CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE, BHOPAL

Original Application No. 606/2018
(I.A. No. 163/2021)

Hon'ble National Green Tribunal (NGT) Principal Bench Delhi vide Order Dated 14.03.2024

w.r.t.

(***Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues in respect of State of Madhya Pradesh***)

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1184

REPORT OF THE JOINT COMMITTEE

Constituted by

Hon'ble National Green Tribunal (NGT) Principal Bench Delhi vide Order Dated 14.03.2024 In O.A No. 606/2018 (I.A. No. 163/2021)

(**w.r.t.** ***Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues in respect of state of Madhya Pradesh***)

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Report of the Joint Committee constituted in the O.A. No. 606 of 2018 (I.A. No. 163 of 2021) w.r.t. Compliance of Municipal Solid Waste Management Rules, 2016 and other Environmental issues in respect of State of Madhya Pradesh before the Hon'ble National Green Tribunal, Principal Bench, New Delhi.

1. Introduction

In pursuance to the order of the Hon'ble Supreme Court dated 02.09.2014 in *Writ Petition No. 888/1996, in the matter of Almitra H. Patel vs. Union of India & Ors., and the order dated 22.02.2017 in W.P. No. 375/2012, reported in (2017) 5 SCC 326 in the matter of Paryavaran Suraksha vs. Union of India*, the issue of solid as well as liquid waste management at the State level is being examined by the Hon'ble National Green Tribunal, Principal Bench, New Delhi in the O.A. No. 606 of 2018. In order to ascertain the correctness of the disclosures made in the six monthly progress report dated 12/03/2024 and the presentation on 11/03/2024 of the Principal Secretary, Deptt. of Urban Development & Housing, Govt. of Madhya Pradesh filed before this Hon'ble Tribunal a Joint Committee has been constituted vide order dated 14/03/2024 by the Hon'ble National Green Tribunal, Principal Bench, New Delhi. The Joint Committee comprising the members of (1). Regional Director, CPCB; (2). Regional Officer, Ministry of Environment, Forest and Climate Change (MoEF&CC), Bhopal (3). Senior Officer from Central Public Health Environmental Engineering Organization of Ministry of Housing and Urban Affairs, GoI with the direction to visit the selected towns: Gwalior, Jabalpur, Ratlam, Morena and Rewa and give their findings based on data provided by the State before the next date of hearing. In the above said Order, Hon'ble NGT directed that MPPCB will coordinate in organizing the visits and Regional Director, CPCB will file the report.

2. Constitution of the Joint Committee

In compliance with the directions of the Hon'ble NGT, CPCB, Regional Directorate, Bhopal circulated vide letter CM-13011/1/2024-LAW-RD Bhopal/17519/36-42 dated 05/04/2024 to the concerned departments for providing the nomination of the Officers for the Joint Committee. Accordingly, the Joint Committee was constituted after getting nominations from concerned Authorities, Shri Vishwa Bandhu Meena, Scientist 'D', was nominated from Ministry of Environment, Forests and Climate Change (MoEF&CC), Regional Office, Bhopal, however due to transfer form Regional Office, Bhopal to Head Office Delhi, Dr. Satya, Scientist 'E', was nominated as Joint Committee member from MoEF&CC, Regional Office, Bhopal, subsequently she visited Gwalior and Morena city. Joint Committee has been constituted comprising the following members based on the Officers deputed / nominated from the Authorities concerned:

1. Shri. P. Jagan, Regional Director, Central Pollution Control Board, Regional Directorate, Bhopal
2. Dr. Yogendra Kumar Saxena, Scientist 'C', Central Pollution Control Board, Regional Directorate, Bhopal
3. Dr. Ramakant, Deputy Adviser (PHE), Central Public Health & Environmental Engineering Organization, Ministry of Housing and Urban Affairs (MoHUA), New Delhi
4. Shri. Vishwa Bandhu Meena, Scientist 'D', Ministry of Environment, Forests and Climate Change (MoEF&CC), Regional Office, Bhopal (Jabalpur, Rewa and Ratlam city was visited by Shri. Vishwa Bandhu Meena and after transfer of the member, Dr. Satya, Scientist 'E', was nominated as member of Joint Committee and subsequently she visited Gwalior and Morena city).

3. Terms of reference (ToR) to the Joint Committee

An introductory meeting of the Joint Committee was held on 03.05.2024 through video conferencing to discuss and decide further course of action. All the members of the Joint Committee, representatives of Madhya Pradesh Pollution Control Board (MPPCB), Bhopal and Urban Administration and Development (UADD), Bhopal were present and deliberated the Terms of Reference (ToR) to the Committee and the issues involved therein, which inter-alia include the following:

- To verify the data gap of solid waste and liquid (waste water) management in Gwalior, Jabalpur, Ratlam, Morena & Rewa and give the findings based on data submitted to Hon'ble NGT (PB) by State of Madhya Pradesh through six monthly progress report dated 12.03.2024 and presentation on 11.03.2024.
- To check the operational status of Refused Derived Fuel (RDF), compost plant, waste to energy plants, Bio-mining & Bio-remediation of legacy waste facility, C&D waste processing facility, sanitary land fill facility for disposing of inert material etc.
- To verify the status of sewerage network construction, household connection, sewage treatment plant capacity and treatment performance.
- To verify the timeline and percentage (%) completion of newly under construction STPs.
- To collect outlet samples of operating STPs for compliance verification with the standards directed by the Hon'ble NGT(PB) in order dated 30.04.2019 in OA No. 1069/2018.
- To monitor the source emission from the stacks attached to the waste to energy plants and collecting the leachate treatment plant outlet samples for compliance verification.

Further, it was discussed regarding the field inspection of the Committee and decided to conduct the field visits in 3 phases and complete the inspections before monsoon.

4.Site inspections by the Joint Committee:

As decided in the preliminary meeting, site inspections of the Joint Committee were held during 14th & 15th May 2024 at Jabalpur, on 16th May 2024 at Rewa, on 10th July 2024 at Ratlam, during 5th & 6th August 2024 at Gwalior and on 7th August 2024 at Morena to verify the factual status and collect the information in respect of various facilities available. Copy of Office order & Attendance sheet for all the cities visited by the Joint Committee is enclosed as **Annexure-1.**

During the visit the Joint Committee has verified the data/information submitted by the state authorities to Hon'ble NGT through the six monthly report dated 12.03.2024 and the presentation made by the Principal Secretary, Deptt. of Urban Development & Housing, Govt. of Madhya Pradesh before Hon'ble NGT. The Joint Committee carried out inspections of various facilities viz. Solid waste processing facilities, Sanitary/Scientific landfill site, Bio-mining & Bio-remediation of legacy waste, C&D waste processing plant, MRF center, RDF plant, Composting plant, STPs, etc., located in Gwalior, Jabalpur, Morena, Ratlam and Rewa. MPPCB made arrangements to the Joint Committee for the visits. The Officers of the Deptt. of Urban Development & Housing, Govt. of Madhya Pradesh extended cooperation during the visit of the Committee by coordinating with respective Municipal authorities / implementing agencies and also furnishing the inputs.

5. Submissions of the Madhya Pradesh State Authority on the observations of the Hon'ble NGT order dated 14.03.2024 and comments of the Joint Committee:

During the meeting of the Joint Committee the Deptt. of Urban Development & Housing, Govt. of Madhya Pradesh has submitted the following status for the observations made by the Hon'ble NGT in its Order dated 14/03/2024:

<table>
<tr><th>S.No</th><th>Observations of the Hon'ble NGT in the Order dated 14/03/2024</th><th>Submissions of the Deptt. of Urban Development & Housing, Govt. of Madhya Pradesh on the observations of Hon'ble NGT up to August 2024</th><th>Comments/ Views of the Joint Committee</th></tr>
<tr><td>(i)</td><td>Out of 33,44,472 MT of legacy waste dumped at 86 sites, only 6 lakh MT has been remediated. For remaining about 27 lakh MT, no timeline is disclosed and therefore violations of MSW rules are evident.</td><td>Out of 33,44,472 MT of legacy waste dumped at 86 sites, 53 Urban Local Bodies (ULBs) have issued work orders and begun remediation work.
Approximately 10,45,812 MT of waste has been processed. Due to the monsoon, remediation work was halted for three months. However, the remaining 22,98,660 MT will be remediated according to the timeline.
Additionally in Gwalior Legacy Waste is 6,03,089 MT collectively which is being remediated and will be processed by March 2025.</td><td>Legacy waste remediation work was under progress in all the cities visited by the Joint Committee and as per the concerned Nagar Nigam authorities the time line for completion is as given below:
<table>
<tr><td rowspan="2">city</td><td rowspan="2">Dumpsite location</td><td colspan="5">Legacy waste quantity in Lakh MT</td></tr>
<tr><td>Total</td><td>Remediated</td><td>Remaining</td><td>% completion</td><td>Completion time</td></tr>
<tr><td>Jabalpur</td><td>Ranital</td><td>3.48</td><td>1.86</td><td>1.62</td><td>53</td><td>Not decided</td></tr>
<tr><td>Rewa</td><td>Kosta</td><td>0.824</td><td>Nil</td><td>0.824</td><td>0</td><td>Dec 2024</td></tr>
<tr><td>Ratlam</td><td>Julwaniya</td><td>3.16</td><td>0.957</td><td>2.21</td><td>30</td><td>Dec 2024</td></tr>
<tr><td rowspan="2">Gwalior</td><td>Kedarpur</td><td>8.76</td><td>2.44</td><td>6.32</td><td rowspan="2">26</td><td rowspan="2">Mar 2025</td></tr>
<tr><td>Budhpark</td><td>0.756</td><td>Nil</td><td>0.756</td></tr>
<tr><td rowspan="2">Morena</td><td>RTO site</td><td>0.156</td><td>0.299</td><td colspan="2">Excess quantity was identified</td><td>Not decided</td></tr>
<tr><td>Nivi</td><td>1.06</td><td>0.505</td><td>0.554</td><td>47</td></tr>
</table>
The detailed status of legacy waste remediation work is given in the subsequent part of the report.</td></tr>
<tr><td>(ii)</td><td>At places like Indore and Bhopal, the residue/inerts are either being landfilled or capped. Landfill operation, wherever being done, has to be in</td><td>As of March 14, 2024, the following progress has been made.
<table>
<tr><td>Total targeted ULBs</td><td>87</td><td>ULBs</td></tr>
<tr><td>Amount of Waste to be Remediated</td><td>41.07</td><td>LMT</td></tr>
<tr><td>Area to be reclaimed</td><td>440.26</td><td>Acres</td></tr>
</table></td><td>The current status of disposal of inerts/residue generated during the legacy waste remediation work in Jabalpur, Rewa, Ratlam, Gwalior and Morena is as given below:
<table>
<tr><td>City</td><td>Residue/inerts disposal status</td><td>Compliance of CPCB guidelines</td></tr>
</table></td></tr>
</table>

accordance with MSW rules. To expedite remediation of legacy waste, the process adopted by Indore Municipal Corporation be explored with due supervision and following of CPCB Guidelines.

Activity for Remediated	Hearing 14th March 2024		Progress 13th Sept 2024		% improvement
	ULBs	% Progress	ULBs	% Progress	
Tender Floated/ Completed	33	38%	87	100%	63%
Work Awarded/ Started	33	38%	54	63%	25%
Amount of Waste Remediated (lakh MT)	6	15%	14.25	35%	20%
Area to be reclaimed (in Acre)	31.05	7%	87	20%	13%

Strategy for Legacy Waste Dumpsite Remediation for ULBs in the State of Madhya Pradesh:

1. Technology Selection
   - After studying successful models implemented in Indore, Bhopal, and other states. State selected model as approved by officials i.e bioremediation, bio-mining, and disposal of residual waste with land reclamation as the preferred model.
2. Expediting Remediation
   - Approved funding of Rs. 226.34 Crores for project.
   - DPR Preparation: Appointed consultants to prepare DPRs for all 87 ULBs.
   - Model Tender Document: Provided a model tender document from the State to expedite the tendering process in all 87 ULBs.
3. Capacity Building
   - Enhanced the capacity of local authorities and waste management agencies through training and workshops.
4. Supervision, Monitoring and Evaluation
   - Conducted regular field visits with AE, JE, SE, and UADD officials to monitor the progress of legacy waste dumpsites remediation.
5. Remediation works are implemented in strict accordance with the comprehensive guidelines outlined by the Central

Jabalpur	• Scientific land fill site (1 cell) provided for waste to energy plant bottom ash disposal but found barren during visit and inerts and bottom ash disposed at the backside of the plant. • Waste to Energy plant fly ash has been selling to brick manufacturers. • Inerts generated from the legacy waste remediation work are disposed in nearby low lying areas.	Partly complied
Rewa	• Sanitary land fill site (2 cells) provided for waste to energy plant bottom ash & inerts disposal. • Waste to Energy plant fly ash has been selling to brick manufacturers. • Inerts are not generated during the visit, as the legacy waste remediation work was started just 3 days back. However, as per the operator the inerts if any generated will be disposed in the Sanitary land fill site located at the integrated solid waste management system developed by Ramkey in the name of M/s Delhi Solid Waste Management System.	Complied
Ratlam	• No Sanitary land fill site developed. The inerts and good soil generating from the legacy waste remediation work are being disposed in low lying areas for which agreement has been made with 3 land owners.	Not complied
Gwalior	• There was no sanitary landfill site in the city. The inerts generating from the legacy waste remediation work is being disposed in Nagar Nigam low lying area at Baran in the outskirts of Gwalior.	Not complied
Morena	• No Sanitary land fill site developed. The inerts generated from the legacy waste remediation work is being disposed in low lying areas at the banks of Asan River and canal.	Not complied

The city wise generation and disposal details of inerts/residues, good earth/bio-soil, C&D and RDF are given in the subsequent part of the report.

<table>
<tr><td></td><td></td><td>Pollution Control Board (CPCB), ensuring effective and environmentally responsible mitigation of the contaminated site.
By implementing these strategies, 86 ULBs have started expediting the remediation of legacy waste and improve the overall environmental health of their cities.</td><td></td></tr>
<tr><td>(iii)</td><td>There is no disclosure of management of good earth, inerts and other components arising out of bio-mining, which needs to be properly disclosed in quantifiable terms.</td><td>Below table represent quantification of fractions derived from remediation of legacy waste and its utilization/disposal.
<table>
<tr><th>Fraction of legacy waste</th><th>% of total legacy waste</th><th>Utilization/disposal of legacy waste</th></tr>
<tr><td>Bio-soil (Good Earth)</td><td>35-40%</td><td>The bio-soil generated during bio-mining is utilized for conditioning degraded soil, improving soil structure, and enhancing fertility. This bio-soil is incorporated into gardens, parks, and urban green areas, promoting sustainable environmental restoration.</td></tr>
<tr><td>Inerts like C&D debris, etc.</td><td>35-40%</td><td>Inerts includes materials such as construction and demolition debris, stones and ash, which is used for filling in low-lying areas, following engineering practices.</td></tr>
<tr><td>Recyclables & RDF</td><td>10-15%</td><td>Segregated and sent for recycling to authorized facilities</td></tr>
<tr><td>Other Residual Waste</td><td>7%</td><td>Used in filling low-lying areas to increase ground level.</td></tr>
</table></td><td>The quantities of generation and disposal of good earth, inerts and other components arising out of bio-mining/remediation in Jabalpur, Rewa, Ratlam, Gwalior and Morena cities have been furnished in the subsequent part of the report.</td></tr>
<tr><td>(iv)</td><td>With regard to waste processing, out of total waste generation of 6671.5 TPD from 413 urban local bodies (ULBs), waste processing facilities are</td><td>➢ Out of total waste generation of 6798.44 TPD from 413 urban local bodies (ULBs), waste processing facilities are existing for 6723.16 TPD.
➢ Plant wise summary is as below –
<table>
<tr><th>Plant Type</th><th>No. of ULBs</th><th>Capacity (TPD)</th></tr>
<tr><td>MRF</td><td>405</td><td>3878</td></tr>
</table></td><td>• Except Rewa, all the cities visited by Joint Committee have poor management of solid waste processing due to lack of adequate capacity for treatment of wet and dry waste, O&M of existing machineries.
• The committee observed that none of the visited cities are doing proper source segregation of solid waste.</td></tr>
</table>

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<tr>
<td></td>
<td>existing for 6608.79 TPD. Facilities to process wet waste exists for 3376 TPD, 700 TPD for energy generation and 3785 TPD for C&D waste. Processing is also being done by 360 Material Recovery Facilities (MRFs) with capacity of 3878 TPD for composting and other kind of processing for which quantitative figures are not disclosed.</td>
<td>
<table>
<tr><td>Compost & CBG</td><td>405</td><td>3376</td></tr>
<tr><td>Waste to Energy (2 Plants)</td><td>45 (Two Clusters of 28+16 ULBs, 1 Standalone)</td><td>1050</td></tr>
<tr><td>C & D</td><td>405</td><td>3785</td></tr>
</table>
</td>
<td>

Waste to Energy(WTE) plant installed at Jabalpur was not functioning properly, hence huge quantity of solid waste was accumulated nearby WTE plant.
Nagar Nigam Gwalior, Morena and Ratlam lacking infrastructure to process 100% waste generated, therefore these 3 Nagar Nigams have proposed waste management facilities in their cities (Ratlam-MRF & CBG, Gwalior-MRF, CBG & WTE and Morena- MRF & CBG).

</td>
</tr>
<tr>
<td>(v)</td>
<td>Status of solid waste management presented for 16 MCs reflects that there is zero gap of waste processing but, individually the kind of waste processing facilities set up and extent of their utilisation is not given. Further detail of utilisation of compost including its quality and management of other rejects is also not disclosed. In case of dump site status, it is</td>
<td>The status report on solid waste management for 16 Municipal Corporations is attached in Annexure 2. This report includes information on MRF, composting, CBG plants, C&D waste, and legacy waste processing status.</td>
<td>Out of 16 MCs, Joint Committee visited 05 MCs, and committee is not in agreement with zero gap in these MCs.

The gap in generation and collection in Rewa city is 10.66TPD, however the installed capacity for processing of solid waste is sufficient.
As per the data provided by the WTE plant for the last 6 months (Nov 2023 to Apr 2024) the gap in processing of waste is about 303TPD in Jabalpur city. The untreated waste is being dumped at the back side of the WTE plant.
The gap in generation and collection in Ratlam city is 14.99TPD, however the installed capacity for processing of solid waste is sufficient.
About 11.26TPD gap observed in generation, whereas the gap in processing is observed as 380.26 TPD in Gwalior city.

</td>
</tr>
</table>

	not disclosed as to how much legacy waste is to be remediated particularly at Ratlam, Rewa, Sagar, Satna, Singrauli and Ujjain. No timeline is given for completion.		• In Morena city the gap in generation and collection observed as 19.94TPD. Whereas 100% gap observed in processing. Though the city is having one MRF of 35TPD capacity but during the visit the committee observed that it is not being used for the purpose from many days and not shown any record for its operation. During the visit it was found that all the unsegregated waste is being dumped at the legacy waste site Nivi.
(vi)	With respect to district wise status, gap in waste processing exists in 9 districts. Town wise status for each district is not disclosed. Also, the details of legacy waste existing at district and town level is necessary to ensure that these towns provide waste processing for day to day waste generated to avoid legacy waste generation.	Town Wise status for each district is attached in **Annexure 3.**	Joint Committee visited the selected towns as per Hon'ble NGT order and observed gap in solid waste collection and treatment. Cities like Gwalior and Morena were dumping fresh solid waste also at legacy sites.
(vii)	In case of waste to energy plant set up at Jabalpur to generate 11.5 MW of Power, on raising the query about nature of waste being fed, no satisfactory answer has been given. It appears that, power is being generated with co-	The Jabalpur Waste-to-Energy (WTE) plant was commissioned in 2016 and operates on a mass incineration model for mixed waste. At the time of commissioning, the plant was established to incinerate unsegregated municipal solid waste as the predominant method of waste disposal. This approach, while effective for managing mixed waste, also contributes to the management of by-products.	As WTE plant is based on mass burning, the Joint Committee observed mixed solid waste was being fed, which lowers the calorific value of waste as well as generates huge quantity of bottom ash.

	mingled waste rather than using segregated high calorific waste. This needs to be clarified in the next report.		
(viii)	There exist a gap of 1359.36 MLD in sewage treatment. Against the 2183.7 MLD of sewage generation, 64 Sewage treatment plants (STPs) with 1436.59 MLD treatment capacity have been provided but, actually utilized capacity is 824.34 MLD indicating poor household.	Updated progress of Sewerage- • Total sewerage generation is 2183.7 MLD in Madhya Pradesh. • Existing treatment capacity of 68 STPs is 1472.79 MLD (Currently 36.2 MLD increased with add of 4 new STP). • Utilization of existing capacity is 876.82 (52.48 MLD capacity increased) • Gap in treatment is 1306.88 MLD (Decreased 52.48 MLD) • Total House connections conducted 1029653 Numbers in different sewerage schemes in State. (37055HSC has been Increased) GAP of Sewage treatment due to not interesting of house hold owners and technical hinders.	Joint Committee observed that due to poor sewage network & household connection, the existing STPs are underutilized and hence there exist gap with respect to collection and treatment of sewage. In Jabalpur 118.43MLD, Rewa 38.55MLD, Ratlam 24.31MLD, Gwalior 47.057MLD and Morena 21.10MLD observed by the committee. Rewa city is not having any operational STPs which is having 100% gap.
(ix)	Performance of STPs, particularly their compliance with the standards directed by the Tribunal in order dated 30.4.2019 in OA 1069/2018 needs to be disclosed. Next report should include the performance.	Total 68 STPs are operational. Out of these, SBR based 46 STPs (1157.95 MLD) were constructed and performing standard norms. Other technologies based 22 STPs (314.84 MLD) designed as per MoEE&FC notification 2017.	Joint Committee collected samples from inlet and outlet of the STPs for performance evaluation and compliance verification as per Hon'ble NGT order dated 30.4.2019 in OA No. 1069/2018. The details including analysis data furnished in the subsequent part of the report.
(x)	With regard to filling up of gap in sewage treatment, 44 STPs are under construction with the capacity to treat	• Out of total sewerage generated, State has created 1472.79 MLD treatment capacity. Remaining 710.91 MLD capacity gap will be fulfilled in under construction and sanctioned projects in AMRUT 2.0, SBM 2.0, NMCG schemes projects.	• Gwalior and Ratlam have sufficient existing capacity of STPs, however, Joint Committee observed gap in collection and treatment of sewage in all the cities due to poor sewage

	362.86 MLD of sewage for which outer time limit is shown to be December, 2027 but still, there will be a gap of 384.25 MLD which as per disclosure will be catered through 433 STPs with 2157.32 MLD capacity which will become effective after two years from date of extension, extending till December 2028 and this is clear in violation of Water Act, 1974.	• Details of under constructions projects are enclosed in **Annexure 4.**	network and households service connections. • Morena Nagar Nigam have STP of capacity 25 MLD, however generation is 31.10 MLD, hence requirement of new STP may be proposed. • The time line for filling up the gap with respect to under construction STPs to treat the sewage in Jabalpur is September 2024 and for sewage network is June 2027 and Rewa is March 2025. The STP wise completion time is mentioned in the subsequent part of the report.
(xi)	The next report should indicate status of sewage management indicating town wise generation, treatment, utilization, Performance of STPS and the gap with squeezed timelines.	Status of report is enclosed in **Annexure-5.**	Town wise generation, treatment, utilization, Performance of STPS and the gap with squeezed timelines has been incorporated in the subsequent part of the report.

6. Site inspections undertaken and observations of the Joint Committee:

To assess the factual status of the implementation of solid and liquid waste management in the selected towns, site inspection was carried out by the Team of Joint Committee in presence of the Commissioner Nagar Nigam, officials of the Nagar Nigam and officials from the Regional Offices of MPPCB in the area of Gwalior, Jabalpur, Morena, Ratlam and Rewa of Madhya Pradesh State. During the site inspection an introductory meeting was held with the respective municipal authorities of the area concerned. During the visit of the Joint Committee, to assess the pollution load, treatment efficiency and compliance of the discharge standards samples of raw sewage before treatment and treated water discharged from the STP has been collected in each operational STPs visited and the samples were analyzed in the laboratory of Central Pollution Control Board, Bhopal. The following two estimations had been adopted:

- Total solid waste generation was estimated considering per capita solid waste generation as 380 gm/capita/day.
- Total sewage generation was estimated as considering sewage generation of 108 liter/capita/day.

Based on the information made available by the Authorities concerned and site inspection of the Joint Committee, the factual status of implementation on the solid and liquid waste management in the area visited and observations of the Joint Committee are furnished below.

1. Status of Solid Waste and Sewage Management in Jabalpur City

As per Hon'ble NGT order in OA No. 606/2018 order dated 14.03.2024, Jabalpur city was visited by Joint Committee during 14th & 15th May 2024 and, a meeting with Commissioner, Jabalpur Nagar Nigam and other officials of Nagar Nigam was held on 14.05.2024 at Waste to Energy plant, Jabalpur.

A brief presentation was given by Nagar Nigam officials on the present status of sewerage systems, Sewage Treatment Plants and Solid Waste Management of the Jabalpur city. Subsequently, the Joint Committee with the officials of Nagar Nigam and Regional officer MPPCB, Jabalpur visited the Waste to Energy plant, solid waste storage site near waste to energy plant, legacy waste remediation dumpsite, scientific landfills site, Bio CNG plant, construction & demolition waste processing plant, sewerage network system and sewage treatment plants. Waste water samples were collected from the inlet and outlet of the sewage treatment plants, drain passing through the waste to energy plant and solid waste storage site near waste to energy plant for the compliance verification of liquid waste discharge standards. In the waste to energy plant, stack emission monitoring was also carried out to check the compliance of source emission norms.

A. Municipal Solid Waste Management as per Solid Waste Management Rules, 2016

I. **Generation and Collection of Municipal Solid Waste**:

Jabalpur is 3rd largest urban agglomeration in the state of Madhya Pradesh, also known as Sanskardhani situated at the bank of River Narmada. Jabalpur Nagar Nigam consists of approx. 13.75 lacs of population and divided into 79 wards within 6 zones and generates about 522.50 TPD of municipal solid waste. The work of collection & transportation of municipal solid waste was outsourced to Jabalpur

Waste Collection and Transportation Management Pvt. Ltd. (JWCTMPL) (ESSEL group) with door to door garbage collection facility from all 79 wards. There were 04 garbage transfer stations located at Chuii Khadan, Ranjhi, Aga Chowk and Damohnaka against the required 12 nos. of transfer station. Chuii Khadan & Ranjhi transfer stations are under JMC and Aga Chowk & Damohnaka transfer stations are under Essel Group. The details of the vehicles are given below in table which were deployed for collection of solid waste from the city and transport to waste to energy plant. All the vehicles were equipped with GPS system for online monitoring of collection and transportation of solid waste. As per the record in the month of April 2024 about15982.48MT (includes 463.69MT from slaughter house) solid waste collected from Jabalpur city. Copy of the invoice of solid waste collection is enclosed as **Annexure-6.** The details of vehicles for collection of waste in the city are as under:

S. No.	Component	Essel group Available Nos.	JMC group Available Nos.
1.	Transfer Station	02	02
2.	Mini Tipper	239	235
3.	Refuse Compactor	22	02
4.	Potable Compactor	03	07
5.	Hook Loader	01	03
6.	JCB	08	20
7.	Dumper	19	20
8.	Tractor	16	17

II. Treatment and Disposal of Municipal Solid Waste:

Waste to Energy Plant: Waste to Energy plant is having 600 TPD municipal solid waste processing capacity based on mass burning technology with power generation capacity of 11.5 MWH was established by Jabalpur MSW Pvt. Ltd. (ESSEL group) at Kathonda, Jabalpur on PPP model.

As the waste to energy plant is based on the mass burning technology, the mixed waste i.e. dry waste and wet waste has been used for power generation. The waste collected from the city and nearby ULBs was processed at the plant by ESSEL group. As per the agreement clause 5.3

between plant operator and JMC, information provided by plant operator, JMC was to provide good quality of waste at the plant site and rejected waste to be returned back on their own cost. There was no practice of waste segregation in wet and dry categories at household level. The entire waste (dry & wet) of the city collected and stored at garbage transfer station and thereafter shifted to the plant. In these process, dry and wet waste mixed together which reduces the calorific value of the waste. As the calorific value of the mixed waste was not getting to the desired level, alternative fuel like rice husk, wooden powder etc. was used to enhance the gross calorific value (GCV) of the waste. As a result, they process more waste than the generated solely within the city by transporting waste from other ULBs, RDF, and additional fuels. JMC daily provides about 517.293 TPD of waste to the plant out of which 40% of waste was not useful for directly use in the furnace of the waste to energy plant.

As per information provided by plant official, the waste-to-energy plant was declared a Non-Performing Asset (NPA) in 2019 and is currently under the jurisdiction of the National Company Law Tribunal (NCLT) & run by Resolution Officer. Subsequent upon declared an NPA, the plant was not receiving the necessary major maintenance funds from the bank, leading to a significant decline in its operational efficiency. Due to lack of maintenance, the plant now required downtime for maintenance of about 1-2 weeks every month. Frequent shut down of the plant operation majorly impact the performance of the plant for waste handling and processing of the city waste. Copy of the NCLT documents are enclosed as **Annexure-7.**

As per record submitted by Nagar Nigam, for the month of April 2024, total solid waste collected and transported from the Jabalpur city is 15518.79 MT & 166.69 MT of waste collected from nearby ULBs. Total solid waste processed in waste to energy plant for the month of April 2024 is 16521.3 MT. It was informed during the visit that the WTE plant is also

consuming the waste stored at the back side of the plant as and when required for power generation, therefore the consumption quantity is more than the collection quantity. Copy of the power generation & waste utilization is enclosed as **Annexure-8.**

S. No.	Month	Total Solid Waste generation in Nagar Nigam Jabalpur (Column 1)	Total Solid Waste received at WTE plant from Nagar Nigam Jabalpur (Column 2)	Gap in collection {(column 1) - (column 2)}	Solid Waste of Nagar Nigam Jabalpur used in WTE plant (Column 3)	Gap in processing {(column 2) - (column 3)}
1.	November 2023	15675 MT	15949 MT	-	6604 MT	9345 MT
2.	December 2023	16197.5 MT	15552 MT	645.5 MT	7042 MT	8510 MT
3.	January 2024	16197.5 MT	14266 MT	1931.5MT	6285 MT	7981 MT
4.	February 2024	15152.5 MT	15301 MT	-	6067 MT	9234 MT
5.	March 2024	16197.5 MT	16604 MT	-	6288 MT	10316 MT
6.	April 2024	15675 MT	15518 MT	157 MT	5726 MT	9792 MT

Note:

- Total solid waste generation is calculated considering population 13.75 lacs and per capita solid waste generation as 380 gm/day.
- In the month of December 2023, January 2024 and April 2024 gap in collection is 645.5 MT, 1931.5 MT and 157 MT respectively (average 911.33 MT for three months).
- There is average processing gap of 9196.33 MT from November 2023 to April 2024, which leads to accumulation of solid waste at the back side of waste to energy plant.
- Copy of the record of Solid waste received from Nagar Nigam Jabalpur and processed by plant operator is enclosed as **Annexure-9.**

As per the data (for the month of April 2024) provided by the waste to energy plant official, approximately 266.95 TPD of bottom ash and about 18.32 TPD of fly ash was generated from the plant. Waste to energy plant

was non-operational during the visit of Joint Committee due to repairing of boiler sider (furnace refractory, super heater tube, duct & insulation repairing, etc), as the information provided by the Plant Operator. As a result, huge quantity of waste was accumulated in the surrounding of the Waste to Energy plant. It was also observed by the Committee that in addition to the municipal solid waste, huge quantity of residues (bottom ash and fly ash) generated from waste to energy plant dumped around the waste to energy plant. However, the scientific landfill site constructed for the purpose was not used and found barren.

Total Municipal Solid waste generation in the city was approximately 522.50 TPD, the Waste to Energy plant installed was sufficient for the handling of the total waste of the city. As there was no practice of segregation of solid waste at household level, and fed as fuel to the boiler in waste to energy plant, large amount of bottom ash was produced while processing of solid waste in WTE plant during their operational period.

