

CHAPTER – III

AUDIT OF TRANSACTIONS: GOVERNMENT DEPARTMENT

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Audit of transactions of the government departments brought out instances of lapses in management of resources and failures in the observance of the norms of regularity, propriety and economy as detailed below:

ENVIRONMENT AND CLIMATE CHANGE DEPARTMENT

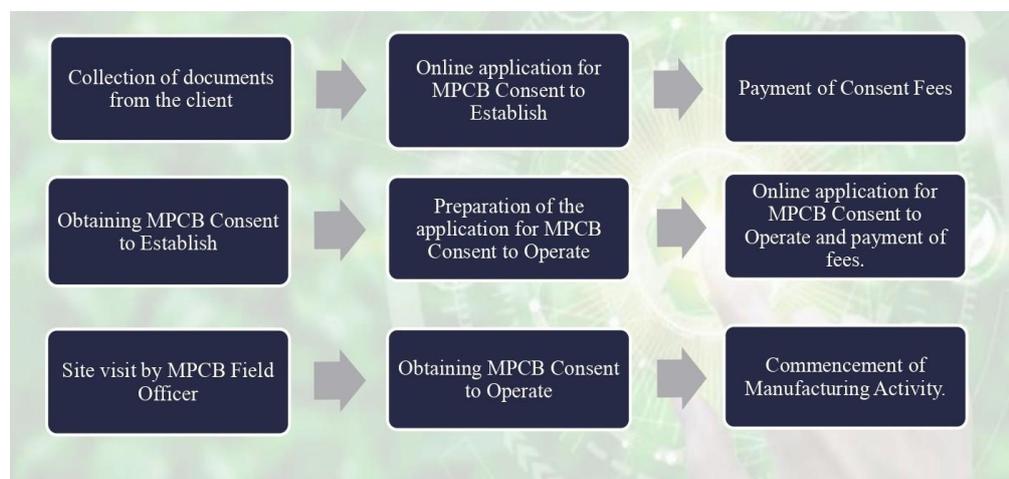
3.1 Subject Specific Compliance Audit of Role of MPCB in issuance of consent and monitoring of compliance of consent conditions for prevention, control and abatement of water pollution in Maharashtra

3.1.1 Introduction

Maharashtra Pollution Control Board (MPCB) implements various environmental legislations in the State of Maharashtra including Water (Prevention and Control of Pollution) Act, 1974 (Water Act). To ensure prevention, control or abatement of pollution, MPCB regulates industrial operations through a structured consent mechanism, ensuring environmental compliance and prevention of water pollution.

As per Section 25 of the Water Act, all industries are required to obtain consent to establish and consent to operate before starting any industry and consent to expansion before extension or addition to the existing industry which is likely to discharge sewage or trade effluent into any stream or on ground. The industries are required to comply with the consent conditions prescribed in the consent document. MPCB is empowered to issue notices, forfeit bank guarantee and even issue closure directions to the industries in case the industries do not comply with the consent conditions. Further, consent to renewal is to be obtained by the industry before expiry of the existing consent to operate. Thus, MPCB is responsible for monitoring and taking preventive action regarding pollution. The process of consent management is depicted in **Chart 1** below:

Chart 1: Flow Chart for Consent Management



As of March 2023, there were 1,19,930 industries in Maharashtra. The industrial effluent generated by the large industries was treated through their own Effluent Treatment Plants (ETPs) and by smaller industries producing lesser quantity of

effluents through Common Effluent Treatment Plants (CETPs). MPCB plays an important role as a regulator through consent management to ensure that industries, Local Bodies operate within acceptable environmental standards in minimizing pollution. By mandating industries to obtain consents at various stages of their operation, MPCB ensures that environmental safeguards are in place right from the inception of industrial projects till their operations are continued.

Audit examined the role of MPCB in issuance of consent and monitoring the compliance of consent conditions for prevention, control and abatement of water pollution.

3.1.2 Organizational structure

MPCB is an Autonomous Body which assists the Environment and Climate Change Department (DECC), Government of Maharashtra. MPCB executes the decisions taken through 12 Regional offices, each headed by a Regional Officer (RO) and 43 Sub-Regional Offices (SROs) having 147 Field Officers to carry out the field visits. MPCB has a Central Laboratory and seven regional laboratories, in which samples are sent by the field offices of MPCB for water testing.

3.1.3 Role of MPCB

MPCB is assigned with various duties of monitoring of pollution control activities *viz.*

- Issue of consent to establish/operate, renewal of consent to industries by including the directions issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC), Central Pollution Control Board (CPCB), MPCB and National Green Tribunal (NGT),
- Ensuring compliance of conditions of the consent, guidelines/ instructions *etc.*
- Collection and testing of samples of surface water, ground water, industrial effluent,
- Issue of warning notices, directions for forfeiture of bank guarantee, levy of environmental compensation, closure notice to the defaulting industries failing to comply with environmental norms,
- Acting as an advisory body to State Government on pollution related issues,
- Collecting information on various types of pollutants.

3.1.4 Audit objectives

The Subject Specific Compliance Audit was conducted to assess whether an effective mechanism was in place to ensure monitoring of compliance of consent condition.

3.1.5 Audit criteria

The audit findings were benchmarked against the following criteria.

- (i) The Water (Prevention and Control of Pollution) Act, 1974

- (ii) Instructions/circulars/order/resolutions/notifications/guidelines issued by NGT, Central/State Government, CPCB/MPCB and other agencies from time to time
- (iii) Enforcement Policy (February 2016) issued by MPCB.

3.1.6 Audit scope, methodology and sampling

The SSCA was conducted from June to November 2022 covering the period from 2017 to 2022. The information was updated till March 2023 based on the replies of the Department.

An Entry Conference was held with the Principal Secretary, DECC, Maharashtra (PS, DECC) in June 2022 wherein, the audit objectives, scope, criteria and samples selected were discussed. The audit methodology involved scrutiny of records, interaction with the personnel of auditee units, joint site visits to the selected sites along with the MPCB officials.

Audit scrutiny was conducted at the office of the PS, DECC and head office of MPCB. Further, six¹ out of 12 ROs were selected by random sampling through IDEA software and all the 24 SROs under these six ROs were covered. For detailed scrutiny, 158 industries from different types of polluting industries² were selected for site visit (July to November 2022) to evaluate compliance of consent condition through joint physical verification. Water samples were also collected by the MPCB officials during joint physical verification in 10 out of 158 sampled industries.

An Exit Conference was held in May 2023, wherein audit observations were discussed with the PS, DECC and the replies of the Government (August 2023 and February 2025) have been appropriately incorporated in the audit report.

