval, CPCB convened a review meeting on 12.09.2019 in CPCB with such 11 States/UTs for reviewing the RRC approved action plans for restoration of polluted river stretches falling under Priority III to V classes in the respective States. 09 out of 11 States/UTs have attended the meeting. CPCB reviewed the action plans and suggested necessary improvements in light of the Hon'ble NGT order dated 20.09.2018. The minutes of the review meeting were also communicated to all the concerned States/UTs vide CPCB letter dated 14.10.2019 (Copy annexed as ***Annexure-X)*** *with a request to take necessary actions.*

Following general suggestions were made for incorporation in the prepared action plans and thereafter for taking approval of RRC constituted by the respective State Government or UT Administration for implementation of action plans in respect of P-III to P-V polluted river stretches: -

- ***(i) Identification of polluting sources including drains contributing to river pollution***
- ***(ii) Map showing Polluted River, its tributaries, drains, major towns, industrial estates, location of STPs/CETPs***
- ***(iii) Functioning status of STPs/ETPs/CETPs and solid waste management and processing facilities in the catchment area of the identified polluted river stretch;***
- ***(iv) Detailed gap analysis w.r.t town-wise water consumption (including ground water consumption), sewage generation,***

existing infrastructure in the catchment area and the gap analysis;

(v) Detailed gap analysis w.r.t industrial water consumption, wastewater generation, existing infrastructure for treatment of industrial effluent (both captive ETPs/CETPs and their performance assessment), gap analysis;

(vi) Quantification and characterisation of waste (such as solid waste, industrial hazardous waste, bio-medical waste, E-Waste), STP sludge management, existing infrastructure and detailed gap analysis;

(vii) Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;

(viii) Aspects such as ground water extraction, adopting good irrigation practices, protection and management of Flood Plain Zones (FPZ), rain water harvesting, ground water charging, maintaining minimum environmental flow of river (by having watershed management provisions), plantation on both sides of the river, setting up biodiversity parks on flood plains by removing encroachment., proper interception and diversion of sewage carrying drains to Sewage Treatment Plant (STP), upgradation of existing sewage treatment plants if not in a position to comply with effluent discharge norms, emphasis on utilization of treated sewage so as to minimize extraction of ground or surface water be included,

(ix) Speedy, definite or specific timelines for execution of action plans and the estimated budget including the monitoring agency

(ix) Achievable goals with specific timelines for restoration of water quality of polluted rivers.

(x) Organisation-wise action plans with timelines and the estimated budget for implementation of action plans.

v) Format for obtaining status on implementation of Action plans for restoration of polluted River Stretches

In order to assess the progress on implementation of action plans already approved by CPCB, a format seeking status on implementation of action plans for restoration of polluted river stretches has been communicated to the Chief Secretaries of concerned States/UTs and State Pollution Control Boards/ Pollution Control Committees, vide CPCB letter dated 26.9.2019. A copy of CPCB letter

dated 26.09.2019 along with the format circulated is annexed at ***Annexure-Xl.*** *As on 06.11.2019, filled in formats have been received from 3 States/UTs viz Daman, Diu, Dadra & Nagar Haveli, Andhra Pradesh and Meghalaya.*

State-wise Identified Polluted Rivers and the Status of Action Plans received by CPCB in compliance to Hon'ble NGT Orders dated 20.09.2018, 19.12.2018 and 08.04.2019 in OA No. 673 of 2018 (as on 07.11.2019)

Name of the State / UT	Total No. of Identified Polluted River stretches (PRS)	Priority I Identified Polluted River stretches		Priority II Identified Polluted River stretches		Priority — III to V Identified Polluted River stretches		Total Action Plans Received
		No. of P-I PRS	Action Plans received w.r.to P-I	No. of P-II PRS	Action Plans received w.r.to P-II	No. of P-III to V	Action Plans received w.r.to P-III to V	
Andhra Pradesh	5	0	0	0	0	5	5	5
Assam	44	3	3	1	1	40	40	44
Bihar	6	0	0	0	0	6	6	6
Chhattisgarh	5	0	0	0	0	5	5	5
DD & DNH	1	1	1	0	0	0	0	1
Delhi	1	1	1	0	0	0	0	1
Goa	11	0	0	0	0	11	11	11
Gujarat	20	5	5	1	1	14	14	20
Haryana	2	2	2	0	0	0	0	2
Himachal Pradesh	7	1	1	1	1	5	5	7
J & K	9	0	0	1	1	8	8	9
Jharkhand	7	0	0	0	0	7	7	7
Karnataka	17	0	0	0	0	17	17	17
Kerala	21	1	1	0	0	20	20	21
Madhya* Pradesh	22	3	3	1	1	18	18	22
Maharashtra	53	9	9	6	6	38	38	53
Manipur	9	0	0	1	1	8	8	9
Meghalaya	7	2	2	0	0	5	5	7
Mizoram	9	0	0	0	0	9	9	9
Nagaland	6	1	1	0	0	5	5	6
Odisha	19	1	1	0	0	18	18	19
Puducherry	2	0	0	0	0	2	2	2
Punjab	4	2	2	0	0	2	2	4
Rajasthan	2	0	0	0	0	2	2	2
Sikkim	4	0	0	0	0	4	4	4
Tamil Nadu	6	4	4	0	0	2	2	6
Telangana**	8	1	1	2	2	5	5	8
Tripura	6	0	0	0	0	6	6	6
UP	12	4	4	0	0	8	8	12
Uttarakhand	9	3	3	1	1	5	5	9

West Bengal	*17*	*1*	*1*	*1*	*1*	*15*	*15*	*17*
Grand Total	***351***	***45***	***45***	***16***	***16***	***290***	***290***	***351***

Note:-

* ***MP State have submitted one combined action plan for river Kolar & River Kaliasot***

** ***Telangana State submitted one action plan for river Manjeera & River Nakkavagu***

State-wise status of action plans received and the action plans approved by CPCB Task Team w.r.to Priority I & Priority II Polluted Rivers (as on 07.11.2019)

NAME OF THE STATE/UT	***Total Identified Polluted River Stretches (PRS) Priority-I & Priority II***	***Identified PS Priority-II***	***Identified PRS Priority-II***	***No. of Action Plans Received***	***Action Plans Not Approved***	***Total Action Plans Approved***
ASSAM	*4*	*3*	*1*	*4*	-	*4*
DAMAN, DIU AND DADRA NAGAR HAVELI	*1*	*1*	*0*	*1*	-	*1*
DELHI	***1***	***1***	***0***	***1***	***1***	***0***
GUJARAT	*6*	*5*	*1*	*6*	-	*6*
HARYANA	*2*	*2*	*0*	*2*	-	*2*
HIMACHAL PRADESH	*2*	*1*	*1*	*2*	-	*2*
JAMMU & KASHMIR	*1*	*0*	*1*	*1*	-	*1*
KERALA	*1*	*1*	*0*	*1*	-	*1*
MADHYA PRADESH	*4*	*3*	*1*	*4*	-	*4*
MAHARASHTRA	*15*	*9*	*6*	*15*	-	*15*
MANIPUR	*1*	*0*	*1*	*1*	-	*1*
MEGHALAYA	*2*	*2*	*0*	*2*	-	*2*
NAGALAND	*1*	*1*	*0*	*1*	-	***1***
ODISHA	*1*	*1*	*0*	*1*	-	*1*
PUNJAB	*2*	*2*	*0*	*2*	-	*2*
TAMIL NADU	*4*	*4*	*0*	*4*	-	*4*
TELANGANA	*3*	*1*	*2*	*3*	-	*3*
UTTAR PRADESH	*4*	*4*	*0*	*4*	-	*4*
UTTARAKHAND	*4*	*3*	*1*	*4*	-	*4*
WEST BENGAL	*2*	*1*	*1*	*2*	-	*2*
TOTAL	***61***	***45***	***16***	***61***	***01***	***60***

State-wise & River-wise recommendations of Task Team - Action Plans for Restoration of Identified Polluted River Stretches- as per Hon'ble NGT Orders dated 20.09.2018, 19.12.2018 & 08.04.2019 (Status as on 07.11.2019)

STATE	***RIVER NAME***	***Status***
ASSAM	*BHARALU*	*Recommended subjected to conditions*
	BORSOLA	*Recommended subjected to conditions*
	SILSAKO	*Recommended subjected to conditions*
	SORUSOLA	*Recommended subjected to conditions*
DAMAN, DIU AND DADRA NAGAR HAVELI	*DAMANGANGA*	*Recommended subjected to conditions*
DELHI	***YAMUNA***	***Not Recommended***
GUJARAT	*AMLAKHADI*	*Recommended subjected to conditions*
	BHADAR	*Recommended subjected to conditions*
	BHOGAVO	*Recommended subjected to conditions*
	KHARI	*Recommended subjected to conditions*
	SABARMATI	*Recommended subjected to conditions*
	VISHWAMITRI	*Recommended subjected to conditions*
HARYANA	*GHAGGAR*	*Recommended subjected to conditions*
	YAMUNA	*Recommended subjected to conditions*
HIMACHAL PRADESH	*SUKHANA*	*Recommended subjected to conditions*
	MARKANDA	*Recommended subjected to conditions*
JAMMU & KASHMIR	*DEVIKA*	*Recommended subjected to conditions*
KERALA	*KARAMANA*	*Recommended subjected to conditions*
MADHYA PRADESH	*CHAMBAL*	*Recommended subjected to conditions*
	KHAN	*Recommended subjected to conditions*
	KSHIPRA	*Recommended subjected to conditions*
	BETWA	*Recommended subjected to conditions*
MAHARASHTRA	*GODAVARI*	*Recommended subjected to conditions*
	KALU	*Recommended subjected to conditions*
	KUNDALIKA	*Recommended subjected to conditions*
	M ITH I	*Recommended subjected to conditions*
	MORNA	*Recommended subjected to conditions*
	MULA	*Recommended subjected to conditions*
	MUTHA	*Recommended subjected to conditions*
	NI RA	*Recommended subjected to conditions*
	VEL	*Recommended subjected to conditions*
	BHIMA	*Recommended subjected to conditions*
	INDRAYANI	*Recommended subjected to conditions*
	MULA-MUTHA	*Recommended subjected to conditions*
	PAWANA	*Recommended subjected to conditions*
	WAINGANGA	*Recommended subjected to conditions*
	WARDHA	*Recommended subjected to conditions*
MANIPUR	*NAMBUL*	*Recommended subjected to conditions*
MEGHALAYA	*UMKHRAH*	*Recommended subjected to conditions*
	UMSHYRPI	*Recommended subjected to conditions*
NAGALAND	*DHANSIRI*	*Recommended subjected to conditions*
ODISHA	*GANGUA*	*Recommended subjected to conditions*
PUNJAB	*GHAGGAR*	*Recommended subjected to conditions*
	SUTLEJ	*Recommended subjected to conditions*
	CAUVERY	*Recommended subjected to conditions*

	SARABANGA	*Recommended subjected to conditions*
TAMIL NADU	*THIRUMANIMUTHAR*	*Recommended subjected to conditions*
	VAS I STA	*Recommended subjected to conditions*
TELANGANA	*MUSI*	*Recommended subjected to conditions*
	MANJEERA	*Recommended subjected to conditions*
	NAKKAVAGU	*Recommended subjected to conditions*
UTTAR PRADESH	*HINDON*	*Recommended subjected to conditions*
	KALINADI	*Recommended subjected to conditions*
	VARUNA	*Recommended subjected to conditions*
	YAMUNA	*Recommended subjected to conditions*
UTTARAKHAND	*BHELA*	*Recommended subjected to conditions*
	DHELA	*Recommended subjected to conditions*
	SUSWA	*Recommended subjected to conditions*
	KICHHA	*Recommended subjected to conditions*
WEST BENGAL	*VINDHADHARI*	*Recommended subjected to conditions*
	MAHANANDA	*Recommended subjected to conditions*

CPCB has reviewed action plans w.r.t. Priority ***I*** *and Priority* ***II*** *polluted river stretches.* ***So far, 60 action plans out of 61 Priority I and Priority II polluted river stretches pertaining to 18 States & 1 UT have been approved by CPCB Task Team in 08 Task Team meetings conducted till date.*** *Action Plan of River Yamuna in Delhi Stretch is not approved by CPCB Task Team till Date. Status along with date of approval of Action plans for Priority — I &II polluted river stretches is given in Table below.*

Task Team Meeting	***Date of Meeting***	***Action Plans approved***	
		STATE	***No of Action***
III	*11 - 12.02.2019*	*GUJARAT*	*6*
		HARYANA	*2*
		HIMACHAL PRADESH	*2*
		KERALA	
		MADHYA PRADESH	*2*
		PUNJAB	*2*
		TELANGANA	*3*
		WEST BENGAL	*2*
IV	*28.03.2019*	*DD, DNH*	*1*
		JAMMU & KASHMIR	*1*
		MADHYA PRADESH	*2*
		MAHARASHTRA	*15*
		ODISHA	*1*
V	*24.04.2019*	*TAMIL NADU*	*4*
VI	*31 05.2019*	*UTTAR PRADESH*	*4*
VII	*16.07.2019*	*UTTARAKHAND*	*4*
VIII	*06.09.2019*	*ASSAM*	*4*
		MANIPUR	*1*
		MEGHALAYA	*2*
		NAGALAND	*1*
Total Action Plans Approved			***60***

With respect to Priority — Ill to V polluted river stretches, action plans for ***282 out of 290*** *polluted river stretches have been submitted to CPCB. Kerala (07) and Madhya Pradesh (01) have not*

submitted Action Plans under these priorities. State- wise status is given in ***Annexure I.***

A meeting is scheduled on 12.09.2019 in CPCB, inviting eleven SPCBs/PCCs for presentation to review the RRC approved action plans for polluted river stretches falling under Priority III to V classes. Only Priority III to V polluted river stretches exist in these States/ UTs.

Name of the State / UT	***Total No. of Identified Polluted River stretches (PRS)***	***Priority I Identified Polluted River stretches***		***Priority II Identified Polluted River stretches***		***Priority — III to V Identified Polluted River stretches***		***Total Action***
		No. of P-I PRS	***Action Plans received w.r.to P-I***	***No. of P-II PRS***	***Action Plans received w.r.to p-II P-1 I 0***	***No. of P-III to P-V V 5***	***Action Plans received w.r.to P-III to P-V 5***	***Plans Received*** *5*
Andhra Pradesh	*5*	*0*	*0*	*0*	*0*	*5*	*5*	*5*
Assam	*44*	*3*	*3*	*1*	*1*	*40*	*40*	*44*
Bihar	*6*	*0*	*0*	*0*	*0*	*6*	*6*	*6*
Chhattisgarh	*5*	*0*	*0*	*0*	*0*	*5*	*5*	*5*
DD & DNH	*1*	*1*	*1*	*0*	*0*	*0*	*0*	*1*
Delhi	*1*	*1*	*1*	*0*	*0*	*0*	*0*	*1*
Goa	*11*	*0*	*0*	*0*	*0*	*11*	*11*	*11*
Gujarat	*20*	*5*	*5*	*1*	*1*	*14*	*14*	*20*
Haryana	*2*	*2*	*2*	*0*	*0*	*0*	*0*	*2*
Himachal Pradesh	*7*	*1*	*1*	*1*	*1*	*5*	*5*	*7*
i & K	*9*	*0*	*0*	*1*	*1*	*8*	*8*	*9*
Jharkhand	*7*	*0*	*0*	*0*	*0*	*7*	*7*	*7*
Karnataka	*17*	*0*	*0*	*0*	*0*	*17*	*17*	*17*
Kerala	*21*	*1*	*1*	*0*	*0*	*20*	*13*	*14*
Madhya Pradesh	*22*	*3*	*3*	*1*	*1*	*18*	*17*	*21*
Maharashtra	*53*	*9*	*9*	*6*	*6*	*38* *8*	*38* *8*	*53* *9*
Manipur	*9*	*0*	*0*	*1*	*1*	*8*	*8*	*9*
Meghalaya	*7*	*2*	*2*	*0*	*0*	*5*	*5*	*7*
Mizoram	*9*	*0*	*0*	*0*	*0*	*9*	*9*	*9*
Nagaland	*6*	*1*	*1*	*0*	*0*	*5*	*5*	*6*
Odisha	*19*	*1*	*1*	*0*	*0*	*18*	*18*	*19*
Puducherry	*2*	*0*	*0*	*0*	*0*	*2*	*2*	*2*
Punjab	*4*	*2*	*2*	*0*	*0*	*2*	*2*	*4*
Rajasthan	*2*	*0*	*0*	*0*	*0*	*2*	*2*	*2*
Sikkim	*4*	*0*	*0*	*0*	*0*	*4*	*4*	*4*
Tamil Nadu	*6*	*4*	*4*	*0*	*0*	*2*	*2*	*6*
Telangana	*8*	*1*	*1*	*2*	*2*	*5* *6*	*5* *6*	*8* *6*
Tripura	*6*	*0*	*0*	*0*	*0*	*6*	*6*	*6*
UP	*12*	*4*	*4*	*0*	*0*	*8*	*8*	*12*
Uttarakhand	*9*	*3*	*3*	*1*	*1*	*5*	*5*	*9*
West Bengal	*17*	*1*	*1*	*1*	***1***	*15*	*15*	*17*
Grand Total	***351***	***45***	***45***	***16***	***16***	***290***	***282***	***343***

”

xxx……xxx……xxx……

45. It is observed that the report of the CPCB has focused only on BOD and FC. It has not taken other parameters for analysis such as pH, COD, DO and other recalcitrant toxic pollutants having tendency of bio magnification. Further, monitoring gaps in terms of number of stations have to be identified, upgraded and upscaled so to cover upstream and downstream locations of major discharges to the river. In this view of the matter, CPCB may also ascertain whether there are any other rivers falling in the category of polluted river stretches.

46. The report of CPCB shows the status of compliance. ***As already noted, the action plans have been prepared with respect to 351 river stretches by the concerned States/UTs with regard to category P-I & P-II (the most polluted river stretches), the action plans have been duly recommended by CPCB with certain changes. The said action plans are reported to be complete with respect to necessary components for river rejuvenation including identification of drains, their interception, setting up of STPs, utilization of treated water, identification of flood plain zones, maintaining e-flow, etc. Let the same be executed by 31.03.2021 as already directed. No case is made out to extend the laid down timeline unconditionally. As noted earlier, situation of water pollution is grim in the country and there has been deterioration inspite of the Water Act which was enacted way back in 1974 which was intended to bring about any improvement. This Tribunal has repeatedly put all authorities to notice in the light of earlier orders of the Hon'ble Supreme Court on the subject. Directions were also issued for budgetary support as part of the action plans which has been done in indicative terms. There can be no plea of lack of funds on issue threatening the existence of human beings. We have thus no option except to be strict about the timelines already laid down. We are also of the view that adherence to the timelines must be monitored by the Chief Secretaries of all the States/UTs and should also be monitored at National level by the Secretary, Ministry of Jal Shakti with the assistance of NMCG and CPCB. For this purpose, a meeting at central level must be held with the Chief Secretaries of all the States/UTs atleast once in a month (option of video conferencing facility is open) to take stock of the progress and to plan further action. NMCG will be the nodal agency for compliance and may give its quarterly report to this Tribunal commencing from 01.04.2020. The Chief Secretaries may set up appropriate monitoring mechanism at State level specifying accountability of nodal authorities not below the secretary level and ensuring appropriate adverse entries in the ACRs. Monitoring at State level must take place on fortnightly basis and record of progress maintained. The Chief Secretaries may have an***

accountable person attached in his office for this purpose. Monthly progress report may be furnished to Secretary, Ministry of Jal Shakti with a copy to CPCB. Steps for in situ remediation as an interim measure may be ensured as directed above as per laid down timeline. Any default must be visited with serious consequences at every level, including initiation of prosecution, disciplinary action and entries in ACRs of the erring officers. As already mentioned, procedures for DPRs/tender process needs to be shortened and if found viable business model developed at central/state level. Wherever work is awarded to any contractor, performance guarantee must be taken in above terms.