On 16.05.2024, the operation of plant was restarted and the CPCB team conducted stack monitoring on 17.05.2024 for the waste to energy plant to check the compliance of emission norms as per consent to operate. It was observed that the emission parameters found to be PM (42 mg/Nm^3), SO_2(48 mg/Nm^3) and NO_x (244 mg/Nm^3) and all the measured parameters are found within the prescribed limit in the consent issued by MPPCB. Copy of the test analysis results of stack monitoring are enclosed as **Annexure-10.** Copy of the CTO of WTE plant is enclosed as **Annexure-11.**

During the time of visit of Joint Committee, Effluent Treatment Plant (ETP) installed at waste to energy plant with capacity 50 m^3/day was not operational, hence sample was collected from WTE Plant Bypass Drain. The analysis results of the waste water sample collected from the Waste to Energy Plant By-pass Drain, Jabalpur (Sampling Date – 15 May 2024) are given below in the table:

S.No.	Location	pH	TSS mg/L	COD mg/L	BOD mg/L	O & G mg/L
1.	WTE Plant bypass Drain, Jabalpur	7.14	**117**	243	**58**	4.6
Consent limits		5.5 – 9.0	100	250	30	10

Note: The BOD and TSS are exceeding the prescribed limits given in the CTO.

Sanitary Landfill site: One scientific landfill site for disposal of MSW was developed by Jabalpur Nagar Nigam at Kathonda. Total area of landfill site was about 8.99 hectare. Capacity of scientific landfill site was 246000 MT. Bottom ash mixed from WTE plant was disposed at scientific landfill site. Capping of landfill site was not done. This site was situated near the waste to energy plant.

Leachate treatment plant: Leachate collection tank at landfill site was provided, but there was no leachate collected in the tank and the ETP was found non-operational.

Legacy Waste Treatment Facility: The legacy waste dumpsite was located at Ranital, Jabalpur spread over around 18 acre of land which was not in operation for more than 15 years. The approximate estimated quantity was 3.48 lakh MT. JMC awarded the work of bio-mining of legacy waste dumpsite remediation to M/s Pradeep Hanumant Jadhav in joint venture with M/s Hydroindia Engineering consultants under Jabalpur Smart City Ltd. Project. Approximately 1.86 lakh MT legacy waste was treated by the agency (Copy of work completion certificate issued by Jabalpur Smart City Limited is enclosed as **Annexure-12)** & 11 acre land was recovered. 39627 MT of enriched soil, 134949 MT of inert materials and 11424 MT of RDF was generated during the process of bio-mining of legacy waste dumpsite remediation. The balance quantity of 1.62 lakh MT on 07 acre land was proposed under JMC project Phase-II with remediation period of 01 year but no tendering has been finalized till the

date of visit. During the visit of Joint Committee, no activity was going on at the site and remaining legacy waste was found dumped.

B. <u>Sewerage System</u>

Centralized Sewerage Scheme of Jabalpur City was first introduced in year 2006 under JNNURM. Jabalpur city had total 69 nos. wards back then. Later on 55 nearby villages were included in municipal boundary in year 2014. This area is now being called Zone 06. So, now Jabalpur city is having 06 different zones with 79 wards consisting of total 300070 Nos. of Household (as per 20.06.2023 count) in the city, having approximated 14,50,616 populations (as per DPR calculations taking base year 2025). Details of zones of Jabalpur city are as given below;

Zone	Area	Households connection required	Households connected as on Apr 2024	Sewerage network length required (Km)	Sewerage network length completed (Km)	Timeline for completion	Scheme
Zone 01	Central area of the city	165999	9000 + 1 Drain	Earlier 200 Km network was proposed, revised length is 701 Km	84	June 2027	JNNURM 2006 as Phase 01, remaining work under AMRUT 2.0
Zone 02	Ranjhi, Adhartaal area	41274	23575	210	207	June 2024	JNNURM 2006 as Phase 02, remaining work under AMRUT 1.0
Zone 03	Civil Line area	6039	-	12	8	November 2024	
Zone 04	Gwarighat Rampur area	27826	-	86	85	June 2024	
Zone 05	Medical,Dhanvantri& Ganganagar area	28803	7142	101	99	June 2024	
Zone 06	Newly added	30129	-	175	-	June 2027	AMRUT 2.0

	55 villages						

Jabalpur Nagar Nigam generates about 148.5 MLD of sewage from the households of city having population of about 13.75 lacs. Out of 148.5 MLD, only 30.07 MLD of sewage is being treated in 07 STPs and rest of the untreated sewage is being directly discharged in to the municipal drains which ultimately join the River Narmada. As per the commissioner, the Nagar Nigam is working on the sewerage network construction & connection of households to it and construction of sewage treatment plants to fill the gap of collection and treatment. The Joint Committee observed that there are 07 operational STPs, 04 under construction STPs and 03 under trail stage STPs are existing in the JMC area for the sewage treatment, however during the visit out of 07 operational STPs, 05 were not working on their design capacity as there was a lack of sewerage network and connection with households, as a result, very small quantity of domestic wastewater is reaching to these STPs. The detailed status of the operational STPs as on 15.05.2024 is as given below:

Details of Operational STPs, Jabalpur

S. No	Location	Capacity of STP (MLD)	Capacity utilized (MLD)	Operational status of STP	Scheme	Gap in treatment (MLD)	Technology
1.	STP Kathonda	50	16	Operational	Project Uday	118.43 with respect to collection and treatment	WSP
2.	Jabalpur (Zone II Khatonda)	32	3.2	Operational	AMRUT, Operational Nov 2022		SBR
3.	Ranital	5.0	5.0	Operational	Smart city project Ltd.		SBR
4.	Jabalpur (Zone-V Tevar)	29	5.0	Not in operation during visit due to power cut	AMRUT, Under trail		SBR
5.	STP, Navaghat-Gwarighat	0.55	0.32	Operational	Nagar Nigam Jabalpur		ASP
6.	STP Gulauatal	0.50	0.45	Operational	Nagar Nigam Jabalpur		MBBR

7.	Sidhhghat - Gwarighat	0.10	0.10	Operational	15th FC		ABR & AF
Total		117.15	30.07				

Analysis results of the samples collected from the STPs, Jabalpur

(Sampling date: 14-15 May 2024)

S.No.	Parameter	Prescribed limits as per Hon'ble NGT order 1069/2018	STP 5.0 MLD Ranital			STP 32.0 MLD Kathonda			STP 50.0 MLD Kathonda		
			Inlet	Outlet	Performance (%)	Inlet	Outlet	Performance (%)	Inlet	Outlet	Performance (%)
1.	pH	5.5-9.0	6.82	7.16	-	7.55	7.12	-	7.0	8.04	-
2.	Suspended Solids (mg/l)	20	56	15	-	42	20	-	54	18	-
3.	COD (mg/l)	50	160	49	69.375	76	46	39.47	68	**57**	16.18
4.	BOD (mg/l)	10	90	**20**	77.78	32	**16**	50.0	18	**15**	16.67
5.	Oil & Grease (mg/l)	-	-	2.1	-	-	2.4	-	-	2.0	-
6.	Fecal coliform MPN/100 ml	Desirable 100 Permissible 230	-	**540**	-	-	4.5	-	-	23	-
7.	Phosphate (mg/l)	1.0	-	**2.48**	-	-	**2.33**	-	-	0.13	-
8.	Nitrate (mg/l)	10	-	5.9	-	-	**12.91**	-	-	3.56	-

S.No.	Parameter	Prescribed standards as per Hon'ble NGT order 1069/2018	STP 0.55 MLD Gwarighat (Navghat)			STP 0.10 MLD Sidhghat			STP 0.50 MLD Gulaua Tal		
			Inlet	Outlet	Performance (%)	Inlet	Outlet	Performance (%)	Inlet	Outlet	Performance (%)
1.	pH	5.5-9.0	6.88	7.28	-	7.27	7.35	-	7.01	7.07	-
2.	Suspended Solids (mg/l)	20	680	**41**	-	120	**24**	-	32	16	-
3.	COD (mg/l)	50	148	49	66.89	213	**53**	75.12	129	**65**	49.61
4.	BOD (mg/l)	10	108	**17**	84.26	106	**18**	83.02	70	**15**	78.57
5.	Oil & Grease (mg/l)	-	-	2.8	-	-	2.4	-	-	2.2	-
6.	Fecal coliform MPN/100 ml	Desirable 100 Permissible 230	-	130	-	-	33	-	-	**920**	-
7.	Phosphate (mg/l)	1.0	-	0.62	-	-	**1.01**	-	-	**2.24**	-
8.	Nitrate (mg/l)	10	-	2.13	-	-	6.69	-	-	**12.43**	-

Analysis results of the samples collected from Drain at Gwarighat Before Confluence River Narmada, Jabalpur

(Sampling date: 15 May 2024)

S.No.	Location	pH	TSS mg/l	COD mg/l	BOD mg/l	O&G mg/l	PO_4 mg/l	NO_3 mg/l	FC /100 ml
1.	Drain at Gwarighat Before Confluence River Narmada	6.99	**134**	137	**87**	5.2	1.53	6.80	920

Note:

- As per analysis of result, discharge level of suspended solids 134 mg/l and BOD 87 mg/l are exceeding the prescribed limits 100 mg/l and 30 mg/l respectively as per general standards for of environmental pollutants Part A: effluents into inland surface water.
- Test analysis results of waste water collected from drain at Waste to Energy plant bypass, all STPs and drain at Gwarighat are enclosed as **Annexure-13.**

1. **50 MLD STP at Kathonda (Zone I):** 50 MLD Waste Stabilization Pond (WSP) and 200KM sewer network was sanctioned under JNNURM in 2006 for treating the domestic wastewater in zone 1 of Nagar Nigam Jabalpur. The 50 MLD Waste Stabilization Pond (WSP) with 84 Km sewer network has been completed but only 16 MLD of waste water reaching to WSPs due to non-completion of laying of remaining 116KM sewer network. During visit, it was observed that 2WSPs having more than 100m length & 50m width each and both the ponds were full with waste water and acting as a holding tanks. It was observed that the network of about 116 KM need to be taken up on priority basis.

   As per analysis of result, discharge level of COD is 57mg/l and BOD is 15 mg/l was exceeding the prescribed limits 50 mg/l and 10 mg/l respectively as per order of Hon'ble NGT OA 1069/2018. The performance of STP with respect to COD and BOD is 16.18% and 16.67% respectively.

2. **32 MLD STP at Khatonda (Zone II):** The installed capacity of STP was 32 MLD with SBR technology. However, only 3.2 MLD sewage was receiving for the treatment due to incomplete sewage collection network and household connection. During the visit, the Joint Committee observed that the SBR basin 1, 3 & 4 were under maintenance and only SBR basin 2 was in operation.

   As per analysis of result, discharge level of BOD is 16 mg/l, phosphate is 2.33 mg/l and nitrate is 12.91 mg/l was exceeding the prescribed limits 10 mg/l, 1.0 mg/l and 10 mg/l respectively as per order of Hon'ble NGT OA 1069/2018. The performance of STP with respect to COD and BOD is 39.47% and 50% respectively.

3. **5 MLD STP at Ranital:** The installed capacity of STP was 5 MLD with SBR technology, STP was operational during the visit with inlet flow of 5 MLD and treated wastewater was discharged into the Ranital pond. STP was operational at full capacity during the visit.

   As per analysis of result, discharge level of BOD is 20 mg/l, Fecal coliform is 540 MPN/100ml and phosphate is 2.48 mg/l was exceeding the prescribed limits 10 mg/l, 230 MPN/100ml and 1.0 mg/l respectively as per order of Hon'ble NGT OA 1069/2018. The performance of STP with respect to COD and BOD is 69.375% and 77.78% respectively.

4. **29 MLD STP at Tevar (Zone-V):** The installed capacity of STP was 29 MLD with SBR technology. CTO granted to the plant and plant was under trail and testing stage. During visit, the plant was not in operation, however as per information provided by Nagar Nigam officials, average incoming flow in the STP was 5 MLD.

5. **0.55 MLD STP at Navghat-Gwarighat:** The installed capacity of STP was 0.55 MLD with ASP technology. It was operational with inlet flow of 0.32 MLD. It was observed that untreated wastewater

was being mixed with treated water and disposed into river Narmada.

As per analysis of wastewater, discharge level of Suspended solids is 41 mg/l and BOD is 17 mg/l was exceeding the prescribed limits of 20 mg/l and 10 mg/l respectively as per order of Hon'ble NGT OA 1069/2018. The performance of STP with respect to COD and BOD is 66.89% and 84.26% respectively.

6. **0.5 MLD STP at Gulauatal:** The installed capacity of STP was 0.50 MLD with Advanced MBBR technology, STP was ready and under trail & testing. The inlet flow noted as 0.45 MLD. As informed by the officials, the treated wastewater will be discharged into the pond after tertiary treatment with Chlorination.

   As per analysis of wastewater, discharge level of COD is 65 mg/l, BOD is 15 mg/l, Fecal coliform is 920 MPN/100ml, phosphate is 2.24 mg/l and nitrate is 12.43 mg/l was exceeding the prescribed limits 50 mg/l, 10 mg/l, 230 MPN/100ml, 1.0 mg/l and 10 mg/l respectively as per order of Hon'ble NGT OA 1069/2018. The performance of STP with respect to COD and BOD is 49.61% and 78.57% respectively.

7. **0.1 MLD STP at Siddhghat-Gwarighat:** The installed capacity of STP was 0.10 MLD with ABR & AF (Anaerobic baffled Reactor & Anaerobic filters) technology. Waste water from the nearby locality flowing in to the drain was being tapped and treated. STP was operational at full capacity during the visit.

   As per analysis of wastewater, discharge level of Suspended solids is 24 mg/l, COD is 53 mg/l, BOD is 18 mg/l and phosphate is 1.01 mg/l was exceeding the prescribed limits of 20 mg/l, 50 mg/l, 10 mg/l and 1.0 mg/l respectively as per order of Hon'ble NGT OA 1069/2018. The performance of STP with respect to COD and BOD is 75.12% and 83.02% respectively.

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Details of Under Construction STPs, Jabalpur

S.No.	Location of STP	Capacity (MLD)	Technology	Physical progress as on April %	Status as on 14-15.05.24	Completion time	Scheme	Cost (Cr)
1.	Lalpur (zone III & IV of Jabalpur)	34	SBR	100	Electrical & mechanical work under progress		AMRUT	32.30
2.	Gaur Pul, gaur nallah	0.7	MBBR	100			15th FC	2.90
3.	Jain Gaushala nallah, tilwara	0.5	MBBR	100	Under testing and trail		15th FC	1.85
4.	Babaha Nallah, Paraswada	1.0	MBBR	95	Electrical & mechanical work remained	May 24	15th FC	3.13
5.	Kharighat	1.0	MBBR	95			15th FC	3.51
6.	Civil lines	5.0	MBBR	10	work under progress	June 24	15th FC	4.75
7.	Bhatauli	1.0	MBBR	05		Sept 24	15th FC	3.00
Total Capacity		43.2	-	-	-	-	-	-

1. **34 MLD STP at Lalpur (Zone III & IV):** The installed capacity of STP was 34 MLD with SBR technology. Construction of STP was completed but not operational during visit, as per the plant officials they have applied for electricity connection which was yet to be provided by MPEB. At the time of visit, internal road construction was under progress. Waste water from the Khandhari nallah will be tapped and treated before it disposed into the river Narmada. The STP was located at approx. 1.5 Km away from river Narmada.

2. **0.7 MLD STP at Gaurpul:** The installed capacity of STP was 0.7 MLD with MBBR technology. Construction work of STP was completed however electric connection and mechanical work was under progress. Sewage of gaur nallah will be treated and will be discharged into Gaur River (tributary of river Narmada).

3. **0.5 MLD STP at Jain Gaushala nallah, Tilwara:** Installed capacity of STP was 0.5 MLD with MBBR technology. Construction work of STP was completed however it was under trail stage but not operational during the visit. The sewage network was supposed to be connected with STP.
4. **1.0 MLD STP at Babaha nallah:** The installed capacity of STP was 1.0 MLD with MBBR technology. STP was under construction with electric connection and mechanical work was under progress.
5. **1.0 MLD STP at Kharighat:** The installed capacity of STP was 1.0 MLD with MBBR technology. 95% of construction work was completed, and remaining work was under progress with electric connection and mechanical work installation. Sewage from nearby basti will be tapped through nallah and further be treated.
6. **5.0 MLD STP at Civil lines:** The installed capacity of STP was 5.0 MLD with MBBR technology. At the time of visit, only 10% of construction work was completed and remaining work was under progress.
7. **1.0 MLD STP at Bhatauli:** The installed capacity of STP was 1.0 MLD with MBBR technology. At the time of visit, only 5% of construction work was completed and remaining work was under progress.

During the visit, total capacity of the STPs installed in the city was 160.35 MLD, out of which construction of 117.15 MLD STP completed and 43.2 MLD of STPs was under construction/trail stage, and total utilized capacity of STPs was 30.07 MLD, hence there was gap of 118.43 MLD with respect to collection and treatment, however due to lack of sewerage collection network and house service connection, plants were not operational at their designed capacity.

The brief outlines of the current status of compliance by Nagar Nigam, Jabalpur on the issues of MSW generation, collection & processing and Sewage generation & treatment and initiatives taken to bridge the existing gap as observed on 14-15.05.2024 is summarized below:

S. No.	Particular	Status as per six monthly progress report submitted to Hon'ble NGT vide letter dated 12.03.2024 and presentation made on 11.03.2024.	Status observed by the Joint Committee during visit on 14-15.05.2024
1.	Municipal Solid Waste Management	Total solid waste generation is 507.93 TPD. MC, Jabalpur has installed Waste to energy plant of 550 TPD at Kathonda. All the solid waste generated is being processed without any gap in processing.	Total no. of wards in the city= *79* Total Solid waste generation= *Approx. 522.50 TPD* Current solid waste treatment facility = *600 TPD (Waste to Energy Plant)* Details of MSW management (Door-to-door collection/ no. of vehicles/ GPS system/ segregation at source/ treatment of wet & dry waste/ legacy site) = *235 numbers and 239 numbers of vehicles are deployed under JMC and Essel group respectively for Door-to-door collection of solid waste from the city provided with GPS.* *As waste to energy plant is based on mass burning technique, hence segregation at source is not being carried.* Management of MSW generated= *As operation of Waste to energy plant is not being maintained properly, hence large heaps of solid waste accumulated in the surrounding of waste to energy plant.* *Approx. 3.86 lakh MT of legacy waste was present at the Ranital dumping site, 1.86 lacs MT of legacy waste has been remediated using bio-mining & bio-remediation and balance quantity of approximated 1.62 lakh MT on 07 acre land, is*

			proposed under JMC project Phase-II with remediation period of 01 year.
2.	Sewerage network and Sewage treatment plants	Total operational capacity of STPs = 112.5 MLD Average capacity of STPs utilized = 24.45 MLD Total capacity of under construction STPs = 34 MLD Total capacity of proposed STPs = 5 MLD	Total Sewage generation at present in the city= *148.50 MLD* Total treatment facility available= 117.15 MLD Average capacity of under construction STPs = 43.2 MLD Average capacity of STPs utilized = 30.07 MLD Gap in the collection & treatment of sewage = 118.43 MLD (148.50-30.07) <u>Operational</u> ➢ There are 07 numbers of operational STPs, however due to poor sewerage network and household connections, STPs are not working on their design capacity. <u>Under construction</u> ➢ There are 07 numbers of under construction STPs, construction work of most of STPs is completed and STPs are either under trail stage or under progress of mechanical & electrical connection. Use of treated Sewage water = *Treated sewage water is being used in agricultural land or being disposed in to drains.* There are 05 major drains and 09 small drains in the city. Total no. of household's zone-wise=*300070 no. including all zones* *Laying of sewerage network in the city is under progress.*

C. <u>Construction and Demolition Waste</u>

There was only one C & D waste processing plant with installed capacity of 50 TPD. Different fractions of waste obtained by crushing & screening and sending to sell in loose form as well as by making bricks, paver blocks out of these material. There were total 05 numbers of collection centers

with installed capacity of 20 TPD each, 08 dedicated vehicles allotted for collection of C&D waste. Toll free number for collection of C&D waste under the jurisdiction of JMC was 07612637500. As per logbook, total of 45-50 TPD of construction and demolition waste has been received at the processing plant on regular basis (Copy of the logbook is enclosed as **Annexure-14).**

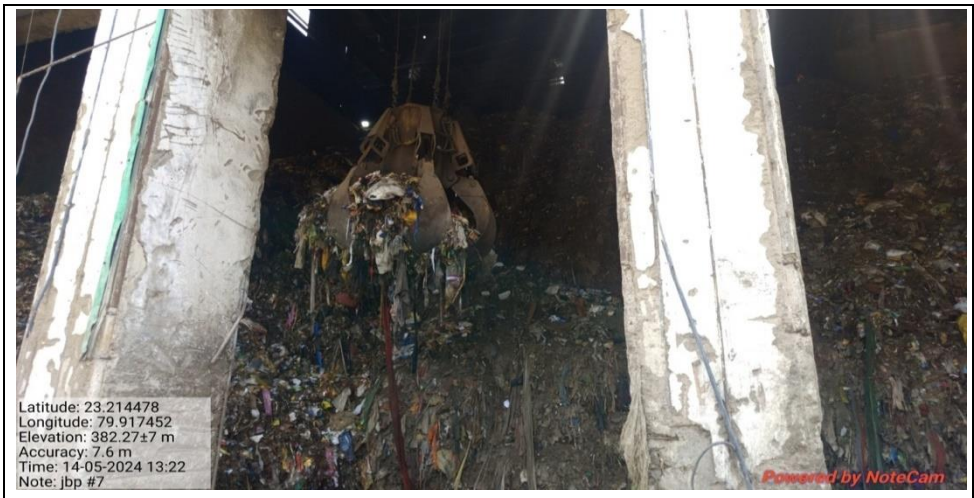
- CTO is not granted for C&D waste processing plant; however, it was operational since last two years.
- There were five conveyer belts provided with crusher unit out of which only one conveyer belt was covered.
- During the visit, fugitive emissions from the crusher unit were observed.
- Proper logbook at C& D waste plant is not being maintained.

Observation of the committee:

- The total municipal solid waste generated in the Jabalpur city was reported as 507.93 TPD in the report submitted to Hon'ble NGT. However, the municipal solid waste generated in Jabalpur city was observed as 522.5 TPD.
- The existing waste to energy plant, based on mass burning technology, at Kathonda, Jabalpur with installed capacity of 600 TPD was sufficient for processing of entire solid waste of the city, however due to poor operation & maintenance, the waste to energy plant was not operational regularly, thereby, large amount of unprocessed solid waste was accumulated at the back side of the plant.
- As per the data provided by the WTE plant for the last 6 months (Nov 2023 to Apr 2024) the gap in processing of waste is about 303 TPD in Jabalpur city. The untreated waste is being dumped at the back side of the WTE plant.

- In the month of December 2023, January 2024 and April 2024 gap in collection is 645.5 MT, 1931.5 MT and 157 MT respectively (average 911.33 MT for three months).
- There was an average processing gap of 9196.33 MT from November 2023 to April 2024, which leads to accumulation of solid waste at the back side of waste to energy plant.
- The reasons for non-operational of waste to energy plant was to receive the mixed waste of low calorific value at the plant which had more content of inert materials. The inert material should be disposed of at scientific landfill site provided for the purpose instead of dumping near the WTE plant.
- There was a lack of coordination between Jabalpur Nagar Nigam and operator of waste to energy plant to provide the facility of waste processing.
- Open burning of solid waste found in the different part of the city during the visit of Joint Committee. JMC must ensure to stop open burning of waste in the city and take necessary action against defaulters, as per SWM Rules, 2016.
- Legacy waste processing of 1.86 lakh MT was done and balance quantity of approximate 1.62 lakh MT was proposed under JMC project Phase-II with remediation period of 01 year, JMC should take immediate action to complete the project.
- During the visit, total capacity of the STPs installed in the city was 160.35 MLD, out of which construction of 117.15 MLD STP completed, and 43.2 MLD of STPs was under construction/trail stage, and total utilized capacity of STPs was 30.07 MLD, hence there was gap of 118.43 MLD with respect to collection and treatment, however due to lack of sewerage collection network and house service connection, plants were not operational at their designed capacity.

Photographs taken during Joint Committee visit of Jabalpur City

	Waste to energy Plant waste feeding pit
	Large heaps of solid waste nearby Waste to energy Plant
	Trommel for waste segregation at Waste to energy Plant

	Waste to energy plant
	Stack Monitoring at waste to energy plant, Jabalpur
	Scientific landfill site

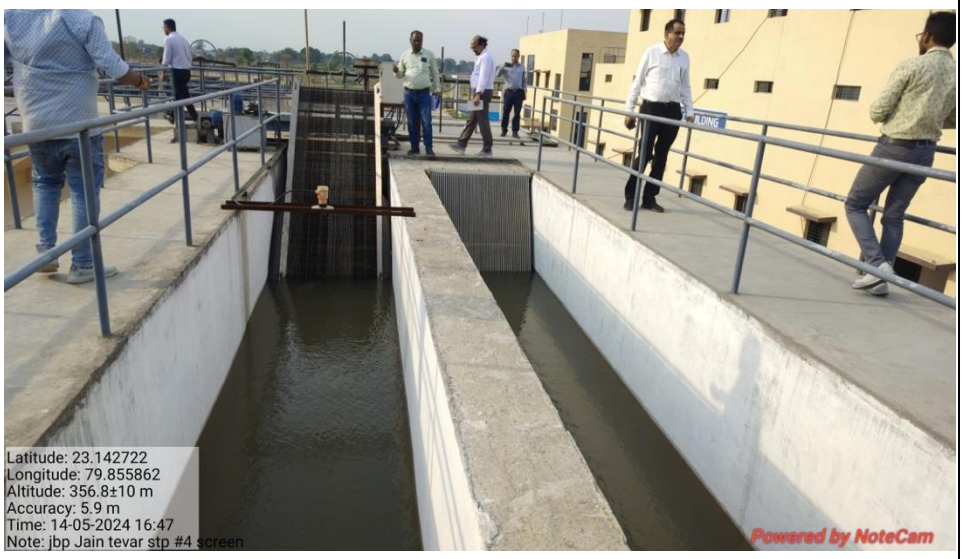
	View of damaged liners at Scientific landfill site
	Partly Remediated legacy waste dumpsite at Ranital
	Joint Committee visit at C&D waste processing plant

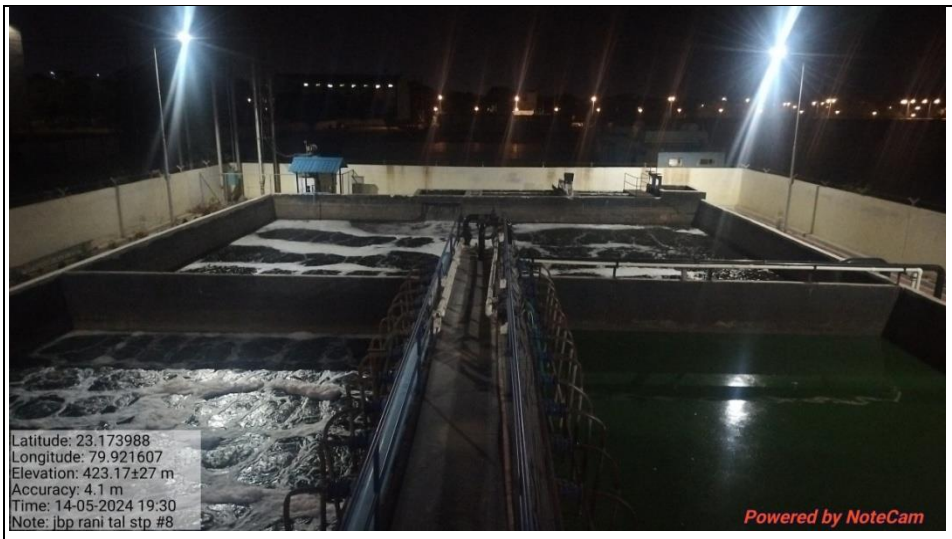
	Crusher unit at C&D waste processing plant
	Manufacturing of Paver blocks at C & D waste processing plant
	Waste stabilization pond, Kathonda

	Waste stabilization pond, Kathonda
	Operational STP at Navghat-Gwarighat
	Settling Tank

	Discharge of treated sewage water
	STP under Trail stage at Gulautal Nallah
	Settling chamber

	Sample collection
	Operational STP 32 MLD at Kathonda
	Overview of STP

	SBR basin
	Under trail STP 29 MLD at Tevar
	Under trail STP at Tevar (non-operational)

	STP 5.0 MLD at Ranital
	Sample collection at outlet of Ranital STP
	Under construction STP at Lalpur

	Khandhari nallah near Lalpur STP
	Under construction STP at kharighat
	Under construction STP at Kharighat

	Under construction STP 0.7 MLD at Gaur pul
	Under construction STP at Babaha Nallah
	Jabalpur Sewerage network Manhole

8. Status of Municipal Solid Waste and Sewage Management in Rewa City

As per Hon'ble NGT order in OA No. 606/2018 order dated 14.03.2024, Rewa city was visited by a Team of Joint Committee on 16.05.2024, a meeting of Joint Committee was held at Nagar Nigam Rewa with the Municipal Commissioner and other officials of Nagar Nigam.

A brief presentation was given by Commissioner, Nagar Nigam on the present status of Municipal Solid Waste Management, Sewage Treatment Plants and sewerage network of the Rewa town. Consequently, the Joint Committee along with the officials of Nagar Nigam and MPPCB visited the Integrated Municipal Solid Waste Management plant where material recovery facility, compost plant, waste to energy plant, sanitary landfills site is provided for processing of solid waste. Joint Committee also visited under construction Sewage Treatment Plants, legacy waste remediation dumpsite and Sewerage network system. Wastewater samples were collected from solar evaporation pond, leachate tank present at sanitary landfill site 1 (one) and Ghoghar nallah near Babaghat before confluence into the river Beehar. In the waste to energy plant, stack monitoring of the stack was carried out to check the compliance of emission norms.

A. Municipal Solid Waste Management as per SWM Rules, 2016

I. **Generation and Collection of Municipal Solid Waste**:

Waste generation in Rewa City: Rewa is a city in the north-eastern part of Madhya Pradesh state in India. The population of Rewa Nagar Nigam is approx. 3.57 lacs. The area of entire Nagar Nigam is approximately 102 Sq. Kms. and is divided into 45 wards within 4 zones and generates approximately 125 TPD of solid waste, however as per the population of the city total solid waste generation should be 135.66 TPD. The work of collection of municipal solid waste has been outsourced to M/s Rewa MSW Holding Ltd. The waste is being collected from households via door-to-door garbage collection by

using 54 nos. of auto-tripper's vehicles equipped with separate compartments for dry and wet waste and installed with GPS tracking system. Source segregation of dry and wet waste has been done in the city. There are 3 (three) transfer stations. As per the Municipal Commissioner out of the total generated solid waste, approx. 71 MT of wet waste, 50 MT of Dry waste, 2 MT of sanitary waste, 1.2 TPD of Domestic hazardous & 0.8 TPD of E-waste is being generated.

- Waste generation in Rewa cluster: The Rewa cluster includes Rewa city also. As per DPR the cluster consists of 28 ULBs in 3 districts i.e. (Rewa, Govindgarh, Gurh, Hanumana, Manganwa, Naigarhi, Semariya, Teonthar, Sirmour, Chakghat, Mauganj, Baikunthpur) in Rewa district, (Satna, Kotar, Kothi, Jaitwara, Birsingpur, Amarpattan, Unchehra, New Ramnagar, Nagod, Maihar, Rampur Baghelan, Chitrakoot) in Satna district & (Sidhi, Rampurnaikin, Churahat, Majhauli) in Sidhi District. Under Rewa cluster approximately 260-391 TPD of waste is received at Integrated Municipal Solid Waste Management site, which is being segregated for RDF, Compost, recyclable and inert waste. As per the data submitted by Nagar Nigam Rewa, the monthly average Municipal solid waste collected under the Rewa cluster for the month of April is 328.73 TPD in which 147.9 TPD (44.99 %) of RDF, 38.7 TPD (11.77 %) of compostable waste, 49.3 TPD (14.99 %) of inert waste, 26.6 TPD (8.09 %) of recyclable waste and 65.7 TPD (19.98 %) of moisture loss. Municipal Solid waste collection under the Rewa cluster for the month of April is enclosed as **Annexure-15.**

II. **Treatment and Disposal of Municipal Solid Waste:**

For processing of solid waste, Nagar Nigam Rewa has installed Regional Integrated Municipal Solid Waste Management facility at Village Pahadiya near Rewa, where RDF processing plant of capacity 120 TPD, Material recovery facility with capacity of 50 TPD, wet waste processing plant with capacity of 300 TPD and compost

section with capacity of 8.44 TPD are provided for segregation, composting and processing of the solid waste. M/s Rewa MSW Holding Ltd is the implementing agency for the handling and processing of Regional Integrated Municipal Solid Waste Management facility.