3.1.7 Audit Findings

3.1.7.1 Delay in issue of consent

Under the Water Act, a statutory period for grant of consent was 120 days from the date of application. As per the policy of ease of doing business, new industries have to register in Maharashtra Industry, Trade and Investment Facilitation Cell (MAITRI) for obtaining consent from MPCB. MPCB had joined the scheme of “Single Window” system at MAITRI (Investment Facilitation Cell) for considering grant of consents. MPCB vide its Enforcement Policy (February 2016) reduced the period for grant of consent 60 days from 120 days which was in vogue before this.

Audit observed that 8273 (50 *per cent*) out of 16,424 consents were issued by MPCB during 2017 to 2022 after the statutory period of 60 days from the date of application was over.

The Government stated (February 2025) that the delay happened due to constraint of manpower, workload, incomplete applications *etc.* It was further stated that the consent applications were kept pending for want of documents and to avoid duplication in remittance of consent fees by the industries.

¹ Amravati, Aurangabad, Kalyan, Nashik, Navi Mumbai and Pune.

² Sugar, paper, chemical, infrastructure projects, slaughterhouses, battery recycle industries, ready-mix concrete plant, hospitals, railway stations, hotels *etc.*

The reply is not acceptable as issue of consent within the prescribed period was required to facilitate the industry to start its operation in time after obtaining consent in the interest of ease of doing business.

3.1.7.2 Industries operating without consent

As per Section 25 of the Water Act, all industries are required to obtain consent to establish and consent to operate while Section 44 prescribes penalty for contravention with imprisonment for a term which shall not be less than one year and six months which may be extended to six years and with fine.

Audit collected information from various departments including Tourism Department, Local Bodies *etc*; and compared these with the data of MPCB to check whether these industries were covered under the consent regime. Audit observed that 1,367 hotels³ falling under the jurisdiction of the six test checked ROs were found operating without obtaining consent from MPCB. Further, additional 40 industries were operating without consent as noticed during Joint Physical Verification as given in *Appendix 3.1.1*.

Government stated (February 2025) that 21 industries have complied with by obtaining consent or by applying for it, action against 15 non-complying industries was in progress and 4 industries were closed.

MPCB needs to develop a mechanism to get the information of various industries operating under their jurisdiction to ensure coverage of all industries as required under the Water Act.

3.1.8 Mechanism to ensure compliance of consent conditions

MPCB is required to ensure compliance of the consent conditions through regular field visits and online monitoring through Online Continuous Effluent Monitoring System (OCEMS). As per circular issued (September 2011) by MPCB, the Field Officers of MPCB were required to visit the industries to ensure compliance of the consent conditions issued to them. Also, as per GR dated 29 August 2017, the highly polluting industries and CETPs were required to be visited monthly and other industries were to be visited quarterly, half yearly and yearly based on their pollution potential to check the compliance of consent conditions by MPCB officials. Similarly, as per MPCB circular dated April 2016, all highly polluting industries and CETPs were required to install OCEMS and connect the same to the MPCB server for online monitoring of the industries. Sample of industrial effluents were also required to be collected by the MPCB officials and checked at its laboratories to verify whether they meet the prescribed standards of the parameters as per conditions of the consent/guidelines of the CPCB.

3.1.8.1 Monitoring of industries

As per Government resolution dated August 2017, the frequency of visits to the industries was prescribed as detailed below:

Duration	Industry type
Monthly	Highly polluting industries, Common Effluent treatment plant (CETP) <i>etc.</i>

³ RO-wise hotels: Amravati (88), Aurangabad (324), Kalyan (43), Nashik (801), Navi Mumbai (2) and Pune (109)

Duration	Industry type
Three monthly	Red (Medium Scale Industries), Orange (Large Scale Industries)
Half yearly	Red (Small Scale Industries), Orange (Medium Scale Industries)
Yearly	Orange (Small Scale Industries), Hotels

Government introduced (June 2015) the Risk Based Inspection tool, where resources were focused on those enterprises which carry a higher risk to the public. The Risk Based Inspection tool was to form the basis for prioritization and determination of the frequency of visit of each industry and ensure that repetition of the same Industry / site could not occur in the same month. The Government instructions stipulated assignment of 20 Industries to each Field Officer (FO) per month, assignment of Industries to FO's on alternate working days and prioritise the industries as per the criteria.

Further, as per MPCB's Random Risk Based Inspection and Sampling Procedure (RRBIS) (June 2015), 75 per cent of the visits were to be carried out by the officers in their own jurisdiction and remaining 25 per cent were to be carried out by the officers from other regions.

Audit observed from the data of field visit scheduled and completed during 2017-23 that there was a shortfall in the range of 53.50 per cent to 68.35 per cent in the number of visits actually carried out with respect to the scheduled visits as shown in **Table-1**.

Table 1: System for monitoring of Industries

Year	Actually scheduled	Actually Visited	Shortfall in actual visits with respect to visits scheduled	Percentage of Shortfall in visits with respect to scheduled visits
2017-18	29845	11624	18221	61.05
2018-19	31449	14624	16825	53.50
2019-20	32620	14919	17701	54.26
2020-21	15291	4839	10452	68.35
2021-22	38509	13082	25427	66.03
2022-23	40619	15069	25550	62.90
Total	188336	74163	114176	61.02

Source: Information furnished by MPCB

Similarly, it was observed that there was substantial shortfall in visits to highly polluting industries such as Sugar, Paper and Pharmaceutical industries in the range of 58 to 84 per cent as discussed in paragraph number 3.1.9.1 to 3.1.9.3.

The RO wise analysis of the field visits revealed that except for Aurangabad, none of the ROs could visit even 50 per cent of the scheduled visits. Particularly, RO, Mumbai, which had eight FOs and could carry out only 29.36 per cent of the scheduled visits, which was the lowest among all ROs and Chandrapur with only one FO achieved 37 per cent visits.

Audit further observed that no visits were carried out by the officers from other regions thus, the RRBIS was not followed.

The Government stated (August 2023) that shortfall in monitoring of industries was due to the engagement of the board officials in other works like NGT matters, legal action, complaints, investigations etc., and very less time was left for monitoring of industries.

The reply indicated inadequate monitoring over industries thereby impacting the compliance of consent conditions, which is one of the crucial function of MPCB.