CPCB may after scrutiny finalize the action plans relating to P-III and P-IV also as has been done for P-I and P-II on or before 31.03.2020. This will not be a ground to delay the execution of the action plans prepared by the States which may start forthwith, if not already started.

10. In the last order dated 21.9.2020, it was observed and directed as follows:-

"

I.<u>Original Application No. 673/2018</u>

Review of proceedings before the Tribunal

12. As noted earlier, the issue for consideration in this matter is rejuvenation of 351 polluted river stretches causing threat to public health and the environment. The Tribunal has considered the matter on several occasions suo motu as well as on directions of the Hon'ble Supreme Court with regard to certain polluted river stretches, ***including Ganga and Yamuna****. It is not necessary to refer to all such orders. We may only refer to the directions issued on 06.12.2019 and 29.06.2020 which are as follows.*

13. Directions in order dated ***06.12.2019:***

"XII. Directions:

47. We now sum up our directions as follows:

i. 100% treatment of sewage may be ensured as directed by this Tribunal vide order dated 28.08.2019 in O.A. No. 593/2017 by 31.03.2020 atleast to the extent of in-situ remediation and before the said date, commencement of setting up of STPs and the work of connecting all the drains and other sources of generation of sewage to the STPs must be ensured. If this is not done, the local bodies and the concerned departments of the States/UTs will be liable to pay compensation as already directed vide order dated

22.08.2019 in the case of river Ganga i.e. Rs. 5 lakhs per month per drain, for default in in-situ remediation and Rs. 5 lakhs per STP for default in commencement of setting up of the STP.

ii. Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning till 31.03.2021 in terms of order dated 08.04.2019 in the present case will remain as already directed. In default, compensation will be liable to be paid at the scale laid down in the order of this Tribunal dated 22.08.2019 in the case of river Ganga i.e. Rs. 10 lakhs per month per STP.

iii. We further direct that an institutional mechanism be evolved for ensuring compliance of above directions. For this purpose, monitoring may be done by the Chief Secretaries of all the States/UTs at State level and at National level by the Secretary, Ministry of Jal Shakti with the assistance of NMCG and CPCB.

iv. For above purpose, a meeting at central level must be held with the Chief Secretaries of all the States/UTs atleast once in a month (option of video conferencing facility is open) to take stock of the progress and to plan further action. NMCG will be the nodal agency for compliance who may take assistance of CPCB and may give its quarterly report to this Tribunal commencing 01.04.2020.

v. The Chief Secretaries may set up appropriate monitoring mechanism at State level specifying accountability of nodal authorities not below the Secretary level and ensuring appropriate adverse entries in the ACRs of erring officers. Monitoring at State level must take place on fortnightly basis and record of progress maintained. The Chief Secretaries may have an accountable person attached in his office for this purpose.

vi. Monthly progress report may be furnished by the States/UTs to Secretary, Ministry of Jal Shakti with a copy to CPCB. Any default must be visited with serious consequences at every level, including initiation of prosecution, disciplinary action and entries in ACRs of the erring officers.

vii. As already mentioned, procedures for DPRs/tender process needs to be shortened and if found viable business model developed at central/state level.

viii. Wherever work is awarded to any contractor, performance guarantee must be taken in above terms.

ix. CPCB may finalize its recommendations for action plans relating to P-III and P-IV as has been done for P-I and P-II on or before 31.03.2020. This will not be a ground to delay the

execution of the action plans prepared by the States which may start forthwith, if not already started.

x. *The action plan prepared by the Delhi Government which is to be approved by the CPCB has to* ***follow the action points delineated in the order of this Tribunal dated 11.09.2019 in O.A. No. 06/2012.***

xi. *Since the report of the CPCB has focused only on BOD and FC without other parameters for analysis such as pH, COD, DO and other recalcitrant toxic pollutants having tendency of bio magnification,* ***a survey may now be conducted with reference to all the said parameters*** *by involving the SPCB/PCCs within three months. Monitoring gaps be identified and upgraded so to cover upstream and downstream locations of major discharges to the river. CPCB may file a report on the subject before the next date by e-mail at judicial-ngt@gov.in.*

xii. *Rivers which have been identified as clean may be maintained."*

(emphasis supplied)

14. Directions in order dated ***29.06.2020:***

"XII. Directions:

45. We reiterate our directions in order dated 6.12.2019 in the present matter, reproduced in Para 38 above, read with those in order dated 21.5.2020 in OA 873/2017 and direct CPCB and Secretary, Jal Shakti to further monitor steps for enforcement of law meaningfully in accordance with the directions of the Hon'ble Supreme Court and this Tribunal. ***The monitoring is expected with reference to ensuring that no pollution is discharged in water bodies and any violation by local bodies or private persons are dealt with as per mandate of law as laid down in orders of the Hon'ble Supreme Court and this Tribunal without any deviation from timelines. The higher authorities must record failures in ACRs as already directed and recover compensation as per laid down scale. Every State/UT in the first instance must ensure that at least one polluted river stretch in each category is restored so as to meet all water quality standards upto bathing level. This may serve as a model for restoring the remaining stretches."***

Review of Compliance Status Reports

CPCB Report dated 15.09.2020

15. Report of the CPCB filed on 15.09.2020 in pursuance of order dated 29.06.2020 in O.A. 673/2018 mentions the status of approval of action plans in a tabular form in Annexure -2 which is summed up as follows:-

"

- *All 61 action plans pertaining to Priority I and Priority II polluted river stretches submitted by 18 States & 2 UTs have been approved along with conditions by CPCB Task Team*
- *Out of 115 Action plans pertaining to P-Ill and P-IV polluted river stretches received from 24 States & 1 UT, 108 action plans pertaining to 22 States and 1 UT have been approved along with the conditions.*
- *Total 169 action plans submitted by 24 States & 3 UTs have been approved by CPCB Task Team."*

Annexure-2 is reproduced below:-

"State-wise Identified Polluted Rivers and the Status of Action Plans approved by CPCB in compliance to Hon'ble NGT Orders dated 20.09.2018, 19.12.2018, 08.04.2019, 6.12.2019 & 29.6.2020 in OA No. 673 of 2018 (as on 10.09.2020)

Name of the State/UT	Total No. of Identified polluted River stretches (PRS)	Priority I & II PRS approved		Priority III PRS		Priority IV PRS		Priority V PRS*	Total Action Plans approved by CPCB Task Team
		Priority I	Priority II	Total Number	CPCB Task Priority III approved	Total Number	Priority IV approved		
Andhra Pradesh	5	0	0			2	2	3	2
Assam	44	3	1	4	4	3	3	33	11
Bihar	6	0	0	1	1			5	1
Chhattisgarh	5	0	0			4**	0	1	0
DD & DNH	1	1	0					0	1
Delhi	1	1	0					0	1
Goa	11	0	0	1	1	2	2	8	3
Gujarat	20	5	1	2	2	6	6	6	14
Haryana	2	2	0					0	2
Himachal Pradesh	7	1	1	1	1			4	3
J & K	9	0	1	2	2	2	2	4	5
Jharkhand	7	0	0			3**	0	4	0
Karnataka	17	0	0	4	4	7	7	6	11
Kerala	21	1	0			5	5	15	6
Madhya Pradesh	22	3	1	1	1	3	3	14	8
Maharashtra	53	9	6	14	14	10	10	14	39
Manipur	9	0	1					8	1
Meghalaya	7	2	0			3	3	2	5
Mizoram	9	0	0	1	1	3	3	5	4
Nagaland	6	1	0	1	1	2	2	2	4
Odisha	19	1	0	3	3	2	2	13	6
Puducherry	2	0	0			1	1	1	1
Punjab	4	2	0			1	1	1	3
Rajasthan	2	0	0	1	1			1	1
Sikkim	4	0	0					4	0
Tamil Nadu	6	4	0			1	1	1	5
Telangana	8	1	2	2	2	2	2	1	
Tripura	6	0	0					6	
Uttar Pradesh	12	4	0	1	1	2	2	5	7
Uttarakhand	9	3	1	1	1	4	4	0	9
West Bengal	17	1	1	3	3	4	4	8	9
Grand Total	351	45	16	43	43	72	65	175	169

**Action plans pertaining to Priority V does not need approval by CPCB.*
*** Action plans under consideration, upon receipt of RRC approved revised action plans from the respective State."*

16. The report further mentions that certain States sought omission of polluted river stretches from the list. In response, CPCB prepared a criteria that a stretch can be deleted from the list of polluted river stretches if water quality complies with the criteria for two years. The report also mentions that in terms of order dated 06.12.2019, Central Monitoring Committee (CMC) has been constituted under the Chairmanship of Secretary, MoJS to review the status of compliance of implementation of action plans with the Chief Secretaries of all States/UTs, with the assistance of the CPCB and the NMCG.

CMC Report dated 15.09.2020

17. Compliance status has been mentioned in the CMC report as follows:-

"Existing Sewage Infrastructure

In respect of the existing sewage infrastructure, ***53,396 MLD of sewage (from urban settlements) is generated in 31 States/ UTs and 29,556 MLD capacity of STPs exists (1212 nos.) which approximates to about 55% of sewage generation. Against the existing capacity, only 62% of the capacity is being utilized for treatment of municipal sewage*** *(except for Andhra Pradesh, Tripura and West Bengal who have not reported the figures of utilization of existing capacity).* ***Rest of the existing capacity remains unutilized because of various reasons, including lack of availability of conveyance of sewage to treatment plants, technology issues requiring up-gradation of plants, or dysfunctionality on various counts. This leaves a gap of 24,144 MLD in treatment capacity for which States are regularly being asked to provide their inputs with regards to their plans to fill the gap including that for financing the creation of infrastructure****. It is also important that operational STPs remain compliant to the STP outlet standards as per environmental norms. The data obtained from the States of Chhattisgarh, Daman, Diu and Dadra Nagar Haveli, Gujarat, Manipur, Odisha, Sikkim, Tripura, Uttarakhand and Uttar Pradesh shows that* ***out of total 235 operational STPs in these States, 162 STPs are compliant to the outlet standards and a large number of STPs remain non-compliant to the environmental norms****. Other States have failed to report compliance of existing STPs to STP outlet standards. The States have assured that the same will be*

provided to CMC. The details of sewage generation, existing sewage treatment capacity, its utilization and gap thereof is presented in ***Table-1****.*

Table-1: Details of Existing Sewage Infrastructure in the 31 States/UTs

No.	***State***	***Sewage Generation (in MLD)***	***Existing STP (capacity in MLD and No.)***	***Capacity Utilization (In MLD)***	***Gap in Treatment at present (in MLD)***
1	***Andhra Pradesh***	*1384*	*515.45*	*-*	*868.55*
2	***Assam***	*703*	*0*	*0*	*703*
3	***Bihar***	*651.5*	*40 (2 STPs)*	*22 (55%)*	*611.5*
4	***Chhattisgarh***	*600*	*73.1 (3 STPs)*	*6 (8.2%)*	*526.9*
5	***Daman, Diu And Dadra Nagar Haveli***	*20.5*	*17.21 (2 STPs)*	*5.2 (30%)*	*3.29*
6	***Delhi***	*3273*	*2714 (35 STPs)*	*2455 (90%)*	*559*
7	***Goa***	*165*	*78.35 (9 STPs)*	*46.6 (59%)*	*86.65*
8	***Gujarat***	*3765*	*3378 (70 STPs)*	*2812 (83%)*	*387*
9	***Haryana***	*1454*	*1767*	*1466 (82%)*	*-*
10	***Himachal Pradesh***	*102.8*	*86.9*	*55.1 (63%)*	*15.9*
11	***Jammu & Kashmir***	*970*	*126.80 (11 STPs)*	*80.70 (63%)*	*843.2*
12	***Jharkhand***	*700*	*131 (19 STPs)*	*75 (57%)*	*569*
13	***Karnataka***	*3356.5*	*2561 (142 STPs)*	*1704 (66%)*	*795.5*
14	***Kerala***	*3759.28*	*124.135 (11 STPs)*	*81.325 (65%)*	*3634.935*
15	***Madhya Pradesh***	*2183.65*	*690.76 (25 STPs)*	*524.24 (75%)*	*1492.89*
16	***Maharashtra***	*9757*	*7746 (137 STPs)*	*4013 (51%)*	*2011*
17	***Manipur***	*114.054*	*27 (1 STP)*	*8 (29%)*	*87.05*
18	***Meghalaya***	*87.91*	*0*	*0*	*87.91*
19	***Mizoram***	*80*	*10 (1 STP)*	*0*	*70*
20	***Nagaland***	*44.3*	*25.4 (1 STP)*	*0*	*18.9*
21	***Odisha***	*439.49*	*91 (5 STPs)*	*70 (76%)*	*348.49*
22	***Puducherry***	*84*	*56*	*30 (52%)*	*28*

23	***Punjab***	*2111*	*1621.5 (115 STPs)*	*80%*	*456*
24	***Rajasthan***	*1712*	*966 (68 STPs)*	*43%*	*746*
25	***Sikkim***	*47.68*	*19.02 (6 STPs)*	*17 (89%)*	*28*
26	***Tamil Nadu***	*2070.855*	*1484.42 (56 STPs)*	*798.34 (53%)*	*586.435*
27	***Telangana***	*2453*	*920.1*	*810 (88%)*	*1532.9*
28	***Tripura***	*175*	*8 (1 STP)*	*-*	*167*
29	***Uttarakhand***	*329.33*	*355.13 (61 STPs)*	*203.9 (57%)*	*-*
30	***Uttar Pradesh***	*5500*	*3365.88 (105 STPs)*	*2566.55 (76%)*	*2134.11*
31	***West Bengal (as per CPCB Report 2018)***	*5303*	*557.64 (43 STPs)*	*-*	*4745.36*
	Total	***53,396.849***	***29,556.795***		***24,144.47***

In particular, ***poor capacity utilization of Rajasthan (43%), Manipur (29%), Daman Diu & Dadra Nagar Haveli (30%), Chhattisgarh (8%), Maharashtra (51%), Puducherry (53%), Tamil Nadu (53%) needs consideration and attention for which Chief Secretaries of the concerned States have been apprised through D.O. letters from Secretary, Department of Water Resources, River Development & Ganga Rejuvenation. The States of Assam and Meghalaya do not have any existing treatment capacity while Tripura & Manipur has only one STP each. The compliance of existing STPs in Telangana (88%), Madhya Pradesh (75%), Delhi (90%), Gujarat (83%), Haryana (82%), Odisha (76%), Punjab (80%), Sikkim (89%), UP (76%), remains good. This needs to be maintained and continuously improved. Utilization has not been reported by Andhra Pradesh, West Bengal, Tripura, for which these States have been reminded.***

Most of States do not have online system of monitoring the functioning of STPs, both in respect of quantity of sewage being treated and whether the treatment conforms to the environmental norms for STP outlet standards. Directions are required to be given to States to not only ensure that created capacity is optimally utilized by carrying out condition assessment of existing STPs/ sewage infrastructure in a fixed time frame, say another 3 months, but also putting in plans to upgrade STPs requiring upgradation so as to make them

functional. In addition, it is also equally important that States must develop a modern technology based online monitoring system, preferably IoT enabled platform for monitoring the performance of sewage infrastructure, with flexibility of integrating STPs under implementation and planning alike and which are likely to be commissioned in future*. Such a system will enable that health of sewage treatment facility is readily available, with minimum human interference in regard to data inflows into the system, at appropriate levels in the Government and State and Central regulators. An IoT enabled platform shall also be futuristic and will have common architecture, thus facilitating, horizontal integration of large number of STP plants (both existing and likely to come up in future) and uniform platform adaptable for all States and also at National level.*

So far as monitoring of water quality of rivers by CPCB is concerned, ***CPCB must continue to monitor all the parameters prescribed under »Primary Water Quality Criteria for Bathing Water" notified under Environment (Protection) Rules, 1986 (i.e. pH, DO, BOD, Faecal Coliform and Faecal Streptococci) as well as COD and other recalcitrant toxic pollutants having tendency for bio-magnification as prescribed under »Guidelines on Water Quality Monitoring - 2017" issued by MoEF&CC****. The monitoring will ensure that environmental standards are observed in respect of rivers and other water bodies."*

18. The report gives State-wise details of the projects which are ongoing, under tendering, awaiting sanction and where DPRs are yet to be prepared. Further mention has been made of the status of bio-remediation projects as follows:

"The status of in-situ bioremediation/ phyto-remediation in Polluted River Stretches being undertaken by the State was monitored. Most of the States have reported that they ***do not have technical expertise as well as competency to take up in-situ bio-remediation/ phyto-remediation measures****. Further, it has been reported that due to lack of availability of vendors, appropriate agencies with proven capability to implement such works and non-availability of standard rates, the progress in this activity has been slow.* ***Accordingly, Andhra Pradesh, Assam, Gujarat, Kerala, Madhya Pradesh, Manipur, Meghalaya, Nagaland, Odisha, Rajasthan, Sikkim, Tamil Nadu, Tripura are yet to take up any such measures on the drains in the polluted river stretches.*** *Other States have taken up measures on pilot basis only which they propose to evaluate based on the results obtained before works in other reaches are taken. Uttar*

Pradesh, West Bengal have reported that works have been taken up in 42 drains and 10 drains respectively in their State.

Further, Hon'ble NGT's vide its order dated 05.3.2020 (hearing on 18.2.2020) in the matter OA No. 06 of 2012 Manoj Mishra & ors while considering the report of Yamuna Monitoring Committee on "Approach to in-situ bio- remediation/ phyto-remediation of sewage in drains of Delhi", has observed and directed that CPCB report on "Alternate technologies for management of WW drains" be revised and circulated to MoUD, MoJS, NMCG and Govt. of Delhi, UP, Haryana for formulation of Policy for alternate technologies for waste water drain management. The same has already been informed to the States for their guidance to enable them to take decisions in implementation.

State wise status of bio-remediation/ phyto-remediation projects is given below.