Material Recovery Facility: For the segregation of dry waste, Material Recovery Facilities (MRF) facility of 50 TPD is provided where waste collected from the city is segregated as RDF, Compost, recyclable, non-recyclable and inert waste. Sanitary waste, domestic hazardous waste & E-waste are being segregated at material recovery facility available at Integrated Municipal Solid Waste Management site and sent to M/s Indowater management & Pollution Control Corporation for further processing for which agreement has been made. Copy of agreement is enclosed as **Annexure-16.** As per the record, the monthly average dry waste received and processed in MRF for the month of April is 47.87 TPD, out of which 9.72 TPD (20.30 %) of RDF, 0.48 TPD (1.0 %) of inert waste, 37.73 TPD (78.82 %) of recyclable waste is segregated. MRF log book details for the month of April are enclosed as **Annexure-17.**

- Refused Derived Fuel (RDF) plant**:** The segregation of Refused Derived Fuel is processed through RDF plant having installed capacity of 120 TPD. Solid waste collected from the city as well as clusters is processed in RDF processing plant. RDF processing plant with Trommel of 75 mm, 25 mm and 4 mm is used for segregation of RDF. As per the record, waste received at RDF processing plant is 116.95 TPD out of which 102.40 TPD of RDF and 14.50 TPD of inert is being generated. Inert is being disposed at sanitary landfill site.
- Waste to Energy Plant: M/s Rewa MSW Energy solutions installed 6MW Waste to Energy plant which is having 350 TPD RDF processing capacity and the plant started commercial production of

electricity from11th February 2024. As per the record, the April month average RDF waste consumed in the WTE process is 425 TPD which is more than the designed capacity of the plant. As per the record submitted by the plant, the bottom ash generated is 63.10 TPD (approx.15% of total waste consumed in the WTE plant) and 7 TPD (approx. 2% of the total waste processed in WTE plant) fly ash is being generated in waste to energy plant. Bottom ash and fly ash is being disposed at landfill site-1. Copy of the waste consumption & bottom ash generation and its disposal details are enclosed as **Annexure-18.** Since the RDF generation from the Rewa cluster is only about 102.4 TPD whereas the requirement is minimum 350 TPD, therefore the facility is collecting RDF from the legacy waste sites of Allahabad and Jhansi to meet the requirement. The monthly average RDF received and processed in waste to energy plant from Rewa cluster and Allahabad & Jhansi for the month of April 2024 are 102.4 and 282.62 TPD, respectively.

During the visit the Joint Committee has also monitored the source emission for the waste to energy plant stack for knowing the compliance of emission norms and found the PM: 29 mg/Nm^3, SO_2: 36 mg/Nm^3 & NO_x: 198 mg/Nm^3. All the monitored values are within the norms prescribed in the consent issued by MPPCB. Test analysis result is enclosed as **Annexure-19** & Copy of CTO is enclosed as **Annexure-20.**

- Wet waste processing plant**:** Wet waste processing plant of 300 TPD, for the processing of wet waste is provided. Segregated wet waste is processed in the wet waste section by culturing of the waste and processed in compost section for final composting as there is compost section of 8.44 TPD is provided. As per the record, wet waste received at compost processing plant is 192 TPD out of which 28.80 TPD of inert is being generated. Inert is being disposed at sanitary

landfill site. As per the data provided by Nagar Nigam, total compost supplied for the month of April 551.6 MT.

- Sanitary Landfill Sites**:** There are 02 numbers of sanitary landfill sites at Regional Integrated Municipal Solid Waste Management facility at Village Pahadiya near Rewa with the capacity of 878567 m^3 under Rewa Nagar Nigam with approx. area of 3.40 ha. Sanitary landfill site is under supervision of M/s Rewa MSW Management Solution Ltd. Segregated inert material and reject from waste to energy plant is being disposed at sanitary landfill site-1 location. Leachate tank and solar evaporation pond are provided near landfill site, provision of ETP should be made for the treatment of leachate. During the visit sanitary landfill site-2 was not being used and planned for use in future.
- Legacy waste treatment facility**:** At Kosta, legacy waste dumpsite of quantity approx. 82464.42 MT was found dumped near Rewa city. For the Bio-mining, Bioremediation and disposal of Residue waste of the legacy waste, work order has been issued to M/s Mishra Traders, Satna on 09.05.2024 (Copy of the work order is enclosed as **Annexure-21).** During the inspection, legacy waste bio-mining work was going on at the site by making windrows and culturing of waste and completion period for remediation of legacy waste is 7 months i.e. December 2024. During the visit, some instances of fires were also observed at the legacy waste dumping site. RDF segregated at legacy waste dumpsite is collected and supplied to Waste to energy plant.

Analysis results of the samples collected from the Leachate of sanitary landfill site and Solar evaporation pond of leachate

S.No.	Location	pH	TSS mg/L	COD mg/L	BOD mg/L	O&G mg/L
1.	Leachate from sanitary pond, Sanitary Landfill no. 1, Waste to Energy plant Rewa	7.85	359	4408	910	5.8
2.	Leachate from Solar Evaporation Pond, Waste to Energy plant Rewa	8.67	149	1550	204	4.2

- Test analysis results of leachate collected from sanitary pond of WTE Plant found to be pH 7.85, TSS 359 mg/l, COD 4408 mg/l, BOD 910 mg/l and O&G 5.8 mg/l.
- Test analysis results of leachate collected from Solar evaporation pond, WTE Plant Rewa are pH 8.67, TSS 149 mg/l, COD 1550 mg/l, BOD 204 mg/l and O&G 4.2 mg/l. Test Analysis results are enclosed as **Annexure-22.**

B. <u>Sewerage System</u>

Rewa city is generating 38.55 MLD of sewage from the households of city, but due to non-availability of sewerage network and operational STPs the untreated sewage is being discharged into the drains which finally mixing in river Beehar and Bichhiya. As per the Nagar Nigam Commissioner, the work of sewerage network connection of households and expediting the construction and operation of sewage treatment plants is under progress which will be completed by March 2025. During the visit, it was observed that there are 05 Nos of STPs provided for the sewage treatment of the city, out of which 03 nos. are under construction, 01 no. STP had land related issue and 01 no. was completed in 2016, however none of these STPs were in operation and all the sewage generated in the city is directly discharged into the drains. The sewerage network work was also going on at the time of visit. Therefore, there is 100% gap with respect to the collection and treatment of the sewage generated in Rewa city. During Joint Committee inspection, waste water sample was collected from Ghoghar nallah near Babaghat before mixing into the river Beehar. The status of STPs is given below at table:

S. No	Location	Capacity of STP (MLD)	Technology	% of Physical progress upto Apr 2024	Status as on 16.05.2024	Completion time	Scheme	Cost (Cr)	Present Gap in treatment
1	Jayanti Kunj	12	SBR	STP completed under NRCP in 2016, but not in operation due to flooding in the city in 2016 damaged the electromechanical parts of the plant before it could be tested. Due to which the PHED is not able to hand over the plant to Nagar Nigam.					100%
2	Vivekanand Nagar Nallah	6.5	SBR	48	Work in progress	Mar 25	AMRUT	244.53	100%
3	Bichiya Laxman Bagh Road	6.5	SBR	32		Mar 25			100%
4	Laxman Bagh Road	9	SBR	3	Work in progress	Mar 25			100%
5	Vibhishan Nagar	3	SBR	0	Land issue	Mar 25			100%

1. **12 MLD STP at Jayanti Kunj (Civil Lines):** The 12 MLD STP construction at Jayanti Kunj had begun under NRCP Scheme in 2013 and completed in 2016 by PHED. In 2016, the electromechanical components of the plant had damaged due to flood in the town and needs to be replaced the components or plant to be retrofitted. STP is located in sewerage zone No. 3B with capacity of 12.0 MLD based on Sequential Batch Reactor (SBR) technology. The Commissioner, Nagar Nigam Rewa has sent a letter to Executive Engineer, PHED on 30.04.2024 for making STP functional and handing over to the Nagar Nigam but till date of Joint Committee visit, no progress has been made with respect to repair/replacement/ retrofitting of faulty electromechanical parts of STP. Total sewage network has been proposed as 81.4 Km, out of which, 66.0 Km of network laid on the ground. Though, lying of sewer lines is under progress, all 13926 household connection has not been provided which results the discharge of untreated sewage into the drain in the town. Therefore, there was a gap of 100% identified between the sewage generation and treatment disposal in the zone.

2. **6.5 MLD STP at Vivekanand Nagar Nallah:** STP is covering sewerage zone No. 3A with capacity of 6.5 MLD based on Sequential Batch Reactor (SBR) technology. 48% of construction work has been completed and remaining work was under progress. Total sewerage network has been proposed as 114.8 Km, out of which, 74.1 Km of network laid on the ground. A total of 7542 nos. of households shall be connected with the sewerage systems. As the house connection has not been completed, untreated sewage of the area is being disposed of into the drain. Expected date of completion of STP is March 2025. The commissioning of the STP had been delayed and contract was terminated under AMRUT scheme on 25.04.2022 due to poor performance of the agency. Therefore, there was a gap of 100% identified between the sewage generation and treatment disposal in the zone.

3. **6.5 MLD STP at Bichiya Laxman Bagh Road:** STP is covering sewerage zone No. 02 with capacity of 6.5 MLD based on Sequential Batch Reactor (SBR) technology. Only 32% of construction work has been completed and remaining work was under progress. A total of 124.60km sewage network has been proposed, out of which, only 47.4 Km of network laid on the ground. A total of 7542 nos. of households shall be connected with sewerage system. As the house connection has not been completed, untreated sewage of the area is being disposed of into the drain. Expected date of completion of STP is March 2025. The commissioning of the STP had been delayed and contract was terminated under AMRUT scheme on 25.04.2022 due to poor performance of the agency. Therefore, there was a gap of 100% identified between the sewage generation and treatment disposal in the zone.

4. **9.0 MLD STP at Laxman Bagh Road (Agriculture College):** The STP is covering sewerage zone No. 01 with capacity of 9.0 MLD based on Sequential batch reactor (SBR) technology. As on April 2024, only 3% of construction work has been completed and remaining work was under progress. A total of 99.3 km sewage network has been proposed, out of

which, only 31.1 Km of network laid on the ground. A total of 10442 nos. of households shall be connected with sewerage systems. As the house connection has not been completed, untreated sewage of the area is being disposed of into the drain. Expected date of completion of STP is March 2025. The commissioning of the STP had been delayed and contract was terminated under AMRUT scheme on 25.04.2022 due to poor performance of the agency. Therefore, there was a gap of 100% identified between the sewage generation and treatment disposal in the zone.

5. **3.0 MLD STP proposed at Vibhishan Nagar:** As per the Commissioner, the proposed STP will be covering sewerage zone No. 04 with capacity of STP is 3.0 MLD based on Sequential Batch Reactor (SBR) technology. Land allotment for the construction of STP is under process. A total of 67 km of sewage network has been proposed, out of which, only 2.5 Km of network laid on the ground. A total of 3481 nos. of households shall be connected with sewerage system. As the house connection has not been completed, untreated sewage of the area is being disposed of into the drain. It was informed that the expected date of completion of STP construction shall be March 2025. Therefore, there was a gap of 100% identified between the sewage generation and treatment disposal in the zone.

Analysis results of the sample collected from the domestic sewage from Ghoghar Nalla Near Babaghat before confluence into the river, Rewa

S/No.	Location	pH	TSS mg/L	COD mg/L	BOD mg/L	O &G mg/L	NO_3 mg/L
1.	Ghoghar Nalla Near Babaghat B/C Beehar River Rewa	6.57	73	163	**41**	2.4	0.97

Note: As per analysis of result, discharge level of BOD 41 mg/l is exceeding the prescribed limits of 30 mg/l as per general standards for of environmental pollutants Part A: effluents into inland surface water. Test analysis result is enclosed as **Annexure-23.**

The brief outlines of the current status of compliance by Nagar Nigam, Rewa on the issues of MSW generation, collection & processing and Sewage generation & treatment and initiatives taken to bridge the existing gap as observed on 16.05.2024 is summarized below:

S. No.	Particular	Status as per six monthly progress report submitted to Hon'ble NGT vide letter dated 12.03.2024 and presentation made on 11.03.2024.	Status observed by the Joint Committee during visit on 16.05.2024
1.	Municipal Solid Waste Management	Total solid waste generation is 123.96 TPD. MC, Rewa has installed Waste to energy plant of 6.00 MW capacity, with 350 TPD of solid waste processing.	**A. MSW management in Rewa** Total no. of wards in the city=*45* Total Solid waste generation in Rewa city= *125 TPD (as per Commissioner Nagar Nigam)* As per the population of the city total solid waste generation = 135.66 TPD Total Solid waste generation in Rewa Cluster = 320 TPD Details of MSW management (Door-to-door collection/ no. of vehicles/ GPS system/ segregation at source/ treatment of wet & dry waste/ legacy site) = *Door-to-door collection by 54 nos. of garbage collection vehicles with separate compartments for dry & wet waste and provided with GPS. Segregation at source is being practiced.* Current solid waste treatment facility- There is Regional Integrated Municipal solid waste management facility provided at Village Pahadiya nearby Rewa city. *Waste to energy Plant = 350TPD* *Wet waste processing plant = 300 TPD* *RDF processing plant = 120 TPD* *MRF = 50 TPD* Gap=*10.66 TPD with respect to collection of solid waste.* ***B. Legacy Waste management*** At Kosta, Rewa legacy waste dumpsite of quantity approx.

			82464.42 MT was found dumped. For the Bioremediation, Bio-mining and disposal of Residue waste of the 82464.42 MT legacy waste work order has been issued to M/s Mishra Traders, Satna on 09.05.2024. *Work started on ground and as per work order it will be completed within 07 months.* *During the visit on 16.05.2024, instances of fires were observed at the legacy site.*
2.	Sewerage network and Sewage treatment plants	There are 05 nos. of under construction STPs present in the city with total capacity of 37 MLD.	Total Sewage generation in the city= *38.55 MLD* Total present treatment capacity = Nil Total Existing / under construction / proposed STPs capacity = 37 MLD • Existing STP = 12 MLD STP (non-operational) • Under construction STPs = 22 MLD • Under proposed STPs = 3 MLD There was no sewage collection network in the city. Hence, the gap identified in collection & treatment = *38.55 MLD (100 % gap)* Major drains in the city= *There are 05 major drains in the city. As of now all the untreated sewage is being disposed in to the drains.* Total no. of household's zone-wise=*42933 no. including all zones* No. of household connected with sewerage network= Nil as *laying of sewerage network is under progress.* Projects proposed under various schemes for Sewage treatment with timeline= *Total sewage network proposed in the city is 487 Km, out of which 221 Km has been laid. Work is under progress and will be completed by March 2025.*

Observations of the Joint Committee:

1. The total Municipal Solid Waste generation in Rewa city was reported as 123.96 TPD. As informed by Commissioner Nagar Nigam, the present Municipal Solid Waste generation in Rewa city and Rewa cluster is 125 TPD and 320 TPD, respectively, however as per the population of the city total solid waste generation should be 135.66 TPD. Hence there is gap of 10.66 TPD in Rewa city with respect to collection of solid waste.
2. The waste is being collected from households via door-to-door garbage collection by using 55 nos. of auto-trippers vehicles equipped with separate compartments for dry and wet waste and installed with GPS tracking system.
3. Source segregation of solid waste is being done at household level for wet waste, dry waste, sanitary waste, domestic hazardous waste and E-waste.
4. There are 55 LMV, 04 Jayo, 04 HMV, 03 RC vehicle, 07 portable compactors and 02 loader/JCB are deployed for the waste collection and transportation to the integrated solid waste management plant.
5. Solid waste was being collected from nearby ULBs also which ultimately transported to Regional Integrated solid waste management plant with 131 LMV, 10 Jayo, 10 HMV, 05 RC vehicle, 19 portable compactors and 05 loader/JCBs.
6. The existing Regional Integrated Municipal Solid Waste Management facility where RDF processing plant of capacity 120 TPD, Material recovery facility with capacity of 50 TPD, wet waste processing plant with capacity of 300 TPD and compost production with capacity of 8.44 TPD, WTE plant capacity of 350 TPD which is sufficient for processing of solid waste for the Rewa city as well as cluster towns.
7. Legacy waste processing was under progress by forming windrows using Bio-mining and Bioremediation. Proper safety and firefighting measures should be taken to avoid any incident of fire.
9. Two numbers of sanitary land fill sites were constructed for disposal of inert materials. Compost has been selling to various companies.
10. The total sewage generation of the Rewa city was reported as 38.55 MLD.
11. One STP was completed but non-functional since 2016 due to poor coordination between PHED and Nagar Nigam. The plant constructed by PHED has not been handed over to the Nagar Nigam. Due to this reason, city is suffering with discharge of untreated sewage into the drain.

12. 03 STPs were under construction and one STP was proposed to be constructed. The total capacity of the under construction/completed STPs was 37 MLD, it appears to be sufficient to treat the sewage of the city once all STPs starts fully functional by March 2025.
13. There were no operational STPs in Rewa and all the untreated domestic sewage from the households was being discharged directly into the municipal drains which ultimately meets river Beehar and Bichhiya.
14. The Joint Committee observed a gap of 100% with respect to sewage collection and treatment. Therefore, the Rewa Nagar Nigam is required to expedite the construction of STPs, laying of sewerage network and connection of households to the sewerage line for stopping the discharging of untreated domestic sewage in to Rivers.

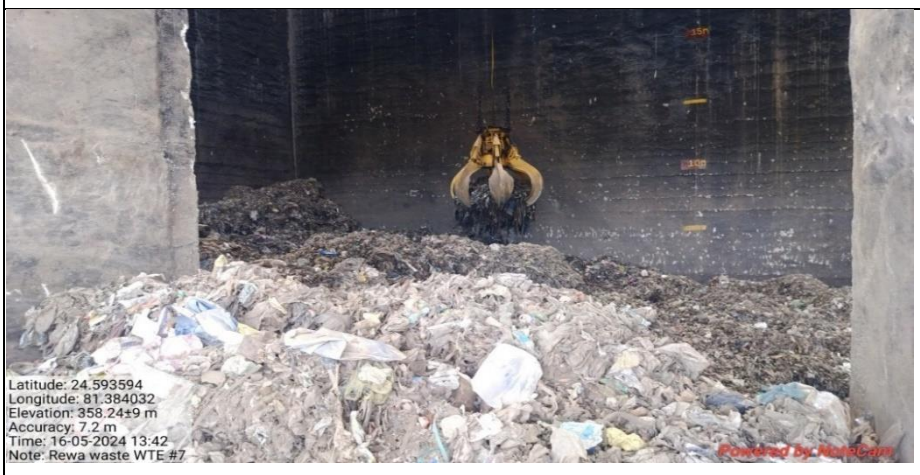
Photographs taken During Joint Committee Inspection of Rewa City

	Joint Committee inspection at Rewa MSW Management solution
	Municipal Solid Waste
	Materials Recovery Facility (MRF)

	Compostable Material
	Wet Waste processing section
	Waste Segregation at RDF Section

	Sanitary Landfill site
	Inert Material disposed at Landfill site
	Leachate tank near Sanitary landfill site

	Legacy Waste Dumpsite visit by Joint Committee
	Legacy waste Dumpsite
	Formation of windrows

	Small instances of fire/smoke detected at legacy waste dumpsite
	Waste to Energy Plant
	RDF being fed into Waste to Energy plant

	Online monitoring systems at the Waste to Energy plant
	Under Construction STP at Vivekanand Nagar
	Under construction STP at Vivekanand Nagar

	Joint Committee inspection of under construction STP at Bichhiya
	Under construction STP at Bichhiya 6.5 MLD
	Non-operational STP 12 MLD at Jayantikunj

	STP 12 MLD at Jayantikunj
	Laying of sewerage network in Rewa city
	Laying of sewerage network in Rewa city

9.Status of Municipal Solid Waste and Sewage Management in Ratlam City

As per Hon'ble NGT order in OA No. 606/2018 order dated 14.03.2024, Ratlam city was visited by a Team of Joint Committee on 10.07.2024 and a meeting was held in Swachh Bharat Mission (SBM) office at Ratlam with the Municipal Commissioner and other officials of Nagar Nigam.

A brief presentation was given by Nagar Nigam official on the present status of Municipal Solid Waste Management, legacy waste remediation, Sewage Treatment Plants and sewer network of the Ratlam City. Subsequently, the Joint Committee along with the officials of Nagar Nigam and officials of MPPCB visited the Municipal Solid Waste processing facility where Material Recovery Facility, Compost Plant, plastic processing unit was provided for processing of municipal solid waste. Joint Committee also visited legacy waste remediation site, Sewage Treatment Plants, Construction & Demolition collection centre. Waste water samples were collected from the inlet and the outlet of the 2 STPs.

A. Municipal Solid Waste Management as per SWM Rules, 2016

I. **Generation and Collection of Municipal Solid Waste**:

Ratlam is in the north-western part of the Malwa region in Madhya Pradesh state of India. The population of Ratlam Nagar Nigam is approx. 331567. The area of entire Nagar Nigam is approximately 39.19 Sq. Kms. which is divided into 49 wards within 6 zones having 66200 households & 7836 shops and generates about 111 TPD of solid waste. The work of collection and transportation of municipal solid waste was being done by Nagar Nigam, whereas processing of solid waste was being done by M/s Mritunjaya waste management. The door-to-door garbage collection was practiced through garbage collection vehicles. For collection and transportation of solid waste, 72 nos. of auto-trippers, 05 E-rickshaws, 04 dumpers, 05 tractors, 06 JCBs and 02 compactors were being used and installed with GPS

tracking system. Approx. 70%-80% source segregation of dry and wet waste is being done in the city. As per the Municipal Commissioner, total solid waste generated was about 111 TPD, out of the total waste generated, approx. 66 MT of wet waste, 45 MT of Dry waste, 0.002 MT of sanitary waste, 0.02 TPD of Domestic hazardous & 0.8 TPD of E-waste was being generated. As per population of the city total solid waste generated should be 125.99 TPD, hence there exist a gap of 14.99 TPD with respect to solid waste collection and treatment.

II. **Treatment and Disposal of Municipal Solid Waste:**

Nagar Nigam Ratlam is having Solid Waste processing facility with wet waste processing capacity of 80 TPD, dry waste processing capacity of 60 TPD and plastic waste processing capacity of 20 TPD at Village Julvaniya, Ratlam. M/s Mritunjaya Waste Management Ltd. was appointed as agency for the handling and processing of Municipal Solid Waste facility. As informed by Commissioner Nagar Nigam, 70-80% source segregation was being achieved. Mix waste was being segregated at MRF manually using conveyor belt. Municipal solid waste treatment facilities (MRF & Compressed bio gas) is proposed at Village Julvaniya, Ratlam with MRF Capacity of 75 TPD and CBG capacity of 90 TPD at an area of 2.50 hectare. Model Request for Proposal (RFP) has been prepared and expected date of tender invitation was 31 July 2024.

- <u>Wet waste processing facility:</u> Wet waste processing facility of 80 TPD, was provided. Segregated wet waste was processed in the pits by culturing of the waste and regular churning of waste. A total of 10 compost pits were provided for composting. As per the record, wet waste received and processed on 9th July 2024 at compost pits was 70.39 TPD out of which 12.44 TPD (17.67 %) of compost 1.97 TPD (2.80 %) of inert was being generated. Compost was being given to local farmers free of cost & also being used by ULB for

gardening and inert was being disposed at low lying areas for which agreement made with 3 land owners. Copy of logbook is enclosed as **Annexure-24.**

- Dry waste processing facility: For the processing and segregation of dry waste, MRF facility with manual segregation of 60 TPD was provided. On an average 45 TPD of dry waste collected from the city was processed and segregated in to recyclable, non-recyclable and inert material. Segregated plastic waste was processed at plastic waste processing facility. As per the record, dry waste received and processed on 9th July 2024 at MRF was 46.93 MT out of which 5.16 MT (10.99 %) Plastic, 4.76 MT (10.14 %) cardboard, 5.32 MT (11.33 %) paper, 4.50 MT (9.59 %) glass, 5.39 MT (11.48 %) rubber, 2.93 MT (6.24 %) metal, 6.29 MT (13.40 %) cloth, 5.02 MT (10.69 %) packaging material and 7.65 MT (16.30 %) inert was being generated. Plastic waste processing unit was established in the same campus. Copy of logbook is enclosed as **Annexure-25.**

- Plastic waste processing facility: Plastic waste processing facility having capacity of 20 TPD was provided. On an average, 5 TPD of plastic waste are processed using Aglo machine, Fatka machine and shredder. There are 01 bailing machine, 02 gatta machine, 01 Aglo machine, 01 shredder and 02 Fatka machine (only 01 operational). Out of 5 TPD of plastic waste processed, 3 TPD RDF and 2 TPD of plastic gatta were being made. RDF was supplied to the Wonder Cement, Nimbherda and gatta was sold to industry for further manufacturing of ropes, black pipes etc.

- E-waste & Sanitary waste were being segregated and sent for further processing by 3rd party for which agreement had been made. Copy of agreements is enclosed as **Annexure-26.**

- Sanitary Landfill Sites**:** At present sanitary landfill site were not available in the city. Inert generated during the processing of solid waste and legacy waste bio-remediation was being disposed at low lying areas of agricultural lands. An agreement with 03 persons had been made for dumping of soil, inert and C&D material**.** Copy of affidavit is enclosed as **Annexure-27.** Sanitary landfill site had been proposed at Julvaniya, Ratlam with 82,024 m^3 capacity at 1.71hectare land. DPR had been approved by state level technical committee(SLTC) and RFP was being prepared.
- Bio-mining & bio-remediation of Legacy waste: The legacy waste dumpsite located at Julvaniya, Ratlam was spread over around 5.85 hectare land with approximate estimated quantity of 3,16,689 MT. For the Bioremediation, Bio-mining and disposal of residue waste, work order was issued to M/s Aakanksha Enterprises, Delhi on 08.09.2023 (Copy of the work order enclosed as **Annexure-28**)**.** Approximately 95767.92 MT legacy waste had been treated by the Agency & 1.75 hectare land has been recovered. 36300.12 MT of good soil, 26209.26 MT of inert waste, 18888.54 MT of C&D waste, 8261 MT of RDF and 6109 MT of other material was recovered during the processing of bio-mining of legacy waste dumpsite remediation. For balance quantity, bio-remediation work was under progress at the site and completion timeline is December 2024. RDF segregated at legacy waste dumpsite was collected and supplied to cement plants. During the visit, 02 power screener 01 trommel was deployed at site. As 01 screener was not in operation, it was replaced with new (extra) trommel machine at site. 03 poclain and 01 JCB were being used for turning of waste. Bio-mining of waste was under progress up to the ground level clearance however, 7-8 ft of legacy waste was also observed below the ground. This was verified by excavating the ground at site. Urban Local Body (ULB) need to take further

action to remediate the legacy waste below the ground surface level till the complete bio-mining of legacy waste. It was observed that the existing windrows formation and bio-culturing was not maintained properly and need to be operated properly. Details of the legacy waste processed and material generated is enclosed as **Annexure-29.**

- Reduce, Reuse, Recycle (RRR) centre, Fawara chowk: Joint Committee also visited one RRR centre located at Fawara chowk, where worn out cloths, toys, books, blankets and other items were collected and further distributed to the needy persons for reuse.
- Construction and Demolition waste collection facility: Joint Committee also visited construction and demolition waste collection facility which was spreaded over an area of 225 Sqm located at opposite to fawarra chowk, Ratlam. Sand, bricks, wood, steel, metal etc. was being collected at this centre, maximum quantity of collected material was being used by Nagar Nigam itself and some of the quantity was being processed through outsourced institution to make paver blocks (MOU has been made between ULB and Rishabh Cement Product).

B. Sewerage System

Ratlam city is generating 35.81 MLD of sewage having population of about 3,31,567. Out of 35.81 MLD, only 11.5 MLD of sewage was being treated in 02 STPs with installed capacity of 37.5 MLD and rest of the untreated sewage was being directly discharged in to the municipal drains. Gap in treatment of sewage was observed due to non-coverage of sewage collection network and house service connections. As per the Nagar Nigam Commissioner, 70% of the city was covered with sewerage network and household connection, rest 30% was proposed under AMRUT2.0 scheme. The work for commissioning of sewerage scheme with household service connection need to expedite on immediate basis. During the visit, it was

observed that there were 02 Nos. of STPs provided for the sewage treatment of the city, both the STPs were operational since Oct 2021. During Joint Committee inspection, waste water sample was collected from inlet and outlet of STPs. There is total gap of 24.31 MLD with respect to collection and treatment of sewage. The status of operational STPs is as given below.

S. No	Location	Capacity of STP (MLD)	Capacity utilized (MLD)	Operational status of STP	Scheme	Technology	Gap in treatment (MLD)
1	Karamdi	21.5	6.0	Operational Oct 2021	AMRUT	SBR	24.31 with respect to collection and treatment
2	Khetalpur	16	5.5	Operational Oct 2021	AMRUT	SBR	
Total		**37.5**	**11.5**				

Analysis results of the samples collected from the STPs, Ratlam
(Sampling date: 10 July 2024)

S.No.	Parameter	Prescribed limits as per Hon'ble NGT order 1069/2018	STP 21.5 MLD Karamdi			STP 16 MLD Khetalpur		
			Inlet	Outlet	Performance (%)	Inlet	Outlet	Performance (%)
1.	pH	5.5-9.0	6.72	7.07	-	7.47	7.28	-
2.	Suspended Solids (mg/l)	20	55	**22**	-	74	15	-
3.	COD (mg/l)	50	149	20	86.58	192	21	89.06
4.	BOD (mg/l)	10	51	8.0	84.31	44	**12**	72.73
5.	O& G (mg/l)	-	-	3.0	-	-	2.0	-
6.	FC MPN/100 ml	Desirable 100 Permissible 230	-	130	-	-	**280**	-
7.	Phosphate (mg/l)	1.0	-	**1.5**		-	**1.6**	-
8.	Nitrate (mg/l)	10	-	2.24		-	2.18	-

Test analysis results are enclosed as **Annexure-30.**

1. **21.5 MLD STP at Karamdi:** The installed capacity of STP was 21.5 MLD with Sequential Batch Reactor (SBR) technology. Presently, only 6 MLD sewage was receiving for the treatment due to incomplete sewerage network and house hold connections. During the visit, the Joint Committee observed that the algae were present in the SBR basin. Total 23000 nos. of household connections were provided. BOD load in the incoming sewage was only 75-100 mg/L. Treated waste water was

partly being used in the gardening and irrigation and remaining was being discharged in to nearby nallah.

As per analysis result, discharge level of suspended solids 22 mg/l and phosphate 1.5 mg/l which are exceeding the prescribed limits 20 mg/l and 1.0 mg/l respectively as per order of Hon'ble NGT OA 1069/2018. The performance of STP with respect to COD and BOD is 86.58% and 84.31% respectively.

2. **16 MLD STP at Khetalpur:** The installed capacity of STP was 16 MLD with Sequential Batch Reactor (SBR) technology. Presently only 5.5 MLD sewage was receiving for the treatment due to incomplete sewerage network and household connections. During the visit of the Joint Committee, the algae were present in the SBR basin. Total 19000 nos. of household's connection had been provided. Treated waste water was partly being used in the gardening and irrigation and remaining was being discharged in to nearby nallah.

   As per analysis result, discharge level of BOD 12 mg/l, Fecal coliform 280 MPN/100ml and phosphate 1.6 mg/l which are exceeding the prescribed limits 10 mg/l, 230 MPN/100ml and 1.0 mg/l respectively as per order of Hon'ble NGT OA 1069/2018. The performance of STP with respect to COD and BOD is 89.06% and 72.73% respectively.