3.1.8.2 Inadequate manpower resulting in poor monitoring

The Field Officers (FO) were responsible to ensure compliance of consent conditions, collect joint vigilance samples and monitor the industries under the jurisdiction. The year wise break up of vacancies in the post of FOs is detailed below in **Table-2**:

Table 2: Status of Men-in-Position

Year	Sanctioned Strength	Men in Position	Vacancies
2017-18	204	168	36
2018-19	204	161	43
2019-20	204	161	43
2020-21	204	160	44
2021-22	204	151	53
2022-23	204	147	57

It can be seen from the above table that vacancies of FOs were increased from 36 in 2017-18 to 57 in 2022-23 whereas Men in Position was decreased from 168 in 2017-18 to 147 in 2022-23.

The number of industries increased from 89,738 in 2017-18 to 1,19,930 in 2022-23, however, the number of Field Officers (FOs) decreased from 168 in 2017-18 to 147 in 2022-23. As such, the monitoring of industries through field visits by FOs also got significantly affected. Based on prescribed sampling norms⁴ of existing industries and frequency of inspections by MPCB, the minimum requirement of FOs was 329 in year 2022. However, sanctioned strength of FOs was 204 and person-in-position was 147 only as of March 2023. The monitoring of compliance conditions can be ensured through field visits in which there was shortfall resulting in non-compliances noticed during joint physical verification as discussed in paragraphs 3.1.9.1 to 3.1.9.6.

MPCB had forwarded (January 2019) proposal for revision of staff strength to DECC, GoM, but it was not sanctioned (January 2025). Apart from the post of FOs, there were vacancies in the post of Regional Officer, Sub Regional Officer and Field Inspectors during 2017-23.

Further, important posts *viz.* Senior Law Officer, Assistant Law Officer, Senior Administrative Officer, Deputy Engineer were vacant throughout the period of five years covered in the audit. Thus, shortage of staff had adverse impact on monitoring the work of pollution control.

The Government stated (February 2025) that the process of recruitment of staff was in progress.

⁴ As per GR issued August 2017 by the Industry, Energy and Labour department of Maharashtra, frequency of visit of the industry is prescribed on the basis of categorization of the industry.

3.1.9 Compliance of Consent conditions/MOEF/CPCB guidelines by industries

Audit physically verified 158 selected industries along with the MPCB officials to check the status of the compliance of consent conditions and MoEF/CPCB guidelines/instructions. It was observed that MPCB could not ensure compliance of conditions by industries as discussed in the succeeding paragraphs.

3.1.9.1 Sugar/distillery industries

Sugar/distillery industries fall under the category of highly polluting industries. The MoEF&CC had issued guidelines (January 2016) prescribing various pollution control activities such as stabilizing ETP one month prior to the start of the crushing season, installation of flow meter on ETPs *etc.* which were included as conditions of the consent issued by MPCB. Further, consent condition/CPCB guidelines directed industries to comply with other pollution control activities such as discharge of effluent after treatment following prescribed standards⁵ of parameters and installation of OCEMS *etc.*

Audit conducted physical verification of 21 out of 184 sugar industries to examine compliance to the consent conditions/guidelines and observed non-compliances to those conditions as given in **Table 3 below**:

Table 3: Non-compliance of consent conditions

Consent conditions/CPCB guidelines	Non compliance	No. of Non-complying Industries
The industry shall recycle reuse the treated effluent. In no case treated or untreated effluent shall find its way outside the factory premises directly or indirectly.	Discharge of untreated effluents either on ground or directly into water bodies leading to contamination of surface/groundwater	12
CPCB prescribes for the installation of OCEMS	OCEMS were not installed	15
	OCEMS sensor was not installed at the outlet from where effluent was discharged	8
Industries to provide Effluent Treatment Plant (ETP) of designed capacity consisting of Primary, Secondary, Tertiary for treatment of industrial effluent	ETP was either non-functional or the tertiary treatment unit was not provided	13

Direct discharge of effluent by sugar industries can be seen in **Photographs** below:

⁵ pH-5.5 to 8.5; Total Suspended Solids-100 mg/l for disposal on land, 30 mg/l for disposal on surface water; BOD-30 mg/l; Oil and Greece-10 mg/l, Total Dissolved Solids-2100 mg/l



Further, samples of treated effluents were also collected at the outlet of ETP through MPCB officials in joint physical verification of seven sugar industries and tested to check compliance with the Consent conditions which prescribed that industrial effluents should meet specific standard of the parameters e.g. Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Dissolved Solids (TDS), Suspended Solid (SS). Test results revealed that effluent exceeded the permissible limit as prescribed for various parameters as shown in **Table 4:**

Table 4: Parameter beyond the permissible limit

Parameter	Permissible Value as prescribed by CPCB	Observed Range
BOD	100 mg/l	105 mg/l to 22,000 mg/l
COD	250 mg/l	260 mg/l to 66,669 mg/l
TDS	2,100 mg/l	2,324 mg/l to 17,060 mg/l
SS	100 mg/l	106 mg/l to 2,700 mg/l

Source: Test result of sample obtained from MPCB Laboratory

Thus, non-compliance with various conditions as discussed above and the test results showing parameter beyond permissible limit, indicated that these industries were not ensuring compliance with the consent conditions.

Audit also observed that only 42 *per cent* of the field visits (4699 against 11040 visits) as against the required visits to 184 sugar industries were carried out by MPCB during 2017 to 2022.

The Government stated (February 2025) that 13 out of 21 industries had complied with the audit observations, two industries were closed and legal action was in progress against the remaining six non-compliant cases.

3.1.9.2 Paper industry

Paper industry discharges large volumes of effluents, adversely impacting surface water. Industries were required to ensure compliance of conditions

mentioned in the consent issued by the MPCB such as recycle of effluent after proper treatment so as to achieve Zero Liquid Discharged (ZLD), installation of OCEMS *etc.*

Audit conducted Joint physical verification of three paper industries along with the MPCB officials which revealed various non-compliances to those conditions as given in **Table 5**:

Table 5: Non-compliance of consent conditions

Consent conditions	Non-compliance	No of non-complying Industries
Installation of ETP to treat, recycle and reuse of the effluent for various purpose such as cooling, process, scrubbing and metering system so to achieve Zero Liquid Discharged (ZLD) and no discharge of effluent on land and outside factory premises	Non achievement of ZLD and discharging contaminated effluent directly into the drain	3
Installation of OCEMS and ensure its proper function so as to display data on CPCB/MPCB server	Non-installation of OCEMS	3
Treatment of effluent to the permissible limit of standard such as BoD 100 mg/l	Exceeding BoD against permissible limit	3
No discharge of sludge on land and factory premises	Sludge found scattered all around the Dissolved Air Floating Machine/ETP	3

Further, M/s Nath Paper and Pulp Industries Ltd, Wahegaon and M/s Laxmi Paper Industry, Bhiwandi were discharging contaminated effluent directly into the drain as shown in the **Photographs** below.