19. The status of Industrial Pollution Management has been mentioned as follows:-

8. Industrial Pollution Management in the State/ UTs:

*"So far as measures for abatement of industrial pollution are concerned, the State-wise details about number of water polluting industries, industries having ETPs, quantity of effluent discharge, treatment capacity of ETPs and number of ETPs and CTPs is given in **Table-7**. It can be seen from the information provided by the States that only Delhi, Dadra and Nagar Haveli and Kerala have all the industries with functional ETPs. In respect of Andhra Pradesh, Kerala, Bihar, Jharkhand and Assam, data submitted by States has been observed to be inconsistent and needs to be further clarified by the States.*

All the industries located in catchment of Polluted River Stretches in State of Gujarat, Delhi, Odisha, Maharashtra, Sikkim, Meghalaya, Jharkhand and Bihar have been provided with functional ETPs. The compliance status of these ETPs is being reviewed and will be taken up in subsequent meetings of CMC."

20. Finally State specific issues have been mentioned. The report also gives the status of Solid Waste Management, Ground Water Augmentation Afforestation, Floodplain and E-flow Management and Scrutiny of Action Plans for P-II and P-IV.

Observations and recommendations in the CMC report:

21. The observations and recommendations in the report are as follows:

"States are regularly submitting Monthly Progress Reports, in the requisite formats, by the stipulated dates. However, ***quality of information provided in MPR in respect of a few States is wanting and needs to be improved.*** *As MPRs are one of an important document which provides requisite status in respect of various activities being undertaken as per approved Action Plans, the quality of information is important for meetings of CMC and further reporting to Hon"ble NGT. MPR before being submitted should therefore, necessarily be studied by senior officers in States and so certified.*

- *Most of States have informed that the progress of ongoing works has been severely affected due to COVID-19 pandemic which has impacted issues related to mobilization of skilled and unskilled manpower as well as supply of materials besides site works. Site works often reportedly get affected due to lockdown kind of situations whenever the same is under enforcement. The project completion timelines, therefore, are getting impacted due to these factors also.*

- *States have failed to report specific reasons for delay in grounding the projects as well identification of officials responsible for the delays. The necessary reporting from the States is being taken up and will be followed up in future review meetings.*

- *States have reported about financing difficulties being faced by them on account of resource crunch due to COVID-19 situation. States, reportedly are trying to arrange funding for priority projects and will be apprising the status in subsequent meetings of the CMC. The process of sanctioning of projects, being dependent on funding, is getting affected due to pandemic situation.*

- ***Considering financial limitations, States/ UTs may take up STP projects on Hybrid Annuity Model, which, as a business model, enables the Urban Local Body/ State Government to fund the development and operation of sewage treatment infrastructure taking into account the future flow of revenue.*** *It will help ULBs to tap the external market funding for development & operation of sewage infrastructure, apart from quality treatment services. NMCG has prepared model tender documents for development of STPs through HAM and recently these documents have also been approved by NITI Aayog.*

- ***One City- One Operator concepts offer integrating the rehabilitation and Operation & Maintenance of the existing treatment infrastructure along with development & operation of new STPs.*** *This concept can be integrated with HAM model, as is being done in many projects under Namami Gange.*

- *Government of India has also introduced* ***National Faecal Sludge & Septage Management (FSSM) Policy in 2017 to emphasize the importance of treating the faecal sludge from on-site sanitation system****. Some State Governments have also issued State level FSSM policies/ guidelines. Nearly 25 Faecal Sludge Treatment Plants (FSTPs) are operational and another 400 are in the offing in the country. Other States must consider adopting State level FSSM policies/ guidelines for regulating the handling, treatment and disposal of faecal sludge.*

- *Many of the States/ UTs have also been looking for alternatives beyond conventional STPs for treatment the sewage/ faecal sludge. States may consider implementation of FSTPs and/or co-treatment of faecal sludge in existing STPs, or may judiciously adopt any other alternate treatment technology, in towns wherever feasible.*

- *Many States/ UTs are constructing or have proposed to develop STPs in Polluted River Stretches with capacity less than 2 MLD. States, in such situations, may consider to adopt installation of* ***decentralized modular STPs; which offer advantages in form of lesser time involved in commissioning of systems, less land footprints, easy operations; instead of conventional centralized STPs based on techno-commercial considerations.*** *This will also enable them to comply to NGT stipulated timelines.*

- *States have created assets for treatment of sewage and capacity of* ***STPs so created is not being optimally utilised due to many reasons, including lack of availability of conveyance of sewage to treatment plants, technology issues requiring up-gradation of plants, or dysfunctionality etc.*** *A large number of STPs remain non-compliant to STPs outlet norms. States must ensure optimum utilization of the existing treatment infrastructure and also ensure compliance of the plants with regard to the environment norms. For this purpose, States may carry condition assessment studies of existing STPs/ sewage infrastructure in a fixed time frame, say another 3 months so as to identify the reasons of sub-optimum utilization and dysfunctionality of existing STPs. This will help them in finalizing plans to upgrade STPs requiring upgradation so as to make them functional.*

- *States do not have an online monitoring system in place to monitor (both quantity and quality of treated water) the health of existing sewerage infrastructure. States must consider to develop an online monitoring system, preferably IoT enabled platform for monitoring the performance of sewage infrastructure, with flexibility of integrating STPs under implementation and planning alike and which are likely to be commissioned in future. Such a system will enable that health of sewage treatment facility is readily available, with minimum human interference in regard to data inflows into the system, at appropriate levels in the Government and State and Central regulators. An IoT enabled platform shall also be futuristic and will have common architecture, thus facilitating, horizontal integration of large number of STP plants (both existing and likely to come up in future) and uniform platform adaptable for all States and also at National level.*

- ***53 projects** with capacity of about **867.46 MLD** in Polluted River Stretches are expected to be completed by December 2020. The concerned States must ensure that monthly monitoring and regular watch on the progress of these projects is to be maintained, so that the completion timelines are strictly complied and projects commissioned in time.*

- ***41 projects** are likely to be completed during time window of January 2021-March 2021. Progress of these projects is also required to be continuously monitored at State level so that lag, if any, in adhering to the timelines is avoided.*

- *State of Maharashtra, Telangana & Gujarat have to ensure that decision on tenders already called by State are finalized and the pending land acquisition issues for many STPs are sorted out urgently.**"***

Consideration of CMC and OC reports

*23. The CMC report states that it addressed communication to all the Chief Secretaries and explained Hybrid Annuity Model (**HAM**) based PPP projects, One City One Operator (**OCOO**) concept, as implemented for sewerage intervention projects under Namami Gange programme as well as Faecal Sludge and Septage Management (**FSSM**) concept. The business model for liquid waste management has in-built mitigation mechanism against time & cost overrun, improper design, sub-optimal operation and failure to meet the performance standards. As a business model, HAM enables the Urban Local Body/ State Government to fund the development and operation of sewage treatment infrastructure taking into account the future flow of revenue. States were also facilitated by holding a Webinar on "Mainstreaming Faecal Sludge & Septage Management in Ganga Basin", which was attended by officials from almost all*

the States. The Webinar also included a session on experience of Odisha which has taken up FSSM extensively, besides initiatives taken by NMCG in these directions. States were urged to consider the implementation of FSTPs and/ or co-treatment of faecal sludge in existing STPs, in all towns wherever feasible, so that dumping of the faecal sludge in water bodies/ land and thereby polluting them, can be avoided. The States/UT Administrations were specifically requested to ensure that ***at least one polluted river stretch in each category is restored to meet all water quality standards up to bathing level*** *as ordered by this Tribunal. This may serve as a "model" with a view to replicate the efforts for restoring the remaining stretches.* ***States have failed to report reasons for delay in grounding the projects as well identification of officials responsible for the delays****. The necessary reporting from the States is being taken up and will be followed up in future review meetings.*

Going Forward

24. We have duly considered the CPCB, CMC and OC reports as above and noted the gaps and recommendations. We accept the recommendations of the Committees already quoted above that the States should furnish quality information and comply with the directions of this Tribunal in terms of orders dated 06.12.2019 and 29.06.2020. The violation of mandate of 100% treatment of sewage may be visited with the assessment and recovery of compensation and violation of timelines for setting up of pollution control devices may also be likewise strictly enforced with the compensation regime in place. There is also need for fully utilizing and augmenting the existing infrastructure as already noted above.

25. The States/UTs may consider using HAM as a business model as well as OCOP concept, FSSM Policy, alternative models for treatment of sewage/faecal sludge, decentralized STPs and also strengthen the online monitoring system. We are also of the view that flood plain zones of all the rivers need to be mapped and demarcated and encroachments removed therefrom. The same be utilized for plantation, creation of bio-diversity parks and constructed wetlands or other recreational purposes, consistent with the environmental concern. We agree with the OC that river side mining needs to be regulated. To reduce the timelines for setting up of STPs, many States/UTs are consuming time in preparing DPRs whereas model DPRs can be prepared and used for shortening the timelines. Similarly, SOPs need to be prepared for the timeline to be taken in setting up of STPs as well as for maintenance and operation of existing STPs particularly those not meeting the norms. Number of monitoring stations also needs to be suitably increased. We are also of the view that the State RRCs

must function effectively and the Chief Secretaries must hold monthly meetings as it is found from the report of the OC for the State of UP that the Chief Secretaries may not be doing so. Huge failures of the States/UTs may show poor governance as far as environment is concerned which may need to be remedied. As found by the CMC, neither delay is explained nor accountability is fixed for the failure of the concerned officers which is not a happy situation.

26. While dealing with the control of pollution of River Ganga, the Tribunal noted that following action points for monitoring:

i. ***Setting up of STPs, Interception and Division (I&D) of drains and preventing untreated sewage and effluents***
ii. ***Use of treated water***
iii. ***Use of sludge manure***
iv. ***Status of septage management***
v. ***Compliance in relation to industries***
vi. ***Installation of STPs/treatment facilities in Hotels/Ashrams and Dharmshalas.***
vii. ***Water quality monitoring of river Ganga and its tributaries.***
viii. ***Maintenance of environmental flow in river Ganga.***
ix. ***Disposal of Bio-medical waste.***
x. ***Compliance of Solid Waste Management (SWM) Rules, 2016.***
xi. ***Preparation of maps and zoning of flood plains.***
xii. ***Mining activity under supervision of the concerned authorities.***
xiii. ***Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring.***

CMC/RRCs/ OC for UP may conduct further monitoring keeping in mind the above action points."

V. Directions:

36. Accordingly, we issue following directions:

i. *All the States/UTs may address gaps in generation and treatment of sewage/effluents* ***by ensuring setting up of requisite number of functional ETPs, CETPs and STPs****, as directed by the Hon'ble Supreme Court in (2017) 5 SCC 326.*
ii. *The timeline for commissioning of all STPs fixed by the Hon'ble Supreme Court, i.e., 31.03.2018, has long passed. The Hon'ble Supreme Court directed that the State PCBs must initiate prosecution of the erring Secretaries to the Governments, which has also not happened. This Tribunal was directed to monitor compliance and in the course thereof, we direct that compensation may be recovered in the manner*

*already directed in earlier orders (See, **Paras 5 and 6** herein), which may be deposited with the CPCB for restoration of the environment.*

iii. *The unutilized capacity of the existing STPs may be utilized expeditiously.*

iv. *The States/ UTs may ensure that the CETP, ETPs and STPs meet the laid down norms and remedial action be taken wherever norms are not met.*

v. *It must be ensured that no untreated sewage/effluent is discharged into any water body. Prompt remedial action may be taken by the State PCBs/PCCs against non-compliant ETPs/CETPs by closing down or restricting the effluents generating activity, recovering compensation and taking other coercive measures following due process of law.*

vi. *Directions outlined in **Paras 24-26** herein may be implemented by the States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level.*

vii. *Wherever action plans have not yet been finalized in respect of polluted river stretches or polluted coastal stretches, the same may be completed within one month from today. The execution of action plans may be overseen in the manner already directed in OA 673/2018 by River Rejuvenation Committees (RCCs). In the coastal areas, the said Committees may be known as 'River/Coastal Rejuvenation Committees'. The action plans must have provision for budgetary support in the manner laid down by the Hon'ble Supreme Court or otherwise which aspect may also be monitored by the CMC.*

viii. *Directions outlined in **Para 29** herein may be implemented by the concerned coastal States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. OA No. 829/2019 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018.*

ix. *Directions outlined in **Para 34 and 35** herein may be implemented by the States/ UTs, and their compliance monitored by the Chief Secretaries at the State level, and the CMC at the National level. OA No. 148/2016 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018.*

x. *CMC may consider development of an appropriate App to enable easy filing and redressal of grievances with regard to illegal discharge of sewage/effluents.*

xi. *The monitoring by the CMC may have the target of reduction of pollution loads and improvement of water quality of rivers and coastal areas.*

xii. *The CMC may also monitor the setting up of the bio-diversity parks, constructed wetlands and other alternative measures to reduce pollution load.*

xiii. *The CMC may also monitor demarcation of flood plain zones.*

xiv. The treated sewage water may be duly utilized for secondary purposes by preparing appropriate action plans and reports in this regard be filed with the CPCB periodically.

xv. CMC may submit its consolidated update report incorporating all the above, before the next date. Each action point mentioned in Para 26 may be individually covered, and summarized in a tabular format."

CMC Report dated 12.02.2021

11. Accordingly, the Central Monitoring Committee has filed its report dated 12.02.2021 titled **'3rd QUARTERLY REPORT OF THE CENTRAL MONITORING COMMITTEE (CMC) IN COMPLIANCE OF THE ORDER DATED 21.09.2020'**. The report refers to the correspondence with the States for preventing and controlling pollution in rivers/ water bodies/ lakes and ensuring that no untreated effluent/ sewage (beyond the prescribed standards) is allowed to be discharged from the ETPs/ CETPs/ STPs. Further reference has been made to the webinar held on 06.11.2020 to discuss approaches and models for waste management. Reference has also been made to discussion with the Niti Aayog to discuss business models to be adopted in Fecal Sludge and Septage Management (FSSM). Webinar held on 19.01.2021 for implementation of FSSM in cities and towns of Ganga basin has also been referred to. The report further mentions the meetings held by the CMC to monitor the progress on 30th September, 2020, 9th November, 2020 and 5th January, 2021 apart from other meetings with the Senior level Officials of the States/UTs to discuss States specific issues. It is further mentioned that the implementation of projects is being monitored in States which is reviewed at Central level. Progress reports were obtained in respect of action plans of States/UTs to prevent pollution of rivers/water bodies and to take action against the violators. **The CMC also sought information about coastal pollution**

from 13 States/UTs. Further, grievance module for addressing the issues of sewage/ effluent has been developed and made online on NMCG website, the States/ UTs have been directed to regularly monitor and update the status. Report also deals with use of treated water for secondary purposes.

12. The report thereafter gives the status as follows:

"Existing Sewage Infrastructure

48,004 MLD of sewage (from urban settlements) is being generated in 31 States/ UTs and 30,001 MLD capacity of STPs (1249 nos.) is existing which approximates to about 62% of sewage generation. Against the existing capacity, only 56% of the capacity is being utilized for treatment of municipal sewage. This leaves a gap of 17,027 MLD in treatment capacity. *The details of sewage generation, existing sewage treatment capacity, its utilization and gap thereof is presented in Table-1.*

Table-1: Details of Existing Sewage Infrastructure in the 31 States/ UTs

No.	State	Sewage Generation (in MLD)	Existing STP (capacity in MLD and No.)	Capacity Utilization (In MLD)	Gap in Treatment at present (in MLD)
1	**Andhra Pradesh**	1463.20	515.85 (43 STPs)	473.77 (91%)	947.35
2	**Assam**	435.53	0	0	435.53
3	**Bihar**	651.5	230 (6 STPs)	100 (44%)	421.5
4	**Chhattisgarh**	600	73.1 (3 STPs)	6 (8%)	526.9
5	**Daman, Diu And Dadra Nagar Haveli**	21.2	17.21 (2 STPs)	6.1 (35%)	3.9
6	**Delhi**	3273	2715 (35 STPs)	2432 (90%)	558
7	**Goa**	112.53	78.35 (9 STPs)	29 (37%)	34.18
8	**Gujarat**	4003	3485 (73 STPs)	2739 (78%)	518
9	**Haryana**	1267	1892 (155 STPs)	1189 (62%)	-
10	**Himachal Pradesh**	163.5	120.5 (65 STPs)	76.8 (64%)	43

11	**Jammu & Kashmir**	523	139 (15 STPs)	82.9 (60%)	383.08
12	**Jharkhand**	452	108 (14 STPs)	83%	343.8
13	**Karnataka**	3356.5	2242 (125 STPs)	1513.5 (67%)	1114
14	**Kerala**	317	124.15 (13 STPs)	91.12 (73%)	192
15	**Madhya Pradesh**	2183.65	618.23 (23 STPs)	472.6 (76%)	1565.4
16	**Maharashtra**	9758	7747 (142 STPs)	4207 (54%)	2011
17	**Manipur**	115	27 (1 STP)	9 (33%)	88
18	**Meghalaya**	75	1.85 (8 STPs)	1.82 (98%)	73
19	**Mizoram**	68	10 (1 STP)	0	58
20	**Nagaland**	44.3	25.4 (1 STP)	0	18.9
21	**Odisha**	367	91 (5 STPs)	70 (76%)	276
22	**Puducherry**	88	56 (5 STPs)	35 (62%)	32
23	**Punjab**	2111	1628.5 (116 STP)	80%	482.5
24	**Rajasthan**	1551	999 (80 STPs)	694.5 (69%)	552
25	**Sikkim**	47.68	19.5 (7 STPs)	60%	28
26	**Tamil Nadu**	3673.3	1616 (66 STPs)	919 (56%)	1320
27	**Telangana**	2613	888 (31 STPs)	735.8 (82%)	1724.45
28	**Tripura**	82.5	8 (1 STP)	3 (37%)	74.5
29	**Uttarakhand**	329.3	379 (63 STPs)	232.9 (61%)	-
30	**Uttar Pradesh**	5500	3370 (106 STPs)	2630.6 (78%)	2130
31	**West Bengal**	2758	776.32 (47 STPs) + 910 MLD addl treatment through EKW	289.89 (37%)	1071.68
Total		**48,003.69**	**30,000.96 (1261 STPs)**	**55.9%**	**17,026.58**

*State reported that 910 MLD of sewage is being treated by East Kolkata wetlands by natural process."

In particular, poor capacity utilization of Chhattisgarh (8%), Manipur (33%), Daman Diu & Dadra Nagar Haveli (35%), Goa (37%), West Bengal (37%), Maharashtra (54%) and Tamil Nadu (56%) needs

consideration and attention for which Chief Secretaries of the concerned States have been apprised during the monthly review meetings as well as through D.O. letters from Secretary, Department of Water Resources, River Development & Ganga Rejuvenation. As many of the STPs are under-utilized due to pending house sewer connections, States have been requested to expedite the remaining works. The State of Assam does not have any existing treatment capacity while Tripura & Manipur has only one STP each. STPs at Nagaland and Mizoram are yet to be made operational. The compliance of existing STPs in Andhra Pradesh (90%), Delhi (90%), Telangana (82%), Punjab (80%) Gujarat (78%), Uttar Pradesh (78%), Madhya Pradesh (76%), Haryana (62%) and Odisha (76%) remains good. This needs to be maintained and continuously improved.