The brief outlines of the current status of compliance by Nagar Nigam, Ratlam on the issues of MSW generation, collection & processing and Sewage generation & treatment and initiatives taken to bridge the existing gap as observed on 10.07.2024 is summarized below:

S. No	Particular	Status as per six monthly progress report submitted to Hon'ble NGT vide letter dated 12.03.2024 and presentation made on 11.03.2024.	Status observed by the Joint Committee during visit on 10.07.2024
1.	Municipal Solid Waste Management	Total solid waste generation is 125.16 TPD. There is no gap in generation and processing of MSW.	**A. MSW management in Ratlam** Total no. of wards in the city =*49* Total Solid waste generation in Ratlam city = *Approx. 111 TPD (as per Nagar Nigam commissioner)* *Total solid waste generation as per population=125.99TPD* Details of MSW management (Door-to-door collection/ no. of vehicles/ GPS system/ segregation at source/ treatment of wet & dry waste/ legacy site) = *Door-to-door collection by 72 nos. of garbage collection vehicles with separate compartments for dry & wet waste and provided with GPS. Segregation of waste at source was little low.* Current solid waste treatment facility- Municipal solid waste processing facility provided at Village Julvaniya nearby Ratlam city. *Wet waste processing facility = 80 TPD* *Dry waste processing facility = 60 TPD* *Plastic waste processing facility = 20 TPD* Gap=*14.99 TPD with respect to collection and treatment* ***B. Legacy Waste management*** At Julvaniya, Ratlam legacy waste quantity at dumpsite was

			approx. 316689 MT. For the Bioremediation, Bio-mining and disposal of residue waste of the 316689 MT legacy waste, work order had been issued to M/s Aakansha Enterprises, Delhi on 08.09.2023. *Work started on ground in December 2023 and as per work order completion timeline for remediation work is December 2024.* *About 95767.92 MT of legacy waste has been remediated using bio-mining & bio-remediation and remediation work for balance quantity was under progress.*
2.	Sewerage network and Sewage treatment plants	There are 02 nos. of operational STPs present in the city with total capacity of 37.5 MLD.	Total Sewage generation in the city = *35.81 MLD* Total present treatment capacity = 37.5 MLD Total utilized capacity of STPs = 11.5 MLD Present gap in collection = *24.31 MLD (sufficient available capacity as of now)* Major drains in the city= *There are 02 major drains in the city. As of now treated waste water from STPs and untreated sewage was being disposed in to the drains.* Total no. of households = *66200 no. including all zones* No. of household connected with sewerage network = 70% *laying of sewerage network has been done, rest is proposed under AMRUT 2.0 scheme.*

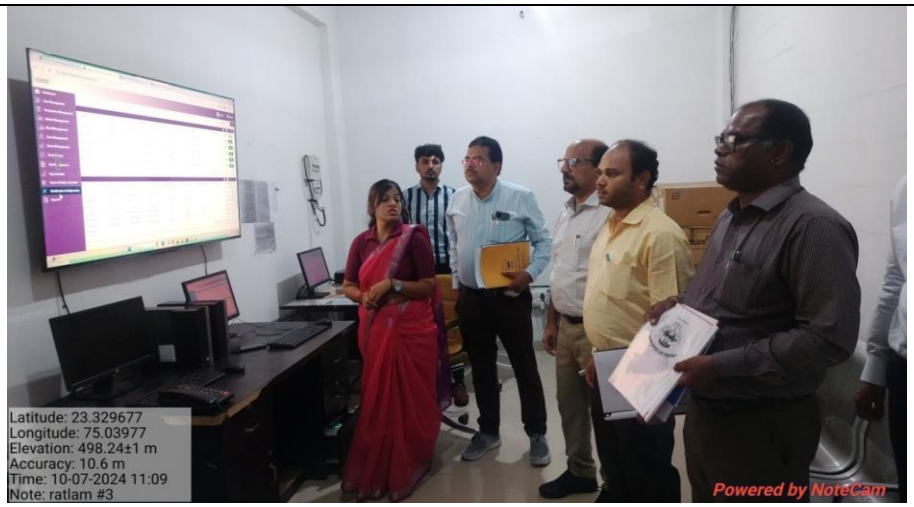
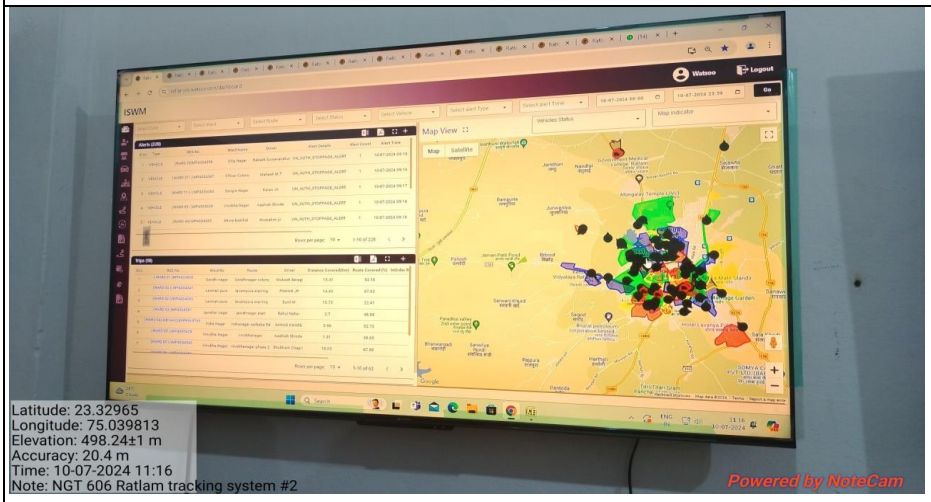
Observations of the Joint Committee:

1. Total Municipal Solid Waste generation in Ratlam city was reported as 125.16 TPD however, present Municipal Solid Waste generation in the city was 111 TPD (as informed by Nagar Nigam officials). In terms of treatment facilities, 80 TPD wet waste processing facility, 60 TPD dry

waste processing facility and 20 TPD plastic waste processing facility has already been created which is sufficient for the Ratlam city. As per population of the city, total solid waste generation should be 125.99 TPD, hence there exist a gap of 14.99 TPD with respect to solid waste collection and treatment.

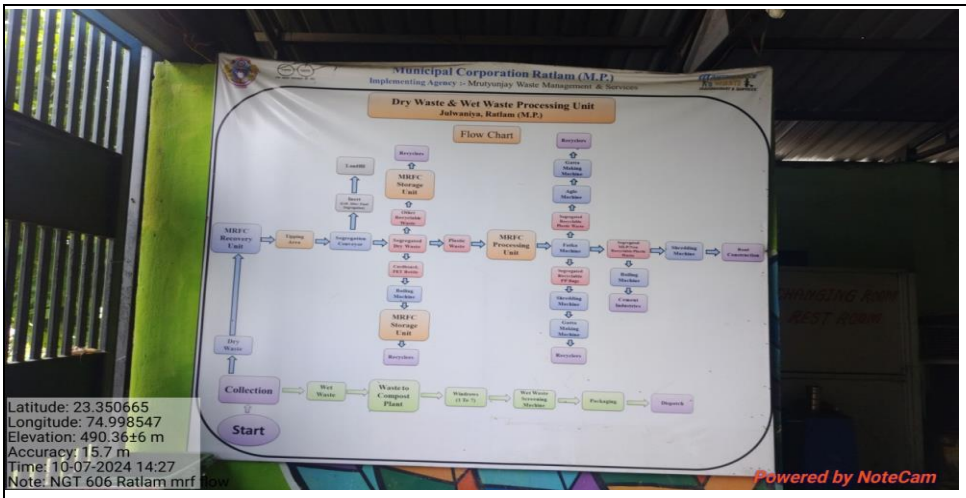
2. Approx. 30% legacy waste remediation has been done and balance work was under progress. Bio-mining of waste was under progress up to the ground level clearance however, 7-8 ft of legacy waste was also observed below the ground at site. Therefore, Urban Local Body (ULB) need to take further action to remediate the legacy waste below the ground surface level till the complete bio-mining of legacy waste.
3. For disposal of inert, there was no sanitary land fill sites available in the city, however an agreement with 03 persons had been made for dumping of soil, inert and C&D material at low lying areas of agricultural lands generated from legacy waste dumpsite and the inert generated from solid waste processing facility is also disposing at low lying areas. Compost has been distributed to the farmers free of cost. Mix waste was being segregated at MRF manually using conveyor belt.
4. Municipal solid waste treatment plant (MRF & Compressed bio gas) project has been proposed at Village Julvaniya, Ratlam with MRF Capacity 75 TPD and CBG capacity 90 TPD at an area of 2.50 hectare.
5. The total sewage generation of the Ratlam city was reported as 35.81 MLD with 02 operational STPs of total installed capacity of 37.5 MLD. The created capacity was sufficient to treat the present generation of sewage of the city. Presently, the untreated domestic sewage from the households was being discharged directly into the municipal drains which ultimately meets river Mahi and Kudhail. Presently there was a gap of approx. 24.31 MLD (70%) observed with respect to sewage collection and treatment.

Photographs taken During Joint Committee Inspection of Ratlam City

	Joint Committee inspection at Ratlam online GPS tracking system
	Online GPS tracking system
	Solid Waste Processing Unit, Julvaniya, Ratlam

	Municipal Solid Waste
	Manual segregation of solid waste
	Wet Waste processing at Compost pits

	Inert Disposed in compost pit
	Unsegregated waste dumped in compost pit
	Material Recovery Facility 60 TPD

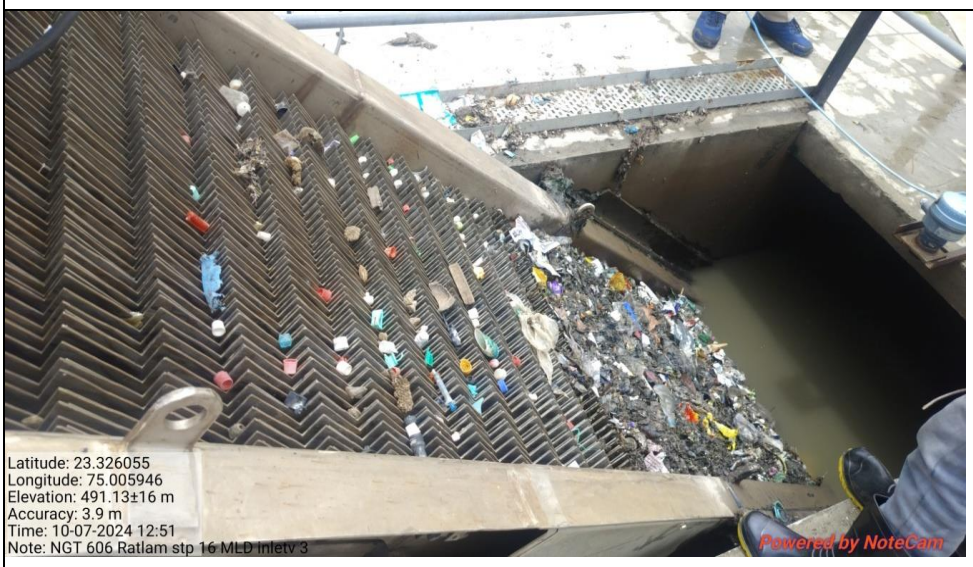
	Flow chart of Municipal solid waste processing
	Processing of Plastic waste at Fatka Machine
	Processing of Plastic waste at Aglo Machine

	Processing of Plastic waste at Bailing Machine
	Processing of Plastic waste at Shredder Machine
	Processing of Plastic waste at Gatta Machine

	Manufacturing of Gatta from Plastic waste
	Legacy Waste Dumpsite visit by Joint Committee
	Legacy waste Dumpsite

	Power Screener at Legacy waste site
	Reclaimed Land at legacy waste site
	Legacy waste beneath the reclaimed land upto 7-8 ft depth

	Legacy waste excavated at reclaimed land upto 7-8 ft depth
	Algae in the SBR Basin at Karamdi STP 21.5 MLD
	Aeration process in the SBR Basin at STP 21.5 MLD

	Karamdi Nallah near 21.5 MLD STP
	Joint Committee visit at STP 16 MLD at Khetalpur
	Inlet screen clogged at STP 16 MLD at Khetalpur

	SBR Basin STP 16 MLD
	Khetalpur nallah near STP 16 MLD
	Construction and demolition waste collection center

	Construction & Demolition waste
	RR Center, Fawara Chowk
	Usable items at RRR center

10. Status of Municipal Solid Waste and Sewage Management in Gwalior City

As per Hon'ble NGT order in OA No. 606/2018 order dated 14.03.2024, Gwalior city was visited a Team of Joint Committee on 5th & 6thAugust 2024, a meeting of Joint Committee was held at Bal Bhawan, Gwalior with the Municipal Commissioner and other officials of Nagar Nigam.

A brief presentation was given by Nagar Nigam official on the present status of Municipal Solid Waste Management, legacy waste dumpsites, Sewerage system of the Gwalior Nagar Nigam. Subsequently, the Joint Committee along with the officials of Nagar Nigam and Regional Officer MPPCB, Gwalior visited the Municipal Solid Waste Management unit where Material Recovery Facility (MRF), compost plant, was provided for processing of solid waste. Joint Committee also visited Sewage Treatment Plants, legacy waste remediation dumpsite, transfer stations. Waste water samples were collected from the inlet and outlet of the operational STPs.

A. Municipal Solid Waste Management as per SWM Rules, 2016

I. Generation and Collection of Municipal Solid Waste:

The population of Gwalior Nagar Nigam is approx. 14.77 lacs. The area of entire Nagar Nigam is approximately 423 Sq. Kms. which is divided into 66 wards within 25 zones and generates approximately 550 TPD of solid waste (the total solid waste generation in Gwalior city was reported as 463.52 TPD in six monthly report submitted to Hon'ble NGT). As per the Commissioner of Gwalior Nagar Nigam, out of total waste generation, 298.9 TPD dry waste, 250 TPD wet waste, 0.1 TPD E-waste and 1.0 TPD of sanitary & domestic hazardous waste estimated. Total processing of solid waste is only 181 TPD. The work of collection, transportation and processing of municipal solid waste was being done by Nagar Nigam. The solid waste was being collected from households via door-to-door garbage collection vehicles. For collection and transportation of solid waste, 09 transfer

stations, 242 nos. of door-to-door collection vehicles, 64 nos. of refuse compactors, 10 nos. of JCB, 15 no. of dumpers and 101 nos. of secondary vehicles fitted with GPS tracking system were being used. There was no segregation of dry and wet waste at source as per the inspection of vehicles at the transfer station. The vehicles used for door-to-door garbage collection were transporting mixed waste in both the compartments (dry-wet). There were no safety gears like gumboot, gloves, mask, etc provided to the sanitary workers. The awareness about collection of segregation waste was not created among the staffs engaged for door to door collection of waste.

Total Municipal Solid Waste generation in Gwalior city was reported as 463.52 TPD in six monthly report submitted to Hon'ble NGT. As per the Commissioner Nagar Nigam, the present Municipal Solid Waste generation in Gwalior city was 550 TPD, however, as per the population (14.77 lacs) the solid waste generation should have been 561.26 TPD, therefore gap in generation of 11.26 TPD. The collection of waste was reported by Nagar Nigam as 540.93 TPD. However, the processing of waste was only for 181 TPD with respect to the existing capacity of solid waste processing facilities of 640 TPD (wet waste 390 TPD, dry waste 250 TPD). Therefore, a gap of 380.26 TPD was identified in the processing of waste. Solid waste generation and processing details are enclosed as **Annexure-31.**

II. Treatment and Disposal of Municipal Solid Waste:

For processing of solid waste Nagar Nigam, Gwalior had Solid Waste processing facility having wet waste processing facility with capacity of 390 TPD, dry waste processing facility with capacity of 250 TPD and compost section 80 TPD at Village Kedarpur, Gwalior. Municipal solid waste was collected, transported and processed by Nagar Nigam. Source segregation of waste (dry-wet) was not being practiced

in the city. Mix waste was being segregated at MRF manually using conveyor belt which was in very poor condition. There were 09 transfer stations in the city where, solid waste compacted and loaded into compactors for further transported to waste management unit. Joint Committee visited 03 transfer stations in the city.

Municipal solid waste treatment plant (MRF, Compressed bio gas (CBG) & WTE plant) project has been proposed at Village Kedarpur, Gwalior with MRF Capacity of 176.89 TPD, CBG capacity of 435 TPD & WTE plant 270 TPD on cluster basis.

- Wet Waste Processing Facility: Wet waste processing facility of 390 TPD was created. Segregated wet waste was processed by making windrows and regular churning of waste. The quality of compost produced was not good with low calorific value. There was no churning of windrows observed at site. As per the information provided, only 80 TPD of wet waste was being processed.

  As per the plant operator, compost generated was being given to local farmers free of cost for which no records was maintained. The compost was also being used by ULB for gardening and inert was being disposed at low lying areas. Joint Committee observed that the proper handling of solid waste was not being done as the unprocessed solid waste was also being dumped in the backside of the processing plant at legacy waste site.
- Dry Waste Processing Facility: For the processing and segregation of dry waste MRF facility with mechanical segregation of 250 TPD was provided. On an average 298.9 TPD of dry waste collected from the city, however due to lack of infrastructure only 100 TPD of dry waste was being processed and segregated at 38 TPD (38 %) recyclable, 13 TPD (13 %) plastic & RDF, 27 TPD (27 %) inert, 12 TPD (12 %) C&D material and 10 TPD (10%) Glass, cardboard &

leather and rest of the waste was being dumped backside at legacy waste site. RDF generated in the process was supplied to JK Cement Industry at Panna, however, the record was not handed over to the Committee. Inert was being disposed of at low lying areas. At the MRF site, grazing of cattle was observed.

- Mechanical MRF was installed but not in operation due to poor maintenance by Nagar Nigam. The MRF would have been functional with the proper utilization of infrastructure. Inspite of maintaining existing MRF, Nagar Nigam had proposed for new MRF under Swachh Bharat Mission 2.0 of Govt. of India.
- For processing of sanitary waste, incinerator plant with capacity 1.0 TPD was provided, however during the visit of Joint Committee the plant was in dilapidated condition and not in operation for long time. Huge quantity of rainwater mixed with Leachate was accumulated in the pond with in the premises.
- Sanitary Landfill Sites**:** There was no sanitary landfill site in the city and inerts generated was being disposed at low lying area. Sanitary landfill site had been proposed at Kedarpur, Gwalior under AMRUT 2.0 scheme. DPR was under preparation stage.
- Bio-mining & Bio-remediation of Legacy Waste: There were two legacy waste dumpsites located at Kedarpur and Buddha Park, Gwalior. For the Bioremediation and Bio-mining of legacy waste work order was issued to M/s Dayacharan and Company, Delhi in joint venture with M/s Shree Bankey Bihari Udyog, Agra dated 29.09.2023 (Copy of the work order is enclosed as **Annexure-32).**
- **Legacy waste at Kedarpur** having approx. quantity as per RFP 5,81,462 MT spreaded over in an area of 1,54,529 Sq m. land. During survey by 3rd party revised quantity was estimated as 8,76,260 MT, remediation of legacy waste started in December 2023 and approximately 2,44,735 MT legacy waste had been treated by the agency & 46,238 Sq m. land had been recovered.

1,27,262 MT (51.99 %) of good soil, 26,920 MT (10.99 %) of inert waste, 31,362 MT (12.81 %) of C&D waste, 9,789 MT (3.99 %) of RDF and 49,402 MT (20.18 %) of moisture loss (as informed by the operator) was recovered during the process of bio-mining of legacy waste dumpsite remediation. A total of 1,26,155 MT (72158.14 MT (57.19 %) good earth, 8648.81 MT (6.86 %) C&D material, 41022 MT (32.52 %) inert, 4320.96 MT (3.42 %) RDF and 4.5 MT (0.0036 % metal) processed fraction had been dispatched from the site. For balance quantity remediation work was halted due to rainy season and completion timeline for remediation of legacy waste was March 2025. RDF segregated at legacy waste dumpsite was collected and supplied to JK cement plant at Panna and Prism Cement (Ultratech) at Satna in Madhya Pradesh. Details of legacy waste processed and material generated is enclosed as **Annexure-33.**

The Joint Committee observed that fresh waste also dumped over the legacy waste site. The quantity of legacy waste estimated by the Agency appointed by Nagar Nigam was very less than the actual quantity of waste. As per the birds eye view estimation, it would have been more than 20 lakh MT legacy waste for which Nagar Nigam should re-evaluate the quantity of legacy waste. A total of 2 nos. of trommels were deployed for bio-mining of legacy waste however one of them were not working during the visit of the Joint Committee. Also, proper windrow formation and bio-culturing was not being practiced for remediation of legacy waste. The committee was in the opinion that the Nagar Nigam Gwalior is doing just eye wash and dumping all the fresh waste with legacy waste from many years and not serious about the MSW treatment.

- **Legacy waste at Buddha Park** having approx. quantity of 21627 MT, as per RFP, spreaded over around 11731 Sqm. land. During survey by 3rd party, revised quantity of waste was estimated as 75672.5 MT, however Joint Committee observed that the quantity

of legacy waste was much more than the estimated. Fresh solid waste was also being dumped at the same site. Bioremediation work of this site has been planned after completion of Kedarpur site, however re-evaluation of quantity was required to estimate the actual quantity at site.

- **Baran Landfill Site in Old Cantonment Area** – Low lying area in Baran in old cantonment was started filling with fresh waste along with dumping of inert materials. This had been opened a new landfill site by Nagar Nigam for dumping of fresh waste which included plastics, solid waste, inert, good earth, etc. Burning of waste was also seen at site. The information on this site was not brought to the notice of the Joint Committee by the Nagar Nigam, Gwalior.
- Joint Committee also observed that there was poor solid waste handling and management in the city as solid waste was spread along the road side in the city.
- The installation of one C&D waste processing plant of capacity 50 TPD was completed but not in operation during the visit.

B. Sewerage System

Gwalior city was generating 159.52 MLD of sewage having population of about 14.77 lacs. Out of 159.52 MLD, only 112.463 MLD of sewage was being treated in 04 STPs against the installed capacity of 222 MLD and rest of the untreated sewage was being directly discharged in to the municipal drains. The Joint Committee observed that 04 Nos. of STPs established for sewage treatment of the city, all the STPs were operational. There was approx. gap of 47.057 MLD with respect to sewage collection and treatment. During Joint Committee's inspection, waste water samples were collected from inlet and outlet of STPs. The status of STPs is given below.

S. No.	Location	Capacity of STP (MLD)	Capacity utilized (MLD)	Operational status of STP	Scheme	Technology	Gap in treatment (MLD)
1.	Gwalior, Jalalpur (Lashkar)	145	66.46	Operational Dec 2020	AMRUT	SBR	47.057 with respect to collection and treatment
2.	Gwalior, Laltipara (Morar)	65	40.72	Operational Mar 2021	AMRUT	SBR	
3.	Gwalior, Shatabdipuram (Morar)	8	5.22	Operational Apr 2021	AMRUT	SBR	
4.	Gwalior, Laliyapura (Lashkar)	4	0.063	Operational Nov 2021	AMRUT	SBR	
Total		222	112.463	-	-	-	

Analysis results of the samples collected from the STPs, Gwalior
(Sampling date: 06 August 2024)

S. No.	Parameter	Prescribed limits per Hon'ble NGT order 1069/2018	STP 145 MLD Jalalpur			STP 65 MLD Laltipara			STP 8.0 MLD Shatabdipuram			STP 4.0 MLD Laliyapura		
			Inlet	Outlet	Performance (%)	Inlet	Outlet	Performance (%)	Inlet	Outlet	Performance (%)	Inlet	Outlet	Performance (%)
1.	pH	5.5-9.0	6.99	7.08	-	7.36	7.23	-	7.42	7.62	-	6.84	7.21	-
2.	Suspended Solids	20	122	12	-	196	16	-	164	15	-	154	14	-
3.	COD	50	258	49	81.01	449	31	93.09	275	38	86.18	313	42	86.58
4.	BOD	10	116	**15**	87.07	182	**14**	92.31	142	**12**	91.55	140	**12**	91.43
5.	O& G	-	-	2.6	-	-	2.5	-	-	2.0	-	-	2.0	-
6.	Fecal coliform MPN/100 ml	Desirable 100 Permissible 230	-	>**1600**	-	-	**540**	-	-	2.0	-	-	170	-
7.	Phosphate	1.0	-	0.5836	-	-	0.3209	-	-	0.4061	-	-	0.2783	-
8.	Nitrate	10	-	4.38	-	-	5.18	-	-	0.96	-	-	1.28	-

Note: All the values are in mg/l except pH
Test analysis results are enclosed as **Annexure-34.**

1. **145 MLD STP at Jalalpur:** The installed capacity of STP was 145.0 MLD with Sequential Batch Reactor (SBR) technology. Presently, only 66.46 MLD sewage was received for the treatment due to incomplete sewerage network and house hold connections. During the visit, the Joint Committee observed that the 01 basin of the plant was under maintenance and 05 basins were working. While visiting the plant with Commissioner of Nagar Nigam of Gwalior, the Joint Committee observed that the STP was non-operational for long time with the evidence of growing of weeds inside the periphery of the sludge thickener basin of

STP. Total 8430 nos. of household connections had been given. Treated waste water was being used for gardening and irrigation purposes.

As per analysis result, discharge level of BOD is 15 mg/l and fecal coliform is more than 1600 MPN/100ml was exceeding the prescribed limits of 10 mg/l and 230 MPN/100ml respectively as per order of Hon'ble NGT OA 1069/2018. The performance of STP with respect to COD and BOD is 81.01% and 87.07% respectively.

2. **65 MLD STP at Laltipara:** The installed capacity of STP was 65.0 MLD with Sequential Batch Reactor (SBR) technology. Presently only 40.72 MLD sewage was received for the treatment due to incomplete sewerage network and household connections. The Joint Committee observed that screen at primary treatment unit was clogged with rags and debris and was under maintenance. Algal growth was also formed in the SBR basin which indicated no proper maintenance of the plant. Sludge generated from the plant was sent to Kedarpur MSW dumpsite. Basin 1 & 3 of SBR was non-operational and SCADA was not working properly during the visit. Treated waste water was being used for gardening and irrigation purposes.

   As per analysis result, discharge level of BOD is 14 mg/l and fecal coliform is more than 540 MPN/100ml was exceeding the prescribed limits of 10 mg/l and 230 MPN/100ml respectively as per order of Hon'ble NGT OA 1069/2018. The performance of STP with respect to COD and BOD is 93.09% and 92.31% respectively.

3. **8 MLD STP at Shatabdipuram:** The installed capacity of STP was 8.0 MLD with Sequential Batch Reactor (SBR) technology. Presently only 5.22 MLD sewage was received for the treatment due to incomplete sewerage network and household connection. Treated waste water was being discharged in to the nallah.

   As per analysis result, discharge level of BOD is 12 mg/l which is exceeding the prescribed limits of 10 mg/l as per order of Hon'ble NGT

OA 1069/2018. The performance of STP with respect to COD and BOD is 86.18% and 91.55% respectively.

4. **4 MLD STP at Laliyapura, Lashkar:** The installed capacity of STP was 4.0 MLD with Sequential Batch Reactor (SBR) technology. Presently only 0.063 MLD sewage receiving for the treatment due to only 277 household connection. The requirement of 4.0 MLD STP is over-estimated. Treated waste water was being discharged in to canal.

   As per analysis result, discharge level of BOD is 12 mg/l which is exceeding the prescribed limits of 10 mg/l as per order of Hon'ble NGT OA 1069/2018. The performance of STP with respect to COD and BOD is 86.58% and 91.43% respectively.

The brief outlines of the current status of compliance by Nagar Nigam, Gwalior on the issues of MSW generation, collection & processing and Sewage generation & treatment and initiatives taken to bridge the existing gap as observed on 5th& 6th August 2024 is summarized below:

S. No.	Particular	Status as per six monthly progress report submitted to Hon'ble NGT vide letter dated 12.03.2024 and presentation made on 11.03.2024.	Status observed by the Joint Committee during visit on 5th& 6th August 2024
1.	Municipal Solid Waste Management	Total solid waste generation is 463.52 TPD. There is no gap in generation and processing of MSW.	**A. MSW management in Gwalior** Total no. of wards in the city= 66 Total Solid waste generation in Gwalior city= *Approx. 550 TPD* Solid waste generation as per population of the city = *561.26 TPD* Gap= *11.26 TPD with respect to generation and 380.26 TPD with respect to processing of solid waste.* Details of MSW management (Door-to-door collection/ no. of vehicles/ GPS system/ segregation at source/ treatment of wet & dry waste/ legacy site) = *Door-to-door collection by 242 nos. vehicles, 04 nos. refuse compactors and 101 nos. secondary vehicles with separate*

			compartments for dry & wet waste and provided with GPS. Segregation at source is very poor. Current solid waste treatment facility- *There is Municipal solid waste processing facility provided at Village Kedarpur nearby Gwalior city.* *Wet waste processing facility = 390 TPD but not in operation with full capacity* *Dry waste processing facility = 250 TPD but not in operation with full capacity* ***B. Legacy Waste management*** *There were two legacy waste dumpsites at Kedarpur and Buddha Park, Gwalior with approx. quantity 951932.5 MT. For the Bioremediation, Bio-mining and disposal of Residue waste of the 951932.5 MT legacy waste work order has been issued to M/s Dayacharan and Company, Delhi in joint venture with M/s Shree Bankey Bihari Udyog, Agra dated 29.09.2023. Work started on ground in December 2023 and as per work order completion timeline for remediation work is December 2024. However as per third party complete remediation will be done by March 2025.* *Approx. 244735 MT (26%) of legacy waste has been remediated using bio-mining & bio-remediation and balance quantity remediation work was halted due to rainy season and completion timeline for remediation of legacy waste is March 2025.*
2.	Sewerage network and Sewage treatment plants	There are 04 nos. of operational STPs present in the city with total capacity of 222 MLD. Average utilized capacity is by all STPs is 138.199 MLD.	Total Sewage generation in the city = *159.52 MLD* Total present treatment capacity = *222 MLD* Total utilized capacity of STPs =*112.463 MLD*

			Present gap in collection and treatment = *47.057 MLD (159.52-112.463 MLD)*

Observations of the Joint Committee:

1. Total Municipal Solid Waste generation in Gwalior city was reported as 463.52 TPD in six monthly report submitted to Hon'ble NGT. As per the Commissioner Nagar Nigam, the present Municipal Solid Waste generation in Gwalior city was 550 TPD, however, as per the population (14.77 lacs) the solid waste generation should have been 561.26 TPD, therefore gap in generation of 11.26 TPD. The collection of waste was reported by Nagar Nigam as 540.93 TPD. However, the processing of waste was only for 181 TPD with respect to the existing capacity of solid waste processing facilities of 640 TPD (wet waste 390 TPD, dry waste 250 TPD). Therefore, a gap of 380.26 TPD was identified in the processing of waste. The existing capacity for processing of waste was sufficient for current generation of waste and safe disposal of municipal waste. There was no segregation of waste (wet and dry) and waste was dumped at the back side of the facility. There was no proper pathway to reach at the top of the landfill site to visualize the site (legacy as well as fresh waste).
2. Joint Committee also observed that there was poor solid waste handling in the city, at many locations huge quantity of waste was disposed untreated.
3. Approx. 25.71 % legacy waste remediation had been done and balance quantity remediation work was halted due to rainy season and completion timeline for remediation of legacy waste is March 2025. Nagar Nigam should engage an agency for re-estimation of legacy waste and accordingly necessary steps should be adopted for bio-remediation and bio-mining of the waste. Nagar Nigam should take efforts to expedite for ongoing bio-mining process of dumped legacy

waste. Fresh solid waste was also being dumped at the legacy waste dumpsites.

4. It was observed that fresh waste also dumped over the legacy waste site. The quantity of legacy waste estimated by the Agency appointed by Nagar Nigam was very less than the actual quantity of waste. As per the birds eye view estimation, it would have been more than 20 lakh MT legacy waste for which Nagar Nigam should re-evaluate the quantity of legacy waste.
5. A total of 2 nos. of trommels were deployed for bio-mining of legacy waste however one of them were not working during the visit of the Joint Committee. Also, proper windrow formation and bio-culturing was not being practiced for remediation of legacy waste. The committee was in the opinion that the Nagar Nigam Gwalior is doing just eye wash and dumping all the fresh waste with legacy waste from many years and not serious about the MSW treatment.
6. Inert generated was being disposed at low lying area. New sanitary landfill site had been proposed at Kedarpur, Gwalior. Currently inert and C&D waste was being disposed at Baran site, a low lying area, however at this site mixed waste was also being dumped. Nagar Nigam should take necessary action to get 'No objection certificate' from MPPCB for operation of Baran landfill site or close the raw waste dumping at this site. MPPCB should take necessary action, as per MSW Rules, against Nagar Nigam of Gwalior for illegal dumping of waste in the city.
7. Municipal solid waste treatment plant (MRF, Compressed bio gas (CBG) & WTE plant) project has been proposed at Village Kedarpur, Gwalior with MRF Capacity of 176.89 TPD, CBG capacity of 435 TPD & WTE plant 270 TPD on cluster basis. Nagar Nigam may submit the report on the need of creation of additional treatment and processing facilities to CPHEEO keeping in view of already created infrastructures in Gwalior for further examination so as to utilize the infrastructure

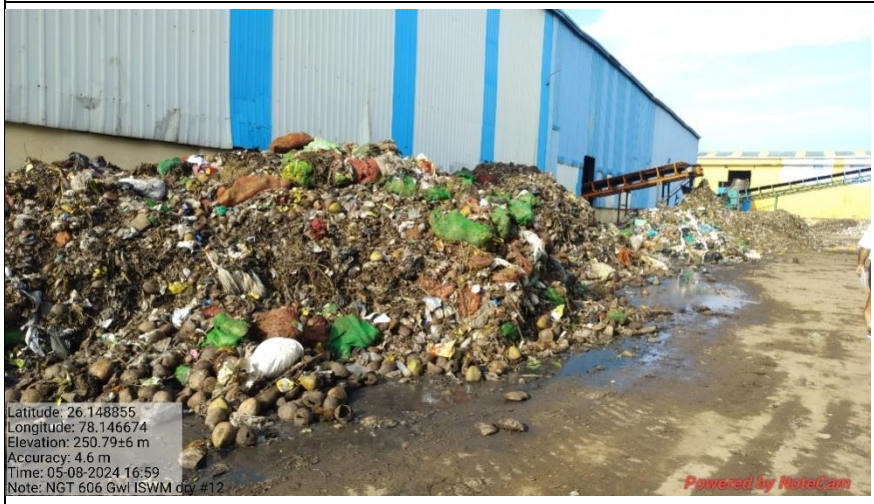
efficiently and optimally. As the existing infrastructures were not operational properly, Nagar Nigam Gwalior may be directed to submit the declaration to MPPCB for successful operation of the proposed plants with respect to the techno-economic feasibility.