Audit also observed that only 16 *per cent* of the field visits (598 against 3660 visits) against the required visits to 61 paper industries were carried out by MPCB during 2017 to 2022.

The Government stated (February 2025) that two out of three industries pointed out by audit have complied with the audit observations and Bank Guarantee of ₹ 20 lakh has been forfeited from one non-complying industry.

3.1.9.3 Pharmaceutical industry

Pharmaceutical industry is one of the 17 highly polluting industries as the drug manufactures release toxic effluents⁶. These industries were required to comply

⁶ Effluent such as Benzene, Xylene, Methylene Chloride, Chlorobenzene, Phosphates, Sulphides, Phenolic Compounds, Zinc, Copper, Total Chromium *etc.*

with the consent condition issued by MPCB such as installation of ETP to treat trade effluents and recycling/re-using the same ensuring ZLD, proper disposal of hazardous waste and installation of OCEMS *etc.*

Audit conducted physical verification in 10 out of 167 pharmaceutical industries in the six test-checked ROs and observed various non-compliances to those conditions as given in **Table 6:**

Table 6: Non-compliance of consent conditions

Consent conditions	Non-compliance	No of non-complying Industries
Creation of green belt in minimum 33% of the available open land	Green belt was not created	5
Treatment/recycle/reprocess/reuse of Hazardous waste as per the provisions contained in the Hazardous and Other wastes Rules, 2016	Hazardous Waste lying unscientifically	5
Installation of ETP to treat trade effluent and recycle the entire treated effluents into the process for various purposes such as for cooling, process <i>etc.</i> so as to achieve Zero Liquid Discharge	ETP was not provided/functioning	4
Installation of separate water/electric meter showing the consumption of energy for operation of domestic and industrial treatment plants	Flow/Energy meter was not installed	5

Samples of treated effluents were collected at the outlet of ETP through MPCB officials in joint physical verification of three Pharmaceutical industries and tested to check compliance of consent conditions for various parameters of treated effluent such as BOD, COD, TDS, SS *etc.* Test results revealed that effluent exceeded the permissible limit as prescribed for various parameters as shown in **Table 7:**

Table 7: Parameter beyond the permissible limit

Parameter	Permissible Value as prescribed by CPCB	Observed Range
BOD	100 mg/l	138 mg/l to 220 mg/l
COD	250 mg/l	284 mg/l to 612 mg/l
TDS	2,100 mg/l	2,650 mg/l to 8,910 mg/l
SS	100 mg/l	124 mg/l to 268 mg/l

Source: Test result of sample obtained from MPCB Laboratory

Thus, non-compliance of various conditions as discussed above and the test results showing parameter beyond permissible limit, indicated that these industries were not ensuring compliance with the consent conditions.

Audit also observed that only 20 *per cent* of the field visits (2058 against 10020 visits) against the required visits to 167 pharmaceutical industries were carried out by MPCB during 2017 to 2022.

The Government stated (February 2025) that nine out of 10 industries have complied with and legal action was being initiated against one industry.

3.1.9.4 Battery Recycler Industries

The toxic effluents like lead generated by Battery Recycler Industries have wide ranging toxic effects and cause serious health hazards. MoEF&CC had issued a notification (May 2001) on management and handling of batteries. Also, as per MoEF notification dated May 2010, all manufacturers, importers, assemblers and re-conditioners were required to file a half-yearly return of their sales and buy-back to MPCB and ensure that used batteries were collected and sent only to the registered recyclers and the same was incorporated in the consent of the battery recycler industries. Industries have to strictly follow conditions of the consent such as scientific disposal of Hazardous waste, non-discharging acid on land and outside the factory premises *etc.*

Physical verification of 10 out of 66 battery recycler industries in the six sampled ROs along with the MPCB officials revealed following non-compliances to those conditions as given in **Table 8**:

Table 8: Non-compliance of consent conditions

Consent Conditions	Non Compliance	No. of non-complying Industries
Acid shall not be discharged on land and outside the factory premises	Acid spilled on the ground	4
Hazardous waste shall be disposed of strictly in accordance with Hazardous and other wastes (Management and Transboundary Movement) Rules 2016	Hazardous lead slag lying unscientifically	9
It is duty of the authorized persons to take permission of the MPCB to closed down the facility	Battery units were found closed without knowledge of MPCB officials with dismantled batteries/hazardous waste scattered in the factory.	3

Further, audit observed that 56 to 74 *per cent* of the units were not submitting periodical returns and 86 to 56 *per cent* of units did not recycle batteries during 2018-19 to 2021-22 indicating lack of monitoring by MPCB.

The Government stated (August 2023) that notices were issued to the stakeholders, who had not submitted the annual returns of the batteries.

3.1.9.5 Infrastructure projects

As per the MoEF notification (September 2006), all construction projects having area of 20,000 square meters or more and town ship projects having area more than/equal to 50 hectare and/or built-up area more than/equal to 1,50,000 square meters were required to obtain environment clearance (EC) from DECC. Similarly, these projects were required consents from MPCB. Under the conditions of consent/EC, Project proponent were required to install STP, Organic Waste Convertor (OWC) and maintain separate funds for Environmental Management Plan (EMP) *etc.*

Audit noticed that MPCB granted consent to establish, operate and renewal to 2,898 infrastructure projects during 2017-22. Audit observed non-compliances

to those consent conditions in nine out of 12 test-checked infrastructure projects as given in **Table 9**:

Table 9: Non-compliance of consent conditions

Condition of Consent/ Environmental clearance	Non-compliance	No. of non- complying Projects
Installation of Sewage Treatment Plant with adequate capacity to treat domestic effluents	Installation of STP with less capacity/ non-operation of STP	6
Creation of green belt considering CPCB guidelines with adequate species of plant in consultation with the local Forest/Agriculture	Non-creation of Green Belt	9
Installation of organic waste digester along with composting facility/bio-digester (biogas) for the treatment of wet garbage	Non-installation/operation of OWC/ Inadequate solid waste management	5
Creation of separate funds for the environmental protection measures as per condition of the Environmental clearance.	Non-maintenance of separate fund for EMP	8

The Government stated (February 2025) that 11 out of 12 projects have complied with the audit observations and legal action was being processed against one non-complying project.

3.1.9.6 Other industries

Audit verified 102 various other industries such as chemicals, oils, food processing, hospital, hotels *etc.* which were also required to treat their effluent after maintaining standard of parameters and other conditions as prescribed in the consent/guidelines of MoEF&CC/CPCB/MPCB.