Many of the States such as Haryana, Uttarakhand, Uttar Pradesh, Delhi, Madhya Pradesh, West Bengal, Tamil Nadu, Karnataka are installing online monitoring systems for capturing the real time data of the existing STPs. In November 2020, Madhya Pradesh has developed an "Env Alert app" and the same has been placed on Google play store and a WhatsApp group "M.R STP Cap. Utilization" has also been framed for day-to-day monitoring of STPs by the senior officials of the State. As reported by the State, this has led to improvement in the utilization capacities of the existing STPs as well as regular monitoring of projects under construction. Other States have been requested to adopt such measures for monitoring the performance of the already developed sewerage infrastructure.

Further, many States such as Meghalaya, Mizoram, Nagaland, Tripura are opting for alternate sewage treatment such as Faecal Sludge Treatment Plants, bio-digester/ bio-remediation/ phyto-remediation over the conventional treatment technologies for treatment of sewage/ septage in their States. Details of the same are provided in ***para 7 and 8****.*

Water Quality in Polluted River Stretches

The water quality data presented by the States during period since January 2020 up to December 2020 has been analyzed and the same has been summarized in ***Table-2****.*

It is seen from the above table that following river polluted stretches have now been reporting BoD levels which are conforming to bathing standard."

13. The details of on-going projects, projects under tendering, projects awaiting sanction of DPRs and at proposal stage are mentioned in Table-3,4,5 and 6 as follows:-

"Table 3: Details of on-going projects

No.	State	Completion By			
		January 2021-March 2021	**April 2021-December 2021**	**January 2022-June 2022**	**Beyond June 2022**
1	**Andhra Pradesh**	2 STPs of 7 MLD	29 STPs of 328.4 MLD	1 STP of 123 MLD	15 MLD STP
2	**Bihar**	12 projects of 355.5 MLD. Revised timeline to be provided			
3	**Chhattisgarh**	-	6 STPs of 238 MLD	-	-
4	**Daman, Diu And Dadra Nagar Haveli**	-	-	-	-
5	**Delhi**	-	1 STP of 318 MLD (new)	-	STPs of 950.8 MLD
6	**Goa**		5 STPs of 35.5 MLD including sewer networks		3 STPs of 43 MLD – work not started due to issues by locals.
7	**Gujarat**	23 STPs of 426.72 MLD	44 STPs of 571.68 MLD	4 STPs of 116.6 MLD	10 STPs of 125.4 MLD
8	**Haryana**	15 STPs of 59.45 MLD	19 STPs of 168.75 MLD	2 STPs of 45 MLD	2 STPs of 180 MLD
9	**Himachal Pradesh**	5 STPs of 26 MLD	10 STPs of 7.9 MLD	6 STPs of 6.1 MLD	5 STPs of 8.26 MLD
10	**Jammu & Kashmir**	2 STPs of 61.2 MLD	4 STPs of 17.6 MLD	4 STPs of 13.21 MLD	-
11	**Jharkhand**	-	3 STPs of 89 MLD	-	-
12	**Karnataka**	21 STPs of 427.17 MLD	9 STPs of 197.3 MLD	21 STPs of 115.67 MLD	4 STPs of 16.07 MLD
13	**Kerala**	STP/ETP/FSTP of 0.331 MLD	STP of 0.01 MLD		
14	**Madhya Pradesh**	15 STPs of 212 MLD	2 STPs of 22.25 MLD	19 STPs of 212.5 MLD	
15	**Maharashtra**	10 STPs of 141.5 MLD	5 STPs of 110.26 MLD	2 STPs of 13 MLD	-
16	**Manipur**	-	-	2 STPs of 17 MLD	-
17	**Meghalaya**	115 KLD Septage Treatment Plant			
18	**Mizoram**	Sewer	-	-	-
19	**Nagaland**		sewer connections in	-	-
20	**Odisha**	2 STPs of 56 MLD	48 MLD STP	-	-

22	**Punjab**	6 STPs of 27.5 MLD	12 STPs of 49.2 MLD	4 STPs of 67.5 MLD	8 STPs of 109 MLD
23	**Rajasthan**	29 STPs of 126 MLD	15 STPs of 113.5 MLD	4 STPs of 59.5 MLD	12 STPs of 141 MLD
24	**Sikkim**	2 STPs of 3 MLD	-	-	3.25 MLD STP
25	**Tamil Nadu**	18 STPs of 244 MLD	8 STPs of 203.46 MLD	6 STPs of 450.53 MLD	16.71 MLD STP
26	**Telangana**	2 STPs of 16.45 MLD	12 STPs of 73.96 MLD	3 STPs of 120 MLD	-
27	**Tripura**	-	-	8 MLD STP	-
28	**Uttarakhand**	3 STPs of 8.9 MLD	3 STPs of 23.7 MLD	1 STP of 28 MLD	
29	**Uttar Pradesh**	6 STPs of 122.01 MLD	21 STPs of 523.55 MLD	7 STPs of 161.5 MLD	3 STPs of 80 MLD
30	**West Bengal**	1 STP of 24 MLD	4 STPs of 47.75 MLD	6 STPs of 271.5 MLD	-
	Total (except Bihar)	**163 STPs of 1989.211 MLD**	**214 STPs of 3187.77 MLD**	**93 STPs of 1828.61 MLD**	**1688.49 MLD**

Table 4: Projects under Tendering and works to be awarded

No.	**State**	**STPs in Tendering**
1	**Andhra Pradesh**	6 STPs of 52.4 MLD
2	**Bihar**	7 projects of 149.5 MLD
3	**Chhattisgarh**	5 STPs of 40.5 MLD
4	**Daman, Diu And Dadra Nagar Haveli**	1 STP of 7 MLD
5	**Gujarat**	59 STPs of 445 MLD
6	**Himachal Pradesh**	8 STPs of 33.31 MLD
7	**Jharkhand**	15 MLD STP - Sanctioned
8	**Karnataka**	14 STP, 1 UGD for STP, 144 MLD 15 STP, 57.366 MLD (work order given)
9	**Kerala**	Projects for treatment of 55.8 MLD effluent
10	**Madhya Pradesh**	STPs of 53.4 MLD
11	**Puducherry**	2 STPs of 6 MLD
12	**Punjab**	43 STPs of 388 MLD
13	**Telangana**	17 STPs of 376.5 MLD

14	**Uttar Pradesh**	24 STPs of 568.1
15	**West Bengal**	9 STPs of 122.36 MLD
	Total	**Projects of 2514.236 MLD**

Table 5: Projects awaiting sanctioning of the DPR

No.	**State**	**STPs awaiting sanctioning of DPR**
1	**Assam**	2 STPs of 4 MLD
2	**Bihar**	4 projects
3	**Chhattisgarh**	1 STP of 35 MLD
4	**Delhi**	14 STPs in Najafgarh zone (of which 7 STPs
5	**Himachal Pradesh**	2 STPs of 4 MLD
6	**Jammu & Kashmir**	STPs of 59.9 MLD
7	**Jharkhand**	STPs of 184 MLD
8	**Karnataka**	29 STP of 134.846 MLD
9	**Kerala**	Treatment Plants of 0.71 MLD
10	**Manipur**	STP of 49 MLD
11	**Telangana**	31 STPs of 1098.17 MLD
12	**Sikkim**	0.72 MLD STP
13	**Uttarakhand**	STPs of 67 MLD

Table 6: Projects in Proposal stage (DPR to be prepared)

No.	**State**	**STPs in proposal stage**
1	**Andhra Pradesh**	STPs of 1215 MLD in proposal stage
2	**Assam**	17 STPs of 163 MLD
3	**Bihar**	20 Projects of which 5 DPR prepared
4	**Daman, Diu And Dadra Nagar Haveli**	1 STP of 16 MLD
5	**Delhi**	42 decentralized STPs and Mori Gate STP

6	**Gujarat**	19 STPs of 472.3 MLD
7	**Haryana**	8 STPs of 64 MLD (for future)
8	**Himachal Pradesh**	22 STPs of 32 MLD
9	**Jammu & Kashmir**	STPs of 47.9 MLD
10	**Jharkhand**	STP of 43 MLD
11	**Karnataka**	23 STP of 72.136 MLD;3 FSSM, 4.5 cum
12	**Kerala**	STP/ETP/FSTP of 2.776 MLD
13	**Madhya Pradesh**	1 scheme at DPR Stage
14	**Maharashtra**	58 STPs of 3569.82 MLD - Proposed
15	**Meghalaya**	STP of 0.105 MLD
16	**Punjab**	53 STPs of 183.5 MLD
17	**Sikkim**	6 STPs of 10.61 MLD
18	**Tamil Nadu**	DPRs prepared and are being prepared on cluster basis
19	**Telangana**	13 STPs of 99.85 MLD
20	**Uttarakhand**	STPs of 39.25 MLD
21	**West Bengal**	12 STPs of 228.89 MLD

”

14. Status of bio-remediation/Phytoremediation has been given as follows:-

“Table-7: Status of bio-remediation/ Phytoremediation projects

No.	State	Action Taken
1	**Andhra Pradesh**	No information provided in the MPR.

2	**Assam**	GMDA has taken up scheme for treatment of polluted water of Borsola Beel through Bioremediation. RFP document for "Treatment of Polluted Water of Borsola Beel through Bio-remediation' will be floated after approval of RFP document. GMDA has taken up a scheme for de-siltation and cleaning of Borsola Beel and the physical progress of the work as on 05.11.2020 is 100%. Govt. of has accorded Administrative approval for the scheme treatment of polluted water of Sarusola Beel and notice inviting RFP will be floated shortly. Tender Notice has been floated for the scheme "Cleaning of Sarusola Beel' in compliance with Hon'ble NGT order amounting to Rs. 47.61 Lakh. GMDA has taken up a scheme on Bioremediation measures for Silsako Beel. Govt. has accorded Administrative approval amounting to Rs. 921.00 Lakh (Rupees Nine Hundred Twenty One Lakh) for the scheme. Finalization of draft RFP document is under process. GMDA has taken up cleaning activities in Silsako Water body through removal of water – hyacinths and floating garbage along with de-siltation of the water body with the help of machineries.
3	**Bihar**	Bio-mining/bioremediation work has been initiated at Bairiya, Patna and Muzaffarpur for disposal of legacy waste. UD&HD, GoB has issued Work Order dated-24.09.2020 to the successful bidder for In-situ treatment through bio-remediation of drains joining Ganga and other polluted rivers for 89 drains. Work has been started in all 89 drains.
4	**Chhattisgarh**	All the households in polluted river stretches have on-site sanitation systems, either twin pits or septic tanks. The State has implemented phytorid treatment in all ULBs.
5	**Daman Diu & Dadra Nagar Haveli**	Phyto-remediation and Bioremediation proposal for the 13 identified drain has been received from NEERI and the same is under process. The drain near Rajiv Gandhi Setu, Daman is being taken up for in-situ treatment on pilot basis. Another drain near Kabra Industrial Estate, Kachigam, Daman is proposed for in-situ treatment.
6	**Delhi**	Integrated Drain Management Cell (IDMC) has been formed for remediation and management of all drains in Delhi. Drain owing agencies have submitted their action plan and started its implementation. The waste water in Kushak Nala running through NDMC areas is under bio-remediation and the water quality parameters are being monitored. Delhi Cantonment Board has started implementation of bio-remediation plan w.e.f 11.06.2020.
7	**Goa**	Conventional method of septic-tank / soak-pit is adopted by individual housing /complexes, wherever underground sewer network did not exist. In villages or hinterland-areas (i.e. pocket settlement areas), stand alone soak-pit / septic-tanks system ensures effective treatment of domestic-sewage.

8	**Gujarat**	State has implied in-situ treatment towards legacy waste management (Pirana dumping site). Pilot project for in-situ remediation at Ankleshwar and Kheda municipalities are under implementation and after positive reviews, the same shall be replicated in 7 municipalities.
9	**Haryana**	ULB Department has started bio/phyto remediation works in the drains in Municipal Corporation, Yamuna Nagar – Jagadhri, as a pilot project, which will be replicated at other places. Municipal Corporation of Sonepat has also invited tenders for the bio/phyto remediation of drains. Similarly, Municipal Corporations of Gurugram and Faridabad are in The process of preparing the proposals for bio/phyto remediation. Municipal Corporation of Panipat has already floated the tenders for the process in their jurisdiction. GMDA has also initiated a pilot project as an interim treatment for untreated discharge of Leg I via geo-synthetic dewatering tubes in consultation with CPCB. PHED has undertaken the in-situ phyto/bio remediation in its new STPs at Indri and Beri.
10	**Himachal Pradesh**	In-situ Phytoremediation technique is being applied in nallahs for treatment of water. The work of in-situ remediation in Priority-I (Sukhna Nallah) has been started and civil work and plantation work is completed and construction of polishing tank is under progress. The tender work in-situ remediation in Jattan Wala Nallah (catchment of Priority-II river stretch) has been awarded and work is in progress.
11	**Jammu & Kashmir**	Tenders for in-situ bio-remediation of drains floated, work yet to commence.
12	**Jharkhand**	Preparation of DPR to adopt in-situ remediation at drains at identified ULBs viz. Chas, Ranchi, Mango and Adityapur, involving CSIR–NEERI and tendering is under process from competent authority from approx. 120 MLD of waste water will be treated.
13	**Karnataka**	Drains contributing to the pollution of the 17 Polluted River Stretches have been identified. Status of bioremediation or any other insitu remediation not provided.
14	**Kerala**	In situ primary treatment were proposed for the river stretches Bharathapuzha and Pamba in the action plans.
15	**Madhya Pradesh**	In-situ bio-remediation for Nagda and Mandideep town has been initiated as pilot project to be adopted a model for replication in other towns of the State.
16	**Maharashtra**	Demonstration project has been started by MPCB for in-situ treatment of wastewater at Kotwali village drain on Vashisthi River to explore the possibilities and viability of the interim measures.
17	**Manipur**	DPR submitted to NRCD for in-situ treatment through Bio-remediation of 16.75 MLD.

18	**Meghalaya**	PMC of Smart City has prepared the feasibility report for Nallah in-situ treatment for the drain falling within the ADB and has been approved and accepted report by RRC for Umkhrah & Umshyrpi. Preparation of DPR for the bio-remediation of remaining drains has been communicated to the PMC for finalization of terms & conditions. DPR has been completed and for remaining rivers and the Water Resources Department is seeking fund for implementing the same.
19	**Mizoram**	For the treatment of sewage, in-situ remediation such as onsite grey-water management systems in rural areas and setting up of improved septic tanks and Bio-digesters for black water management in the catchment areas of the polluted rivers are in process.
20	**Nagaland**	Phytoremediation and Faecal Sludge and Septage Management Plants are proposed in all the ULBs. DPR to be completed by November 2020. Bioremediation is adopted for treatment of legacy waste along 1 km buffer stretch of river Dhansiri
21	**Odisha**	H & UD Department has identified Drains contributing to river pollution.
22	**Puducherry**	All the drains reaches the rivers Sankaraparani and Arasalar were identified and in-situ remediation of providing grills gratings and bar screen are provided to all the 172 drains.
23	**Punjab**	The work for in-situ remediation of the Sirhind Choe (near Bhadson, District Patiala), with the demonstration of Constructing Wet Land Technology has been completed. The performance of the technology is under evaluation and will be replicated in rest of the drains in depending upon its success. In-situ remediation of Bhulana drain carried out by Punjab Pollution Control Board with installing bioremediation, phyto-remediation enhanced through Nano Bubble Technology on Pilot basis and is under evaluation. WSP based STP at Bhulath has been upgraded by adding Nano Bubble Technology. The performance of the technology is under evaluation and will be replicated in rest of the drains in depending upon its success. The work on piloting low cost ecofriendly on 500 KLDSTP for Banur, based on modified constructed wetland approach, is near completion
24	**Rajasthan**	The State has implemented bioremediation treatment for legacy waste, for which tenders have been invited. Drain identified for contribution in River Chambal in Kota Region.
25	**Sikkim**	No tangible information is provided
26	**Tamil Nadu**	No details have been provided. The State has proposed for incinerator installation to process plastic waste.

27	**Telangana**	HMWSSB has entrusted for preparation of DPRs for In-situ remediation for 5 drains leading to lakes to NEERI, Hyderabad. NEERI has submitted DPR for Kokapet drain of 1.0 MLD Capacity. It is under implementation stage by NEERI. For balance 4 drains, DPRs are received from NEERI which are under sanction stage. In-Situ remediation is proposed only in priority I&II and in priority III to V stretches it is not feasible as Flat terrain is not available, Steep slope gradient leading to high velocity and Flow of greater than 5 MLD
28	**Tripura**	As reported in the MPRs, the State has directed all ULBs to adopt in-situ bioremediation and phytoremediation of sewage in drains. 210 drains and land identified. Tender for Bio remediation of 5 drains as pilot basis in Agartala has been completed.
29	**Uttar Pradesh**	Bio-remediation is being done in 42 drains of Prayagraj.
30	**Uttarakhand**	DPR for treatment of 19 drains by bioremediation approved and is under tendering.
31	**West Bengal**	Work started as pilot project for drains for Ganga & Churni river stretches.