8. The total sewage generation of the Gwalior city was reported as 159.52 MLD however with the 04 operational STPs, total capacity of 222 MLD was sufficient to treat the sewage of the city once all the STPs starts operational at full capacity. The present utilized capacity of all STPs was 112.463 MLD due to incomplete coverage of sewerage network and household service connections. The Joint Committee observed a gap of approx. 47.057 MLD (29.50 %) with respect to sewage collection and treatment. Therefore, the Gwalior Nagar Nigam is required to expedite the laying of sewage network and connection of households to the sewerage systems for proper collection of sewage and its treatment so as to eliminate the discharge of untreated domestic sewage in to drains/rivers. This will also prevent the contamination of surface water as well as ground water in the city.

Photographs taken During Joint Committee Inspection of Gwalior City

	Online GPS tracking system
	Transfer Station, Jalalpur FCTS
	Solid waste dumped near Jalapur Transfer station

	Waste disposal on road side, Anandnagar Chauraha
	Transfer Station, Mela Ground FCTS
	Mixed waste in waste collection vehicle

	Solid Waste Processing Unit, Kedarpur, Gwalior
	Municipal Solid Waste
	Mixed waste at Solid Waste Processing Unit

	Dry Waste processing
	Wet Waste processing by forming windrows
	Mismanagement of solid waste

	Waste dumped in drain near Jalalpur STP
	Hazardous & sanitary waste incinerator
	Legacy waste Dumpsite

	Legacy waste Dumpsite
	Baran Site used as low lying area
	Legacy site Buddha Park

	Fresh waste dumped at Legacy site Buddha Park
	Legacy waste site & Transfer station inspection by Joint Committee
	Joint Committee visit at STP 145 MLD at Jalalpur

	Inlet Screen STP 145 MLD at Jalalpur
	SBR Basin STP 145 MLD
	Weeds grown on Sludge thickner

	STP 65 MLD at Lalitpura
	Algae present in SBR Basin STP 65 MLD at Laltipara
	Algae present in Sludge thickner STP 65 MLD at Laltipara

	STP 8 MLD at Shatabdipuram
	Aeration in SBR Basin STP 8 MLD
	STP 4 MLD at Laliyapura

11. Status of Municipal Solid Waste and Sewage Management in Morena City

As per Hon'ble NGT order in OA No. 606/2018 order dated 14.03.2024, Morena city was visited by a Team of Joint Committee on 7th August 2024, a meeting of Joint Committee was held at Nagar Nigam Morena with the Municipal Commissioner and other officials of Nagar Nigam.

A brief presentation was made by Commissioner along with officials of Nagar Nigam on the present status of Municipal Solid Waste Management, legacy waste dumpsites, Sewage Treatment Plants and sewerage network of the Morena Nagar Nigam. Subsequently, the Joint Committee along with the officials of Nagar Nigam and Regional Officer MPPCB, Gwalior visited the Municipal Solid Waste Management facilities where material recovery facility, compost pits were provided for processing of solid waste. Joint Committee also visited Sewage Treatment Plant and legacy waste remediation dumpsites. Waste water samples were collected from inlet and outlet of operational STP.

A. Municipal Solid Waste Management as per SWM Rules, 2016

I. **Generation and Collection of Municipal Solid Waste**:

The population of Morena Nagar Nigam is approx. 2.88 lacs spread over an area of approximately 79.83Sq. Kms. which is divided into 47 wards within 4 zones and generates approximately 89.5 TPD of solid waste. The work of collection, transportation and processing of municipal solid waste was being done by Nagar Nigam. The solid waste was being collected from households via door-to-door garbage collection vehicles. For door-to-door collection and transportation of solid waste 47 nos. of auto-trippers (one in each ward) were being used. Approx. 80% source segregation of dry and wet waste had been done in the city. As per the Commissioner, out of the 89.5 TPD total generated solid waste approx. 53 MT (59.22 %) of wet waste, 32 MT

(35.75 %) of dry waste, 2 MT (2.23 %) of sanitary waste, 2.5MT (2.79 %) of Domestic hazardous & E-waste was being generated.

As per the Commissioner, total solid waste generated was 89.5 TPD, however as per the population (2.88 lacs) of the city total solid waste generation should be 109.44 TPD. Hence, there was gap of 19.94 TPD with respect to collection, transportation and treatment.

II. **Treatment and Disposal of Municipal Solid Waste:**

Morena Nagar Nigam is having solid waste processing facility of capacity 145 TPD having wet waste processing facility with capacity of 110 TPD and dry waste processing facility with capacity of 35 TPD at Jiwaji Ganj, Morena. Nagar Nigam, Morena was the implementing agency for the handling and processing of Municipal Solid Waste processing facility. As informed by Commissioner Nagar Nigam, 80 % source segregation was being achieved. Mix waste was being segregated at MRF manually. Municipal solid waste treatment plant (Compressed bio gas 75 TPD & MRF 50 TPD) project had been proposed at Nivi, Morena. The Committee observed that huge quantity of waste was dumped in open area within the premises of MRF centre. However, the same open area was covered with green curtain to hide the waste collection area before the Committee.

- <u>Wet Waste Processing Facility:</u> A total of 24 compost pits for the processing of wet waste with capacity 110 TPD (50 TPD near MRF & 60 TPD at Nivi site) was provided. Segregated wet waste was processed in the pits by culturing of the waste and regular turning of waste. As per the record, wet waste received and processed on 05.08.2024 in compost pits was 47 TPD out of which 9.40 TPD (20 %) of compost and 1.88 TPD (4.0%) of inert was being generated. Compost was being given to local farmers at the cost of Rs. 1100 per trolly & also being used by ULB for gardening and inert was being disposed at low lying areas. Joint Committee observed that the compost pits were filed with cow dung instead of wet waste. It

seems that the compost pits were not in operation since long time and just to satisfy the Committee, cow dung in the name of compost was added to the pits. There was no wet waste observed in the compost pits for processing of compost. The staff present during the site visit were not aware about processing of compost through these pits and therefore, capacity of ULBs to be created for proper management of municipal waste. Copy of the waste collected and processed is enclosed as **Annexure-35.**

- Dry Waste Processing Facility: For the processing and segregation of dry waste MRF facility with semi-mechanical segregation of 35 TPD was provided. On an average, 30 TPD of dry waste collected from the city was processed and segregated in to recyclable, non-recyclable and inert material. As per the record, total dry waste received and processed on 6th August 2024 at MRF was 29 MT, out of which 2.0 MT (6.89%) of plastic, 4.5 MT (15.52%) of cardboard, 3.2 MT (11.03%) of paper, 3.3 MT (11.38%) of glass, 6.5 MT (22.41%) of rubber, 5.5 MT (18.97%) of metal, 0.5 MT (1.72%) of cloth and 3.5 MT (12.07%) of inert was being sorted. However, during the visit of Joint Committee, there was no machinery working at facility centre, no fresh waste was seen at MRF. As per the Commissioner, the MRF area was made clean in view of visit of Committee. Fresh waste was being dumped at Nivi legacy waste dumpsite. Copy of the waste collected is enclosed as **Annexure-36.**
- Sanitary waste was sent to District Hospital for further processing, MoU had been signed with District Hospital, Morena.
- Sanitary Landfill Sites**:** At present sanitary landfill site were not available in the city. Inert generated during the processing of solid waste and legacy waste remediation was being disposed at low lying areas. Sanitary landfill site had been proposed at Nivi,

Morena with 90,338 Cum capacity spread over at an area of 18,769 Sqm. land. DPR was in approval stage by SLTC.

- Bio-mining & Bio-remediation of Legacy waste: There were three legacy waste dumpsites located at ITI site, Nivi site and RTO site, respectively at Morena. Bioremediation and Bio-mining of legacy waste work order was issued to M/s Mars planning & Engineering services Pvt Ltd in joint venture with M/s Core Project Engineers and Consultant Pvt. Ltd. dated 29.12.2023 (Copy of the work order is enclosed as **Annexure-37).**
  - Legacy waste at ITI site was having approx. quantity, as per RFP, 5,859 MT spread over an area of around 5324 Sqm. land. During survey by 3rd party agency, revised quantity was estimated as 7030.8 MT. Legacy waste of this site was transferred to RTO legacy waste site for further processing.
  - Legacy waste at Nivi site was having approx. quantity, as per RFP, 88,295 MT spread over an area of around 33598.7 Sqm. land. During survey by 3rd party agency, revised quantity was estimated as 1,05,954 MT, however Joint Committee observed more quantity of legacy waste as assessed by the agency. Fresh solid waste was also being dumped nearby the legacy site instead of processing; therefore, re-evaluation of waste quantity has been required. Bio-remediation of legacy waste started in February 2024 and approximately 50516.6 MT legacy waste had been treated by the agency. Out of the total bio-remediation of waste, 38953.86 MT (77.11 %) of good soil, 5651.8 MT (11.89 %) of inert and C & D waste and 1152.52 MT (2.28 %) of RDF material was recovered during the processing of bio-mining of legacy waste dumpsite other than 4731.42 MT (9.37 %) of moisture loss (as informed by the operator). Bioremediation work of this site was not operational since 04 June 2024 due to rainy season. On the reclaimed land, plantation had been done.

FSTP and compost sheds having 20 compost pits with 60 MT capacity for processing of wet waste had been provided, however only cow dung instead of wet waste was being used for composting.

- Legacy waste at RTO site was having approx. quantity, as per RFP, of 7,122 MT spread over an area of around 5601 Sqm. land. During survey by 3rd party agency, revised quantity of waste was estimated as 8546.4 MT. Legacy waste of 7030.4 MT from ITI site was also transferred at this site. Fresh solid waste was also being dumped nearby the legacy site instead of processing, therefore, re-evaluation of waste quantity was required. Bio-remediation of legacy waste started in April 2024 and approximately 29,992 MT legacy waste had been treated by the agency. Out of the total bio-remediation of waste, 23139.48 MT (77.15 %) of good soil, 4645.5 MT (15.49 %) of inert and C & D waste and 684.6 MT (2.28 %) of RDF material was recovered during the processing of bio-mining of legacy waste other than and 1522.42 MT (5.07 %) of moisture loss (as informed by the operator). Bioremediation work of this site was stopped since 04 June 2024 due to rainy season. Bioremediation work of this site was under progress, however re-evaluation of quantity was required. Copy of the legacy waste processed & material recovered and disposed is enclosed as **Annexure-38.**

B. <u>Sewerage System</u>

Morena city was generating 31.10 MLD of sewage having population of about 2.88 lacs. Out of 31.10 MLD, only 10 MLD of sewage was being treated in 01 STP with installed capacity of 25 MLD and rest of the untreated sewage was being directly discharged in to the municipal drains. Nagar Nigam should take necessary action on immediate basis and measures to control the untreated discharge into water bodies. As

per the Nagar Nigam Commissioner, 24 wards of the city were covered with sewerage network and household service connections, sewerage network of rest 23 wards was proposed under AMRUT2.0 scheme. During the visit, only one STP for the sewage treatment of the city was operational since Oct 2021. During Joint Committee inspection, waste water sample was collected from inlet and outlet of STP. The status of STP is given below.

S. No	Location	Capacity of STP (MLD)	Capacity utilized (MLD)	Operational status of STP	Scheme	Technology	Gap (MLD)
1.	Morena Ward No. 4, Atarsuma Area	25	10	Operational since April 2021	AMRUT	SBR	21.10 (w.r.t collection & treatment as generation is more)

Analysis results of the samples collected from the STP, Morena
(Sampling date: 07 August 2024)

S.No.	Parameter	Prescribed standards as per Hon'ble NGT order 1069/2018	STP 25 MLD Atarsuma ward no. 4		
			Inlet	Outlet	Performance (%)
1.	pH	5.5-9.0	7.54	7.41	-
2.	Suspended Solids (mg/l)	20	34	14	-
3.	COD (mg/l)	50	94	35	62.76
4.	BOD (mg/l)	10	28	**13**	53.57
5.	Oil & Grease (mg/l)	-	-	2.67	-
6.	Fecal coliform MPN/100 ml	Desirable 100 Permissible 230	-	**>1600**	-
7.	Phosphate (mg/l)	1.0	-	0.6958	-
8.	Nitrate (mg/l)	10	-	1.26	-

Test analysis results of STP is enclosed as **Annexure-39.**

1. **25 MLD STP at Ward No. 4, Atarsuma Area:** The installed capacity of STP was 25 MLD with Sequential Batch Reactor (SBR) technology. Currently, only 10 MLD sewage was receiving for the treatment due to incomplete sewerage network and household service connections. Total sewage generation in the city was 31.10 MLD. During the visit, the Joint Committee observed that online monitoring system was not installed, flow meter at outlet was not installed and only pH value was displayed on the SCADA. Total 22,331 nos. of household connection

has been done and more need to be given. Treated water was being discharged into the nallah which was again mixed with untreated drain and finally meeting with Kwari river. Nagar Nigam should be directed to adopt the practice of recycling and reuse of treated wastewater for agricultural/gardening purpose, water body rejuvenation, etc. There was a gap of 21.10 MLD (31.10-10.0MLD) between treatment capacity created and sewage received & treated. As the existing capacity of STP was 25 MLD, therefore a gap of 6.10 MLD with respect to existing treatment capacity of STP was identified.

As per analysis result, discharge level of BOD is 13 mg/l and fecal coliform is more than 1600 MPN/100ml was exceeding the prescribed limits of 10 mg/l and 230 MPN/100ml respectively as per order of Hon'ble NGT OA 1069/2018. The performance of STP with respect to COD and BOD is 62.76% and 53.57% respectively.

The brief outlines of the current status of compliance by Nagar Nigam, Morena on the issues of MSW generation, collection & processing and Sewage generation & treatment and initiatives taken to bridge the existing gap as observed on 7th August 2024 is summarized below:

S. No.	Particular	Status as per six monthly progress report submitted to Hon'ble NGT vide letter dated 12.03.2024 and presentation made on 11.03.2024.	Status observed by the Joint Committee during visit on 7thAugust 2024
1.	Municipal Solid Waste Management	Total solid waste generation is 79.19 TPD. There is no gap in generation and processing of MSW.	**A. MSW management in Morena** Total no. of wards in the city = *47* Total Solid waste generation in Morena city= *Approx. 89.5 TPD* Solid Waste Generation as per population = 109.44 TPD Details of MSW management (Door-to-door collection/ no. of vehicles/ segregation at source/ treatment of wet & dry waste/ legacy site) = *Door-to-door collection by 47 nos. of garbage collection vehicles with separate compartments for dry & wet waste. Segregation at source is very poor.*

			Current solid waste treatment facility- *There is Municipal solid waste processing facility provided at Jiwajiganj, Morena city.* Wet waste processing facility = *110 TPD (50 TPD at nearby MRF and 60 TPD at Nivi site)* Dry waste processing facility = *35 TPD* Gap= *19.94 TPD with respect to collection, transportation and treatment of solid waste.* ***B. Legacy Waste management*** *There were three legacy waste dumpsites at ITI, RTO and Nivi, Morena with approx. quantity 1.21 lacs MT. For the Bioremediation, Bio-mining and disposal of Residue waste of the 1.21 lacs MT legacy waste work order has been issued to M/s Core Project Engineers and Consultant Pvt. Ltd. on 29.12.2023. Work started on ground in December 2023 and as per work order completion timeline for remediation work was December 2024, however no new timeline has been given.* *Approx. 55 % of legacy waste has been remediated using bio-mining & bio-remediation and remediation work for balance quantity was halted since 04 June 2024 due to rainy season.*
2.	Sewerage network and Sewage treatment plants	There is only one operational STP present in the city with capacity of 25 MLD. Average utilized capacity is 15.40 MLD.	Total Sewage generation in the city= *31.10 MLD* Total present treatment capacity = 25 MLD Total utilized capacity of STPs = 10 MLD Present gap between treatment capacity created and sewage received & treated = 21.10 MLD (31.10-10.00 MLD) Gap in existing capacity = 6.10 MLD Major drains in the city= *There are 02 major drains in the city. As of now treated water from STPs and untreated sewage is being disposed in to the drains.*

			Total no. of household's zone-wise *=57331 no. including all zones* No. of household connected with sewerage network= 38.95 % *laying of sewerage network has been done rest is proposed under AMRUT 2.0 scheme.* Projects proposed under various schemes for Sewage treatment with timeline= *Total sewage network proposed in the city is 386 Km, out of which 151 Km has been laid. 235 Km of additional network is required.*

Observations of the Joint Committee:

1. The total Municipal Solid Waste generation in Morena city was reported as 79.14 TPD. As informed by Commissioner Nagar Nigam, the present Municipal Solid Waste generation in Morena city was 89.5 TPD, however as per the population of the city total solid waste generation should be 109.44 TPD. Hence, there was a gap of 19.94 TPD between actual reported and generation in the city for collection, transportation and processing. The existing solid waste processing facility was 110 TPD wet waste processing facility and 35 TPD dry waste processing facility which was sufficient for proper processing and safe disposal of municipal waste of the Morena city. As the gap identified between generation and actual collection, Nagar Nigam should develop a proper mechanism for collection and processing of waste before their safe disposal.
2. In Morena city the gap in generation and collection observed as 19.94 TPD. Whereas 100 % gap observed in processing. Though the city is having one MRF of 35 TPD capacity but during the visit the committee observed that it is not being used for the purpose from many days and not shown any record for its operation. During the visit it was found that all the unsegregated waste is being dumped at the legacy waste site Nivi.

3. Nagar Nigam Morena should take necessary steps for segregation of waste at door steps and their collection (dry & wet) so as to utilize the waste as per their utilization.
4. During the visit, it was found that no machinery was working at MRF, no fresh waste was seen at MRF, compost pits provided for processing of wet waste were being used for cow dung processing. Fresh waste was found dumped at Nivi legacy waste site.
5. Approx. 55 % legacy waste remediation had been completed and work for balance quantity was stopped since 04 June 2024 due to rainy season. On reclaimed land plantation had been done at Nivi site. Fresh waste was being dumped at landfill area. Nagar Nigam Morena should take necessary measures to assess the legacy waste and further processing of waste as per the MSW Rules. Nagar Nigam should also expedite the work of bio-mining & bio-remediation of legacy waste.
6. For disposal of inert, there was no sanitary land fill site available in the city, however inert were being disposed at low lying areas. Sanitary landfill at Nivi had been newly proposed.
7. Municipal solid waste treatment plant (MRF & Compressed bio gas) project has been proposed at Village Nivi, Morena with MRF Capacity 50 TPD and CBG capacity 75 TPD at total land of 4307 Sq m. Nagar Nigam may submit the report on the need of creation of additional treatment and processing facilities to CPHEEO keeping in view of already created infrastructures in the city for further examination so as to utilize the infrastructure efficiently and optimally. As the existing infrastructures were not operational properly, Nagar Nigam may be directed to submit the declaration to MPPCB for successful operation of the proposed plants with respect to the techno-economic feasibility.
8. As per population of the city, the total sewage generation should be 31.10 MLD and there was only one operational STP with installed capacity of 25 MLD. The utilized capacity of the STP was 10 MLD, hence there was a gap of 21.10 MLD (31.10-10.0MLD) between

treatment capacity created and sewage received & treated. As the existing capacity of STP was 25 MLD, therefore a gap of 6.10 MLD with respect to existing treatment capacity of STP was identified. The untreated domestic sewage from the households is being discharged directly into the municipal drains. Therefore, the Morena Nagar Nigam is required to expedite the laying of sewerage network and connection of households to the sewerage systems for proper collection and treatment of sewage so as to eliminate the discharging of untreated domestic sewage in to drains/rivers.

Photographs taken During Joint Committee Inspection of Morena City

	Joint Committee meeting at Nagar Nigam Morena
	Joint Committee visit at Material Recovery Facility, Morena
	Solid waste collection vehicles

	Material Recovery Facility center Morena
	Mixed waste at MRF
	Sorting of Dry waste at MRF

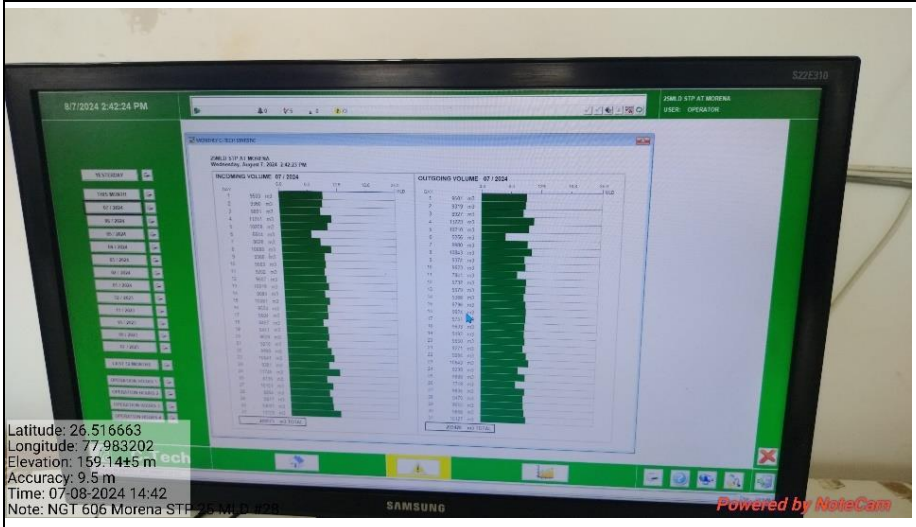
	Compost pits at waste processing unit
	Waste dumping yard
	Fresh waste dumped at Nivi legacy site

	Joint Committee visit at legacy waste site, Nivi, Morena
	Legacy waste site, Nivi, Morena
	Reclaimed land at legacy waste site, Nivi

	Compost pits at legacy waste site, Nivi
	Fecal sludge treatment plant at Nivi
	Sludge drying bed at FSTP

	Reclaimed legacy waste site at ITI, Morena
	Legacy waste site, RTO site, Morena
	Legacy waste dumped from ITI site to RTO site, Morena

	Legacy waste dumped near water body at RTO site, Morena
	Joint Committee visit at STP 25 MLD, Morena
	Inlet tank STP 25 MLD, Morena

	Aeration in SBR Basin STP 25 MLD
	Treated Water discharged into drain
	Online monitoring of STP

12. <u>Overall Conclusion:</u>

i. Based on the inputs made available during the site inspections undertaken in the above 5 cities (Jabalpur, Rewa, Ratlam, Gwalior and Morena) having various existing solid waste treatment facilities, the Joint Committee is not in agreement with the claim of the Deptt. of Urban Development & Housing, Govt. of Madhya Pradesh that 94% source segregation, 99.06% waste processing of solid waste and its management in the ULBs have been achieved as reported in the six monthly report submitted to the Hon'ble NGT.

ii. In all the cities visited by Joint Committee, there exists gap in the collection and treatment process of solid waste. Solid waste management facilities created are not being utilized at their full capacities due to poor operation & maintenance. Moreover, the authorities are more concerned about collection of solid waste rather than processing of waste.

iii. The Joint Committee observed the segregation of waste at solid waste processing facilities and fresh waste was dumped at legacy waste sites in Gwalior & Morena and mixed waste was dumped at the back side of Waste to Energy plant at Jabalpur due to poor functioning of plant.

iv. State Authority shall expedite the ongoing remediation work of legacy waste at various dumpsites with scientific manner ensuring all precautionary and safety measures to protect the environment. Proper provision should be made for the collection and treatment of leachate generated during the bio-remediation process.

v. The Joint Committee noticed that the source segregation of solid waste was not practiced in all the visited cities inspite of continuous efforts made by the implementing agency. However, 100% source segregation can be achieved only by awareness and voluntary responsible participation of all the residents of the concerned cities.

vi. The Committee has observed existence of few C&D waste management plants. However, State Authority shall ensure its sustainability by adopting suitable policy by promoting mandatory procurement of manufactured products from the C&D plants in certain percentage at fixed cost for fixed years by the ULBs for using in its constructions activities.

vii. Joint Committee observed very poor sewerage network along with the house service connections in the cities to collect and treat the

sewage. Collection and conveyance of sewage was being regulated through Nallah, which leads to the dilution of sewage and also possible mixing of storm water, which may lead ineffective / uneconomical treatment at any point of time. Most of STPs were operating under capacity and some of the STPs were yet to be made operational. Treated waste water shall be effectively reuse. In certain STPs it has been observed that treated waste water was being discharged in to the downstream of the same Nallah, where the sewage was tapped. State Authorities shall explore sustainable buyers for reuse of treated waste water.

13. City Specific Recommendations:

A. <u>Jabalpur:</u>

1. Residues (bottom ash and fly ash) generated from waste to energy plant should be disposed at scientific landfill site and solid waste dumped near waste to energy plant should be processed immediately.
2. As plant is designed based on the mass burning technique which is not functioning properly due to use of mixed waste as required calorific value is not being achieved, hence alternative for segregation of dry waste and wet waste should be explored with the concerned company which established the plant, dry waste may be used for burning in waste to energy plant so that required Calorific value may be achieved and wet waste may be processed for composting etc.
3. During the time of visit of the Joint Committee, ETP installed at waste to energy plant with capacity 50 m^3/day was not operational, the unit is required to treat the effluent in ETP installed and should not discharge effluent outside the premises.
4. In the month of December 2023, January 2024 and April 2024 gap in collection is 645.5 MT, 1931.5 MT and 157 MT respectively (average 911.33 MT for three months). Nagar Nigam should

ensure the proper collection of solid waste from Municipal area of Jabalpur.

5. There is average processing gap of 9196.33 MT from November 2023 to April 2024, which leads to accumulation of solid waste at the back side of waste to energy plant. Nagar Nigam should ensure the proper processing of solid waste in waste to energy plant and process all the solid waste accumulated back side of plant on priority basis.
6. JMC should be given direction by Hon'ble NGT to make waste to energy plant operational by providing desired amount of fresh waste, without mixing with inert, so as to get desired amount of calorific value of waste for its mass burning.
7. There was a lack of coordination between Jabalpur Nagar Nigam and operator of waste to energy plant to provide the facility of waste processing. Therefore, an officer should be designated by the State Government to work as mediator between JMC and plant official to resolve day to day issues.
8. Government of Madhya Pradesh should be directed by Hon'ble NGT to develop a suitable mechanism for financial arrangement within 3 months to make waste to energy plant operational so as to treat and dispose the waste of the city.
9. To bridge the gap in sewage collection and treatment, Nagar Nigam should expedite the work of laying of sewerage network and household connection, further to the STPs.
10. During the visit, Joint Committee observed that, there is approx. gap of 118.43 MLD with collection and treatment of sewage of the city. Nagar Nigam should take proper action to bridge the gap.
11. Nagar Nigam should get CTO from MPPCB for C&D waste processing plant and control fugitive emissions during the operation of plant and maintain proper logbooks of C&D waste processing Plant.

B. Rewa:

1. As there is gap of about 10.66 TPD of solid waste, Nagar Nigam should ensure the proper collection and treatment of solid waste from Municipal area of Rewa to bridge the gap.
2. As there was 100% gap with respect to collection and treatment of sewage, therefore Nagar Nigam should take proper action to bridge the gap.
3. Functioning of 12 MLD STP which is already existing should be made operational immediately.
4. Nagar Nigam should ensure that all under construction STPs be completed within the time limit.
5. Nagar Nigam should ensure proper collection of solid waste from the city to bridge the gap of solid waste collection.

C. Ratlam:

1. As there is gap of about 14.99 TPD of solid waste, Nagar Nigam should ensure the proper collection and treatment of solid waste from Municipal area of Ratlam to bridge the gap.
2. Urban Local Body (ULB) should take further action to remediate the legacy waste below the ground surface level (7-8 ft) till the complete bio-mining of legacy waste and completely reclaim the land.
3. Nagar Nigam may submit the report on the need of creation of additional treatment and processing facilities to CPHEEO keeping in view of already created infrastructures in Gwalior for further examination so as to utilize the infrastructure efficiently and optimally. As the existing infrastructures were not operational properly, Nagar Nigam Gwalior may be directed to submit the declaration to MPPCB for successful operation of the proposed plants with respect to the techno-economic feasibility.

4. To bridge the gap of sewage collection and treatment, the Ratlam Nagar Nigam need to expedite the commissioning of sewerage scheme along with household service connection to treat the entire sewage of the city to the desired standards so as to stop discharging the untreated sewage in the open drain.
5. During the visit, Joint Committee observed that, there is approx. gap of 24.31 MLD with collection and treatment of sewage of the city. Nagar Nigam should take proper action to bridge the gap.

D. <u>Gwalior:</u>

1. To bridge the gap of solid waste collection and treatment, the existing waste processing facilities should be operated at their full capacity with proper maintenance of infrastructures.
2. The Nagar Nigam Gwalior should develop sanitary land fill site for disposal of inerts generated from legacy waste remediation sites instead of dumping in Baran site low lying area. Nagar Nigam should take necessary action to get 'No objection certificate' from MPPCB for operation of Baran landfill site or close the raw waste dumping at this site. MPPCB should take necessary action, as per MSW Rules, against Nagar Nigam of Gwalior for illegal dumping of waste in the city.
3. Nagar Nigam should engage an agency for re-estimation of legacy waste and accordingly necessary steps should be adopted for bio-remediation and bio-mining of the waste. Nagar Nigam should take efforts to expedite for ongoing bio-mining process of dumped legacy waste.
4. Nagar Nigam may submit the report on the need of creation of additional treatment and processing facilities to CPHEEO keeping in view of already created infrastructures in Gwalior for further examination so as to utilize the infrastructure efficiently and optimally. As the existing infrastructures were not operational

properly, Nagar Nigam Gwalior may be directed to submit the declaration to MPPCB for successful operation of the proposed plants with respect to the techno-economic feasibility.

5. The Gwalior Nagar Nigam is required to expedite the laying of sewage network and connection of households to the sewerage systems for proper collection of sewage and its treatment so as to eliminate the discharge of untreated domestic sewage in to drains/rivers. This will also prevent the contamination of surface water as well as ground water in the city.

E. <u>Morena:</u>

1. Nagar Nigam should ensure source segregation of solid waste, and further collection & processing of solid waste as per SWM rules, 2016.
2. To bridge the gap of solid waste collection and treatment, the existing infrastructure should be used at its full capacity and work of new infrastructure proposed should be expedited.
3. Nagar should also ensure that the fresh waste is not being dumped at legacy waste site.
4. Remediation of legacy waste dumped at RTO site at bank of river Asan should be done at priority, as there would be chances of water contamination and also provision for leachate collection and treatment shall be made.
5. Nagar Nigam may submit the report on the need of creation of additional treatment and processing facilities to CPHEEO keeping in view of already created infrastructures in the city for further examination so as to utilize the infrastructure efficiently and optimally. As the existing infrastructures were not operational properly, Nagar Nigam may be directed to submit the declaration to MPPCB for successful operation of the proposed plants with respect to the techno-economic feasibility.

6. To bridge the gap of sewage collection and treatment, Nagar Nigam should expedite the work of laying and connection to the household with the sewage network, the existing facility of sewage treatment is not sufficient hence provision for expansion of existing STP or new STP should be proposed.

14. Common Recommendations:

(a) All the five Nagar Nigams should ensure source segregation of solid waste and further collection & processing of solid waste as per SWM rules, 2016.

(b) Various treatment facilities executed through third party shall be periodically monitored by the Madhya Pradesh Pollution Control Board to ensure proper operation of various utilities installed and compliance of various statutory requirements.