Audit observed cases of non-compliances during joint physical verification along with MPCB officials such as non-operational STPs/ETPs, discharge of untreated effluent and lying of hazardous waste un-scientifically *etc.* as detailed given in **Appendix-3.1.2**.

The Government replied (August 2023) that show-cause notices were issued against the defaulting industries for non-compliance.

Thus, it is clear that due to non-compliances of consent conditions such as non-operational/functional ETP, discharge of effluent directly into drain *etc.* as discussed in Paragraphs No. 3.1.9.1 to 3.1.9.6. MPCB could not ensure prevention, control and abatement of water pollution.

Also, there was lack of monitoring due to shortfall in the number of field visits indicating ineffective monitoring on the part of MPCB.

3.1.10 Common Effluent Treatment Plants

CPCB adopted (October 2005) the concept of Common Effluent Treatment Plant (CETP) stating that it was difficult for each Small-scale industrial unit to provide and operate individual waste-water treatment plant due to the scale of operations or lack of space or technical manpower. MPCB was required to ensure compliance of the consent conditions issued to CETP.

As of March 2022, there were 26 CETPs in Maharashtra catering to 7,856 industrial units. Audit observations in respect of CETPs are discussed in succeeding paragraphs:

3.1.10.1 Checking of parameters of effluent discharged by CETP

CPCB has prescribed specific parameters with certain standards for each industry which are required to be incorporated as condition to the consent issued to such industry. This needed to be complied with the industry concerned while discharging effluent after treatment. As per MPCB Circular (December 2012), the samples of effluent after treatment from the outlets of the CETPs are being collected and checked *i.e.* all parameters are being checked on first and third Monday and six parameters are on second and fourth of the month.

Audit observed in five CETPs that as per CPCB guidelines, parameters prescribed for treated effluent for various types of industries connected to those CETPs were in the range of 12 to 53. All these parameters were required to be checked by MPCB. Audit analysed the test results of 70 samples of treated effluents furnished by MPCB for those CETPs for the period 2021-22 which revealed that as against aforesaid parameters, maximum number of parameters checked were in the range of 6 to 23, as detailed in *Appendix 3.1.3*. Thus, MPCB did not ensure checking of all parameters as per CPCB guidelines.

Further, audit analyzed data of samples of effluent tested by MPCB for 15 CETPs under six sampled ROs during 2017-18 to 2021-22 which revealed that out of 12319 samples, 5033 samples were non-complying against the prescribed standard fixed for CETPs.

The Government stated (August 2023) that the samples were being collected and checked on the basis of board Circular.

Reply is not acceptable as test results for the period 2021-22 did not display checking of all required parameters, as mentioned above.

As per CPCB guidelines for CETP (October 2001), penal charges were required to be imposed on the industries discharging effluent into the CETP with parameters beyond the prescribed norms. Audit observed the test results of 14 industries connected to CETPs and noticed that the industries discharged effluent beyond prescribed standards of parameters in the range of 5 to 37 months. However, ROs did not initiate any action against these defaulting industries.

3.1.10.2 Establishment/Expansion of new industries in under-performing CETP

NGT ordered (July 2015) not to permit for expansion/establishment of the industrial units in the areas, where the associated CETPs were not complying with the norms prescribed for treatment of effluent by CETPs. Audit analysed test report of samples of effluent of CETP, Taloja, Navi Mumbai and observed that CETP were consistently non-complying to the standards of BOD and COD prescribed for treatment for more than eight years. However, RO, Navi Mumbai issued consents to establish to one industry and consent to expansion to one more industry during 2016-20 as detailed below:

- (i) As per consent issued to establish Panchmahal District Co-operative Milk Producers Union (New Industry), the treated effluent from the industry was to be discharged at the outlet of the existing CETP through dedicated effluent disposal pipeline so that it could not rout through the CETP for treatment and avoid extra burden on the already non-performing CETP. However, audit observed during field visit (July 2022) that the effluent from the industry was being discharged into the inlet of CETP for treatment thus, violating the consent condition.
- (ii) Similarly, as per the consent for expansion issued to M/s I.G. Petrochemicals Limited, the industry was required to treat the effluent to the maximum extent by recycling it and the remaining treated effluent was to be disposed into CETP which was against the NGT orders.

Since, the CETP, Taloja was non-complying for more than eight years, the NGT orders were violated by allowing industries to establish or expansion.

The Government stated (August 2023) that the consent to establish was issued to the industry with the condition to discharge treated effluent at the outlet of the CETP through dedicated pipeline.

Reply is not tenable as the industry was required to set up its own ETP and discharge the treated effluent at the outlet of CETP whereas during field visit the industry was found discharging the effluent into the CETP indicating lapse in monitoring. Government was silent about the issue of consent to expansion to the other industry.

3.1.11 Recovery of environmental compensation

The Polluter Pays principle as evolved through various SC Judgements⁷ envisages that polluter is responsible for the environmental and social costs resulting from their pollution and should bear the costs of cleaning up and mitigating its impacts.

On the recommendation of NGT, CPCB issued (March 2019) instructions for levying of EC on industrial units on “*polluter pays principle*” for various reasons such as violation of consent conditions, non-installation of Online Continuous Effluent Monitoring System (OCEMS), non-adherence to action plan, accidental/intentional discharges resulting in damage to the environment *etc.* As per Section 43 and 44 read with Section 24, 25 and 26 of the Water Act, 1974, imprisonment and fine is the penalty for causing pollution.

Accordingly, MPCB identified 339 defaulting industries on the basis of field visits and issued directions levying compensation amounting to ₹ 183.25 crore during 2019-20. However, no compensation was recovered from the defaulting industries even after lapse of two and half years of issue of notices. The notices issued to the defaulting industries were withdrawn by MPCB without any reason and the industries were let off without recovering the EC despite polluting the environment.

⁷ Indian Council for Enviro-Legal Action v. UOI (1996), Vellore Citizen's Welfare Forum v. UOI (1996)

The Government stated (August 2023) that notices were issued to the industries for environmental compensation; however, the notices were withdrawn considering representations received from the industries.

Audit is of the view that timely action needs to be taken by MPCB to recover the environmental compensation and withdrawal of notices should be supported with justified reasons.