"

15. The report gives the details of **alternate technology adopted or proposed to be adopted by the States/ UTs for treatment of sewage through the Septage Treatment Plants taking lesser time in commissioning compared to the conventional STPs** as follows:-

> "***Faecal Sludge Treatment Plants***
>
> *States are taking up projects for treatment of sewage through Septage Treatment Plants, which takes up lesser time in construction as compared to conventional STPs or are implementing co-treatment facilities in the existing STPs. Chhattisgarh has reported that 100% septage management scheme has been achieved in all the cities under polluted river stretches. Maharashtra has installed 15 FSTPs with total capacity of 290 KLD along polluted river stretches. Similarly, Odisha is implementing Septage Management System in a phased manner in all its ULBs, 10 FSTPs in 10 ULBs of 440 KLD have been commissioned, 82 Nos. in 82 ULBs of 1367 KLD are under construction. Tamil Nadu also proposes to establish 49 FSTPs, of which 5 FSTPs have been completed and co-treatment facility at 38 STPs have been facilitated. In Telangana, co-treatment of septage from the Septic Tanks of individual and community septic tanks in the existing 6 STPs have been completed and about 26 million liters of septage has been treated so far at these cotreatment plants, thereby preventing the pollution of lakes to that extent. 2 FSTPs have been completed in Uttar Pradesh.*

xxx *xxx* *xxx*

a. Decentralized/ modular STPs

Decentralized modular STPs are assets that can be created for sewage management of smaller capacity. ***These tailored systems, being pre-fabricated and involves minimal on-site civil construction and hydro-electro-mechanical installations, are easy to install, take significantly less time in commissioning (only few months) and easy to operate being compact systems****. Accordingly, they are suited in situations where sewage generation is say less than 2 MLD, water quality profile permits tailoring the modular STP system specific to the requirements of site water quality and time available for commissioning the system is less. Many of States can therefore adopt such systems in situations instead of conventional STPs (which take much longer time, not less than 24 months, for construction) based on evaluation of techno-commercial merits. Many States/ UTs are constructing or have proposed to develop STPs in Polluted River Stretches with capacity less than 2 MLD.*

xxx *xxx* *xxx"*

16. The details of Industrial Pollution Management is mentioned as follows:-

"Table-8: Statement on Industries and Treatment Capacity established in States/ UTs

State	Stretch	No. of Industries(Water Polluting)	Current Effluent Discharge (MLD)	No. of Industries having ETPs	Treatment Capacity of ETPs (MLD)	CETPs (Nos. and Capacity in MLD)
Gujarat	State	**12815**	**NA**	**12700**	**NA**	**Existing CETPs : 34 of 755.259 MLD, Proposed/Under construction: 16 of 263.35 MLD, Under expansion: 3, Capacity: 45.5 MLD**
Tamil Nadu	**State**	**11445**	**2835.7**	**11445**	**NA**	**Existing-36 of 87.350 MLD capacity. Proposed- 10 (41MLD) 1497 units connected to CETP.**
	PRS	1770	452.696	1770	NA	Existing – NA Proposed- 10 CETPs (41MLD)
Haryana	PRS	3729	126	3729	-	Existing- 19 CETPs of 190.1 MLD capacity. Proposed- 11 CETPs 141.5 MLD capacity Under Construction: 1 CETP of 6 MLD

Karnataka	State	3503	1339	3287	4523	Existing - 10 CETPs of 5.875 MLD installed capacity; Operational Capacity = 3.445 KLD (59%); 733 units connected Under construction = 2 (in Bidar and Yadgir), Expression of Interest issued = 1
Delhi	UT	1516	36	1516 (100%)	-	Existing – 13 CETPs of capacity 212.3MLD of which 2 are complying, 11 non complying. All CETPs have OLMS installed. Upgradation of CETPs has been proposed.
Goa	State	NIL				
Odisha	State	1031	886	1030	886	NIL
Tripura	PRS	179	0.0144	18 ETPs Installed	-	1 CETP of 500 KLD capacity installed
Maharashtra	State	16597	2100	16597	NA	Existing CETPs: 26 nos. (244.85 MLD) Under Construction-2CETPs, Proposed: 2 CETP at Nashik and Kolhapur

Himachal Pradesh	State	2773	45.67	955	35.1	Existing: 25 MLD CETP at Baddi. (468 units connected) Proposed: 2 MLD at Poanta Sahib Under Construction: 5 MLD at Kala Amb
Jammu & Kashmir	State	450	17	239	-	2 CETPs of 1.05 MLD functional, 1 CETP under trial, 10 CETP under construction and 10 CETP proposed
Uttarakhand	State	830	145	830	175	Existing-3 (13.2MLD) Proposed- 3 CETPs of 18 MLD
State	Stretch	No. of Industries(Water Polluting)	Current Effluent Discharge (MLD)	No. of Industries having ETPs	Treatment Capacity of ETPs (MLD)	CETPs (Nos. and Capacity in MLD)
Uttar Pradesh	State	1648	850.5	1404	NA	Existing – 7 (58.60 MLD) (NC-01/07 operational) Under Construction – 01No. (20 MLD)/ 3 Nos. of 26.65 MLD Sanctioned – 2 Nos. of (6.65 MLD)

Rajasthan	State	1199	-	1167	3173.61	16 CETPs (14 Operational, 01 under construction and 01 closed) Capacity - 159.88MLD
Assam	State	2641	-	2134	-	-
Sikkim	State	63	1.926	63	3.385	NIL
Meghalaya	State	260	3.5	254	-	-
DDDNH	UT/PR S	262	6.54	262	11.39	NIL
Nagaland	State	5	102 KLD	3	102 KLD	2 Units of 30KLD is under process
Manipur	State	Non-polluting industries	-	-	-	5 industrial units are connected to 1 non-functional CETP of 400 KLD
Mizoram	State	56	0.0438	56	0.099	NIL

Punjab	State	4055	402	1760	398	Existing – 4 CETPs of 20.535 MLD. Under Construction – 3 CETPs: 50 MLD -91% work completed & 40 MLD at Ludhiana-completed , 0.15 MLD at Jalandhar- status quo against court orders, hearing date on 15.02.2021
Madhya Pradesh	State	1186	25100	1186	28000	Existing: 3 CETPs of 9.1 MLD
Jharkhand	State	190	-	187	-	Existing : 2 Nos. of 25.05 KLD Under Construction: 3.5 MLD at Ranchi, Tupadana Industrial Cluster.
Bihar	State	219	NA	212	-	Existing : NA Under Construction/ Proposed: There are 52 industrial areas under control of BIADA, 5 Industrial Areas were identified in first Phase for construction of CETPs – Fathua, Hajipur-Vaisali-Bela, Barai, Bhagalpur, Patliputra. DPR for all Industrial area except for Patliputra was finalized and in first three calls for Bid submission no bidder responded.

West Bengal	State	454	1360.60	454(400 SPIs & 54 GPIs)	1360.60	Existing: 20 MLD CETP, Under Construction: 4 module of 20 MLD
Kerala	State	1401	156.3	5166	-	Existing- 8 CETPs of 12.4 MLD. 64 units connected.
Telangana	State	2178	603	1519	593.85	Existing- 4 Nos. of 7 MLD capacity operational. Under Construction – 1 CETP of 480 KLD
Andhra Pradesh	State	1069	4494.33	1069	-	Existing-7 CETP of (31 MLD) total capacity having 330 units as members
Puducherry	UT	96	4.75	95	4.75	NIL

VI. <u>Status of Solid Waste Management, Ground Water Augmentation, Afforestation, Floodplain and E-flow Management</u>

State-wise status of solid waste management, hazardous and plastic waste management, ground water management, good irrigation practices adopted by farmers, installation of rain water harvesting, protection and management of Floodplain Zones and maintenance of minimum E-flow in the river stretches as per the Action Plan and MPR submitted by the States is placed at Annexure- V. States of Andhra Pradesh, Goa, Haryana, Jammu & Kashmir, Maharashtra, Karnataka, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal have major gap in solid waste treatment facilities and have taken up projects for establishment of processing facilities, which are at various stages of implementation. These States need to ensure timely completion of the projects and ensure optimum utilization of their infrastructures. The status and progress will continue to be monitored in subsequent meetings of Central Monitoring Committee.

VII. <u>Scrutiny of Action Plans for P-II and P-IV</u>:

As reported by CPCB, all the Action Plans for Polluted river stretches in Priority I-IV have been approved with conditions.

VIII. <u>Model River Stretch identified by the State</u>

As directed by NGT, States have identified Model River to be taken up for rejuvenation in the first phase. States of Andhra Pradesh, Chhattisgarh, Jammu & Kashmir, Kerala, Mizoram, Rajasthan, Telangana and Uttar Pradesh are yet to identify Model River to be rejuvenated, the model of which can be replicated in rejuvenation of other river stretches. The identification and implementation of various strategies for rejuvenation of model river stretch assumes particular significance as it can translate as best ground to test the efficacy of various interventions so that such approach and models can be taken for implementation in other reaches. The experience gained out of such implementation will also help in wider dissemination of good and successful practices amongst the States. Accordingly, the State of Andhra Pradesh, Chhattisgarh, Jammu & Kashmir, Kerala, Mizoram, Rajasthan, Telangana and Uttar Pradesh may complete identification of Model River for rejuvenation and direct the concerned State officials to implement various interventions in coordinated manner as per Action Plan for rejuvenation of the model river.

Details as reported in the MPRs are in Table-9 as below.

Table-9: Status of Model Rivers Identified by State

No.	State	Model River Identified
1	**Andhra Pradesh**	-
2	**Assam**	Digboi River
3	**Bihar**	Harbaura River
4	**Chhattisgarh**	-
5	**Daman, Diu And Dadra Nagar Haveli**	Damanganga
6	**Delhi**	Yamuna
7	**Goa**	Sal River
8	**Gujarat**	Sabarmati River
9	**Haryana**	Both Yamuna & Ghaggar
10	**Himachal Pradesh**	Beas River
11	**Jammu & Kashmir**	-
12	**Jharkhand**	Swarnrekha River
13	**Karnataka**	Tungabhadra River
14	**Kerala**	-
15	**Madhya Pradesh**	Khan River
16	**Maharashtra**	Chandrabhaga River
17	**Manipur**	Nambul River
18	**Meghalaya**	Nonbah River
19	**Mizoram**	-
20	**Nagaland**	Chathe River
21	**Odisha**	Kathajodi river
22	**Puducherry**	Sankarabarani River
23	**Punjab**	Beas River
24	**Rajasthan**	-
25	**Sikkim**	Maney Khol River
26	**Tamil Nadu**	Bhavani River
27	**Telangana**	-

28	**Tripura**	Haora River
29	**Uttarakhand**	Ganga River
30	**Uttar Pradesh**	-
31	**West Bengal**	Karola River

IX. Status of Preparation/Submission of Action Plan for Coastal Pollution

Subsequent to the Hon"ble NGT order dated 21.09.2020, CPCB has issued a reminder vide letter dated 10.12.2020 to all the concerned coastal States/ UTs (except Andhra Pradesh) to submit the Action Taken Report and Time Bound Comprehensive Action Plan to CPCB for control of coastal/ marine pollution within the jurisdiction of the State/UT. Also, reminder was issued to Andhra Pradesh State to submit the Action Taken Report for ensuring compliance to directions dated 31.08.2020 issued under section 18(1)(b) of Water (Prevention & Control of Pollution) Act, 1974 by CPCB. Till 28.01.2021, Andhra Pradesh and Kerala State have submitted Time Bound Comprehensive Action Plan whereas Goa and Kerala State have submitted only the Action Taken Report. Remaining coastal States/ UTs viz Lakshwadeep, Daman, Diu & Nagar Haveli, Andaman & Nicobar, West Bengal, Tamil Nadu, Maharashtra, Karnataka, Gujarat, Odisha and Puducherry have yet not submitted the requisite information. Status of submission of Action Plan by States is as given Table-10 below.

Table-10: Status of Submission of Action Plans for Coastal Pollution by States

No.	State	Status
1	Andhra Pradesh	Action Plan Submitted to CPCB and under consideration of CPCB
2	Daman, Diu & Dadra Nagar	-
3	Goa	-
4	Gujarat	-
5	Karnataka	-
6	Kerala	Action Plan Submitted to CPCB and under consideration of CPCB
7	Maharashtra	-

8	Odisha	-
9	Puducherry	-
10	Tamil Nadu	-
11	West Bengal	-
12	Andaman & Nicobar	-
13	Lakshadweep	-

X. ***Development of Grievance portal***

As per directions of Hnn"ble NGT, it was directed that CMC may consider development of an appropriate App to enable easy filing and redressal of grievances with regard to illegal discharge of sewage/ effluents. ***Accordingly, NMCG has developed an online module on its website for submission of grievances and redressal of grievances with regards to illegal discharge of sewage/ effluents. The url of portal is https://nmcg.nic.in/ngtgrievance.aspx and has been operational with effect from January 2021.*** *Chief Secretaries of all the 31 States/UTs have been directed to regularly monitor and to address the issues within a stipulated time period. The status report in this regard shall be incorporated from next submission onwards.*

XI. ***Reutilization of Treated water***

Acknowledging the importance of ***safe reuse of treated waste water (SRTW) in India as well as prioritizing the same in planning and management due to rapid urbanisation and increased wastewater generation and also with an aim towards increased water security, the action plan for Reuse of Treated Waste Water has been undertaken at national level in Ministry of Jal Shakti.*** *The introduction of the concept of SRTW into water resource strategies and policies could provide additional resources for multiple uses and water security for fast growing cities, industry, agriculture and the environment. So far, India has no national policy regarding SRTW, except for a few State policies viz., Gujarat, Maharashtra, Tamil Nadu and Haryana. Accordingly, National Mission for Clean Ganga Ministry of Jal Shakti in collaboration with the Indo-German „Support to Ganga Rejuvenation" project (GIZ-SGR) and the India-EU Water Partnership (IEWP) has initiated formulation of National Policy on Safe Reuse of Treated Water (SRTW). The policy development is based on a comprehensive consultation process by engaging relevant*

stakeholders under a dedicated steering group. The stakeholders involved included MoEF&CC, MoHUA, industries, ULBs and representations from pioneering States (Maharashtra, Gujarat, Haryana, UP). ***The policy development process is supported by European and national experts bringing in best international practice****. Based on extensive consultations during various Consultation meetings, 1st Draft Working document has been prepared. Further consultation for finalisation of National Policy is underway.*

State–wise details of re-utilization of treated water as reported by the State is provided in Table-11 below.

Table-11: Status of Re-utilisation of Treated Water by States

State	Status
Andhra Pradesh	321.81 MLD of treated wastewater is being reused.
Assam	Being done by P&RD Department for rural areas. No further details provided.
Bihar	Treated sewage water of STP having capacity 100 MLD or above will be used by Water Resource Department and less than 100 MLD will be used by Minor Water Resource Department for agriculture purposes.
Chhattisgarh	Treated waste water will be utilized after the completion of construction of STPs.
DDDNH	Treated water is used daily for road washing, horticulture, soil compaction, irrigation etc.
Delhi	90 MGD is being used for various purposes e.g. horticulture, irrigation, DTC depot etc.
Goa	Part utilization has been proposed for (i) release of STP-treated water at Colva into Sal-river so as to maintain the flow, (ii) flushing of St. Inez creek, (ii) municipal gardening, (iii) social forestry, (iv) private plantation, (v) dust-suppression measures etc.
Gujarat	Gujarat Government has framed Policy for Reuse of Treated Waste Water (TWW) wherein targets have been set for use of 70% of the treated wastewater by 2025 and 100% of treated wastewater by 2030. 643 MLD of treated waste water is used by MC and Municipalities.
Haryana	State has prepared a draft policy for resuse of treated waste water and an action plan for reuse of treated sewage and as per the plan, approx. 80% of treated sewage will be reutilized by 2024-2025. Treated waste water will be used for the farming purpose.
Himachal Pradesh	JSV is providing facility for bulk water user at all the STPs to enable drawing the effluent for reuse.

Jammu and Kashmir	Reuse of Treated Water through Pumping Plant with Rising Main to Railway Station Katra for cleaning and washing purpose, Horticulture purpose at Air force station, at Army Unit for cleaning and washing purpose have been proposed.
Jharkhand	Water will be used for irrigation, fish farming, landscaping, cooling water for power plants and oil refineries, toilet flushing, public parks, dust control, artificial lakes, construction etc.
Karnataka	Quantity of treated water reused in Bengaluru = 427.5 MLD; other than Bengaluru = 106.65 MLD. It is to be used for recharge of lakes, use in industrial establishments, by horticulture departments, used in gardening etc.
Kerala	Utilization of the treated effluent for irrigation, gardening, industries, construction and recharge are being explored.
Madhya Pradesh	At present 84.96 MLD of treated water is being used or irrigation/gardening purpose (including STP of 35 MLD, Bhopal under AMRUT scheme)
Maharashtra	The Infrastructure Projects are mandated by MPCB to recycle 60% of treated sewage for secondary use by providing duel pipeline for different class of users like Thermal Power Plants, Industrial Units, Construction activities, non-potable municipal uses, Agriculture-Irrigation, etc. depending on its availability.
Manipur	No information provided.
Meghalaya	Stand-alone ETPs are operational in 260 number of hotels/guesthouse/health care centers /Industries and treated wastewater are reuse for gardening/cleaning purpose.
Mizoram	Action Plan for sewage treatment including recycle and reuse of treated waste water was submitted to the State Govt.
Nagaland	Treated water is to be used for agricultural farms, sprinkling the road construction sites, flushing/cleaning of the sewage drains
Orissa	806 MLD treated industrial wastewater are being recycled/ reused in the process or being utilized for plantation/ irrigation purposes. Bulk users have been identified for utilization of treated water for the STPs under commissioning.
Puducherry	15.3 MLD treated wastewater is been in use for Industrial usage, Silk cotton trees, Coconut Plantation, Construction activities, Watering the road side plantation
Punjab	The Government of Punjab has Notified "The State Treated Waste Water Policy 2017" to promote recycling and reuse of treated sewerage for non-potable applications. Till date, 47 number projects have been completed by Department of Soil & Water Conservation, Punjab for using 243.3 MLD treated wastewater of STPs. These projects have been implemented by laying underground pipeline system for irrigation water conveyance covering an area of 7652 hectares. The Department further proposes to utilize 1238.8 MLD of treated wastewater from 164 existing, under progress and proposed/new STPs for irrigation purposes for an agricultural area of 37,683 hectares. Others relevant Departments are also exploring various options to promote utilization of the treated wastewater of STPs for non-potable use such as domestic use, construction activities, industrial processes, urban landscaping & green belts, etc.

<table>
<tr><td>Rajasthan</td><td>No information provided.</td></tr>
<tr><td>Sikkim</td><td>Treated effluent is to be utilized in cooling towers, irrigation of green belt, evaporation or flushing purposes.</td></tr>
<tr><td>Tamil Nadu</td><td>Tamil Nadu Government has notified Promotion of Use of Treated Waste Water policy during December 2019 to maximize the collection & treatment of sewage generated and reuse of treated waste water on a sustainable basis, thereby reducing dependency on fresh water resources. At present Memorandum of Understanding (MoU) has been executed between the ULB and the user agency for the re-use of secondary treated effluent water (STEW). 80.5 MLD of treated wastewater is being reused for cooling purpose, Agricultural use to farmers association, MRF Industrial use, to maintain the TDS level of Tanners for Agro- forestry etc.</td></tr>
<tr><td></td><td>Some of details are given in Table-11.1 below.
<table>
<tr><th>S. No</th><th>Name of the ULB</th><th>Quantity (in MLD)</th><th>Usage/ Purpose</th></tr>
<tr><td>1</td><td>Nagapattinam</td><td>2.00</td><td>M/s KVK Power for cooling purpose</td></tr>
<tr><td>2</td><td>Dindugul</td><td>5.00</td><td>To maintain the TDS level of Tanners as well for Agro-forestry.</td></tr>
<tr><td>3</td><td>Tirunelveli</td><td>24.00</td><td>Nanguneri SEZ for Industries</td></tr>
<tr><td>4</td><td>Perambalur</td><td>3.00</td><td>MRF Industrial use</td></tr>
<tr><td>5</td><td>Ramanathapuram</td><td>3.00</td><td>NTC Infra</td></tr>
<tr><td>6</td><td>Coimbatore</td><td>15.00</td><td>Agricultural use to farmers association</td></tr>
<tr><td>7</td><td>Pollachi</td><td>11.50</td><td>Agricultural use to farmers association</td></tr>
<tr><td>8</td><td>Chinnamannur</td><td>3.00</td><td>Agricultural use</td></tr>
<tr><td>9</td><td>Karur</td><td>7.00</td><td>Agricultural use</td></tr>
<tr><td>10</td><td>Arakkonam</td><td>7.00</td><td>MRF Industrial use</td></tr>
</table>
As per the Policy, following is proposed.
• The treated wastewater is to be utilized for eco-parking, greenery development and avenue plantation and the remaining will be disposed into the river after meeting the standards.
• Industries having ZLD system are reusing the treated wastewater in the process.
• Domestic grey water has been recharged into the ground through Individual soak pit constructed at individual households and filtered grey water from community soak pits are being utilized for agricultural purpose in Rural areas.</td></tr>
</table>

Telangana	Govt. of Telangana has released a policy for reuse of the treated water. 56 MLD has been reused.
Tripura	AMC is using treated waste water from the Barjala (Near Lankamura) STP for watering of gardens & open space in Agartala city, road watering in dry seasons, irrigation of agricultural fields etc.
Uttar Pradesh	No information provided.
Uttarakhand	Treated water of 95 MLD capacity at Jagjeetpur is used for irrigation through canal system.
West Bengal	*Treated Wastewater Re-use Policy of Urban West Bengal* has been notified by Urban Development & Municipal Affairs Department of Government of West Bengal in June"2020. Department has identified Kalyani Town as a model for resue of the treated water generated at Kalyani STP under KMDA. „ DPR is under preparation.