(c) Legacy waste should be processed as per CPCB guidelines and proper safety & firefighting measures should be taken to avoid any incident of fire at legacy waste site.

(d) Nagar Nigam should be directed to adopt proper tariff/ revenue model for creation of funds for maintaining the infrastructures created for municipal solid waste management and sewerage systems in the city.

(e) Madhya Pradesh State Authority may consider for laying of sewer network for collection of sewage and the same shall be directly linked to the STPs and shall ensure that the treated waste water is being discharged without mixing with untreated sewage.

(f) Stringent measures to be taken up by the MPPCB and CPCB for ensuring installation and proper functioning of online continuous effluent monitoring systems (OCEMS) at STPs and the real-time monitored data same shall be linked with the servers of MPPCB and CPCB.

(g) Treated effluents shall be utilized to the extent possible and shall be avoided discharging treated waste water in to the downstream of the same nallah where the sewage is being drawn.

(h) Operation and maintenance of STPs shall be carried out on regular basis to make STPs work efficiently.

(i) Nagar Nigam should ensure the conformity of outlet discharge parameters from all the STPs as per standards prescribed with respect to Hon'ble NGT order OA no. 1069/2018.

(j) For the time being, in-situ bioremediation may be adopted for the drains in which sewage of the city is being discharged.

(k) Nagar Nigam should make an effort to provide training and capacity building of the sanitary workers/staff engaged for solid waste handling and management.

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MoEF&CC,
Regional Office,
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(Dr. Ramakant)
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Central Pollution Control Board,
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क्षेत्रीय निदेशालय (मध्य), भोपाल
केन्द्रीय प्रदूषण नियंत्रण बोर्ड
(पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)

CM-13011/1/2024-LAW-RD Bhopal/17519/228-237

दिनांक: 09 मई, 2024

माननीय एन.जी.टी. प्रकरण

अति आवश्यक

प्रति,

सदस्य सचिव
म.प्र. प्रदूषण नियंत्रण बोर्ड
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भोपाल – 462 016

विषय: माननीय एनजीटी प्रिंसिपल बैंच, दिल्ली के प्र.क.–606/2018, माननीय एनजीटी द्वारा पारित आदेश दिनांक: 14/03/2024 के अनुपालन में जबलपुर एवं रीवा क्षेत्र का दौरा करने बाबत।

महोदय,

उपरोक्त विषयांतर्गत जबलपुर शहर का दौरा दिनांक: 14–15/05/2024 (दिनांक: 15/05/2024 को दिन में जबलपुर से 02:00 बजे संयुक्त समिति रीवा के लिए प्रस्थान करेगी तथा लगभग सायं: 07:00 बजे तक रीवा पहुंच जायेगी) एवं रीवा शहर का दौरा दिनांक 16–17/05/2024 (दिनांक: 17/05/2024 को दोपहर: 01:00 के बाद संयुक्त समिति जबलपुर होते हुये भोपाल प्रस्थान करेगी) के दौरान किया जायेगा। उक्त कार्य हेतु इस कार्यालय से अधोहस्ताक्षरकर्ता को नामित किया गया है। अतः आपसे अनुरोध है कि उक्त दौरे के दौरान माननीय एनजीटी द्वारा गठित संयुक्त समिति का सहयोग तथा यात्रा के आयोजन का समन्वय करने हेतु संबंधित अधिकारी को निर्देशित करने का कष्ट करें ताकि संयुक्त समिति द्वारा निर्धारित समय–सीमा के पूर्व निरीक्षण करके प्रतिवेदन माननीय एनजीटी के समक्ष प्रस्तुत किया जा सके।

भवदीय,

(पी. जगन)
क्षेत्रीय निदेशक

प्रतिलिपि:

1 सदस्य सचिव, के.प्र.नि.बो., दिल्ली
2 सुश्री दिव्या सिन्हा, Director & In-charge, UPC-II, के.प्र.नि.बो., दिल्ली
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4 श्री रमाकांत, डिप्टी एडवाईजर, CPHEEO, MoHUA, दिल्ली
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} की ओर कृपया सूचनार्थ।

6 आयुक्त, नगरीय प्रशासन एवं विकास, संचालनालय, भोपाल
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} कृपया जबलपुर तथा रीवा, नगर निगम आयुक्त से समन्वय करने बाबत।

8 श्री हेमंत शर्मा, डायरेक्टर, तकनीकी, म.प्र.प्र.नि.बो., भोपाल
9 श्री एस.पी. झा, कार्यपालन यंत्री, म.प्र.प्र.नि.बो., भोपाल

} 1. कृपया जबलपुर तथा रीवा यात्रा के आयोजन का समन्वय करने बाबत।
2. कृपया नगर निगम से समन्वय करने बाबत।

क्षेत्रीय निदेशक

O/C

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AC

क्षेत्रीय निदेशालय (मध्य), भोपाल
केन्द्रीय प्रदूषण नियंत्रण बोर्ड
(पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)

CM-13011/1/2024-LAW-RD Bhopal/17519/601

दिनांकः 04 जुलाई, 2024

माननीय एन.जी.टी. प्रकरण

अति आवश्यक

प्रति,

सदस्य सचिव
म.प्र. प्रदूषण नियंत्रण बोर्ड
पर्यावरण परिसर
ई–5, अरेरा कालोनी
भोपाल – 462 016

विषयः माननीय एनजीटी प्रिंसिपल बैंच, दिल्ली के प्र.क.–606/2018 द्वारा पारित आदेश दिनांकः 14/03/2024 के अनुपालन में रतलाम क्षेत्र का दौरा करने बाबत।

महोदय,

उपरोक्त विषयांतर्गत रतलाम शहर का दौरा दिनांकः 10/07/2024 (दिनांकः 09/07/2024 को रात्रि में माननीय एनजीटी द्वारा गठित संयुक्त समिति रतलाम पहुंच जायेगी) को किया जायेगा। अतः आपसे अनुरोध है कि उक्त दौरे के दौरान माननीय एनजीटी द्वारा गठित संयुक्त समिति का सहयोग तथा यात्रा के आयोजन का समन्वय करने हेतु संबंधित अधिकारी को निर्देशित करने का कष्ट करें ताकि संयुक्त समिति द्वारा निर्धारित समय–सीमा के पूर्व निरीक्षण करके प्रतिवेदन माननीय एनजीटी के समक्ष प्रस्तुत किया जा सके।

भवदीय,

(पी. जगन)
क्षेत्रीय निदेशक

प्रतिलिपिः

1 सदस्य सचिव, के.प्र.नि.बो., दिल्ली
2 सुश्री दिव्या सिन्हा, Director & In-charge, UPC-II, के.प्र.नि.बो., दिल्ली
3 डिविजनल हेड, विधि विभाग, के.प्र.नि.बो., दिल्ली
4 श्री रमाकांत, डिप्टी एडवाईजर, CPHEEO, MoHUA, दिल्ली
5 श्री विश्वबंधु मीणा, वैज्ञा.–डी, MoEF&CC, क्षेत्रीय कार्यालय, भोपाल

} की ओर कृपया सूचनार्थ।

6 आयुक्त, नगरीय प्रशासन एवं विकास, संचालनालय, भोपाल
7 श्री हिमांशु सिंह, जॉईंट डायरेक्टर (SBM) नगरीय प्रशासन एवं विकास, भोपाल

} कृपया रतलाम, नगर निगम आयुक्त से समन्वय करने बाबत।

8 श्री हेमंत शर्मा, डायरेक्टर, तकनीकी, म.प्र.प्र.नि.बो., भोपाल
9 श्री एस.पी. झा, कार्यपालन यंत्री, म.प्र.प्र.नि.बो., भोपाल

} 1. कृपया रतलाम यात्रा के आयोजन का समन्वय करने बाबत।
2. कृपया नगर निगम से समन्वय करने बाबत।

क्षेत्रीय निदेशक

पताः "परिवेश भवन"
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पूर्वी अर्जुन नगर, दिल्ली-110032
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क्षेत्रीय निदेशालय (मध्य), भोपाल
केन्द्रीय प्रदूषण नियंत्रण बोर्ड
(पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)

CM-13011/1/2024-LAW-RD Bhopal/17519/739

दिनांक: 19 जुलाई, 2024
माननीय एन.जी.टी. प्रकरण
अति आवश्यक

प्रति,

सदस्य सचिव
म.प्र. प्रदूषण नियंत्रण बोर्ड
पर्यावरण परिसर
ई–5, अरेरा कालोनी
भोपाल – 462 016

विषयः माननीय एनजीटी प्रिंसिपल बैंच, दिल्ली के प्र.क.–606/2018, माननीय एनजीटी द्वारा पारित आदेश दिनांकः 14/03/2024 के अनुपालन में ग्वालियर एवं गुरैना क्षेत्र का दौरा करने बाबत।

महोदय,

उपरोक्त विषयांतर्गत ग्वालियर शहर का दौरा दिनांकः 05–06/08/2024 एवं मुरैना शहर का दौरा दिनांक 07/08/2024 को किया जायेगा। अतः आपसे अनुरोध है कि उक्त दौरे के दौरान माननीय एनजीटी द्वारा गठित संयुक्त समिति का सहयोग तथा यात्रा के आयोजन का समन्वय करने हेतु संबंधित अधिकारी को निर्देशित करने का कष्ट करें ताकि संयुक्त समिति द्वारा निर्धारित समय–सीमा के पूर्व निरीक्षण करके प्रतिवेदन माननीय एनजीटी के समक्ष प्रस्तुत किया जा सके।

भवदीय,

क्षेत्रीय निदेशक

प्रतिलिपिः

1	सदस्य सचिव, के.प्र.नि.बो., दिल्ली	की ओर कृपया सूचनार्थ।
2	सुश्री दिव्या सिन्हा, Director & In-charge, UPC-II, के.प्र.नि.बो., दिल्ली	
3	डिविजनल हेड, विधि विभाग, के.प्र.नि.बो., दिल्ली	
4	श्री रमाकांत, डिप्टी एडवाईजर, CPHEEO, MoHUA, दिल्ली	
5	श्री विश्वबंधु मीणा, वैज्ञा.–डी, MoEF&CC, क्षेत्रीय कार्यालय, भोपाल	
6	आयुक्त, नगरीय प्रशासन एवं विकास, संचालनालय, भोपाल	कृपया ग्वालियर तथा मुरैना, नगर निगम आयुक्त से समन्वय करने बाबत।
7	श्री हिमांशु सिंह, जॉईंट डायरेक्टर (SBM) नगरीय प्रशासन एवं विकास, भोपाल	
8	श्री हेमंत शर्मा, डायरेक्टर, तकनीकी, म.प्र.प्र.नि.बो., भोपाल	1. कृपया ग्वालियर तथा मुरैना यात्रा के आयोजन का समन्वय करने बाबत।
9	श्री एस.पी. झा, कार्यपालन यंत्री, म.प्र.प्र.नि.बो., भोपाल	2. कृपया नगर निगम से समन्वय करने बाबत।

क्षेत्रीय निदेशक

के. 5/-

Hon'ble NGT case 606/2018, Jabalpur visit (14/05/2024)

	Name	Post	Dept.	Sign
1.	Vishwa Bandhu Meena	Scientist-D	MoEF&CC R.O. Bhopal	14/05/2024
2.	P. Jayan	Regional Director	CPCB RO Bhopal	
3.	Kamlesh Shivastava.	EE JMC	Nagar Nigam Jabalpur	
4.	Alok Jain	RO MPPCB	MPPCB Jabalpur	
5.	Bikishan Sharma	SUB Engg.-MPPCB	MPPCB, RO, Jabalpur	
6.	Sunil Kumar Singh	Project manager	P C Snehal const. Pvt Ltd.	
7.	Ajay Kumar Pandey	Resident Engineer.	Egis india Consultant PVT. LTD	
8.	Rupendra Kumar	Scientist 'B'	CPCB, RO Bhopal	Rupendra
9.	Dr. Y.K. Saxena	Scientist-C	CPCB, RO, Bhopal	
10.	Sayeed Parvez	A.E,	MPPCB Jbp RO	
11.	Smt. Preeti yadav (IAS)	Commissioner, JMC	JMC.	
12.	Sanjay Singh Kushwah	A.E.	JMC	

Hon'ble NGT case 606/2018, Rewa Visit (16/05/2024)

Name	Designation	Department	Signature
1. Dr. Ramakant	Deputy Adviser CPHEEO, MoHUA	M/o Housing and Urban Affairs, GOI	[signature]
2. Sanskriti Jain	Commissioner, RMC	Rewa Municipal Corp	[signature]
3. P. Jagan	Regional Director	CPCB, Bhopal	[signature]
4. Vishwa Bandhu Meena	Scientist, RO	MoEF&CC R.O. Bhopal	[signature]
5. Dr. P.S. Bundela	R.O. Katni, MP Pollution Control Board	MPPCB	[signature]
6. S.D. Baluik	RO M.P. Pollution Control Board Rewa	MPPCB	[signature]
7. Dr Achal Tiwari	J.S RO MPPCB Rewa	MPPCB	[signature]
8. Dr. Yogendra Kumar Saxena	Scientist-C	CPCB, RD Bhopal	Y. K. Saxena
9. H.K. Tripathi	EE SBM / Nodal Officer	M.C. Rewa	[signature]
10. S.L. Dahayat	EE (Sewer/PMAY)	M.C. Rewa	[signature] 16.05.2024
11. Rupendra Kumar	Scientist 'B'	CPCB, RD Bhopal	Rupendra
12) Murari Kumar	H.O	N.N Rewa	[signature]
13) Anchit Singh Baghel	Resident Engineer	PDMC	[signature]
14) Aadesh Patel	I.E.	RMC Rewa	[signature]
15) Abhinav Chaturvedi	Sub Engineer	RMC, Rewa	[signature]
16. Rajesh Mishra	AE	RMC Rewa	[signature]
17. Ashish Dwivedi	Ramky	Rewa Ramky	[signature]
18 Ravi Kumar	Dy PM.	Sewerage Contractor	[signature]
19. Vikash Pandey	Nagar Nigam	SBM	[signature]
20. Vinit Singh	ARE	PDMC	[signature] 16/05/2024
21. Nitin Sahu	J.E	I.E.	[signature]

PAGE NO.: 01
DATE: 10/7/24.

विषय :- NGT के निरीक्षण दल द्वारा रतलाम नगर से अवलोकित नगरीय ठोस अपशिष्ट व्यवस्थाओं के सत्यापन संबंधी रिपोर्ट बाबत् ।

आज दिनांक 10/7/2024 को NGT (नेशनल ग्रीन ट्रिब्यूनल) दल द्वारा नगरीय ठोस अपशिष्ट से संबंधित उपलब्ध व्यवस्थाओं का जमीनी सत्यापन हेतु रतलाम नगर के भ्रमण के पूर्व निगम के SBM सेल कार्यालय में व्यवस्थाओं से संबंधित संक्षिप्त प्रस्तुति रखी गई। जिसमें निगम की ओर से निम्न लिखित अधिकारी/कर्मचारी उपस्थित द्वारा।

(1) श्री हिमांशु भट्ट - आयुक्त, न.पा.नि. रतलाम

(2) श्री अनवर कुरैशी - नोडल अधिकारी (SBM)

(3) श्री शैलेश पाटीदार उपयंत्री

(4) श्री अरविन्द प्रताप सिंह (स्वा.अधि.)

10/7/24

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(5) श्री शिवम शुक्ला — उपयंत्री

(6) श्री मृणाल तिवारी उपयंत्री

(7) श्री बृजेश कुशवाह उपयंत्री

(8) श्री बलवंत अहिरवार स्व. स्वा. निरीक्षक

(9) श्री विनोद पाटीदार उपयंत्री

(10) श्री सुभाष पंडित जीवपालन मंत्री

(11) श्री भैयालाल धाकड़ उपयंत्री

(12) P. Jagan RA Bhopal

(13) डॉ. वाय. के. सक्सेना वैज्ञानिक-D CPCB, Bhopal

(14) रूपेन्द्र कुमार (CPCB, RD Bhopal) Rupendra

Hon'ble NGT case OA No. 606/2018, Gwalior Visit

Date of Inspection: Date : 05.08.2024 12:00 PM onwards

S.No.	Name	Designation	Department	Signature
1	HARSH SINGH P. Jagan	Commissioner Nagar Nigam Regional Director CPCB	GMC, Gwalior	
2	Dr. Ramakant	Deputy Adviser (PHE)	CPHEEO M/o Housing UA	
3.	Vijay Raj	Add Comm.	Nagar Nagam gwl	
4	R.K. Shukla	Executive Engineer	Nagar Nigam Gwalior	
5	Amar Satya Gupta	Deputy Commissioner & Nodal officer (SBM)	Nagar Nigam	
6.	Mahendra Agrawal.	AE	Nagar Nigam	
7.	Shelendra Saxena	Nodal officer. Workshop	Workshop	
8	Rakesh Kashyap	SB Redevelop Plan	SWM	
9	Pushpendra Shivastava	AE STP Plant	Nagar Nigam Gwalior	
10	Shraddha Sharma	SBM Consultant	SWM	
11	Devendra NIM	SBM consultant	SBM	
12	Salman Khan	Sub engineer	RO, MPPCB Gwalior	
13.	Shubham Sahu	AE, MPPCB	RO MPPCB Gwalior	
14.	Rupendra kumar	Scientist 'B'	CPCB. RD Bhopal	Rupendra
15.	Dr. Mrs. Saha	Scientist – E	MoEF&CC, RO Bhopal	
16.	Dr. Yogendra Kumar Saxena	Scientist-C	CPCB, BD	

17	R.R. Singh Sengar	Regional Officer	MPPCB, Gwalior	
18	R. Bandevaar	SSA	cpcb	
19	Pankaj Shukla	AE	GMC	
20	Suresh Kumar Ahirwar	EE	Municipal Corp. Gwalior	05/08/24
21	Deepali Pandey	EPCB. CMCAP Studies	Central pollution Control Board	
22.	Harsh Singh	Commissioner GMC.		

Hon'ble NGT case OA No. 606/2018, Morena Visit

Date of Inspection: 07/08/2024

S.No.	Name	Designation	Department	Signature
1	P. Jagan	Regional Director CPCB		
2	Dr. Ramakant	Deputy adviser (PHE)	CPHEEO/ MoHUA	
3.	DR. (MRS.) SATYA	Scientist – E	MoEF&CC, RO Bhopal	
4.	DEVENDRA	Comm. N.M.	N.M.C.	
5.	Dr. Y.K. Saxena	Scientist E	CPCB RD, Bhopal	Y.K. Saxena
6.	R.R. Singh Sengar	RO, MPPCB, Gwalior	RO, MPPCB Gwalior.	Sengar
7.	Rupendra kumar	Scientist 'B'	CPCB, RO Bhopal	Rupendra
8.	Shubham Sahu	Assistant Engineer	Regional office MPPCB Gwalior	
9.	Navneet Sharan	E.E	Nagar Nigam morena	
10.	Gazal Khanna	A.E	M.M.C	
11	Lalit Sharma	A.E	M.M.C	
12	Amarnath Vyas	Sub Engg.	M.M.C.	
13	RAJAT PACHORIYA	Sub. Engg.	M.M.C.	
14.	FARMAN KHAN	Sub. Engg.	Municipal Corporation morena	
15.	Pankaj Barajya	Sub. Engg.	Municipal Corporation Morena	Pankaj
16	SK. [illegible]	[illegible]	[illegible]	

17	Sagir Ahmed	S/E Nigam	9827314414	
18	Bhanupratap Tomar	S/E Nigam	9111116651	
19	Rishikesh Sharma	S/E Nigam	7725865116	
20	R. Bandewar	cpcb	9424949391	
21	Rohit Tomar	STPMO	9074389787	
22	Lakhan Rajput	SBM-Clerk	9171163186	
23	Indrajeet	SBM(CO)	7000050104	
24	V. SUNIL	SIIPL - Hyd	9550774747	
25	Limba bhai Raban	SIIPL - Hyd	8899999920	
26	[illegible]	HO	9827308686	
27	Dr. Parag			
28	Rajveer singh Dhakar	Consultant. SBM2.0	9399079221	
29	Manoj Delgamwar	Corp project	9860006934	
30	Gaurav Tiwari	CORP PROJECT	8208576276	
31	Giyanendra Dwivedi	Divine	8349698450	
32	Chandra Prakash Soni	Divine	8871633757	
33.	Abhishek behare	Sub Engineer (N.N)	8959260774	
34.	Shekhar Shrivastav	A.E.	7000142530	
35	Kailash Chand Batham	U.D.C N.N. Morena N.N. N	8305200858	

Annexure-2

- **Individually the kind of waste processing facilities set up and extent of their utilization.**

S. No.	Municipal Corporation Name	Total Waste Generation (TPD)	Total Waste Processed (TPD)	MRF (TPD)	Compost Plant (TPD)	CBG (TPD)	Waste to Energy (TPD, MW)	C&D (TPD)	Other Rejects	Dumpsite Status
1	Bhopal	818.8	818.8	505	457	5	-	100	556	Remediated
2	Burhanpur	60.63	60.63	25	54	-	-	1	5	Remediated
3	Chhindwara	64.12	64.12	55	102	-	-	7	5	Remediated
4	Dewas	109.34	109.34	65	80	-	-	18	18	Remediation work under process
5	Gwalior	484.3671	484.36	250	370	-	-	15	1	50 % Work completed will be remediated by March 2025
6	Indore	979	979	194	544	587	-	100	36	Remediated
7	Jabalpur	519.74	519.74	-	-	-	600, 11.5 MW	50		Remediated
8	Khandwa	43.38	43.38	50	60	-	-	3	0.58	50 % Work completed, will be remediated by March 2025
9	Morena	88.06	88.06	50	60	-	-	10	1	Dumpsite Status
10	Murwara (Katni)	121.45	121.45	60	90	-	-	20	1.5	Remediated
11	Ratlam	113.70	113.70	60	80	-	-	120	4	Remediated
12	Rewa	116.45	116.45	150	350	-	350,6 MW	50	10	55 % Work completed, will be remediated by March 2025
13	Sagar	123.12	123.12	175	175	-	-	20	2.4	40 % Work completed, will be remediated by March 2025
14	Satna	146	146	110	70	-	-	17	1.5	Remediated
15	Singrauli	99.58	99.58	150	70	-	-	30	82	Remediated
16	Ujjain	255.13	255.13	8	225	5	100 (RDF)	100	2	Remediated

- **Dumpsite status different cities**

S.No	Division	ULB Name	Legacy Waste to be remediated (in MT)	Timeline for Completion
1	Ratlam	Ratlam	316689	Jan 2025
2	Rewa	Rewa	82464	Jan 2025
3	Sagar	Sagar	NA	NA
4	Rewa	Satna	NA	NA
5	Singrauli	Singrauli	NA	NA
6	Ujjain	Ujjain	47698	March 2025

Annexure-3

➢ **Town Wise status for each district:-**

S.No	ULBName	ULBID	SW_Generation(TPD)	SW_Processed(TPD)	Processing Gap
1	AGAR	802237	10.32	10.32	0.00
2	BADAGAON_A	802235	0.81	0.81	0.00
3	BARODE	802236	4.19	4.19	0.00
4	KANAD	802238	1	1	0.00
5	NALKHEDA	802234	0.19	0	0.19
6	SOYATKALAN	802232	3.7	3.7	0.00
7	SUSNER	802233	3.68	3.68	0.00
8	ALIRAJPUR	802433	8.19	8.19	0.00
9	BHAVRA	802431	4.82	4.22	0.00
10	JOBAT	802432	1.94	0	1.92
11	AMARKANTAK	802421	1.61	1.61	0.00
12	ANUPPUR	802419	3.26	3.26	0.00
13	BANGAWAN (RAJNAGAR)	900691	4.84	4.84	0.00
14	BIJURI	802416	2.65	2.65	0.00
15	DOLA	900692	0.65	0.65	0.00
16	DUMARKACHAR	900693	1.29	1.29	0.00
17	JAITHARI	802420	1.94	1.94	0.00
18	KOTMA	802417	1.77	1.77	0.00
19	PASAN	802418	5	5	0.00
20	Bargawan (Amlai)	NA	7.8	2	2.79
21	ASHOKNAGAR	802408	15	15	0.00
22	CHANDERI	802407	3.39	3.39	0.00
23	ESAGARH	802406	5.26	5.26	0.00
24	MUNGAOLI	802409	7.2	7.2	0.00
25	PIPARAI	900682	3.6	3.6	0.00
26	SHADORA	900156	4.45	4.45	0.00
27	BAIHAR	802398	1.61	1.61	0.00
28	BALAGHAT	802397	30.68	30.68	0.00
29	KATANGI_B	802395	1.94	1.94	0.00
30	LANGI	802400	1.87	1.87	0.00
31	MALAJKHAND	802399	9.68	9.68	0.00
32	WARASEONI	802396	4.78	4.78	0.00
33	ANJAD	802286	3.32	3.32	0.00
34	BADWANI	802285	25.85	25.85	0.00
35	KHETIA	802290	3.4	3.4	0.00
36	NIWALI BURJURG	900677	3.55	3.55	0.00
37	PALSOOD	802288	3.06	3.06	0.00
38	PANSEMAL	802289	2.84	2.84	0.00
39	RAJPUR_M	802287	6.81	6.81	0.00
40	SENDHWA	802291	19.39	19.39	0.00
41	THIKARI	900678	3.26	3.26	0.00
42	AMLA	802340	10.06	10.06	0.00
43	ATHNER	802334	1.87	1.87	0.00
44	BETUL	802335	36.19	36.19	0.00
45	BETUL BAZAAR	802336	4.23	4.23	0.00

S.No	ULBName	ULBID	SW_Generation(TPD)	SW_Processed(TPD)	Processing Gap
46	BHAINSDEHI	802333	2.29	2.29	0.00
47	CHICHOLI	802337	1.21	1.21	0.00
48	GHODADOGRI	900702	1.74		1.74
49	MULTAI	802339	5.42	4.84	0.54
50	SARNI	802338	29.1	29.1	0.00
51	SHAHPUR	900703	2.48	2.48	0.00
52	AKODA	802091	3.48	3.48	0.00
53	ALAMPUR	802098	5.16	5.16	0.00
54	BHIND	802090	67.35	67.35	0.00
55	DABOH	802099	5.81	5.81	0.00
56	GOHAD	802094	8.39	8.39	0.00
57	GORMI	802093	7.06	7.06	0.00
58	LAHAR	802097	11.13	11.13	0.00
59	MALANPUR	900680	4.97	4.97	0.00
60	MAU	802095	6.87	6.87	0.00
61	MEHGAON	802092	6.71	6.71	0.00
62	MIHONA	802096	5.87	5.87	0.00
63	PHUPHKALAN	802089	3.35	3.35	0.00
64	RAUN	900681	3.1	3.1	0.00
65	BERASIA	802311	3.13	3.1	0.00
66	BHOPAL	802312	818.8	818.8	0.00
67	BURHANPUR	802439	60.63	60.63	0.00
68	NEPANAGAR	802441	0.21	0.21	0.00
69	SHAHPUR_B	802440	2.97	2.97	0.00
70	BADALMALHERA	802142	5.45	5.45	0.00
71	BIJAWAR	802145	6.55	6.29	0.00
72	BUXWAHA	802146	2.36	2.36	0.00
73	CHANDALA	802134	1.68	1.68	0.00
74	CHHATARPUR	802139	32	32	0.00
75	GADIMALHARA	802137	3.94	3.94	0.00
76	GHUWARA	802143	4.04	4.04	0.00
77	HARPALPUR	802135	5.23	5.23	0.00
78	KHAJURAO	802141	9.55	9.55	0.00
79	LAVKUSH NAGAR	802133	4.71	4.71	0.00
80	MAHARAJPUR	802138	5.14	5.14	0.00
81	NOGAON	802136	9.2	9.2	0.00
82	RAJNAGAR	802140	3.13	3.13	0.00
83	SATAI	802144	4.19	4.19	0.00
84	WARIGARH	802132	2.85	2.85	0.00
85	AMARWARA	802377	4.56	4.56	0.00
86	BADKUHI	802385	2.66	2.66	0.00
87	BICHHUUA	900160	2.08	2.08	0.00
88	CHAND	900161	2.45	2.45	0.00
89	CHANDAMETA BUTARIA	802384	4.21	4.21	0.00
90	CHHINDWARA	802386	64.13	64.13	0.00
91	CHORAI	802379	1.48	1.48	0.00
92	DAMUA	802381	9.1	9.1	0.00

S.No	ULBName	ULBID	SW_Generation(TPD)	SW_Processed(TPD)	Processing Gap
93	DONGAR PARASIYA	802383	10.23	10.23	0.00
94	HARRAI	802378	2.55	2.55	0.00
95	JUNNARDEO	802380	5.26	5.26	0.00
96	LODHIKHEDA	802389	3.55	3.55	0.00
97	MOHGAON	802388	3.25	3.25	0.00
98	NEWTONCHIKHLI	802382	2.11	2.11	0.00
99	PANDHURNA	802391	13.55	13.55	0.00
100	PIPLANARAYANWAR	802390	2.24	2.24	0.00
101	SAUSAR	802387	4.84	4.84	0.00
102	DAMOH	802167	26	26	0.00
103	HATTA	802164	6.41	6.41	0.00
104	HINDORIYA	802166	2.78	2.78	0.00
105	PATERA	900165	5.87	5.87	0.00
106	PATHARIYA	802165	7.61	7.61	0.00
107	TENDUKHEDA_D	802168	4.03	4.03	0.00
108	BADONI	802110	3.42	3.42	0.00
109	BHANDER	802111	9.87	9.87	0.00
110	DATIA	802109	39.39	39.39	0.00
111	INDERGARH_MP	802108	9.61	9.61	0.00
112	SEONDHA	802107	10	10	0.00
113	BAGLI	802254	2.9	2.9	0.00
114	BHAURASA	802245	2.26	2.22	0.00
115	DEWAS	802248	109.35	109.35	0.00
116	HATPIPLIYA	802255	4.11	4.11	0.00
117	KANNOD	802249	3.89	3.89	0.00
118	KANTHAPHOD	802251	1.42	1.42	0.00
119	KARNAWAD	802253	2.9	2.9	0.00
120	KHATEGAON	802256	3.97	3.97	0.00
121	LOHARDA	802250	2.6	2.6	0.00
122	NEEMAWAR	900166	1.84	1.84	0.00
123	PIPALRAWAN	802247	2.61	2.56	0.00
124	SATWAS	802252	3.7	3.7	0.00
125	SONKATCH	802246	3.12	3.09	0.00
126	TONKHURD	802244	2.4	2.38	0.00
127	BADNAWAR	802257	5.21	5.21	0.00
128	DAHI	802264	2.31	2.31	0.00
129	DHAMNOD_D	802266	4.35	4.35	0.00
130	DHAR	802260	33.55	33.55	0.00
131	DHARAMPURI	802267	5.31	5.31	0.00
132	KUKSHI	802263	7.7	7.7	0.00
133	MANAVAR	802265	9.52	9.52	0.00
134	MANDAV	802262	2.99	2.99	0.00
135	PITHAMPUR	802261	40.97	40.97	0.00
136	RAJGARH_D	802258	7.19	7.19	0.00
137	SARDARPUR	802259	2.74	2.74	0.00
138	DINDORI_D	802371	4.26	4.26	0.00
139	SHAHPURA_D	802370	2.51	2.51	0.00
140	ARON	802404	2.28	2.28	0.00