3.1.12 Consent fee

MPCB issued (January 2016), guidelines for calculation of consent fee regarding consent to establish, consent to operate, renewal of the consent to operate in respect of industries on the basis of gross block of fixed assets plus capital work in progress disclosed in their Balance Sheet. In case, Balance Sheet is not finalized, Chartered Accountant's (CA) certificate, project report and undertaking or self-declaration shall be considered while applying for consent to establish and consent to operate. Once the Balance Sheet is finalized after consent to operate, the capital investment shown in the Balance Sheet shall be taken into consideration and accordingly consent fees are to be charged. Audit observed that Consent fee was charged in majority of cases on the basis of capital investment shown in the CA certificate instead of Balance sheet during 2017-22 as discussed in the succeeding paragraphs:

3.1.12.1 Charging consent fee on the basis of CA certificate in respect of Industries

Audit observed (July 2022) that out of 6,627 applications of industries received for grant of consent to renewal during 2020-22, in 98.23 *per cent* cases, consent fee was charged on the basis of the CA certificate/Undertaking and in only 1.77 *per cent* cases, consent fee was charged on the basis of Balance Sheet.

Audit worked out consent fee of ₹ 373.82 lakh for grant of four consents issued to three industries on the basis of capital investment shown in Balance Sheets, where MPCB provided Balance Sheets of industries. Further, audit compared consent fee calculated with consent fee of ₹ 343.68 lakh which was charged by MPCB on the basis of capital investment shown in CA certificates submitted in such cases. There was short recovery of ₹ 30.14 lakh, as detailed in *Appendix 3.1.4*.

Hence, MPCB did not implement the provisions for the calculation of consent fee using Balance Sheet which resulted in short recovery.

The Government stated (February 2023) that in one case, it was charged on the basis of the CA certificate, however, no reply was furnished in the remaining cases. Further, it was stated that MPCB had started charging consent fee on the basis of Balance Sheet.

3.1.12.2 Charging consent fee on the basis of CA certificate in Infrastructure Projects

MPCB issued guidelines for calculation of consent fees (January 2016) prescribed that while issuing consent to establish infrastructure projects, capital investment should be calculated based on Ready Reckoner (RR)⁸

⁸ Ready Reckoner rate is the minimum rate of land at particular location based on which the government charges registration fee and stamp duty for any property related transaction.

rates as issued by the revenue authorities. At the time of giving consent to operate, the actual cost of the project ascertained on the basis of RR and duly certified by CA should be considered for calculation of consent fees. Audit observed that MPCB was not considering RR rates for the purpose of calculation of capital investment, instead consent fee was calculated on the basis of CA certificates.

Audit calculated consent fee of ₹ 11.26 crore on the basis of RR rates in 13 infrastructure projects and compared it with the consent fee of ₹ 3.70 crore charged by MPCB on the basis of capital investment shown in the CA certificates submitted in such cases. There was short recovery of consent fee of ₹ 7.56 crore during 2018-22 as detailed in *Appendix 3.1.5*.

The Government stated (August 2023) that instructions have been issued for calculation of consent fee for the infrastructure projects on the basis of capital cost mentioned in environmental clearance.

3.1.13 Bank Guarantee

3.1.13.1 Inadequate monitoring over Bank Guarantee

As per the Enforcement Policy issued in February 2016, in order to secure compliance by the Industries, it was prescribed to obtain Bank Guarantee (BG) on the basis of “*polluter pays principle*”. If compliance is not secured within the stipulated time provided to the concerned industry, the Board shall initiate action for forfeiture of Bank Guarantee. Further, as per consent conditions/directions issued by the MPCB, the industries were required to upload the BG on the MPCB portal and submit the original BG within 15 days. The BGs so obtained from industries could be forfeited in case of non-compliance. Audit noticed several instances where non-compliances of Enforcement Policy/consent conditions in respect of management of BGs were observed as discussed below:

(i) It was observed (September 2022) that as of March 2022, out of 16,722 BGs submitted by industries to MPCB, 2,678 BGs amounting to ₹ 272.47 crore were not received in physical form and hence could not be verified by MPCB till then. Further, in case of 50 BGs, expiry dates were shown before the date of issue of BGs.

The Government Stated (August 2023) that BG was monitored through online module and action regarding verification/extension/forfeiture was done at the level of RO.

(ii) MPCB had directed to forfeit BGs amounting to ₹ 9.04 crore in 372 cases, on the ground of non-compliance by the industries. However, it was observed that in these cases, MPCB could not forfeit BGs as it was not obtained from the Industries while issuing consent. As such, there was no system to ensure whether the BG was furnished, as prescribed, by the industries at the time of grant of consents by MPCB. MPCB was aware about non-receipt of BG at a later period, when further follow up action was required due to non-compliance.

This indicated that there was lack of monitoring over BG resulting in non-realization of money on forfeiture of BG in case of non-compliance which could be utilized for environmental remediation measures.

The Government stated (February 2025) that 174 industries had submitted the BG and the remaining industries are yet to submit the BG. Also, the BG of 12 industries out of 174 had been forfeited by MPCB and action against remaining industries was in progress.

(iii) As per Enforcement Policy (2016), the amount of BG forfeited shall be deposited in a separate account in the name of “Environment Improvement and Environment Compliance Fund”. This fund shall be utilized to take remedial measures, intensive monitoring of the said area *etc.* in respect of incidence of pollution caused in those areas.

Audit observed that during the period 2017-22, MPCB had forfeited BGs to the extent of ₹ 17.98 crore from various industries. It was observed that instead of maintaining separate account for depositing the forfeited BG, MPCB was crediting the amount in the regular account. Since, there was no separate account for forfeited bank guarantee it was not possible to ascertain whether forfeited amount was utilized for its intended purpose.

The Government stated (February 2025) that a separate bank account for depositing forfeited BG has been opened.

The reply is silent about utilization of the forfeited BG which is to be utilized for the remediation measures in the affected area.

3.1.14 Conclusion

MPCB plays an important role as a regulator through consent management to ensure that industries, Local Bodies operate within acceptable environmental standards in minimizing pollution.

Even though there are statutory provisions for obtaining consent to establish, operate and renewal, many industries were operating without obtaining consent.

MPCB was working with significant shortage of manpower and shortfall in visits to industries to check compliance with prescribed consent conditions resulted in inadequate monitoring.

Instances of non-compliance with prescribed consent conditions such as discharge of polluted effluent, untreated sewage into water bodies, non-functional ETPs, Non-installation of OWC, OCEMS were noticed in joint physical verification of some of the highly polluting industries.

There was short charging of consent fee as it was not charged on basis of Balance Sheet and RR rates as required. There were instances of not obtaining and non-verification of Bank guarantees as well as non-forfeiture of Bank guarantees in cases of non-compliance.

Hence, MPCB could play limited role in prevention, control and abatement of water pollution through issuance of consent and monitoring of compliance of consent conditions. MPCB needs to strengthen its monitoring mechanism with respect to the role assigned for effective prevention, control and abatement of water pollution.