17. The report concludes with the observations and recommendations as follows:-

XII. <u>Observations</u> <u>and Recommendations</u>

Besides State specific issues highlighted under para-V of this report, following observations and recommendations are made.

- *States are regularly submitting Monthly Progress Reports, in the requisite formats, by the stipulated dates. However, information provided in MPR on water quality aspects in respect of a few States may need to be regularly provided base on the data being collected by State Pollution Control Boards. As MPRs are one of an important document which provides requisite status in respect of various activities being undertaken as per approved Action Plans, the quality of information is important for meetings of CMC and further reporting to Hon"ble NGT. MPR before being submitted should therefore, necessarily be studied by senior officers in States and so certified.*
- *Most of States have informed during monthly meetings of CMC that the progress of ongoing works continues to be impacted due to COVID-19 pandemic on account of labour mobilization issues, financial resource availability besides site works. The project completion timelines, therefore, are getting impacted due to these factors also*
- *The compliance of existing STPs in Andhra Pradesh (90%), Delhi (90%), Telangana (82%), Punjab (80%) Gujarat (78%), Uttar Pradesh (78%), Madhya Pradesh (76%), Haryana (62%) and Odisha (76%) remains good. This needs to be maintained and continuously improved.*
- *Many of the States such as Haryana, Uttarakhand, Uttar Pradesh, Delhi, Madhya Pradesh, West Bengal, Tamil Nadu, Karnataka are installing online monitoring systems for capturing the real time data of the existing STPs. In November 2020, Madhya Pradesh has developed an "Env Alert app" and the same has been placed on Google play store and a WhatsApp group "M.R STP Cap. Utilization" has also been*

framed for day-to-day monitoring of STPs by the senior officials of the State. As reported by the State, this has led to improvement in the utilization capacities of the existing STPs as well as regular monitoring of projects under construction. Other States may consider adopting such measures for monitoring the performance of the already developed sewerage infrastructure.

- *The river polluted stretches reporting BoD levels conforming to bathing standard have been given in para-3. The efforts need to be continued to ensure that these stretches which reportedly fall under cleaner category shall continue to remain clean and should not slip back to polluted stretches. Efforts made by State in this directions need to continue and propagated amongst other States through the framework of Central Monitoring Committee.*
- *Similarly, river stretches having BoD levels which are slightly higher than limit of 3m/l and accordingly fall under Priority-V are low hanging fruits which can be easily transformed into clean stretches by concerted efforts and less investments. Focus of the States may remain on these stretches which can provided primary treatments to control the pollution levels.*
- *During the period w.e.f August to December 2020, States except Rajasthan have reported that 59 sewerage projects (STPs) have been completed and are under commissioning adding a total capacity of 1116.885 MLD. These sewerage infrastructure plants are under commissioning. Rajasthan has reported that 15 STPs of 45.5 MLD have been completed and made operational in the State in 2020 during January to December‟2020.*
- ***STPs of around 8859 MLD treatment capacity are under-construction in the on-going projects in the States/ UTs. States of Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Uttarakhand, Uttar Pradesh and West Bengal will be able to complete 163 projects with capacity of about 1989.211 MLD in the States/ UTs by March 2021. The progress of these projects have to be regularly monitored using appropriate progress monitoring mechanism (eg., creation of Whatsapp group) similar to one established by Madhya Pradesh so that lag in completion of timeline is avoided.***
- *Among on-going projects,* ***States may have to review the project timelines in detail so as to assess if any further reduction in completion timelines schedule in respect of projects scheduled for completion during the period beyond April 2021 as indicated in par – 5 of this report is possible.***
- ***There are 242 projects under tendering in Andhra Pradesh, Bihar, Chhattisgarh, DDDNH, Gujarat, Himachal Pradesh, Jharkhand, Karnataka,Kerala, Maharashtra, Puducherry, Punjab, Uttar Pradesh and West Bengal, while a large no. of projects are awaiting sanction of the DPR or DPR is yet to be prepared. States have reported about financing difficulties being faced***

by them on account of resource crunch due to COVID-19 situation. *States, reportedly are trying to arrange funding for priority projects and will be apprising the status in subsequent meetings of the CMC. The process of sanctioning of projects, being dependent on funding, is getting affected due to this.*

- *Observations continued from 2nd Quarterly Report of Central Monitoring Committee:*

  - *Considering financial limitations, S**tates/ UTs have been advised to take up STP projects on Hybrid Annuity Model, which, as a business model, enables the Urban Local Body/ State Government to fund the development and operation of sewage treatment infrastructure taking into account the future flow of revenue. It will help ULBs to tap the external market funding for development & operation of sewage infrastructure, apart from quality treatment services. NMCG has prepared model tender documents for development of STPs through HAM and recently these documents have also been approved by NITI Aayog. The documents have been made available to States as per their requests also.***
  - *"One City- One Operator" concepts offer integrating the rehabilitation and Operation & Maintenance of the existing treatment infrastructure along with development & operation of new STPs. This concept can be integrated with HAM model, as is being done in many projects under Namami Gange.*

  - *Government of India has also introduced **National Faecal Sludge & Septage Management (FSSM) Policy in 2017 to emphasize the importance of treating the faecal sludge from on-site sanitation system. Some State Governments have also issued State level FSSM policies/ guidelines**. More than 30 Faecal Sludge Treatment Plants (FSTPs) are operational and another 400 are in the offing in the country. Other States must consider adopting State level FSSM policies/ guidelines for regulating the handling, treatment and disposal of faecal sludge.*
  - *Many of the States/ UTs have also been looking for alternatives beyond conventional STPs for treatment the sewage/ faecal sludge. States may consider implementation of FSTPs and/or co-treatment of faecal sludge in existing STPs, or may judiciously adopt any other alternate treatment technology, in towns wherever feasible.*
  - *Many States/ UTs are constructing or have proposed to develop STPs in Polluted River Stretches with capacity less than 2 MLD. States, in such situations, may consider to adopt **installation of decentralized modular STPs; which offer advantages in form of lesser time involved in commissioning of systems, less land footprints, easy operations; instead of conventional centralized STPs based on techno-commercial considerations.***
  - *States have created assets for treatment of sewage and capacity of **STPs so created is not being optimally utilised due to many reasons, including lack of availability of***

conveyance of sewage to treatment plants, technology issues requiring up-gradation of plants, or dysfunctionality etc. A large number of STPs remain non-compliant to STPs outlet norms*. States must ensure* ***optimum utilization of the existing treatment infrastructure and also ensure compliance of the plants with regard to the environment norms****. For this purpose, States may carry condition assessment studies of existing STPs/ sewage infrastructure in a fixed time frame, say another 3 months so as to identify the reasons of suboptimum utilization and dysfunctionality of existing STPs. This will help them in finalizing plans to upgrade STPs requiring upgradation so as to make them functional.*

- ***Most of the States do not have an online monitoring system in place to monitor (both quantity and quality of treated water) the health of existing sewerage infrastructure.*** *States must consider to develop an online monitoring system, preferably IoT enabled platform for monitoring the performance of sewage infrastructure, with flexibility of integrating STPs under implementation and planning alike and which are likely to be commissioned in future. Such a system will enable that health of sewage treatment facility is readily available, with minimum human interference in regard to data inflows into the system, at appropriate levels in the Government and State and Central regulators. An IoT enabled platform shall also be futuristic and will have common architecture, thus facilitating, horizontal integration of large number of STP plants (both existing and likely to come up in future) and uniform platform adaptable for all States and also at National level.*

- ***There is need to have a separate paradigm in urban planning for river cities****. As the urban system is key to impact the health of rivers and urbanization is likely to grow in future, this needs to be given due importance and urban river management plans need to be developed. Mainstreaming river and water body health into Master Plan is suggested to have long term perspective and enable legal support at municipal level for several of these activities."*

Compliance Status with regard to directions of this Tribunal dated 21.9.2020 in OA 829/2019 (coastal pollution) and OA 148/2016 (use of treated sewage for secondary purposes)

18. It may be noted that the Tribunal has considered overlapping issues in above matters as follows:

- **O.A. 829/2019**: issue of coastal pollution on account of discharge of untreated effluents/sewage. This matter was

disposed of on 21.09.2020 with the following operative directions:-

> *"29. While the CPCB report mentions the directions issued to 13 Costal State PCBs/PCCs but compliance of such directions needs to be monitored. We have dealt with OA Nos. 593/2017 and 673/2018, dealing with the setting up of ETPs/ STPs/CETPs and preventing discharge of untreated effluents/sewage into the rivers hereinabove.* ***The subject of coastal pollution needs to be dealt with in the same manner as polluted river stretches by preparing action plans of each States/UTs which may also be monitored by the Central Monitoring Committee (CMC) simultaneously with the 351 polluted river stretches and the said subject may also be covered in the next report of the CMC. As already mentioned, the CMC is to be headed by the Secretary, Ministry of Jal Shakti and assisted by the CPCB and NMCG and at the States/UTs level, the Chief Secretaries have to monitor the compliance status and give reports to and interact with the CMC.***
>
> *OA No. 829/2019 stands disposed of and further monitoring of the issue will henceforth be in OA 593/2017 and OA 673/2018."*

- **O.A. 148/2016**: management of sewage treated water is involved. This matter was also disposed of on 21.09.2020 with the following operative directions:-

> ***"34. In view of the above reports finding a huge gap in utilisation of sewage treated water, further action needs to be taken by all the States/UTs to ensure updating and enforcement of the action plans for 100% utilization of the treated water for secondary purposes.***
>
> *35. Since the above issue is interrelated to the issue of operation of STPs, it will be appropriate that* ***this aspect is also now monitored by the CMC headed by the Secretary, Ministry of Jal Shakti and assisted by the CPCB and NMCG. Ministry of Urban Development may also nominate an officer of not below the rank of Joint Secretary in the said Committee****. OA No. 148/2016 need not be kept pending separately which stands disposed of as the subject will be henceforth considered in OA 593/2017 and OA 673/2018."*

19. Accordingly, the CMC has in its report dealt with the issue of coastal pollution and reutilization of treated water in Para IX and XI already quoted above.

Separate order in respect of some polluted rivers for further monitoring by the concerned Executive authorities

20. Apart from the said matter, the Tribunal is considering/has considered the remedial action for control of pollution of certain rivers separately, under Supreme Court directions, or otherwise[23]. Further reference to the orders in the said matters will be made later. After monitoring the remedial action, the Tribunal has directed the Chief Secretaries of the concerned States to take over further monitoring as will be shown from paras 32 to 35. **Consistently with the said approach, this course of action needs to be followed for monitoring prevention of discharge of waste in rivers and water bodies as well as preventing pollution and rejuvenating the polluted river stretches.**

Reports from some States/Oversight Committee for UP

21. Though some States have also filed their individual reports, it is not necessary to refer to the same as they are covered in the above report of CMC. However, report of an Oversight Committee constituted by this

[23] These include (not an exhaustive list):
- M.C. Mehta V. UOI **O.A. No. 200/2014** (pollution of **Ganga**), see also 2017 NGTR (3) PB 1
- Manoj Mishra V. UOI, **O.A. No. 06/2012** (pollution of **Yamuna**)
- Stench Grips Mansa's Sacred Ghaggar River (Suo-Moto Case) **O.A. No. 138/2016** (TNHRC) (pollution of river **Ghaggar**)
- Mahendra Pandey V. UOI & Ors. **O.A. No. 58/2017** (river **Ramganga**, a tributary of river Ganga)
- Sobha Singh & Ors. V. State of Punjab & Ors. O.A. 916/2018, and **O.A. No. 101/2014** (rivers **Sutlej and Beas**)
- Amresh Singh V. UOI & Ors. **O.A. No. 295/2016, Execution Application No. 32/2016** (rivers **Chenab and Tawi**)
- Nityanand Mishra V. State of M.P. & Ors. **O.A. No. 456/2018** (river **Son**)
- Doaba Paryavaran Samiti V. State of U.P. &Ors. **O.A. No. 231/2014** (river **Hindon**)
- Arvind Pundalik Mhatre V. MoEF&CC &Ors. **O.A. No. 125/2018** (river **Kasardi**)
- Sudarsan Das V. State of West Bengal & Ors. **O.A. No. 173/2018** (river **Subarnarekha**) Meera Shukla V. Municipal Corporation, Gorakhpur & Ors. **O.A. No. 116/2014** (rivers **Ami, Tapti, Rohani and Ramgarh lake**)
- O.A. 426/2018, Mohammed Nayeem Pasha & Anr. v. The State of Telangana & Ors. (river Musi)
- O.A. 50/2018, Nav Yuva Sanghatan & Ors. v. The Secretary, Narmada, Water Resources, Water Supply & Kalpsar Department & Ors. (river Tapi).

Tribunal for State of UP headed by Justice SVS Rathore, former Judge of Allahabad High Court at Lucknow have also filed two separate reports - in *O.A. No. 593/2017* and *O.A. No. 673/2018*.

22. The report in *O.A. No. 593/2017* filed on 13.02.2021 gives the status of compliance of the STPs, ETPs, CETPs, use of treated water and concludes with the following recommendations:-

> ***"Recommendations:***
>
> *In view of the above we recommend as follows:*
>
> 1. *Recovery position of EC is not good. Strict steps should be taken to accelerate the process of EC recovery.*
> 2. *Action plans for reuse of treated water have not been finalized yet. They may be prepared expeditiously and implemented with strict timelines.*
> 3. *There are many non-operational STPs under rehabilitation. The process may be expedited. It is also suggested that wherever old STPs are under operation on UASB technology, they may be upgraded to latest technology like SBR technology.*
> 4. *Steps have been taken to address gaps in generation and treatment of sewage/effluents by setting up functional ETPs, CETPs and STPs in the state. However city wise evaluation of requirements of STPs/ETPs/CETPs has not been done so far*
> 5. *The capacity utilisation of existing STPs may be improved by identifying the bottlenecks and plugging them in each case.*
> 6. *The operation and maintenance of STPs/ETPs/CETPs and their respective distribution system should be improved for optimal results. The working of operators under One City One Operator Scheme needs to be continuously evaluated and this evaluation may be linked with their payment and renewal system."*

23. The report in *O.A. No. 673/2018* filed on 12.02.2021 concludes with the following recommendations:-

> ***"<u>RECOMMENDATIONS BY THE OVERSIGHT COMMITTEE</u>***
>
> 1. *Out of total 339 drains in 12 polluted river stretches, 257 are untapped till date. Untreated sewage is flowing into the rivers and no interim measure has been taken to prevent this. Plan details along with timelines and corresponding physical and financial progress regarding*

tapping of these 257 drains be filed by the Govt before NGT within a month.

2. *Out of total 5500 MLD sewage generated in the State of these 12 polluted river stretches, only 2630 MLD is treated in operational 100 STPs. There exist a gap of 2870 MLD. Currently, 38 STPs with capacity of 887.06 MLD are under construction while 24 STPs with capacity of 568.10 MLD are proposed. The progress in construction and project implementation appears to be slow. The State Govt should file the physical and financial progress of STP capacity augmentation before NGT along with definite timelines within a month. Vide order dated 22.08.2019 it was stated that with regard to sewerage works/STP under construction, after 01.07.2020, direction for payment of environmental compensation of Rs. 10 lakhs per STP per month to CPCB will apply. Accordingly, UPPCB/CPCB shall calculate EC and send notices to defaulters in the next 15 days. It shall also explain why notices have not been issued in this regard so far.*

3. *Progress of in situ remediation as an interim measure appears to be not satisfactory. In the meeting held by Oversight Committee on 5.2.2021 no information could be furnished by the concerned authorities which suggests that no action has been taken in this regard. CPCB had given notice for EC for inaction by authorities for ensuring bio/phytoremediation for Rs 18 Crore which has also been not deposited. CPCB must submit report regarding how much EC has been realized out of total imposed EC of Rs 18 crore on 120 drains for non-compliance of this order for the period 1.11.2019 to 31.1.2020. Further, the proposed timelines for in situ remediation along with details of project approval and financial approvals for these 257 untapped drains be filed by the Govt before NGT within a month.*

4. *It has been observed that e-flow is being maintained in River Ganga while study was in progress with reference to other perennial rivers. The report of the study was expected to be received by Dec, 2020 from IIT, Delhi. However, till date no report has been received by the Department. It is recommended that Irrigation Dept. must pursue the matter and ensure post study action.*

5. *Monitoring of Grossly Polluting Industries needs to be stepped up. UPPCB should issue notices to all defaulters and also realize the EC imposed earlier. GPIs in all polluted river stretches be connected to Central Control Room at Lucknow through OCEMS. This shall ensure accountability in the pollution reporting of the GPIs.*

6. *The State government has not yet deposited the Performance Guarantee of Rs.15 crore as mandated by*

NGT. Chief Secretary, UP must ensure compliance in this matter.

7. *The Irrigation Department should coordinate with Forest Department of the State to identify vacant areas /flood planes on the banks of these river stretches which may be developed as Green Belts. An action plan regarding this may be submitted by Irrigation Department to Department of Forest, Uttar Pradesh within two months.*

8. *The work of floodplain demarcation is still under progress. It is suggested that pillars be fixed in all the stretches and notification be done within six months.*

9. *The residents of different districts were contended to see the clean water of all the rivers during the lockdown period. In view of this, the Committee suggests conducting mass awareness campaigns and media-based water consciousness campaigns that make people sensitive towards the environment as well as show that they are an integral part of the solution.*

10. *The Committee recommends Mining Dept., UP to submit a detailed report about status of illegal sand mining in all the 12 polluted stretches in the State. Information regarding enforcement and action taken by the Dept. to control illegal sand mining must be elaborated.*

11. *The sewage treatment capacity of Lucknow needs to be augmented for improving the water quality of river Gomti. The present treatment capacity is 438 MLD against requirement of 784 MLD. The gap of 346 MLD is proposed to be be filled up in 3 Phase-160 MLD in Phase1, 102 MLD in Phase2 and 85 MLD in Phase3.So far Phase 2 comprising of Bijnor STP (80 MLD) and Ghaila STP (22MLD) is pending for sanction with NMCG.DPR for Phase3 (Bharwara 85 MLD) is under preparation. The State Govt should immediately get these STPs sanctioned and ensure that work commences as per timelines prescribed by NGT.*

12. *In the interim, NGT had directed that in situ remediation measures be taken up to check the discharge of untreated water in the river. Unfortunately, despite two pilots having been taken in the past, no in situ remediation has been initiated. CPCB/SPCB may impose and realize EC as directed by NGT on this count.*

13. *There are many flaws in Waste Management Processing Plant in Lucknow managed by M/s Eco Green. During the inspection visits it was found that waste processing plant at Shiveri was non-operational. No 'waste to energy' work had been started in the treatment unit. SPCB must issue show cause notice within a fortnight to Nagar Nigam and impose EC for violations of Environmental norms with liberty to the Nagar Nigam to realize it from*

the Operator along with such penal action as they deem fit."