S.No	ULBName	ULBID	SW_Generation(TPD)	SW_Processed(TPD)	Processing Gap
141	CHACHODABINAGANJ	802405	5.73	5.73	0.00
142	GUNA	802401	58.06	58.06	0.00
143	KUMBHRAJ	802403	7.13	7.13	0.00
144	MADHUSUDANGARH	900683	2.26	2.26	0.00
145	RADHOGARH	802402	10.68	10.68	0.00
146	ANTRI	802106	4.03	4.03	0.00
147	BILAUA	802102	3.9	3.9	0.00
148	BITARWAR	802105	6.13	6.13	0.00
149	DABRA	802104	26.28	26.28	0.00
150	GWALIOR	802100	484.37	484.37	0.00
151	MOHNA	900684	3.61	3.61	0.00
152	PICHHORE	802103	5.32	5.32	0.00
153	HARDA	802342	23.23	23.23	0.00
154	KHIRKIYA	802341	4.52	4.52	0.00
155	SIRALI	900704	4.11	4.11	0.00
156	TIMARNI	802343	3.03	3.03	0.00
157	BABAI	802347	3.65	3.65	0.00
158	HOSHANGABAD	802346	23.55	23.55	0.00
159	ITARSI	802345	19.77	19.77	0.00
160	PIPARIYA_M	802349	3.16	3.16	0.00
161	SEONI MALWA	802344	4.77	4.77	0.00
162	SOHAGPUR	802348	3.88	3.88	0.00
163	VANKHEDI	900171	2.97	2.97	0.00
164	BETMA	802270	4.2	4.2	0.00
165	DEPALPUR	802269	9.68	9.68	0.00
166	GAUTAMPURA	802268	5.03	5.03	0.00
167	HATHOD	802271	2.9	2.89	0.00
168	INDORE	802273	979	979	0.00
169	MANPUR	802277	3.02	3.02	0.00
170	MHOWGAON	802276	7.35	7.35	0.00
171	RAU	802274	13.29	13.29	0.00
172	SANWER	802272	3.39	3.39	0.00
173	BERALA_M	802363	4.37	4.37	0.00
174	BHEDAGHAT	802362	2	2	0.00
175	JABALPUR	802361	519.74	519.74	0.00
176	KATANGI_J	802357	5.21	5.21	0.00
177	MANJHOLI_J	802356	3.55	1.87	0.00
178	PANAGAR	802364	15.48	7.04	0.01
179	PATAN_MP	802358	4.67	3.33	0.00
180	SHAHPUR BHITONI	802359	3.68	3.68	0.00
181	SIHORA	802355	15	15	0.00
182	JHABUA	802429	8.48	8.48	0.00
183	MEGHNAGAR	900157	4.35	4.35	0.00
184	PETLAWAD	802428	5.29	5.29	0.00
185	RANAPUR	802430	3.61	3.61	0.00
186	THANDLA	802427	3.71	3.71	0.00
187	CHHANERA	802434	4.04	4.03	0.00
188	KHANDWA	802435	43.39	43.39	0.00

S.No	ULBName	ULBID	SW_Generation(TPD)	SW_Processed(TPD)	Processing Gap
189	MUNDI	802437	7.1	7.1	0.00
190	OMKARESHWAR	802436	3.57	3.56	0.00
191	PANDHANA	802438	3.84	3.84	0.00
192	Punasa	NA	3.92	0.	1.20
193	BARWAHA	802278	7.82	7.82	0.00
194	BHIKANGAON	802283	4.06	4.06	0.00
195	BISTAAN	900679	2.88	2.83	0.00
196	KARHI PANDLYA	900158	5.42	0.03	5.39
197	KASRAWAD	802282	6.68	6.68	0.00
198	KHARGONE	802284	38.97	38.97	0.00
199	MAHESHWAR	802280	6.74	6.74	0.00
200	MANDLESHWAR	802281	3.48	3.48	0.00
201	SANAWAD	802279	11.89	11.89	0.00
202	BAMHANI	802374	5.11	5.11	0.00
203	BHUA BHICHHIA	802375	4.87	4.87	0.00
204	MANDLA	802373	19.03	19.03	0.00
205	NAINPUR	802376	9.5	9.5	0.00
206	NIWAS	802372	2.81	2.81	0.00
207	BHAINSODA MANDI	900701	2.73	2.68	0.00
208	BHANPURA	802205	4.58	4.58	0.00
209	GAROTH	802209	1.29	1.29	0.00
210	MALHARGARH	802206	0.94	0.94	0.00
211	MANDSAUR	802211	44.98	44.98	0.00
212	NAGRI_M	802212	1.43	1.43	0.00
213	NARAYANGARH	802207	0.65	0.65	0.00
214	PIPALYA MANDI	802208	2.05	2.05	0.00
215	SHYAMGARH	802210	0.32	0.32	0.00
216	SITAMAU	802213	1.17	1.17	0.00
217	SUWASRA	802214	1.19	1.19	0.00
218	AMBAH	802081	11.29	11.29	0.00
219	BAMORE	802084	12.45	12.45	0.00
220	JAURA	802085	10.94	10.94	0.00
221	JHUNDPURA	802087	4.06	4.06	0.00
222	KAILARAS	802086	10.94	10.94	0.00
223	MORENA	802083	88.06	88.06	0.00
224	PORSA	802082	10.87	10.87	0.00
225	SABALGARH	802088	10.52	10.52	0.00
226	BARHI	802352	3.48	3.48	0.00
227	KATNI	802351	121.45	121.45	0.00
228	KYMORE	802353	3.73	3.73	0.00
229	VIJAY RADHOGARH	802354	3.44	3.44	0.00
230	CHICHLI	900163	3.03	3.03	0.00
231	GADARWARA	802366	11.5	11.5	0.00
232	GOTEGAON	802365	6.69	6.69	0.00
233	KARELI	802368	9.78	9.78	0.00
234	NARSINGHPUR	802367	12.81	12.81	0.00
235	SAINKHEDA	900159	3.19	3.19	0.00
236	SALICHOKA	900162	3.26	3.26	0.00

S.No	ULBName	ULBID	SW_Generation(TPD)	SW_Processed(TPD)	Processing Gap
237	TENDUKHEDA_N	802369	3.19	3.18	0.00
238	ATHANA	900167	1.24	1.24	0.00
239	DIKEN	802196	1.69	1.69	0.00
240	JAWAD	802197	2.2	2.2	0.00
241	JEERAN	802201	0.16	0.16	0.00
242	KUKDESHWAR	802204	0.08	0.08	0.00
243	MANASA	802203	5.53	5.52	0.00
244	NAYAGAON	900168	1.24	1.24	0.00
245	NEEMUCH	802200	29.68	29.68	0.00
246	RAMPURA	802202	2.4	2.4	0.00
247	RATANGARH_N_M	802199	0.65	0.65	0.00
248	SARWANIA MAHARAJ	900169	0.49	0.49	0.00
249	SINGOLI	802198	0.93	0.93	0.00
250	JERON KHALSA	802122	2.99	2.99	0.00
251	NIWARI	802120	2.45	2.45	0.00
252	ORCHHA	802121	3.81	3.81	0.00
253	PRITHVIPUR	802123	4.6	4.6	0.00
254	TARICHARKALA	802119	2.81	2.81	0.00
255	AJAIGARH	802147	4.66	4.66	0.00
256	AMANGANJ	802151	4.04	4.04	0.00
257	DEVENDRA NAGAR	802149	4.41	4.41	0.00
258	GUNNOR	900696	4.55	4.55	0.00
259	KIKRATHI	802150	4.45	4.45	0.00
260	PANNA	802148	10.35	10.35	0.00
261	PAWAI	802152	4.39	4.39	0.00
262	BAADI	802330	5.6	5.6	0.00
263	BARELI	802329	5	5	0.00
264	BEGUMGANJ	802325	4.03	4.03	0.00
265	GAIRATGANJ	802324	2.26	2.26	0.00
266	MANDIDEEP	802327	8.42	8.42	0.00
267	OBEDULLAGANJ	802328	6.07	6.07	0.00
268	RAISEN	802323	5.15	5.15	0.00
269	SANCHI	802322	2.94	2.94	0.00
270	SILWANI	802331	3.87	3.87	0.00
271	SULTANPUR_R	802326	3.1	3.1	0.00
272	UDAIPURA	802332	4.96	4.96	0.00
273	Deori	NA	4.54	0.	2.93
274	BIAORA	802299	6.56	6.56	0.00
275	BODA	802302	0.97	0.97	0.00
276	CHHAPIHEDA	802295	1.01	1.01	0.00
277	JEERAPUR	802293	2.47	2.47	0.00
278	KHILCHIPUR	802294	2.13	2.13	0.00
279	KHUJNER	802297	1.03	1.03	0.00
280	KURAWAR	900154	1.27	1.27	0.00
281	MACHALPUR	802292	1	1	0.00
282	NARSINGHGARH	802301	4.86	4.86	0.00
283	PACHORE	802303	7.63	7.55	0.00
284	RAJGARH_R	802296	4.75	4.75	0.00

S.No	ULBName	ULBID	SW_Generation(TPD)	SW_Processed(TPD)	Processing Gap
285	SARANGPUR	802300	4.76	4.76	0.00
286	SUTHALIA	802298	3.23	3.23	0.00
287	TALEN	802304	1.07	1.07	0.00
288	ALOT	802218	6.77	6.77	0.00
289	BADAWADA	802217	1.48	1.48	0.00
290	DHAMNOD_R	802223	2.9	2.9	0.00
291	JAWARA	802216	18	18	0.00
292	NAMLI	802221	2.3	2.3	0.00
293	PIPLODHA	802215	2.19	2.19	0.00
294	RATLAM	802222	113.7	113.7	0.00
295	SAILANA	802220	1.29	1.29	0.00
296	TAL	802219	2.91	2.91	0.00
297	BAIKUNTHPUR_M	802183	3.06	3.06	0.00
298	CHAKGHAT	802180	2.58	2.58	0.00
299	DABHOURA	900690	0.05	0	0.05
300	GOVINDGARH	802190	2.45	2.45	0.00
301	GURH	802191	1.81	0	1.81
302	HANUMANA	802186	2.26	2.23	0.00
303	MANGAVA	802184	2.48	2.48	0.00
304	MAUGANJ	802187	8.06	8.06	0.00
305	NAI GARHI	802188	2.16	2.16	0.00
306	REWA	802189	116.45	116.45	0.00
307	SEMARIA	802185	2.02	2.02	0.00
308	SIRMOUR	802182	3.16	3.16	0.00
309	THEOTHAR	802181	3.13	3.13	0.00
310	BAANDRI	900697	6.26	6.26	0.00
311	BANDA	802155	7.44	7.44	0.00
312	BILHARA	900698	4.58	4.58	0.00
313	BINA ETAWA	802153	16.81	16.81	0.00
314	DEORI_S	802163	6.29	6.29	0.00
315	GARHAKOTA	802161	7.08	7.08	0.00
316	KHURAI	802154	21.81	21.81	0.00
317	MAKRONIA	900172	8.87	8.87	0.00
318	MALTHAUN	900699	3.87	3.87	0.00
319	RAHATGARH	802157	9.03	9.03	0.00
320	REHLI	802162	3.95	3.95	0.00
321	SAGAR	802159	123.12	123.12	0.00
322	SHAHGARH	802156	5.87	5.87	0.00
323	SHAHPUR_S	802158	4.92	4.92	0.00
324	SURAKHI	900700	5.39	5.39	0.00
325	Karrapur	NA	6.8	0.	3.29
326	Sagar	NA	7.86	2.9	1.63
327	AMARPATAN	802178	4.1		4.10
328	BIRSINGHPUR	802172	3.29	3.29	0.00
329	CHITRAKOOT	802171	2.9	2.9	0.00
330	JAITWARA	802173	0.97	0.97	0.00
331	KOTAR	802177	2.19	2.19	0.00
332	KOTHI	802169	2.9	2.9	0.00

S.No	ULBName	ULBID	SW_Generation(TPD)	SW_Processed(TPD)	Processing Gap
333	MAIHAR	802179	5.4	5.4	0.00
334	NAGOD	802174	8.36	8.36	0.00
335	NEW RAMNAGAR	900164	3.48	3.48	0.00
336	RAMPUR BHAGHELAN	802176	3.61	3.61	0.00
337	SATNA	802170	146	146	0.00
338	UCHEHRA	802175	3.06	3.06	0.00
339	ASHTA_MP	802315	12.96	12.96	0.00
340	BUDNI	802320	5.59	5.59	0.00
341	ICHHAWAR	802318	1.55	1.55	0.00
342	JAWAR	802317	2.32	2.28	0.01
343	KOTHRI	802316	3.55	3.55	0.00
344	NASRULLAGANJ	802319	3.65	3.65	0.00
345	REHTI	802321	2.65	2.65	0.00
346	SEHORE	802314	23.23	23.23	0.00
347	SHAHGANJ	900127	3.38	3.38	0.00
348	BARGHAT	802394	2.58	2.58	0.00
349	CHAPARA	900688	2.58	2.58	0.00
350	KEWLARI	900689	2.58	2.58	0.00
351	LAKHNADOAN	802392	3.65	3.65	0.00
352	SEONI_M	802393	19.35	19.35	0.00
353	BAKHO	900694	0.65	0.65	0.00
354	BEOHARI	802411	2.9	2.52	0.00
355	BURHAR	802414	2.92	2.92	0.00
356	DHANPURI	802415	6.73	6.73	0.00
357	JAYSINGH NAGAR	802412	1.83	1.83	0.00
358	KHAND	802410	2.09	2.09	0.00
359	SHAHDOL	802413	25.57	25.57	0.00
360	AKODIA	802242	3.28	3.28	0.00
361	MAKSHI	802240	3.57	3.53	0.00
362	PALAYKALA	802243	3.39	3.39	0.00
363	PANKHEDI KALAPIPAL	900170	2.65	2.65	0.00
364	SHAJAPUR	802239	21.13	21.13	0.00
365	SHUJALPUR	802241	13.71	13.71	0.00
366	BADODA	802080	8.1	8.1	0.00
367	BIJAYPUR	802078	6.16	6.16	0.00
368	SHEOPUR	802079	12.72	12.72	0.00
369	BADARWAS	802116	2.1	2	0.10
370	BAIRAD	900155	5.42	5.42	0.00
371	KARERA	802114	6.52	6.52	0.00
372	KHANIADHANA	802118	4.58	4.58	0.00
373	KOLARAS	802115	2.26	2.26	0.00
374	MANGRAUNI	900685	4.35	4.35	0.00
375	NARWAR	802113	7.39	7.39	0.00
376	PICHHOR	802117	7.74		7.74
377	POHARI	900686	5.29	5.29	0.00
378	RANNOD	900687	3.48	3.48	0.00
379	SHIVPURI	802112	101.92	101.92	0.00

S.No	ULBName	ULBID	SW_Generation(TPD)	SW_Processed(TPD)	Processing Gap
380	CHURHAT	802423	4	4	0.00
381	MANJHOLI_S	802425	1.94	1.94	0.00
382	RAMPURNEKIN	802422	3.19	3.19	0.00
383	SIDDHI	802424	11.54	11.54	0.00
384	SINGRAULI	802426	99.58	99.58	0.00
385	Sarai	NA	7.73	2.1	2.93
386	Bargawan		9.58	3.2	2.39
387	BADAGAON_T	802131	1.99	1.99	0.00
388	BALDEVGARH	802127	3.04	3.04	0.00
389	JATARA	802125	3.67	3.67	0.00
390	KARI	802129	3.94	3.94	0.00
391	KHARGAPUR	802128	4.33	4.33	0.00
392	LIDHORAKHAS	802124	4.1	4.1	0.00
393	PALERA	802126	4.23	4.23	0.00
394	TIKAMGARH	802130	12.8	12.8	0.00
395	BADNAGAR	802231	6.77	6.77	0.00
396	KHACHROD	802224	6.11	6.11	0.00
397	MAHIDPUR	802227	0.51	0.51	0.00
398	MAKDONE	802229	2.48	2.48	0.00
399	NAGDA	802225	11.68	11.68	0.00
400	TARANA	802228	2.9	2.9	0.00
401	UJJAIN	802230	255.13	255.13	0.00
402	UNHEL	802226	3.52	3.45	0.06
403	CHANDIA	802193	2.19	2.16	0.00
404	MANPUR-U	900695	3.35	3.35	0.00
405	NAWROZABAD	802195	2.66	2.66	0.00
406	PALI_M	802194	4.26	4.2	0.00
407	UMARIYA	802192	10.06	9.93	0.00
408	GANJBASODA	802308	9.26	9.25	0.00
409	KURWAI	802307	2.06	2.06	0.00
410	LATERI	802305	2.86	2.83	0.00
411	SHAMSHABAD	802309	3.2	3.2	0.00
412	SIRONJ	802306	4.82	4.82	0.00
413	VIDISHA	802310	61.29	61.29	0.00

Annexure-4

Details of Under Construction STPs in the State

Annexure- 8

S. No.	Name of ULBs	Location	Capacity of the Plant in MLD	Physical Progress in Aug %	Status	Completion Timeline	Scheme	Cost (Cr)
1	Guna	P H E Guest House	7.6	95	Work in progress	Dec-24	AMRUT	81.09
2	Guna	Saket Pura	14.65	96	Work in progress	Dec-24		
3	Murwara (Katni)	Madhav Nagar	7.5	72	Balance Work in progress	Dec-24		121.57
4	Murwara (Katni)	Katyaghat	6	8	Balance Work in progress	Dec-24		
5	Murwara (Katni)	Kuthla Bus Stand	11	8	Balance Work in progress	Dec-24		
6	Rewa	Vivekanand Nagar Nallah	6.5	58	Balance Work in progress	Mar-25		244.53
7	Rewa	Bichiya Laxman Bagh Road	6.5	40	Balance Work in progress	Mar-25		
8	Rewa	Vibhishan Nagar	3	-	Land issue	Mar-25		
9	Rewa	Laxman Bagh Road	9	33	Balance Work in progress	Mar-25		
10	Rewa		12		STP completed under JNNURM, Network Under AMRUT remaining	Mar-25		
11	Satna	Zone I Dhawari	15	86	Balance Work in progress	Dec-24		215.89
12	Satna	Zone II Nazirabad Mela Mod	16	57	Balance Work in progress	Dec-24		
13	Satna	Zone III Kripalpur	11	70	Balance Work in progress	Dec-24		
14	Singrauli	Ward 43 Near Nirvah Colony	11	85	Balance Work in progress.	Dec-24		126.33
15	Singrauli	Ward 29 Near Devera Village	10	23	Balance Work in progress.	Mar-25		
16	Singrauli	Ward 32 Navjivan Vihar Colony	10	46	Balance Work in progress.	Dec-24		
17	Jabalpur (Civil Lines)	Civil Line	5	2	Work in progress	Dec-24		
18	Chhindwara	Ward No.35	28	99	Work in progress	Sep-24	World Bank	218.45
19	Maheshwar	Maheshwar	4.91	48	Work in progress	Dec-24		44.83
20	Nasrullaganj	Ward No.6	4.2	99	Work in progress	Sep-24		39.01
21	Shahdol	Near Murna Nalla	17	75	Work in progress	Dec-24		172.61
22	Mandleshwar	Mandleshwar	3	86	Work in progress	Sep-24		23.27

Details of Under Construction STPs in the State

Annexure-8

S. No.	Name of ULBs	Location	Capacity of the Plant in MLD	Physical Progress in Aug %	Status	Completion Timeline	Scheme	Cost (Cr)
23	Nemawar	Village Nemawar	1	53	Work in progress	Sep-24		12.72
24	Chitrakoot	Village Manjhgawa	4.7	99	Work in progress	Oct-24		35.19
25	Dindori	Vill-Sukharmaal	3.85	95	Work in progress	Sep-24		26.75
26	Hoshangabad	Kishanpur, Rashulia	21	22	Work in progress	Nov-24		170.98
27	Mandla	Ward No. 23,	7.75	66	Work in progress	Apr-25		107.72
28	Mandla	Village Gaunjhi	1.75	66	Work in progress	Apr-25	KFW	
29	Narsingpur	Dedwara Region, Near WTP	6.25	78	Work in progress	Sep-24		105.46
30	Narsingpur	Naktua Region, Near Jail	2.75	78	Work in progress	Sep-24		
31	Badwani	Bheelkhera	9	60	Work in progress	Jun-25		105.18
32	Sendhwa	Village Semalia	8.5	60	Work in progress	Dec-24		78.55
33	Barwaha	Near Trenching Ground, Ward no. 2, Barwaha	3.75	67.5	Work in progress	Oct-24	ADB	43.95
34	Anjad	Gram Panchayat Palasia, Anjad	3.66	86	Work in progress	Oct-24	ADB	30.56
35	Saikheda	Ward no. 14, near Girl's Hostel, Saikheda,	2.6	96	Work in progress	Sep-24	ADB	33.74
36	Sanavad	Sanavad	5.58	26	Work in progress	Dec-24	ADB	43.95
37	Khajuraho	Khajuraho	4.56	-	Work in progress	Aug-26	ADB	93.59
38	Rajnagar	Rajnagar	2.82	-	Work in progress	Aug-26	ADB	
39	Maihar	Maihar	14.5	-	Work in progress	Sep-26	ADB	145.83
40	Sanchi	Sanchi	2.1	-	Work in progress	Jul-27	ADB	
41	Dhamnod	Dhamnod	6.68	12	Work in progress	Aug-26	ADB	
42	Unhel	Unhel	1	0	Work in progress	Aug-26	SBM 2.0	5.3
43	Alirajpur	Alirajpur	3	0	Work in progress	Aug-26	SBM 2.1	6.82
44	Meghnagar	Meghnagar	0.45	0	Work in progress	Aug-26	SBM 2.0	3.84
45	Meghnagar	Meghnagar	0.55	0	Work in progress	Aug-26	SBM 2.0	

Details of Under Construction STPs in the State

Annexure-8

S. No.	Name of ULBs	Location	Capacity of the Plant in MLD	Physical Progress in Aug %	Status	Completion Timeline	Scheme	Cost (Cr)
46	Mangrauni	Mangrauni	1	0	Work in progress	Sep-26	SBM 2.0	5.82
47	Maksi (NP)	Maksi (NP)	1.6	0	Work in progress	Aug-26	SBM 2.0	5.2
		Total Capacity (MLD)	**339.26**					**2348.73**

Annexure-5

Annexur

S. No.	ULB	Population in 2020	Waste water generation in (MLD)	Treatment facility available	Average capacity being utilized	Untreated Waste water in MLD	Under Constrution STP	Complition time line	Name of the Schemes	Remark
1	Betul	115101	12.43	0		-12.43			Amrut 2.0	DPR under preparation in Amrut 2.0
2	Bhind	236912	25.59	12	7.21	-13.59			Amrut	DPR under preparation in Amrut 2.0
3	Bhopal	2151532	232.37	177.6	107.64	-54.77			Amrut	Under tendering in Amrut 2.0
4	Burhanpur	256910	27.75	25.5	14.38	-2.25			Amrut	Under tendering in Amrut 2.0
5	Chattarpur	160593	17.34	0		-17.34			Amrut	DPR under preparation in Amrut 2.0
6	Chhindwara	197235	21.30	28	14	6.70			MPUDC- World Bank	Under tendering in Amrut 2.0
7	Dabra	72768	7.86	0		-7.86			Amrut	DPR under preparation in Amrut 2.0
8	Damoh	157693	17.03	0		-17.03			Amrut	DPR under preparation in Amrut 2.0
9	Datia	119089	12.86	12	3.37	-0.86			Amrut	DPR under preparation in Amrut 2.0
10	Dewas	328280	35.45	48	14.17	12.55			Amrut	Under tendering in Amrut 2.0
11	Guna	214864	23.21	0		-23.21	22.25	Dec-24	Amrut	DPR under preparation in Amrut 2.0
12	Gwalior	1252145	135.23	222	138.81	86.77			Amrut	DPR under preparation in Amrut 2.0
13	Hoshangabad	131429	14.19	0		-14.19	21.00	Nov-24	MPUDC-KFW	DPR under preparation in Amrut 2.0
14	Indore	2429654	262.40	412	376.37	149.60			Amrut	NMCG project awarded. AMRUT 2.0 DPR approved
15	Jabalpur	1218747	131.62	151.05	33.7	19.43	5.00	Dec-24	Amrut	DPR under preparation in Amrut 2.0
16	Katni	250000	27.00			-27.00	24.50	Dec-24	Amrut	DPR under preparation in Amrut 2.0
17	Khandwa	244547	26.41	0		-26.41			Amrut	DPR under preparation in Amrut 2.0
18	Khargone	141499	15.28	17.6	6.1	2.32			Amrut	DPR under preparation in Amrut 2.0

19	Mandsaur	160616	17.35	25		7.65			Amrut	DPR under preparation in Amrut 2.0
20	Morena	240386	25.96	23	15.4	-2.96			Amrut	DPR under preparation in Amrut 2.0
21	Nagda	113420	12.25	16		3.75			Amrut	AMRUT 2.0 udner tendering, NMCG-under tendering
22	Neemuch	145757	15.74	16.5	5.44	0.76			Amrut	DPR under preparation in Amrut 2.0
23	Pithampur	153742	16.60	0		-16.60			Amrut	DPR under preparation in Amrut 2.0
24	Ratlam	300349	32.44	37.5	19.31	5.06			Amrut	DPR under preparation in Amrut 2.0
25	Rewa	270493	29.21			-29.21	37	Mar-25	Amrut	DPR under preparation in Amrut 2.0
26	Sagar	310226	33.50	43	12	9.50			Amrut	DPR under preparation in Amrut 2.0
27	Satna	324812	35.08			-35.08	42	Dec-24	Amrut	DPR under preparation in Amrut 2.0
28	Sehore	130558	14.10	12	6.96	-2.10			Amrut	Under tendering in Amrut 2.0
29	Seoni	115312	12.45	0		-12.45			Amrut	DPR under preparation in Amrut 2.0
30	Shivpuri	213726	23.08	20	3	-3.08			Amrut	DPR under preparation in Amrut 2.0
31	Singrauli	252820	27.30	28.22	13	0.92	31.00	Dec-24	Amrut	DPR under preparation in Amrut 2.0
32	Ujjain	584130	63.09	175.5	71.5	112.41			Amrut	AMRUT 2.0 Under tendering, NMCG-under tendering
33	Vidisha	186592	20.15	22.25	20	2.10			Amrut	Under tendering in Amrut 2.0
34	Dharampuri	19934.06112	1.116307423	2.5	1.63	1.38			MPUDC-World Bank	
35	Barwani	67617.19296	7.30265684	0		-7.30	9	Jun-25	MPUDC -KFW	
36	Sendhwa	68812.2864	7.431726931			-7.43	8.5	Dec-24	MPUDC -KFW	
37	Anjad	32026.31136	3.458841627			-3.46	3.66	Oct-24	MPUDC -ADB	
38	Sanavad	47194.6176	5.097018701			-5.10	5.58	Dec-24	MPUDC -ADB	
39	Badwah	32233.41216	3.481208513			-3.48	3.46	Oct-24	MPUDC -ADB	
40	Mandleshwar	15036.73632	0.842057234			-0.84	3	Sep-24	MPUDC- World Bank	
41	Maheshwar	29738.45664	3.211753317			-3.21	4.91	Dec-24	MPUDC- World Bank	
42	Omkareshwar	12259.14912	0.686512351	1	0.5	0.31			MPUDC-Vishesh Nidhi	
43	Nemawar	6777.61728	0.379546568			-0.38	1	Sep-24	MPUDC- World Bank	

44	Shajapur	78527.61888	8.480982839	11.25	2	2.77			MPUDC-World Bank	
45	Budni	20110.43584	1.126184407	3.28	2.03	2.15			MPUDC-Vishesh Nidhi	
46	Nasrullahganj	28461.86624	1.593864509			-1.59	4.2	Sep-24	MPUDC- World Bank	
47	Chitrakoot	26763.03744	1.498730097			-1.50	4.7	Oct-24	MPUDC- World Bank	
48	Amarkantak	9019.25888	0.505078497	1.2	0.6	0.69			MPUDC-World Bank	
49	Bhedaghat	7500.57504	0.420032202	0.89	0.8	0.47			MPUDC-World Bank	
50	Narsingpur	67564.89152	7.297008284			-7.30	9	Aug-24	MPUDC -KFW	
51	Saikheda	10818.76544	0.605850865			-0.61	2.6	Aug-24	MPUDC -ADB	
52	Mandla	62119.45376	6.708901006	0.5	0.3	-6.21	9.5	Apr-25	MPUDC -KFW	
53	Dindori	24025.05056	1.345402831			-1.35	3.85	Sep-24	MPUDC -ADB	
54	Khajuraho	27661.57152	1.55			-1.55	4.56	Aug-26	MPUDC -ADB	
55	Rajnagar	16104.74976	0.901865987			-0.90	2.82	Aug-26	MPUDC -ADB	
56	Maihar	46133.98528	4.98247041			-4.98	14.5	Sep-26	MPUDC -ADB	
57	Sanchi	10051.62848	0.562891195			-0.56	2.1	Jul-27	MPUDC -ADB	
58	Dhamnod	9456.69216	0.529574761			-0.53	6.68	Apr-26	MPUDC -ADB	

Jabalpur Waste Collection & Transportation Management Private Limited
Corporate Office 20th Floor, A Wing, Marathon Futurex, N M Joshi Marg, Lower Parel, Mumbai-400013
Tel +91 227108 4444 Fax +91 2271084500

Ref: JWCTMPL/2024-25/12 Date: 01/05/2024

Annexure-6

To,

The Commissioner,

Jabalpur Municipal Corporation

JABALPUR,

नगर पालिक निगम जबलपुर
प्राप्त
दिनांक 02/05/2024

Sub: INVOICE -APRIL- 2024

Dear Sir,

Enclosed here with please find Invoice No JWCTMPL/24-25/01, Date 01/May/2024 for the month of April 2024 Amounting INR. **3,30,58,800** (Rupees Three Crore Thirty Lac Fifty Eight Thousand Eight Hundred Only.).

Thanking You,

Yours truly,

For: Jabalpur Waste C&T Management Pvt. Ltd.

Jabalpur Waste Collection and Transportation Management Private Limited

(Kshitij Saxena)

C&T Head

Encl: As above

Copy to:

1. Additional Commissioner Municipal Corporation, Jabalpur
2. Health Officer, Jabalpur Municipal Corporation, Jabalpur.

02/05/24
लिपिक
अपर आयुक्त (वित्त)
नगर निगम जबलपुर

नगर पालिक निगम
आवक क्र.
02/05/24

SSEL GROUP

Jabalpur Waste Collection & Transportation Management Private Limited
Corporate Office: 20th Floor, A Wing, Marathon Futurex, N.M. Joshi Marg, Lower Parel, Mumbai-400013
Tel: +91 227108 4449 Fax: +91 2271084500

Name : **Jabalpur Municipal Corporation**

Address : **SWM,**

City : **Jabalpur,** **State : MP** **PIN : 482001**

Invoice Date: 01/May/2024

Invoice No.: JWCTMPL/24-25/01

Code :400014379

S.No.	Description	Tax/	Qty.(Ton)	Unit	Rate	Amount (INR)
1.	Collection & Transport of MSW For the period of 1st April 2024 to 30th April 2024	ST	15982.48	1	2068.44	3,30,58,800.93
Amount in Words: - Rupees Three Crore Thirty Lac Fifty Eight Thousand Eight Hundred Only.					Sub Total	3,30,58,800.93
					Round Off	0.93
					Total	**3,30,58,800**

For: **Jabalpur Waste Collection and Transportation Management Pvt. Ltd.**

Jabalpur Waste Collection and Transportation Management Private Limited

Authorized Signatory

Jabalpur Waste Collection & Transportation Management Private Limited
Corporate Office: 20th Floor, A Wing, Marathon Futurex, N M Joshi Marg, Lower Parel, Mumbai-400013
Tel: +91 227108 4444 Fax: +91 2271084500

Ref : JWCTMPL/2024-25/13 Date: 01/05/2024

To,

The Commissioner,

Jabalpur Municipal Corporation

JABALPUR,

02/05/2024

Sub: SUMMARY- APRIL -2024

Dear Sir,

Enclosed here with please find the Summary of April 2024.

Thanking You,

Yours truly,

For: Jabalpur Waste C&T Management Pvt. Ltd.