Recommendations

- 1. MPCB should proactively coordinate with other government departments to ensure that all operational industries are brought under the consent regime.*
- 2. The Government may review the existing manpower structure and take timely action to fill up all sanctioned posts at various levels to strengthen MPCB's field presence.*
- 3. MPCB must ensure strict enforcement of consent conditions through regular and effective monitoring, particularly focusing on industries identified as high polluters.*

Idle/Unfruitful expenditure due to taking up works without ensuring availability of land

Para 251 of the Maharashtra Public Works Manual stipulates that no work should be commenced on land which has not been duly made over by the responsible civil officer. When tenders for works are accepted but the land required for the purpose is still to be acquired, the time that should be allowed for the acquisition of the land should be ascertained from the District Collector concerned before orders to commence the works are issued.

Audit observed that in same works undertaken by the Public Works Department and Water Supply and Sanitation Department, Work Orders were issued without ensuring availability of land, the details of which given below:

PUBLIC WORKS DEPARTMENT

3.2 Non-completion of bridge work due to non-availability of the required land resulted in expenditure of ₹ 9.64 crore as idle

Section 4 of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, *w.e.f.* 01.01.2014, provides that whenever the Government intends to acquire land for a public purpose, it shall consult the concerned Panchayat, Municipality or Municipal Corporation, as the case may be, at village level or ward level, in the affected area and carry out a Social Impact Assessment (SIA) Study in consultation with them. The Government shall ensure the completion of SIA study within a period of six months from the date of its commencement.

The Government of Maharashtra (GoM), Public Works Department, accorded (January 2016) Administrative Approval for ₹ 17.04 crore for Construction of a Major Bridge at Rajaram Bandhara ODR-68 on Panchganga River. The Chief Engineer, Public Works Region (PWR), Pune accorded (November 2016) Technical Sanction for ₹ 14.88 crore. The GoM accorded (March 2017) another Administrative Approval of ₹ 1.50 crore for acquiring land required for construction of approaches to this bridge. The Executive Engineer, Public Works Division, Kolhapur (EE) awarded⁹ (January 2017) the work to a contractor¹⁰ at a lump sum cost of ₹ 14.87 crore (estimated cost put to tender was ₹ 14.88 crore). The stipulated period of completion of this work was up to 09.01.2019.

The EE paid¹¹ ₹ 9.64 crore to the contractor in March 2021 on the running bill submitted by the contractor. However, the work has come to a standstill since then due to the unavailability of the required land for further execution. The land required for the construction of approaches to the bridge was 0.905 hectare¹². The Sub-divisional Officer Karvir conducted (March 2021) a final assessment for land acquired through private negotiations. The landowners on Wadange side accepted the rate fixed through private negotiation and accordingly, ₹ 45.96 lakh was paid to them. However, the landowner on Kasba Bawada side did not agree with the rate fixed through private negotiation and

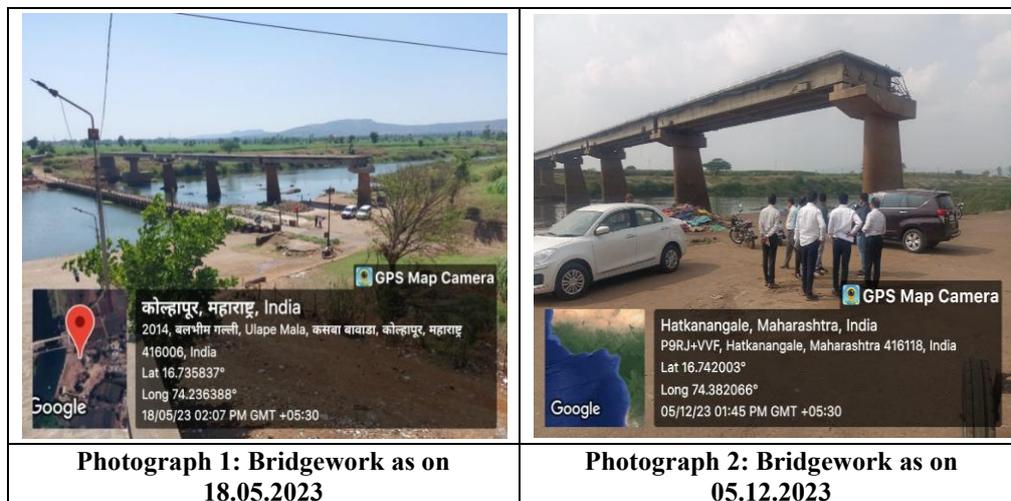
⁹ Agreement No. CE/C/4/2016-17

¹⁰ Shri Vijay Sudam Patel, Shirpur

¹¹ Eleventh Running Account Bill

¹² On the Wadange side 0.4550 hectare and on Kasba Bawda side 0.450 hectare

demanded higher rate of compensation. In the meantime, the Department granted (December 2021) third time extension to the contractor upto 31 March 2022. The following photographs illustrate the status of completion of bridge as of December 2023.



Awarding of work without ensuring clear availability of an encumbrance free land required for the project was in violation of the provisions *ibid* which resulted in non-completion of the bridgework even after incurring an expenditure of ₹ 9.64 crore.

The Chief Engineer, Public Works Region, Pune stated (July 2023) that initially the Department had the consents of the landowners, however, during execution they did not co-operate, and the compulsory land acquisition process was initiated and now SIA is in progress. The project would be finalized through the same contractor after the acquisition of the required land. Audit noticed that the SIA has been taken up in April 2023 i.e. more than four years after the stipulated completion date of the work (January 2019) which indicates ineffective planning.

The Government stated (August 2024) that bridge will be used for the transportation of public transport as well as transporting the agriculture goods of the farmers to the market. According to the requirement of land acquisition for the approaches on both side of the bridge, land acquisition process has been completed in the area of Wadange village on the left side of the bridge and sale deed process on this said land has also been completed. They further stated that the required land on Kasba Bawada side is not acquired till date. The same is under process through compulsory land acquisition. Initially Sub-divisional officer, Karvir division, Kolhapur demanded (December 2024) ₹ 35 lakh, which was received (February 2025) by them. However, additional demand of ₹ 25 lakh was made (February 2025) considering new rate, payment for which has been made (May 2025).

The reply is not acceptable as the Public Works Manual stipulates that work should not commence on land, which has not been duly made over. Thus, non-adherence to the provisions, *ibid* resulted in blocking of Government money amounting to ₹ 9.64 crore.