Consideration of the Reports and further directions:

24. We have given careful consideration to the data furnished by way of above reports and found that the progress achieved is insubstantial. We note discrepancy in the data in the current report compared to the data in the last report dated 15.09.2020. In the last report, the data of sewage generation was mentioned to be 53,396.84 MLD while in the current report it is mentioned as 48,000 MLD. Explanation in the report is that the earlier information was incomplete and the current report gives the correct figure. **It is seen that huge gap in generation and treatment of sewage continues. Capacity is said to be only 62% but the entire capacity is not utilised. Utilised capacity is only 44% as per data furnished by the CPCB in OA 95/2018, *Aryavart Foundation v. M/s Vapi Green Enviro Ltd. & Ors*, to be referred later. As per last report, 1831 industries were working without any ETP in violation of law. 1123 ETPs were non functional. 62 CETPs and 530 STPs were non-compliant. Several projects are still at tender/DPR stage with no interim remediation arrangement. This statistic relates to the urban areas of the entire country, including the towns on the banks of rivers in question. No statistics have been given about the gap in generation and treatment of the sewage in rural areas.** While the report mentions that the National FSSM Policy has been introduced in 2017 and some States have also issued their State Level Policies, the FSTPs operational are said to be only about 30 and in the offing about 400 which are hardly sufficient to address the huge gap. Credible database needs to be compiled in this regard and comprehensive action plan prepared to ensure that there is no gap in the waste generation and treatment. Execution of the

action plan has to be planned having in mind the requirements of the urban and rural areas separately. The policy must include utilization of biosolids for using as composting need to be duly ensured. The observations and recommendations in the report on issues not expressly dealt with need to be duly followed.

To address the huge gap in generation and treatment of waste, requisite number of treatment plants need to be in place at the earliest, including modular STPs wherever necessary. The plants already set up need to be functional and compliant. The ongoing projects have to be completed within the stipulated timelines. Pending such treatment interim measures for phyto/bio-remediation needs to be taken to ensure compliance of the provisions of the Water Act prohibiting discharge of any contaminant in water bodies.

Thus, huge water pollution is taking place as per official data with no effective adverse action against polluters, though it is crime under the law of land in the same way as homicide and assault. Pollution is resulting in deaths and diseases but with no punishment and no protection to the victims posing serious threat to rule of law requiring protection of innocent and punishment of guilty by the State. Emergent and stringent measures are necessary for discharge of Constitutional duties by the States concerned otherwise it is tolerating and ignoring lawlessness. Repeated directions to shorten tendering/DPR procedures have remained uncomplied as also fixing accountability of officers responsible for the situation.

25. Thus, further action is required in mission-mode at all levels to discharge constitutional obligation of providing pollution free environment and also to protect public health. Scarce sources of drinking water and

irrigation are required to be maintained free from contamination. This is basic constitutional obligation of the authorities under the Constitution being linked to 'Right to Life'. Without this being done in a meaningful manner, there can be no sustainable development. **There is need for stringent enforcement by way of adverse measures, including recovery of compensation for continuing violation and adverse entries in the record of defaulting officers. Accountability for those who are entrusted the responsibility to comply with these directions must be fixed on the principle of good governance to enforce rule of law to protect rights of citizens.**

26. We find that the river water quality has been analyzed without taking into account one of the major components of river pollution i.e. fecal coliform. **The river water quality is declared 'fit for bathing' only with reference to BOD, without concern of the fecal coliform, which does not represent true picture and such course is thus against the law.** This may be duly remedied. **There is need for compiling an annual progress report in terms of improvement of water quality by reducing pollution load. The progress should be evaluated depending on extent of reduction of pollution load, in comparison to the earlier period. Such annual progress report must be put in public domain and appropriate action taken for inadequate progress after finding out the persons responsible for such failure and other causes, if any.** Adequate number of monitoring stations need to be installed in a timebound manner for the purpose of monitoring water quality.

27. One major step for monitoring is compiling data in transparent manner. The Tribunal has already directed, vide order dated 05.02.2021 in OA 95/2018, *Aryavart Foundation v. M/s Vapi Enviro Ltd. & Ors.*, that

National/State/District Environment Data Grids be established which will go a great way in compiling data and monitoring compliance. **There is also need to take further steps for enhancing the utilization of treated waste water. The gap in generation of treated water and its utilization needs to be addressed expeditiously and monitored in terms of quantity and quality.**

28. There is further need to re-engineer the administrative processes adopted and giving of the contracts, as earlier mentioned. **The time consuming DPRs and approval processes in the administration needs to be avoided and speedy action taken based on model DPRs and laid down standards.** It is a matter of regret that, as per official statistics, 56% of total generated sewage remains untreated and finds its way into the water bodies which is a crime under the law of the land for the last 47 years. This remains a constant threat to contamination of potable water. **Similar is the position with regard to the water pollution from other sources, including industries and dumping of solid and other waste.**

29. **Demarcation and protection of 'flood plain zones' keeping them free from encroachment is another challenge which needs to be tackled on war-footing by designating responsible and accountable officers to ensure that in the interregnum till requisite water treatment equipment are set up. Interim steps for sewage treatment need to be taken to reduce the pollution load.**

Need for improved Monitoring Mechanism in the light of Notification dated 07.10.2016 issued by the Ministry of Water Resources, River Development, and Ganga Rejuvenation

30. The Ministry of Water Resources, River Development, and Ganga Rejuvenation has issued Notification dated 07.10.2016 in respect of

management of River Ganga under the Environment (Protection) Act, 1986 called **"River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016"** (the Ganga Order) constituting authorities at National, State and District Levels called 'National Ganga Council', 'Empowered Task Force on River Ganga', 'State Ganga Rejuvenation, Protection and Management Committee' and 'District Ganga Committees'. Further, 'National Mission for Clean Ganga' (NMCG) has been constituted. The object of the said notification is to **abate pollution and rejuvenate river Ganga, maintain e-flow, restrict activities on the river banks and other allied issues.** Steps to be taken are exhaustively laid down, apart from providing safety audit and conferring statutory authority to issue directions on related matters, including in respect of tributaries of River Ganga. The National Ganga Council is headed by the Hon'ble Prime Minister and the 'Empowered Task Force' is headed by the Jal Shakti Minister. The 'State Ganga Committees' are headed by the Chief Secretaries of the States. The 'District Ganga Committees' are headed by the District Magistrates. The NMCG is headed by its Director General with representatives of Central Ministries and State Governments. There is also a provision for setting up monitoring centers. Powers of the NMCG include issuance of directions to State Ganga Committees and District Ganga Committees or Local Authorities for rejuvenation of River Ganga and connected issues. It can frame a policy and direct its implementation. The Ganga safety audit is to be conducted by the National Ganga Council. It is to publish an annual report. The functioning of District Ganga Committees can be overseen by the NMCG either directly or through the State Ganga Committees. Every District Ganga Committees is also to prepare plan for protection of River Ganga and its tributaries and their

river beds and District Ganga Committees also to prepare its own budget and give monthly and annual reports.

31. **As noted earlier, protecting the rivers from pollution is a National necessity. Pollution of rivers has resulted in worst water crisis in the country**. This requires control of domestic and industrial pollution, utilization of treated sewage for secondary purposes to prevent use of potable water for such purposes, protecting the catchment areas, regulating activities in flood plains zones, maintaining e-flow which includes conserving the ground water. All these steps are duly mentioned in the Notification dated 07.10.2016 as necessary for control of pollution and rejuvenation of Ganga. This Tribunal in its earlier orders, including orders dated **20.09.2018, 19.12.2018, 08.04.2019, 06.12.2019 29.06.2020 and 21.09.2020, dealt with preparation and execution of action plans for all the 351 polluted river stretches almost on same pattern.** The compensation regime has been laid down not only for delay in finalizing action plans but also **for delay in commencing and completing the projects** on the pattern of regime applicable to Ganga. Similarly, in connected matter (OA 593/2017) relating to setting up of requisite numbers of ETP, CETP and STPs (including modular STPs wherever necessary) as per mandate of law under the Water Act and the judgment of the Hon'ble Supreme Court in *Paryavaran Suraksha*, supra, also compensation regime has been laid down and compliance of direction of the Hon'ble Supreme Court for rigid implementation mechanism for ensuring compliance by 31.03.2018 has been overseen, as mentioned earlier. Finally, this aspect of monitoring for setting up of all requisite ETPs, CETPs and STPs **(including modular STPs wherever necessary)** within the timelines and for also taking other steps for control of pollution and rejuvenation of 351 polluted river stretches was left to the CMC to be

headed by the Secretary, Ministry of Jal Shakti along with the NMCG and CPCB. At the State levels, directions have been issued for constituting River Rejuvenation Committee for preparation and execution of the action plans to be overseen by the Chief Secretaries of all the States by constituting 'environment cells' directly under them. The status reports given by the CMC constituted by this Tribunal have already been quoted above.

32. As mentioned earlier, apart from larger issues of control of pollution and rejuvenation of 351 river stretches, the Tribunal separately dealt with control and rejuvenation of some rivers separately including **Yamuna, Hindon, Ganga and Satluj.** River Yamuna which is tributary of Ganga was earlier subject matter of consideration before the Hon'ble Supreme Court and later the monitoring was entrusted to this Tribunal. The Tribunal gave detailed directions dated 13.01.2015 and 07.12.2017. The Tribunal also constituted an independent Monitoring Committee. **The said matter was finally disposed of on 27.01.2021 wherein the status of compliance under each head of action plan was duly mentioned.** It was further noted that clear roadmap already stands laid out and further success depended on the matter being taken seriously by the Administrative Authorities. **Accordingly, the Chief Secretaries were directed to take over the monitoring** as follows:

> "23. *Accordingly, we direct that in terms of directions of the Hon'ble Supreme Court and earlier orders of this Tribunal, henceforth* ***the Chief Secretary, NCT of Delhi, in coordination with other authorities (such as, Additional Chief Secretary Urban Development, DDA, IDMC, DPCC, DJB) and the Chief Secretaries of Haryana and UP may personally monitor the progress, by evolving effective administrative mechanism to handle grim situation caused by years of neglect.*** *Causes of failure of existing mechanism and remedial measures required be addressed in the light of reports of the Committee. This needs to be further overseen at National level by the Central Monitoring Committee,*

> *headed by Secretary Jalshakti, which also includes NMCG and CPCB, in terms of earlier orders of this Tribunal. To give effect to the orders of the Hon'ble Supreme Court, the Tribunal has already directed constitution of River Rejuvenation Committees (RRCs) in all the States/UTs by order passed in OA No. 673 of 2018 in Re: News item published in "The Hindu" authored by Shri Jacob Koshy titled "More river stretches are now critically polluted : CPCB, to be headed by the Environment Secretaries of States/UTs, to prepare and execute action plans for restoration of the polluted river stretches, under the oversight of the Chief Secretaries of the States/UTs. Such action plans are already in place.* ***The RRCs of Delhi, Haryana and UP may accordingly monitor execution of the action plans with proper inter-departmental coordination, to remedy the polluted stretches of river Yamuna in their respective jurisdiction, subject to oversight of the Chief Secretaries on quarterly basis, who may thereafter give their quarterly reports to the Central Monitoring Committee (CMC) headed by the Secretary, Jal Shakti in terms of order dated 21.09.2020 in O.A. No. 673/2018, supra."***

33. In dealing with the river Satluj, vide order dated 22.01.2021 in O.A. No. 916/2018, *Sobha Singh & Ors. v. State of Punjab & Ors.*, the Tribunal also constituted a Monitoring Committee which oversaw preparation and execution of action plan. **The Tribunal finally concluded that once the roadmap was clear the ownership must be taken over by the Chief Secretary, Punjab.** The direction is as follows:-

> ***"17. Accordingly, as already directed earlier, the ownership of the issue may now be taken over by the Chief Secretary, Punjab who may, having regard to seriousness of the issue, affecting health and environment, personally monitor progress of compliance atleast once in a month and also evolve an appropriate administrative mechanism to handle the grim situation. We may also note that the RRCs headed by Environment Secretaries in all the States/UTs have already been directed to monitor execution of action plans for the polluted river stretches on continuous basis. The RRC Punjab may also accordingly monitor execution of action plans for Sutlej and Beas rivers in continuation of 5th report of the Monitoring Committee, referred to above, subject to overall oversight of the Chief Secretary. The Chief Secretary while reviewing the status of various issues may focus on timely completion of the ongoing works****. Quarterly reports be sent by the Chief Secretary to the CMC in terms of the order dated 21.09.2020 in OA 673/2018 which deals with the subject of restoration of 351 polluted river stretches, including the rivers in question."*

34. Similar course was adopted for river Hindon, vide final order dated 02.02.2021 in O.A. No. 231/2014, *Doaba Paryavaran Samiti v. State of U.P & Ors.*, as follows:-

> ***"14. Accordingly, as already directed earlier, the ownership of the issue may now be taken over by the Chief Secretary, UP, who may, having regard to seriousness of the issue, affecting health and environment, personally monitor progress of compliance atleast once in a month and also evolve an appropriate administrative mechanism to handle the grim situation. We may also note that the RRCs headed by Environment Secretaries in all the States/UTs have already been directed to monitor execution of action plans for the polluted river stretches on continuous basis. The RRC UP may also accordingly monitor execution of action plans for Hindon, subject to overall oversight of the Chief Secretary. The Chief Secretary while reviewing the status of various issues may focus on timely completion of the ongoing works****. Quarterly reports be sent by the Chief Secretary to the CMC in terms of the order dated 21.09.2020 in OA 673/2018 which deals with the subject of restoration of 351 polluted river stretches, including the rivers in question."*

35. While dealing with the issue of control of pollution and rejuvenation of river Ganga, vide order dated 08.02.2021 in *O.A. No. 200/2014, M.C. Mehta v. Union of India & Ors.*, the Tribunal issued following **direction on the subject of recovery of compensation after specified date for failure to take steps within the prescribed timelines**:-

> *"14. At the cost of repetition, it may be mentioned that inspite of the fact that Water (Prevention and Control of Pollution) Act, 1974 was enacted 47 years back, to give effect to the decision in Stockholm Conference in the year 1972, the water pollution remains rampant. Though water pollution is a serious criminal offence under the law of the land, the authorities have failed to take stringent action against the violators. In a way the major violators remain State-authorities, who are constitutionally under obligation to ensure treatment of sewage before the same is discharged into the rivers and drains connected thereto which is not fully happening. The effect of water pollution on health and food safety is well known. Water is scarce and large population remains deprived of access to drinking water but still steps to prevent pollution of sources of drinking water are inadequate. The Hon'ble Supreme Court in its judgment in*

Paryavaran Suraksha vs. Union of India & Ors., (2017) 5 SCC 326 discussed the problem in detail and fixed a firm deadline of 31.03.2018 by which all necessary CETPs/STPs/ETPs should be in place failing which coercive action, including prosecution of State authorities was mandated. ***The States continue to violate the directions of the Hon'ble Supreme Court and give their own convenient deadlines which are thereafter further relaxed at will. This can hardly be held to be conducive to the environmental rule of law. The sewage treatment is less than 50% (the sewage generation from the urban population of the country is reported to be about 70000 MLD and treatment capacity about 27000 MLD)***[24] *which is a matter of serious concern. The Tribunal has issued repeated directions. Till it is remedied, the goal of sustainable development is far cry.*

15. The environmental law principles, which this Tribunal is mandated to apply under sections 20 and 15 of the NGT Act, 2010, are – 'sustainable development', 'precautionary' and 'polluter pays'. These principles, accepted in Stockhome conference, have been held to be part of right to life under article 21 of the Constitution in Vellore Citizens' Welfare Forum v. Union of India, (1996) 5 SCC 647. In Hanuman Laxman, (2019) 15 SCC 401, (paras 142-156), significance of environmental rule of law has been highlighted to achieve sustainable development goals for prosperity, health and well being. ***This requires filling of gap between law and enforcement****. In T.N. Godavarman Thirumulpad v. Union of India, (2002) 10 SCC 606, at page 621****,*** *it was observed that the State has to*

> *"forge in its policy to maintain ecological balance and hygienic environment. Article 21 protects right to life as a fundamental right. Enjoyment of life and its attainment including the right to life with human dignity encompasses within its ambit, the protection and preservation of environment, ecological balance free from pollution of air and water, sanitation without which life cannot be enjoyed. Any contra acts or actions would cause environmental pollution. Therefore,* ***hygienic environment is an integral facet of right to healthy life and it would be impossible to live with human dignity without a humane and healthy environment.*** *Environmental protection, therefore, has now become a matter of grave concern for human existence. Promoting environmental protection implies maintenance of the environment as a whole comprising the man-made and the natural environment. Therefore, there is constitutional imperative on the Central Government, State Governments and bodies like municipalities, not only to ensure and safeguard proper environment but also an imperative duty to take adequate measures to promote, protect and improve the man-made environment and natural environment."*

[24] As per report of the CPCB dated 30.09.2020 quoted in the order of this Tribunal dated 05.02.2021 in OA 95/2018, Aryavart Foundation v. M/s Vapi Green Enviro Ltd. & Ors.

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19. In view of above, control of pollution of river Ganga needs to be taken seriously at all levels in Uttarakhand, UP, Bihar, Jharkhand and West Bengal. In absence thereof, the desired result of rejuvenation of river Ganga which is dream of every Indian will remain unfulfilled. ***As observed earlier, the Hon'ble Supreme Court has monitored the subject for 34 years (1985-2014) and finally transferred the matter to this Tribunal in the year 2014. Though certain steps have been taken, the tables and compliance summary filed by NMCG quoted above show that with respect to various projects, the matter is still at the tender/DPRs stage and progress in completing the ongoing projects in a timely manner remains a challenge, inspite of availability of funds, supported by the Government of India initiatives.***

20. xxx ……xxx……xxx……

21. While removing already raised constructions from the floodplain zones may be dealt with separately, there is need to atleast identify and take protective measures. All remedial measures have already been outlined in the earlier orders of this Tribunal and need not be repeated. As earlier observed, the desirable situation is that not a drop of pollution is discharged into the river Ganga, but in any case, ***every next report must show decreasing trend of pollution load which needs to be quantified by the NMCG in a tabular form giving the extent of pollution load on a particular date and reduction achieved in terms of gap after steps for treatment.*** *Stopping pollution is as much necessary as stopping any other heinous crimes of homicides and assaults as pollution is acknowledged cause of deaths and diseases and deprivation of access to drinking water.*

22. xxx ……xxx……xxx……

23. ***With regard to the recovery of laid down compensation, it is made clear that the compensation must be faithfully paid by the concerned States by way of deposit to the CPCB which can thereafter be spent for restoration in the same State, as per action plan prepared for the purpose by the State and approved by the NMCG, after due evaluation on the pattern of orders earlier passed by this Tribunal[25]. NMCG may monitor compliance. Control of pollution of river Ganga will be incomplete without controlling pollution of all the tributaries and drains connected thereto.***

xxx ……xxx……xxx……

27. Further progress reports may be furnished by the concerned five States to the NMCG on or before 30.06.2021

[25] Vide order dated 22.01.2021 in OA 916/2018, Sobha Singh v. State of Punjab & Ors.

showing status as on 15.6.2021. NMCG may give its consolidated progress report with its recommendations to this Tribunal by 15.07.2021 by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF, with liberty to the States to file their response to such report. The NMCG report may inter alia specify reduction in pollution load, if any achieved during the interregnum, and if not, suggest further measures to achieve such reduction."

36. The Tribunal, vide order dated 05.02.2021 in O.A. No. 95/2018, *Aryavart Foundation v. M/s Vapi Green Enviro Ltd. & Ors.* dealt with pollution of River Daman Ganga in Gujrat on account of inadequately functional CETP at Vapi. While considering the said issue, **the Tribunal obtained an audit-report on functioning of monitoring mechanism by State PCBs and found that the State PCBs were not as effective as required under the law**. They lacked manpower as well as the equipment. **Till revamping of the State PCBs takes place, it is difficult to expect effective monitoring from them to comply with the direction of the Hon'ble Supreme Court in *Paryavaran Suraksha*, supra for effective measures against polluters. The Tribunal also directed considering setting up of environment data grids.** Relevant observations from the said order are:-

"*10. We have given due consideration to the report, which shows startling state of affairs tested on the touchstone of 'Sustainable Development' principle, accepted in Stockholm conference and which has been held to be part of right to life under article 21 of the Constitution in Vellore Citizens' Welfare Forum v. Union of India, (1996) 5 SCC 647.*

11. Some of the significant observations include failure to fill up key positions, to acquire necessary equipment, to arrange continuous training, to prepare State Environment policy, to specify industries-siting criteria, making inventory of grossly polluting industries, not specifying standards of inlet to the CETPs and hazardous waste, inaction against identified polluters, taking steps for bridging gaps in law and enforcement with regard to liquid and solid waste (of different kinds), including non-functional and noncompliant ETPS, STPs and CETPs, inadequate monitoring of environmental compliance in Class II towns and coastal areas, failure to compile and

analyse data and filing annual reports, inefficiency shown by inaction against serious violations of environmental norms. Needless to say that such sorry state of affairs is reflection of poor governance, making environmental rule of law far from reality.

12. The environmental law principles, which this Tribunal is mandated to apply under sections 20 and 15 of the NGT Act, 2010, are – 'sustainable development', 'precautionary' and 'polluter pays'. In Hanuman Laxman, (2019) 15 SCC 401, (paras 142-156), significance of environmental rule of law has been highlighted to achieve sustainable development goals for prosperity, health and well being. ***This requires filling of gap between law and enforcement****. In T.N. Godavarman Thirumulpad v. Union of India, (2002) 10 SCC 606, at page 621****,*** *it was observed that the State has to*

> *"forge in its policy to maintain ecological balance and hygienic environment. Article 21 protects right to life as a fundamental right. Enjoyment of life and its attainment including the right to life with human dignity encompasses within its ambit, the protection and preservation of environment, ecological balance free from pollution of air and water, sanitation without which life cannot be enjoyed. Any contra acts or actions would cause environmental pollution. Therefore,* ***hygienic environment is an integral facet of right to healthy life and it would be impossible to live with human dignity without a humane and healthy environment.*** *Environmental protection, therefore, has now become a matter of grave concern for human existence. Promoting environmental protection implies maintenance of the environment as a whole comprising the man-made and the natural environment. Therefore, there is constitutional imperative on the Central Government, State Governments and bodies like municipalities, not only to ensure and safeguard proper environment but also an imperative duty to take adequate measures to promote, protect and improve the man-made environment and natural environment."*

*13. In A.P. Pollution Control Board v. Prof. M.V. Nayudu, (1999) 2 SCC 718, at page 732, it was observed "..****Good governance is an accepted principle of international and domestic laws. .....It includes the need for the State to take the necessary "legislative, administrative and other actions" to implement the duty of prevention of environmental harm****…". In Techi Taga Tara, supra, the Hon'ble Supreme Court referred to several Committees on* ***need for revamping the regulatory bodies by appointing persons of outstanding ability and high reputation to the State PCBs and equipping them with laboratories and other equipment for performing statutory functions****. Apart from the Tribunal being approached under sections 14 and 15 by aggrieved parties, pointing out degradation of environment and inaction of the statutory regulators, the*

Hon'ble Supreme Court has required this Tribunal to monitor compliance of such statutory obligations for protecting environment. This is not possible unless the statutory regulators are effective. Significant issues so referred by the Hon'ble Supreme Court include a) liquid waste management, (2017) 5 SCC 326, Paryavaran Suraksha vs. Union of India & Ors. wherein it was directed that requisite STPs, ETPs, CETPs must be set up by 31.3.2018, failing which coercive measures may be taken against concerned authorities, to enforce statutory mandate of the Water (Prevention and Control of Pollution) Act enacted in 1974, prohibiting any water pollution, making it a criminal offence. b) compliance of solid waste management rules. Vide order dated 2.9.2014 in WP 888/1996, Almitra H. Patel Vs. Union of India & Ors. on the file of the Supreme Court, the issue has been referred to this Tribunal for monitoring compliance of Solid Waste Management Rules. c) In (2015) 12 SCC 764, MC Mehta v. UOI, issue of rejuvenation of Ganga stands referred to this Tribunal. d) Vide order dated 24.7.2017 in WP 725/1994, 'And quite flows Yamuna', rejuvenation of Yamuna stands referred to this Tribunal. It is not necessary to refer to several other orders. Finding that statutory regulators were not effective and serious damage was continuing, the Tribunal has appointed independent monitoring Committees[26] on several issues.

In substance, monitoring of the enacted environmental laws including the Water Act, Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986 and Rules framed thereunder needs to be reviewed and made effective in the interest of protection of environment and public health. This is not possible unless the regulatory bodies are duly manned and equipped and function efficiently. The report shows that it is not happening and there are huge gaps. With such gaps, it is only a dream to expect clean environment – fresh water or fresh air. Irreversible degradation of environment is bound to result in avoidable deaths and diseases and loss of scarce and good quality water, air and soil and biodiversity.

xxx ……xxx……xxx……

[26] To monitor compliances with regard to:

(i) River Ghaggar in OA No. 138/2016 (TNHRC), Stench Grips Mansa's Sacred Ghaggar River
(ii) River Sutlej in OA 916/2018, Sobha Singh v. State of Punjab & Ors.
(iii) River Yamuna in OA 06/2012, Manoj Mishra v. UOI & Ors.
(iv) River Musi in OA 426/2018, Mohammed Nayeem Pasha & Anr. v. State of Telangana & Ors.
(v) River Ganga in OA 200/2014, M.C. Mehta v. Union of India & Ors.
(vi) River Jojari in OA 329/2015, Gram Panchayat Araba v. State of Rajasthan & Ors.
(vii) CETP in Taloja District in OA 125/2018, Arvind Pundalik Mhatre v. Ministry of Environment, Forest and Climate Change & Ors.
(viii) District Environment Plan in OA 360/2018 Shree Nath Sharma v. Union of India & Ors.
(ix) 'Rat Hole' coal mining in OA 110(THC)/2012, Threat to Life Arising Out of Coal Mining in South Garo Hills District v. State of Meghalaya & Ors.
(x) Solid waste management rules in OA 606/2018, Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues.

17. As earlier observed, damage to environment is directly linked to the public health and neglecting compliance of environmental norms results in deaths and injuries. Violation of environmental norms needs to be taken as seriously as preventing crimes of homicides and assaults. It is more serious as the victims may be wide spread and unidentified. The consequences may even affect future generations. The compliance status is directly linked to effectiveness of monitoring which requires that the key office bearers of statutory regulators and oversight bodies are qualified, competent and reputed and exclusively dedicated to such work, instead of devoting part time, while simultaneously holding other positions. In this regard, the Tribunal has made observations vide order dated 02.02.2021 in OA 231/2014, Doaba Paryavaran Samiti v. State of U.P & Ors, finding that the Member Secretary of the PCB in UP was only devoting part-time, while holding several other positions. Adequate and well-equipped laboratories and effective machinery for implementation of "Polluter Pays" principle for assessment and collection of compensation is another important aspect of environmental governance.

xxx .....xxx.....xxx.....

20. ***Further, for improving monitoring and planning, authentic data needs to be compiled at all levels. Initiative will have to be taken consistent with Digital India initiatives by the MoEF/MoJS/MoUD/CPCB and based on such policy decisions, the Environment departments of all States/UTs will have to compile data in their respective jurisdiction, preferably Districtwise. On that basis District Environment Data Grid (DEDG), State Environment Data Grid (SEDG) and National Environment Data Grid (NEDG) can be set up and continuously updated. The Grid can be connected to online monitoring systems. Comprehensive Environment Pollution Index (CEPI) is being prepared limited to the Industrial Area but the Grid can cover larger areas and aspects and can be source of research and planning. It can also facilitate monitoring of and be in sync with other government initiatives such as National Mission for Clean Ganga, Swachh Bharat and Jalshakti Abhiyan etc. Based on such data, it may also be easier to study 'carrying capacity' of different areas to plan siting policy for various activities****.*

22. ***xxx .....xxx.....xxx.....***

(i) to (vii). ***xxx .....xxx.....xxx***

(viii) Consistent with Digital India initiatives, MoEF&CC/MoJS/CPCB may consider setting up and periodically updating National Environment Data Grid (NEDG) linked to the State Environment Data Grids (SEDGs) DEDGs and further linked to available portals

like online air/water quality, Sameer and other monitoring stations to facilitate analysis, research and planning on the subject. It may be further interlinked to initiatives like NMCG/Swachh Bharat/Jal Jeevan Mission."

Conclusion

37. **In view of the above, we are of opinion that the monitoring by the Tribunal cannot be unending and must now be taken over by the concerned authorities. The roadmap stands laid out. Action plans have been prepared for remediation of all the 351 identified polluted river stretches. Gaps have been identified for ETPs/CETPs/STPs (including modular STPs wherever necessary). Timelines are clear. Sources of funding are clear in the Supreme Court order. HAM model is also available as per Govt. of India Policy mentioned in the report of the CMC. Alternative conventional methods of bio/phytoremediation are also available as mentioned in the report of the CMC. Existing treatment capacity is not fully utilised. New projects, already ongoing or those yet to commence need to be expedited. Consequences for delay in terms of compensation and administrative measures have been clearly mentioned. The river rejuvenation committees in the States/UTs, as per directions of the Chief Secretaries may perform their obligations accordingly which may be monitored by the Central Monitoring Committee, headed by Secretary, Jal Shakti, as directed earlier.**

38. We find that the monitoring mechanism introduced as per directions of this Tribunal in the form of RRCs at the States level and CMC at the Central level is to an extent identical to the monitoring mechanism laid down under the River Ganga Rejuvenation, Protection and Management Authorities Notification 2016. **However, mechanism under the 2016 notification being statutory and exhaustive, it will be better that the**

same is adopted for all the river stretches as issues involved are common. The Empowered Task Force on river Ganga headed by Union Minister of Jal Shakti may exercise all powers and discharge all functions in relation to all the polluted river stretches in the same manner as the functions entrusted to it under the River Ganga 2016 order for control of pollution and rejuvenation of polluted river stretches. This is necessary so that the Nation/Central Monitoring Mechanism can be effective, in view of continuing failure of statutory mechanism under the Water Act for preventing pollution of water, resulting in pollution of almost all the rivers and water bodies in the country, posing serious threat to availability of potable water for drinking purposes as well as for safety of food chain. Hardly any accountability has been fixed for such serious failures. **It will be open to the MoJS to issue any further appropriate statutory order to give effect to the above directions under the EP Act**. **The National/Central Mechanism may enforce the earlier directions of this Tribunal for collecting compensation for the failure to commence or complete the projects for setting up of sewage treatment equipments or taking steps for interim remediation measures. This is necessary for accountability for the failure to obey the law. The compensation so assessed may be deposited in a separate account to be used for rejuvenation of the polluted river stretches in the same manner as directed in the case of Ganga quoted above. As directed vide order dated 19.12.2018 in OA 673/2018, responsibility to pay compensation on behalf of the States/UTs will be of the Chief Secretaries. As per scheme of the NGT Act, every order of NGT is executable as a decree of Civil Court[27].**

[27] Section 25 of the NGT Act, 2010 read with Section 51 of the CPC providing for mode of execution which include civil imprisonment.

Further, failure to comply order of the NGT is an offence punishable with imprisonment upto three years or fine upto Rs. 10 crores with additional fine for continuing offence after conviction.[28] If the offence is by a Government Department, Head of the Department is deemed to be guilty.[29] Cognizance of the offence can be taken by a Court on a complaint of Central Government or any other person who has given notice to the Central Government or its authorized representative. The complaint can be filed before a Court of Magistrate of first class. It is, thus, necessary in view of continuing violation of NGT order, requiring payment of compensation to reiterate the direction of responsibility for payment of compensation, to be of the Chief Secretaries and in default, their liability to be proceeded against for coercive measures for execution or by way of prosecution as per NGT Act, 2010.

39. Our directions are summed up as follows:

(i) In the light of observations in Para 38 above, MoJS may devise an appropriate mechanism for more effective monitoring of steps for control of pollution and rejuvenation of all polluted river stretches in the country. The said mechanism may be called "National River Rejuvenation Mechanism" (NRRM) or given any other suitable name. NRRM may also consider the observations with regard to setting up of National/State/District Environment Data Grid at appropriate levels as an effective monitoring strategy.

(ii) Chief Secretaries of all States/UTs and PCBs/PCCs must work in mission mode for strict compliance of timelines for

[28] Section 26
[29] Section 28

commencing new projects, completing ongoing projects and adopting interim phyto/bio-remediation measures, failing which compensation in terms of earlier orders be deposited with the MoJS, to be utilised in the respective States as per action plan to be approved by the NRRM. Other steps in terms of action plans for abatement of pollution and rejuvenation of rivers, including preventing discharge or dumping of liquid and solid waste, maintaining eflow, protecting floodplains, using treated sewage for secondary purposes, developing bio-diversity parks, protecting water bodies, regulating ground water extraction, water conservation, maintaining water quality etc. be taken effectively. The process of rejuvenation of rivers need not be confined to only 351 stretches but may be applicable to all small, medium and big polluted rivers, including those dried up.

(iii) The Chief Secretaries of all States/UTs may personally monitor progress at least once every month and the NRRM every quarter.

(iv) Directions of this Tribunal in earlier order, the last being dated 21.9.2020 are reiterated.

(v) The NRRM and the Chief Secretaries of all the States/UTs may take into account the observations in Paras 24 to 38 above.

(vi) In view of discussion in para 38 above, it is made clear that accountability for failure to comply with the direction for payment of compensation will be of the concerned Chief Secretaries under Sections 25, 26, 28 and 30 of the NGT Act, 2010. The MoJS or any other aggrieved person will be free to take remedies by way of initiating prosecution or execution.

The applications are disposed of in above terms.

A copy of this order be forwarded to Secretary, MoJS, MoEF&CC, GoI, CPCB, Chief Secretaries and State PCBs/PCCs of all States/UTs by e-mail for compliance.

Adarsh Kumar Goel, CP

S.K. Singh, JM

Dr. Nagin Nanda, EM

February 22, 2021
Original Application No. 593/2017
(W.P.(Civil) No. 375/2012)
& Original Application No. 673/2018
SN

Weblinks for 'Online Continuous Effluent/Emission (OCEMS) Monitoring System" (OCEMS) data					
Sl. No.	**SPCB/PCC**	**Display of OCEMS data on SPCB/PCC website (Yes/No)**	**If Yes: Weblink of the webpage**	**If No: Likely date by which data will be dislayed on the website**	**Remarks**
1	Andaman & Nicobar	No	–	–	
2	Andhra Pradesh	Yes	http://aprtpms.ap.gov.in/publicview.html	–	–
3	Arunachal Pradesh	No	–	–	There is no industry requiring OCEMS
4	Assam	Yes	https://pcba.rtdas.in/	–	–
5	Bihar	Yes	bpcbcems.nic.in	–	–
6	Chandigarh	No	–	Data will be displayed after upgradation of STPs.	Requested for time till 30-Nov-2020
7	Chhattisgarh	No	–	–	Proper link not provided
8	Daman & Diu and Dadra Nagar Haveli	No	–	–	–
9	Delhi	No	–	–	–
10	Goa	Yes	http://gspcb.glensserver.com/GSPCB_ONLINE/index.html	–	–
11	Gujarat	Yes	https://gpcb.gujarat.gov.in/webcontroller/viewpage/online-monitoring-system-dashboard	–	–
12	Haryana	Yes	www.hspcbcems.nic.in	–	Link not working
13	Himachal Pradesh	Yes	http://envirologiciq.com/public/dashboard/industries		
14	Jammu and Kashmir	No	–	–	–
15	Jharkhand	No	–	–	–
16	Karnataka	No	https://kspcb.gov.in/onlinemonitoring.html	–	Link not working
17	Kerala	Yes	https://keralapcb.glensserver.com/public/graph.html	–	–
18	Lakshadweep	No	–	–	–
19	Madhya Pradesh	Yes	https://esc.mp.gov.in/online/	–	–
20	Maharashtra	No	http://www.mpcb.gov.in/Online_CEMS.php	–	No data available on webpage
21	Manipur	No	–	–	–
22	Meghalaya	No	–	–	–
23	Mizoram	No	–	–	–
24	Nagaland	No	–	–	–
25	Odisha	Yes	http://ospcbrtdas.com	–	–
26	Puducherry	Yes	http://ppcc.glensserver.com/PPCC_ONLINE/index.html	–	–
27	Punjab	No	https://app.cpcbccr.com/AQI_India/ and cpcbrtdms.nic.in User Id : computer.section.ppcb@gmail.com Password : ppcb@1234	–	Desired information is not available on weblinks
28	Rajasthan	No	–	–	–
29	Sikkim	No	115.114.10.198:8080/enviroconnect/servlet/com.aipl.pls.web.admin.AdminServlet	–	Link not working
30	Tamil Nadu	Yes	1) http://117.232.97.121/RealTime_tnpcb_cac/index.html (2)http://117.232.97.121/RealTime_tnpcb_cac_new/index.html	–	–
31	Telangana	Yes	http://183.82.41.227:8080/enviroconnect/aqms	–	–
32	Tripura	No	–	–	–
33	Uttar Pradesh	No	–	–	–
34	Uttarakhand	No	http://zylem.cpcb.com/ https://hitech.glensserver.com	–	Link not working
35	West Bengal	Yes	http://www.wbpcb.gov.in/cmsdata.php	–	–