WATER SUPPLY AND SANITATION DEPARTMENT

3.3 Unfruitful expenditure of ₹ 17.80 crore on construction of underground sewerage scheme for Beed city under Atal Mission for Rejuvenation and Urban Transformation

The Central Government Sponsored Amrut (Atal Mission for Rejuvenation and Urban Transformation) Abhiyan is being implemented in the State from the year 2015-16. Under this campaign, the creation of infrastructure facilities such as water supply, sewage disposal, rainwater drainage, urban transport and green area development *etc.*, will be done in the campaign cities. Accordingly, under this campaign, the Central Government had approved the State's plan worth ₹ 3280 crores in the financial year 2017-18 and the sewage project of Beed city had been included in the said plan.

As per the guidelines 2015 of the scheme, no projects should be included which do not have land available and no work order for the project should be issued if all clearances from all the departments have not been received by that time.

The Chief Officer (CO), Municipal Council (MC), Beed submitted (28 December 2017) a proposal for a project of 'Underground sewerage scheme' for Beed City for its inclusion in AMRUT scheme. The project included the work of 'Construction of collection system, trunk main, wet wells, approach bridge, approach bunds, rising mains, Sewerage Treatment Plant (STP) and nullah interception *etc.*'

The project was to be funded by the Government of India (GoI), Government of Maharashtra (GoM) and the MC Beed in the ratio of 50:25:25 respectively.

Chief Engineer (CE), Maharashtra Jeevan Pradhikaran (MJP), Chhatrapati Sambhajinagar (Aurangabad) accorded (01 January 2018) technical sanction (TS) for ₹ 165.80 crore. Based on the proposal of the CO, MC Beed and TS of the CE, MJP, administrative approval (AA) of ₹ 165.80 crore was accorded (15 January 2018) by Urban Development Department (UDD), GoM for the work of 'Underground sewerage scheme' for Beed City under AMRUT. As per the AA, MJP was designated as implementing agency (IA) for the project. For implementation of the project, an agreement was executed (November 2018) between the CO, MC Beed and the Executive Engineer (EE), MJP, Beed. As per this agreement, the land required for the project was to be made available by the MC, Beed.

The work under the project was awarded (July 2018) by the EE, MJP Beed to M/s Indrayani Construction-KIPL (JV), Aurangabad (contractor) at a tender cost of ₹ 149.47 crore, which was 3.53 *per cent* below the estimated cost of ₹ 154.94 crore put to tender and the work started on 7 February 2019. The stipulated period of completion was 24 months (upto July 2020). However, MC Beed could not make available the requisite land to the Contractor due to which the work was stalled. On this ground, the Contractor requested (August 2021) the Department to either allow time extension for the completion of work or make final payment for the work executed till that date. Accordingly, the Department extended the timeline upto 18 July 2022. EE, MJP, Beed made (September 2022) a payment of ₹ 17.80 crore to the contractor for works executed upto 13th running account (RA) bill.

Audit observed (June 2023) that:

- As per the scope of work, the contractor had to execute 13 components such as collection system zone-1, trunk main, wet well, Approach Bridge, Approach Bund, Sewage Treatment Plant (STP), Nalla Interception, Trial Run *etc.* Out of these components of works, only two components (collection system zone-I and trunk main) were partially executed by the contractor at a cost of ₹ 17.80 crore against the tendered cost of ₹ 149.47 crore which is 11.91 *per cent* upto 13th RA bill as the required land was not made available by the MC, Beed.
- As the works remained incomplete for want of required land, CE, MJP informed (July 2022) in a meeting with the Member Secretary (MS), MJP, Maharashtra State, that the execution of works under the scheme was stopped and chances of availability of land was also very remote. The MS, MJP, directed the CE to submit a proposal for closure of the project on 'as is' basis to the State Level Technical Committee (SLTC).
- CE, MJP, therefore, proposed (August 2022) for termination of the contract and foreclosure of work on 'as is' basis. It was stated by the CE that even if the MC, Beed provides alternate land, the new alignment and the existing cost would require the MJP to obtain fresh sanction and float a separate proposal for completing the work.

Accordingly, as per instruction of the Principal Secretary, UDD, GoM (September 2023), the E.E., MJP Beed prepared 14th and final bill (October 2023) and the CE submitted (December 2023) a proposal for the foreclosure of the work to the Central Planning, Design and Monitoring Cell (CPDM). However, the final decision is yet to be made by CPDM.

Thus, issue of work order and commencement of work without having the required land in possession by the EE, MJP, Beed resulted in non-execution of major components *viz.* STP, wet well, rising main *etc.*, of the project and stoppage of works at incomplete stage. The execution of partial works did not serve any purpose and the entire expenditure of ₹ 17.80 crore incurred thereon proved to be unfruitful.

On this being pointed out, the CE, MJP, Chhatrapati Sambhajnagar (Aurangabad) accepted the facts and stated (June 2024) that;

- Work order was issued after having confirmed that the required land at village Jirewadi was in possession of MC, Beed, which was revenue land (*Gairan*) showing 'other rights' of MC Beed as per records of the Revenue Department and was being used as waste dumping ground.
- The MC, Beed had cleared the garbage from the dumping ground to make it available for the STP, but the locals made encroachments on the dumping ground. Also, MC, Beed could not obtain 'No Objection Certificate' (NOC) from the Revenue Department therefore they were not able to remove encroachment made by the local villagers.
- The collection system was designed for the ultimate population of Beed till the year 2050 and the structural life of the system is at least 50 years. Therefore, the work of collection system done under this scheme can be utilized by executing the remaining works.

Reply of the CE is not acceptable as the work was taken up in clear violation of AMRUT guidelines 2015 and provision of para 251 of MPW Manual, since the

work order for the project was issued without clearances from all the concerned departments and without obtaining the possession of required land for execution of work from the MC, Beed. Work Order was issued (July 2018) even before signing the agreement with MC Beed (November 2018) according to which the land required for the project was to be made available by MC, Beed. Further, the land required for the STP at village Jirewadi was 2.53 hectare and the land in possession with the MC, Beed was only 1.61 hectare which was not sufficient.

Non-availability of the land led to non-execution of major components of work and ultimately stoppage thereof and resulted in incomplete execution of the work by incurring an expenditure of ₹ 17.80 crore. Moreover, non-completion of the project of ₹ 165.80 crore not only resulted in delays in the delivery of intended amenities to the citizens of Beed city but also led to unfruitful expenditure of ₹ 17.80 crore as the work has been foreclosed without any plan for utilization of the executed work.

Matter has been referred to the Government (February 2025), their reply is awaited.



(DATTAPRASAD SHIRSAT)
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Nagpur
The 23 December 2025

Countersigned



(K. SANJAY MURTHY)
Comptroller and Auditor General of India

New Delhi
The 30 December 2025