Jabalpur Waste Collection and Transportation Management Private Limited

(Kshitij Saxena)

C&T Head

Encl: As above

Copy to:

1. Additional Commissioner Municipal Corporation, Jabalpur
2. Health Officer, Jabalpur Municipal Corporation, Jabalpur.

02/05/24

02/05/24

Essel GROUP
Registered Office: 513/A, 5th Floor, Kohinoor City, Kirol Road, Kurla (West), Mumbai-400070
Corporate Identity Number: U74999MH1987PLC044006

Jabalpur Waste Collection & Transportation Management Private Limited
Corporate Office: 20th Floor, A Wing, Marathon Futurex, N.M. Joshi Marg, Lower Parel, Mumbai-400013
Tel: +91 22 7108 4444 Fax: +91 22 7108 4500

April' 2024 Waste Collection Summary		
Date	SWM Wt	Slaughter House Waste
1-Apr-24	584.47	0.00
2-Apr-24	576.80	27.70
3-Apr-24	588.26	24.01
4-Apr-24	558.24	0.00
5-Apr-24	587.29	27.55
6-Apr-24	566.47	0.00
7-Apr-24	478.25	0.00
8-Apr-24	586.61	0.00
9-Apr-24	595.09	20.89
10-Apr-24	601.19	28.70
11-Apr-24	556.55	0.00
12-Apr-24	536.30	20.50
13-Apr-24	537.88	20.78
14-Apr-24	451.08	0.00
15-Apr-24	529.01	0.00
16-Apr-24	462.56	0.00
17-Apr-24	431.63	23.98
18-Apr-24	460.53	0.00
19-Apr-24	425.36	0.00
20-Apr-24	483.27	54.87
21-Apr-24	448.40	0.00
22-Apr-24	447.11	0.00
23-Apr-24	507.80	33.97
24-Apr-24	519.95	20.22
25-Apr-24	481.50	0.00
26-Apr-24	486.76	49.80
27-Apr-24	541.83	43.02
28-Apr-24	450.15	0.00
29-Apr-24	521.17	34.20
30-Apr-24	517.28	33.53
Total	15518.79	463.69
Grand total		**15982.48**

Jabalpur Waste Collection and Transportation Management Private Limited

Jabalpur Waste Collection & Transportation Management Private Limited
Corporate Orrice: 20th Floor, A Wing, Marathon Futurex, N. M. Joshi Marg, Lower Parel, Mumbai - 400 013
Tel: +91 22 7108 4444 Fax: +91 22 7108 4500

Ref: JWCTMPL/2024-25/14

दिनांक : -01/05/2024

सेवा में,

स्वास्थ्य अधिकारी महोदय,
नगर पालिक निगम, जबलपुर

विषय : - दिसंबर 2023 माह के बिल की 30% राशि के भुगतान हेतु ।

महोदय,

निवेदन है कि हमारे द्वारा प्रस्तुत किए गए बिल की 30% राशि का भुगतान माह दिसंबर 2023 से लंबित है जिसके संबंध में यह पत्र महोदय के समक्ष प्रस्तुत किया जा रहा है, अत: महोदय से बिनम्र अनुरोध है की माह दिसंबर 2023 की 30% राशि का भुगतान शीघ्र करने की कृपा करें, जिससे कार्य को और अधिक सुचारु रूप से क्रियांवित किया जा सके, महोदय की अतिकृपा होगी।

धन्यवाद

Jabalpur Waste Collection and Transportation Management Private Limited

पार्थी
जबलपुर वेस्ट कलेक्शन एंड ट्रांसपोर्टेशन
मैनेजमेंट प्राइवेट लिमिटेड, जबलपुर

02/05/24

Annexure-7

FORM A

PUBLIC ANNOUNCEMENT

(Under Regulation 6 of the Insolvency and Bankruptcy Board of India (Insolvency Resolution Process for Corporate Persons) Regulations, 2016)

FOR THE ATTENTION OF THE CREDITORS OF JABALPUR MSW PRIVATE LIMITED

	RELEVANT PARTICULARS	
1.	Name of corporate debtor	**JABALPUR MSW PRIVATE LIMITED**
2.	Date of incorporation of corporate debtor	**23.012013**
3.	Authority under which corporate debtor is incorporated / registered	ROC - DELHI
4.	Corporate Identity No. / Limited Liability Identification No. of corporate debtor	U90001DL2013PTC247509
5.	Address of the registered office and principal office (if any) of corporate debtor	**Regd Office** :Essel House, B-10 Lawrence Road, Industrial Area New Delhi, New Delhi 110035 IN **Principal Office**: 6th Floor, Plot No.19 & 20, Film City, Sector 16A, Gautam Buddha Nagar, Noida 201301 UP IN **Factory** : Vill.: Kathonda, Patwari halka no.23, R.I. Circle : Maharajpur, Tehsil & District : Jabalpur, MP 482002 IN
6.	Insolvency commencement date in respect of corporate debtor	15.09.2023 (Order dated 14.09.2023, uploaded on 15.09.2023)
7.	Estimated date of closure of insolvency resolution process	13.03.2024
8.	Name and registration number of the insolvency professional acting as interim resolution professional	Sajjan Kumar Dokania **IBBI/IPA-003/IP-N000150/2017-2018/11729**
9.	Address and e-mail of the interim resolution professional, as registered with the Board	25, Globus Fab city, Kolar Road, Chuna Bhatti, Near Suyash Hospital, Bhopal, Madhya Pradesh, 462016 **sajjan_suman@hotmail.com**
10.	Address and e-mail to be used for correspondence with the interim resolution professional	25, Globus Fab city, Kolar Road, Chuna Bhatti, Near Suyash Hospital, Bhopal, Madhya Pradesh, 462016 **sajjan_suman@hotmail.com** msw.cirp@hotmail.com
11.	Last date for submission of claims	29.09.2023
12.	Classes of creditors, if any, under clause (b) of sub-section (6A) of section 21, ascertained by the interim resolution professional	Name the class(es) N.A.
13.	Names of Insolvency Professionals identified to act as Authorised Representative of creditors in a class (Three names for each class)	1.NA 2.NA 3.NA
14.	(a) Relevant Forms and (b) Details of authorized representatives are available at:	Web link: https://ibbi.gov.in/home/downloads Physical Address: N.A.

Notice is hereby given that the National Company Law Tribunal has ordered the commencement of a corporate insolvency resolution process of the JABALPUR MSW PRIVATE LIMITED on 14.09.2023.

The creditors of JABALPUR MSW PRIVATE LIMITED, are hereby called upon to submit their claims with proof on or before 29.09.2023 [the date falling fourteen days from the appointment of the interim resolution professional Date of appointment of Interim Resolution Professional is 15.09.2023, date of uploading of order by Hon'ble NCLT] to the interim resolution professional at the address mentioned against entry No. 10.

The financial creditors shall submit their claims with proof by electronic means only. All other creditors may submit the claims with proof in person, by post or by electronic means.

A financial creditor belonging to a class, as listed against the entry No. 12, shall indicate its choice of authorized representative from among the three insolvency professionals listed against entry No.13 to act as authorized representative of the class [specify class] in Form CA.

Submission of false or misleading proofs of claim shall attract penalties.

Sajjan Kumar Dokania

Date and Place: 18.09.2023, Bhopal — Name and Signature of Interim Resolution Professional

NOTICE

It is hereby informed to all concerned that Vide order No. CP(IB) No.417/ND/2021 dated 14.09.2023, HON'BLE NATIONAL COMPANY LAW TRIBUNAL, New Delhi Bench- VI allowed application of State Bank of India to Initiate Corporate Insolvency Resolution Process of **M/s Jabalpur MSW Private Limited**, and declared moratorium with effect from 14.09.2023. Accordingly, **M/s Jabalpur MSW Private Limited** is now under Corporate Insolvency Resolution Process. It is further to inform that vide the same order undersigned (**Sajjan Kumar Dokania, Insolvency Professional**) has been appointed as Interim Resolution Professional.

All concerned please note accordingly.

Sajjan Kumar Dokania
Interim Resolution Professional

Annexure-8

JABALPUR MSW PVT.LTD (APR-2024)						
DATE	GENERATION POWER	EXPORT POWER	PLF %	Total Fuel	Boiler BottomDry Ash	Boiler Fly Ash
	GEN.(KWH)	EXP.(KWH)		MT	MT	MT
01-04-2024	168590.0	136760	61.08	770	290	44.77
02-04-2024	1100.0	990	0.40	0	0	0
03-04-2024	0.0	0	0.00	0	0	0
04-04-2024	0.0	0	0.00	0	0	0
05-04-2024	0.0	0	0.00	0	0	0
06-04-2024	0.0	0	0.00	0	0	0
07-04-2024	0.0	0	0.00	0	0	0
08-04-2024	172900.0	147550	62.64	780	290	0
09-04-2024	207600.0	176700	75.22	920	305	43.83
10-04-2024	200700.0	168300	72.72	850	310	0
11-04-2024	219200.0	192000	79.42	832	312	0
12-04-2024	212800.0	181300	77.10	813	302	0
13-04-2024	205100.0	176550	74.31	839	312	0
14-04-2024	162100.0	132500	58.73	806	301	21.36
15-04-2024	164800.0	136180	59.71	787	289	60.8
16-04-2024	190200.0	161770	68.91	837	317	0
17-04-2024	156300.0	129550	56.63	784	271	0
18-04-2024	103400.0	80780	37.46	685	243	0
19-04-2024	125000.0	101630	45.29	794	278	0
20-04-2024	122800.0	93150	44.49	780	295	61.41
21-04-2024	60400.0	43890	21.88	358	145	20.19
22-04-2024	0.0	0	0.00	0	0	0
23-04-2024	92400.0	77900	33.48	491	190	37.86
24-04-2024	61100.0	50380	22.14	372	140	0
25-04-2024	176900.0	147570	64.09	852.24	310	71.56
26-04-2024	171000.0	139450	61.96	854	325	20.99
27-04-2024	153100.0	123800	55.47	827	345	38.62
28-04-2024	102400.0	73850	37.10	780.1	280	0
29-04-2024	120500.0	95850	43.66	710	290	0
30-04-2024	115000.0	85800	41.67	750	290	0
	3465390.0	2854200	1255.6	16521.3	6140.0	421.4

JABALPUR MSW PVT.LTD. JABALPUR

JABALPUR MSW PVT.LTD (MAR-2024)						
DATE	GENERATION POWER	EXPORT POWER	PLF %	Total Fuel	Boiler BottomDry Ash	Boiler Fly Ash
	GEN.(KWH)	EXP.(KWH)		MT	MT	MT
01-03-2024	21700.0	19700	7.86	0	0	0
02-03-2024	0.0	0	0.00	0	0	0
03-03-2024	0.0	0	0.00	0	0	0
04-03-2024	60900.0	50650	22.07	432	168	0
05-03-2024	207500.0	177700	75.18	857	314	23.59
06-03-2024	126700.0	102600	45.91	743	251	23.1
07-03-2024	147300.0	117390	53.37	780	287	41.48
08-03-2024	88400.0	69810	32.03	567	172	0
09-03-2024	173700.0	141080	62.93	576	197	0
10-03-2024	164700.0	139010	59.67	784	290	0
11-03-2024	52300.0	45930	18.95	323	130	44.65
12-03-2024	26300.0	25230	9.53	0	0	0
13-03-2024	122600.0	108920	44.42	602	205	0
14-03-2024	203000.0	160530	73.55	855	287	46.56
15-03-2024	193500.0	164100	70.11	830	310	0
16-03-2024	215400.0	183150	78.04	860	330	68.77
17-03-2024	217200.0	190740	78.70	849.996	320	0
18-03-2024	194400.0	163410	70.43	830	290	23.2
19-03-2024	199000.0	168250	72.10	816	288	42.7
20-03-2024	190700.0	161500	69.09	803	276	22.92
21-03-2024	173500.0	140750	62.86	760	249	0
22-03-2024	176800.0	148050	64.06	799	289	68.52
23-03-2024	205900.0	176000	74.60	808	310	0
24-03-2024	103900.0	84600	37.64	459	170	0
25-03-2024	0.0	0	0.00	0	0	0
26-03-2024	38000.0	32750	13.77	332	110	0
27-03-2024	180700.0	147750	65.47	751	290	0
28-03-2024	75200.0	64450	27.25	451	168	0
29-03-2024	180500.0	148420	65.40	755.37	270	0
30-03-2024	143800.0	116220	52.10	730	279	0
31-03-2024	144510.0	120960	52.36	736	265	42.41
	3883600.0	3248690	1459.5	16623.4	5971.0	447.9

JABALPUR MSW PVT. LTD. JABALPUR

नोडल ऑफिसर
(स्वच्छता सेल)
नगर पालिक निगम जबलपुर

Annexure-9

Solid Waste Received from Nagar Nigam Jabalpur at WTE Plant				
Jabalpur MP				
	Month	NNJ Wt	Plant Use MT	Remark
1	23-Nov	15949	6604	Secondary Balance in Plant
2	24-Dec	15552	7042	Secondary Balance in Plant
3	24-Jan	14266	6285	Secondary Balance in Plant
4	24-Feb	15301	6067	Secondary Balance in Plant
5	24-Mar	16604	6288	Secondary Balance in Plant
6	24-Apr	15518	5726	Secondary Balance in Plant

CUSTOMER COPY .....
MASTER COPY .....
COPY FOR LAB I/C.....

Annexure-10

Regional Directorate (Central)
Central Pollution Control Board

"Parivesh Bhawan" Paryawaran ParisarNagar, E-5, Arera Colony
Bhopal – 462016
Tel: 0755-2775385/86, Fax: 0755-2775587

EPA Recognized Lab-2015

TEST REPORT

Source Emission Sample Analysis Report

F/LAB/06/TR-04

Sample from :	**M/s. MSW, Jabalpur (MP) West to Energy Plant**			**Req. No. 101**	**Test report No: 04/24-25**
Sample Description:	**Stack**			**Registration No.**	**SE/24-25/04**
Date of collection:	17.05.2024	**Type of sample: grab**/composite		**Date:**	**27.05.2023**
Date of receipt :	18.05.2024	**Sample collected By**	**Sh. Rupendra Kumar & Rameshwar B.**		
Date of analysis :	24.05.2024				

S. No.	Parameters	Unit	Result	Methods
1.	**Particulate Matter(PM)**	**mg/ Nm^3**	**42**	USEPA-17, 3rd Edition, 1998 (Gravimetric Method)
2.	**Sulphur Dioxide (So_2)**	**mg/ Nm^3**	**48**	USEPA- 6, 3rd Edition 1998 (Titrametric Method)
3.	**Nitrogen Dioxide (No_x)**	**mg/Nm^3**	**244**	USEPA -7, 3rd Edition, 1998 (PDS Method)
4.	Fluoride (F)	mg/Nm^3	---	USEPA-13 A , 3rd Edition 1998 (Photometric Method)
5.	Acid Mist	mg/Nm^3	--	USEPA- 8 ,3rd Edition 1998 (Titrametric Method)
6.	Other Specific Parameter	mg/Nm^3	-	USEPA- 29, 3rd Edition 1998 (AAS/ Graphite generation)

*( ) OCEMS reading during monitoring period.

Prepared By:

Lab Head
Authorized Signator

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लेब प्रमुख एवं सरकारी विश्लेषक
Scientist-'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)

M.P. Pollution Control Board
E-5, Arera Colony
Paryavaran Parisar, Bhopal - 16
MP
Tele : 0755-2466191, Fax-0755-2463742

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Consent Order

Outward No:120448,01/06/2024 Consent No:AWS-60301

RED-LARGE	CCA-Renewal (A/W Consent & SWM Auth.valid up to 28/02/2025)	CONSENT NO: ***	PCB ID: 28396

To,

The Occupier,
M/s. Jabalpur MSW Pvt. Ltd.,
Kh.No. 375, 376 & 379, P. H. No. 23, Village - Kathonda, Tehsil Jabalpur,
City : Jabalpur,
Dist : Jabalpur, Tal : Jabalpur, SIDC : Not In SIDC, Latitude : 23.2139 Longitude : 79.9174

Subject: Grant of Consent to Operate under section 25 of the Water (Prevention & Control of Pollution) Act,1974 under section 21 of the Air (Prevention & Control of Pollution) Act,1981& Authorization under Solid Waste Management Rules, 2016.

Ref: Your Consent to Operate Application Receipt No. 1358626 Dt. 10/04/2024 and lastcommunication dated 25/04/2024.

With reference to your above application for consent to operate has been considered under the aforesaid Acts and existing rules therein. The M. P. Pollution Control Board has agreed to grant consent up to **28/02/2025**, & Authorization under Solid Waste Management Rules, 2016is valid up to **28/02/2025** subject to the fulfillment of the terms & conditions, enclosed with this letter and-

SUBJECT TO THE FOLLOWING CONDITIONS :-

a. Location: Kh.No. 375, 376 & 379, P. H. No. 23, Village - Kathonda, Tehsil & District - Jabalpur ,

b. The capital investment in lakhs: Rs. 17795

c. Product & Production Capacity:

PRODUCT	*QTY / YEAR*
POWER PLANT (11.5 MW AT MSW BASED)	*11.500 MWH {ELEVEN POINT FIVE MWH)*
PROCESSING & DISPOSAL OF MSW	*600 MT (SIX HUNDRED MT)*

Note:-

1. *For any change in above industry shall obtain fresh consent from the boar.*
2. ***The unit shall use segregated waste and RDF to comply with the provisions of SWM Rules, 2016.***
3. ***The unit shall make the arrangements for disposal of flyash and bottom ash properlyas per proposal submitted on 25/04/2024.***

The Validity of the consent is up to **28/02/2025** and has to be renewed before expiry of consent validity. Online application through XGN with annual license fees in this regard shall be submitted to this office 6 months before expiry of the consent/Authorization. Board reserves the right to amend/cancel / revoke the above condit... as and when required.

By the Order of Chairman, MPPCB

Signature Not Verified
Digitally Signed by : A. A Mishra, Member Secretary
Date: 01/06/2024 02:48:00 PM

ACHYUT ANAND MISHRA
Member Secretary

** Conditions under Water Act*
** Conditions under Air Act*
** General conditions*
** Conditions under SWM Rules.*

(Organic Authentication on AADHAR from UIDAI Server)
TPAV # SEG0B8HKUR

CONDITIONS PERTAINING TO WATER (PREVENTION & CONTROL OF POLLUTION) ACT 1974 :-

1. The daily quantity of trade effluent of the unit shall not exceed 16.000 KL/day, and the daily quantity of sewage of the unit shall not exceed 8.000 KL/day

2. Trade Effluent Treatment:-

The applicant shall operate and maintain effluent treatment system as per the proposal submitted to the Board and maintain the same properly to achieve following standards-

pH	*Between*	*5.5 – 9.0*
Suspended Solids	*Not exceed*	*100 mg/l.*
BOD_3 Days 27 ^{0} C	*Not exceed*	*30 mg/l.*
COD	*Not exceed*	*250 mg/l.*
Oil and grease	*Not exceed*	*10 mg/l.*

TDS	*Not exceed*	*2100 mg/l.*
Chlorides	*Not exceed*	*1000 mg/l.*

For other parameters general standards of discharge as notified under EP Act 1986 shall be applicable.

3. Sewage Treatment :- The applicant shall operate and maintain sewage treatment facility to achieve following standards-

pH	*Between*	*5.5 – 9.0*
Suspended Solids	*Not exceed*	*100 mg/l.*
BOD 3 Days 27 ^{0} C	*Not exceed*	*30 mg/l.*
COD	*Not exceed*	*250 mg/l.*
Oil and grease	*Not exceed*	*10 mg/l.*
fecal coliform	*Not exceed*	*1000 MPN/100 ml*

Sr	Water Code (Qty in klpd - Kilo Ltr per Day)	WC : 250.000	WWG : 24.000	Water Source	Remark
1	Boiler Feed	38.000	16.000	Borewell	Valid permission for use of ground water shall be maintained from competent authority.
2	Boiler Feed	22000.000	50000.000	Borewell	
3	Cooling Water	108.000	0.000	Borewell	
4	Domestic Purpose	20.000	8.000	Borewell	
5	Others	84.000	0.000	Borewell	

4. The effluent shall be treated up to prescribed Standards and reuse in the process, for cooling and for green belt devolvement/gardening within premises. Hence zero discharge condition shall be practiced. In no case treated effluent shall be discharged outside of facility premises.

5. Water meter preferably electromagnetic/ultrasonic type with digital flow recording facilities shall be installed separately for category wise consumption of water for Industrial cooling/boiler feed, mine spray, process & domestic purposes and data shall be submitted online through XGN monthly patrak/statements.

6. Any change in production capacity, process, raw material used etc. and for any enhancement of the above prior permission of the Board shall be obtained. All authorized discharges shall be consistent with terms and conditions of this consent. Facility expansions, production increases or process modifications which result new or increased discharges of pollutants must be reported by submission of a fresh consent application for prior permission of the Board

7. All treatment/control facilities/systems installed or used by the applicant shall be regularly maintained in good working order and operate effectively/efficiently to achieve compliance of the terms and conditions of this consent

8. The specific effluent limitations and pollution control systems applicable to the discharge permitted herein are set forth as above conditions.

9. Compilation of Monitoring data-

i. Samples and measurements taken to meet the monitoring requirements specified above shall be representative of the volume and nature of monitored discharge. ii. Following promulgation of guidelines establishing test procedures for the analysis of pollutants, all sampling and analytical methods used to meet the monitoring requirements specified above shall conform to such guidelines unless otherwise specified sampling and analytical methods shall conform to the latest edition of the Indian Standard specifications and where it is not specified the guidelines as per standard methods for the examination of Water and Waste latest edition of the American Public Health Association, New York U.S.A. shall be used.

10. Recording of Monitoring Activities & Results-

i. The applicant shall make and maintain online records of all information resulting from monitoring activities by this Consent.

ii. The applicant shall record for each measurement of samples taken pursuant to the requirements of this Consent as

29 .Operator of the facility shall display on their websites the data in relation to the functioning of the plant and its adherence to the prescribed parameters. This data shall be placed in the public domain and any person would be entitled to approach the authority, if the plant is not operating as per specified parameters.

30. The RDF, Plastic Granules and Lumps made by processing of the Solid Waste shall be sold/disposed to the genuineend users and a record of the same shall be maintained.

31. The inert waste remaining after the processing of the Solid Waste shall be disposed in the land fill being operatedby the Local body i.e. Indore Municipal Corporation or any operator entrusted for the purpose by the local body, andthe record for the same shall be provided and shall be made available to the authorized officers of the MPPCB.

GENERAL CONDITIONS:

1. The non hazardous solid waste arresting in the industry/unit/unit premises sweeping, etc. be disposed off scientifically so as not to cause any nuisance/pollution. The applicant shall take necessary permission from civic authorities for disposal to dumping site. If required.

Non Hazardous Solid wastes:-

Type of waste	*Quantity*	*Disposal*
Scrap/ Plastic packing material wood, card board, gunny begs etc	*To Be inventorise and inform to the Board*	*Sale to authorized party/As Per CPCB. MoEF Guide lines / Others.*

2. The applicant shall allow the staff of Madhya Pradesh Pollution Control Board and/or their authorized representative, upon the representation of credentials:

a. To inspect raw material stock, manufacturing processes, reactors, premises etc to perform the functions of the Board.

b. To enter upon the applicant's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this Consent.

c. To have access at reasonable times to any records required to be kept under the terms and conditions of this Consent.

d. To inspect at reasonable times any monitoring equipment or monitoring method required in this Consent: or,

e. To sample at reasonable times any discharge or pollutants.

3. This consent / authorisation is transferable in nature, in case of any change in ownership / management, the new owner / partner / directors / proprietor shall immediately apply for the consent with new requisite information.

4. The issuance of this Consent does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorise any invasion of personal rights, nor any infringement of Central, State or local laws or regulations.

5. Industry shall install separate electric metering arrangement for running of pollution control devices and this arrangement shall be made in such fashion that any non functioning of pollution control devices shall immediately stop electric supply to the production and shall remain tripped till such time unless the pollution control device/devices are made functional.

6. This consent is granted in respect of Water pollution control Act 1974 or Air Pollution Control act, 1981 or Authorization under the provisions of Hazardous and other Waste (Management & Transboundary movement) Rules 2016 only and does not relate to any other Department/Agencies. License required from other Department/Agencies have to be obtained by the unit separately and have to comply separately as per there Act / Rules.

7. Balance consent/authorisation fee, if any shall be recoverable by the Board even at a later date.

8. The applicant shall submit such information, forms and fees as required by the board not letter than 180 day prior to the date of expiration of this consent/authorisation

9. The industry/unit shall establish a separate environmental cell, headed by senior officer of the unit for reporting the environmental compliances. The industry/ Unit shall submit environmental statement for the previous year ending 31st March on or before 30th September every year to the Board.

10. Knowingly making any false statement for obtaining consent or compliance of consent conditions shall result in the imposition of criminal penalties as provided under the section 42(g) of the Water Act or section 38 (g) of the Air Act.

11. After notice and opportunity for the hearing, this consent may be modified, suspended or revoked by the Board in whole or in part during its term for cause including, but not limited to, the following :

(a) Violation of any terms and conditions of this Consent.

(b) Obtaining this Consent by misrepresentation of failure to disclose fully all relevant facts.

(c) A change in any condition that requires temporary or permanent reduction or elimination of the authorized discharge.

12. On violation of any of the above-mentioned conditions the consent granted will automatically be taken as canceled and necessary action will be initiated against the industry.

13. The industry/unit shall also monitor the treated wastewater flow and report the same online through monthly patrak/statements.

14. The applicant shall take samples and measurement to meet the monthly requirements specified above and report online through XGN the same to the Board.

15. Ambient air quality at the boundary of the industry/unit premises shall be monitored and reported to the Board regularly on quarterly basis

16. The record of electricity consumption for running of pollution control equipment shall be maintained and submitted to the Board every month.

Additional condition:-

(1)SWPTDF shall comply with the direction/guidelines issued time to time by MoEF&CC, CPCB, MPPCB and various courts/NGT.
(2) SWPTDF shall maintain details of MSW received and disposed in record register and report monthly to Board online.
(3) SWPTDF shall maintain ETP & STP properly alongwith the logbook of ETP/STP operation.
(4) SWPTDF shall obtain CGWA NOC for ground water extraction and submit to the Board.
(5) SWPTDF shall install digital water meter at ground water sources and provide its web connectivity to Board server.
(6) SWPTDF shall use segregated waste and RDF to comply with the provisions of SWM Rules, 2016.
(7) PP shall constructed new scientific landfill site for disposal of fly Ash and bottom ash and time bound action plan shall be submitted within 01 month as per per proposal submitted on 25/04/2024.

Advisory Conditions

1.The Facility shall obtain NOC from Central Ground Water Board for extraction of ground water.
2. The HCF shall install separate Digital Water meter with digital flow recording facilities for different Water sources and provide its connectivity with server of Environment Surveillance Centre, M P Pollution Control Board Bhopal for remote surveillance.
3. The HCF shall provide Rain water harvesting system for ground water conservation and recycle treated waste water in plantation and flushing.
4. Potable drinking water shall be used for drinking purposes only.
5. Appropriate legal action shall be initiated in case of violation of above mentioned conditions.

Consent/authorization as required under the Water (Prevention & Control of Pollution) Act,1974 , The Air (Prevention & Control of Pollution) Act,1981is granted to your industry subject to fulfillment of all the conditions mentioned above. For renewal purpose you shall have to make an application to this Board through XGN at least Six months before the date of expiry of this consent/authorisation. The applicant without valid consent (for operation) of the Board shall not bring in to use any outlet for the discharge of effluent and gaseous emission.

For and on behalf of
M.P. Pollution Control Board

By the order of Chairman, MPPCB

eSign Signing from UIDAI
Digitally Sign with Aadhaar

(Organic Authentication on AADHAR from UIDAI Server)
TPAV # 5EG6B8HKUR

ACHYUT ANAND MISHRA
Member Secretary

Consent No:AWS-60301

1. ***Reference: Application No.*** CCA-Renewal - 1358626- 10/04/2024- A,W,S

2. ***To,***

The Occupier
12. - ***M/s. Jabalpur MSW Pvt. Ltd,***
Kh.No. 375, 376 & 379, P. H. No. 23,
Village - Kathonda,Tal & Dist: Jabalpur (M.P.)

Authorization shall be valid for a period valid up to 28/02/2025 Authorization For : Operator of facility for MSW disposal

The MP Pollution Control Board, after examining the proposal of M/s. . Jabalpur MSW Pvt. Ltd, Kh. no Kh.No. 375, 376 & 379, P. H. No. 23, Village - Kathonda,Tal & Dist: Jabalpur (M.P.) hereby grants authorisation to operate facility for disposal of MSW through use of waste in power generation. The authorization is subject to the terms and conditions stated below and such conditions as may be otherwise specified in these rules and the standards laid down in Schedule I & II under these rules:

A. The MP Pollution Control Board may, at any time, revoke any of the conditions applicable under the authorization and shall communicate the same in writing.

B.Any violation of the provision of the Solid Waste Management Rules, 2016 will attract the penal provisions of Environment (Protection) Act, 1986.

C. SPECIFIC CONDITIONS (Following-1. to 31.):

1. The operator of the Solid Waste Processing and recycling facility shall comply with the provisions of the Solid WasteManagement Rules, 2016.

2. The Solid Waste Processing, Treatment and Disposal facility (SWPTDF) shall comply with the Specification for Sanitary Landfills mentioned in Schedule-I of Solid Waste Management Rules, 2016 pertaining to old deposited wasteand sanitary land filling of existing waste if any , i.e. to comply various criteria for, Development of facilities at the sanitary landfill, Specification for land filling operations and closure on completion of land filling, Pollution prevention, Water Quality monitoring, Ambient Air Quality monitoring, plantation at the landfill site and Post care of land fill site.

3. The SWPTDF shall comply with the standards of Processing & Treatment of Solid Waste as given in Schedule II ofthe Solid Waste management Rules, 2016 i.e. to comply the Standards for composting, treatment of leachates as per thegiven standards.

4. The SWPTDF ensure the safe collection, segregation, storage, transportation, processing and disposal of MSW withall safety to avoid any environmental/ health problems in surrounding area due to activities of facility. Efforts shall be made to ensure complete treatment of waste received at SWPTDF.

5. In order to prevent pollution problems from SLF operations, the following provisions shall be made namely:

(a) The storm water drain shall be designed and constructed in such a way that the surface runoff water is diverted fromthe land filling site and leachates from solid waste locations do not get mixed with the surface runoff water. Provisions for diversion of storm water discharge drains shall be made to minimize leachate generation and prevent pollution of surface water and also for avoiding flooding and creation of marshy conditions.

(b) Non-permeable lining system at the base and walls of waste disposal area. For landfill receiving residues of waste processing facilities or mixed waste or waste having contamination of hazardous materials (such as aerosols, bleaches, polishes, batteries, waste oils, paint products and pesticides) shall have liner of composite barrier of 1.5 mm thick high density polyethylene (HDPE) geo – membrane or geo-synthetic liners or equivalent, overlying 90 cm of soil (clay or amended soil) having permeability coefficient not greater than 1 x 10 -7 cm/sec. The highest level of water table shall be at least two meter below the base of clay or amended soil barrier layer provided at the bottom of landfills.

(c) Provisions for management of leachates including its collection and treatment shall be made. The treated leachate shall be recycled or utilized as permitted, otherwise shall be released into the sewerage line, after meeting the standardsspecified in Schedule II. In no case, leachate shall be released into open environment.

(d).Arrangement shall be made to prevent leachate run-off from SLF area entering any drain, stream, river, lake orpond. In case of mixing of runoff water with leachate or solid waste, the entire mixed water shall be treated by the SWPTDF management.

6. The SWPTDF shall comply with the provisions of Rule 25 of SWM Rules, regarding immediate reporting of accidents at solid waste processing or treatment or disposal facility or landfill site to the local body and MPPCB in Form –VI and the local body shall review and issue instructions if any, to the incharge of facility.

7. The SWPTDF shall comply with the provisions of Rule 24 for submission of annual report in Form-III to the localbody every

year on or before 30th day of April every year. The local body shall submit its annual report before 30th June every year in Form – IV to M.P. Pollution Control Board as per provision of rule 24(

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8. The management of SWPTDF shall take all necessary steps to strictly comply with the duties mentioned in Rule19 regarding setting up of solid waste processing and treatment facility in accordance to the technical guidelines issued byCPCB in this regard from time to time and the manual on Solid Waste Management prepared by the Ministry of UrbanDevelopment.

9. The Operator of the facility shall ensure safe and environmentally sound operations of the solid waste processing and treatment facilities as per the above guidelines/manual.

10. The Ambient Air Quality at the land fill site and the vicinity shall be regularly monitored and shall meet the Standards prescribed in air consent issued under Air (Prevention & Control of Pollution) Act, 1981.

11. The SWPTDF shall take all preventive and other control measures to avoid odour nuisance for general public insurrounding areas during management of the MSW.

12. The ground water quality within 50 meter of periphery of landfill site shall be periodically monitored to ensure thatthe ground water is not contaminated beyond acceptable limit. Such monitoring shall be carried out to cover different seasons in a year that is summer, monsoon and post monsoon period.

13 The SWPTDF shall constitute an Environmental Management Cell headed by the Senior Executive to keep the record and carry out the works related compliance of provisions of the SWM Rules, Preferably the work should besupervised by a qualified and experienced Environmental Engineer who understand the technicality of the subject.

14 Afforestation, roadside plantation, plantations on suitable vacant land, plantation on barren land shall be carried out for generation improvement of the environmental and a buffer zone of suitable width shall be developed in consultationwith Local body and SPCB as per site conditions.

15 The SWPTDF shall carried out the public awareness programs throughout the year under intimation to MPPCBamongst the citizens in vicinity for proper management of Solid Waste.

16 The facility operator, any stake holders who violates or fails to comply with the provisions of Solid Waste Management Rules - 2016 shall be liable for penal action in accordance with Section - 15 of the Environment (Protection) Act, 1986 and shall also be liable to pay environmental compensation in terms of Sections 15 & 17 of theNational Green Tribunal Act, 2010.

17 .The management of SWPTDF shall comply all the conditions stipulated in consent and Authorization issued under Water Act 1974, Air Act 1981.

18 . The management of SWPTDF shall install, operate & maintain Outdoor HD Industrial grade IP(Internet Protocol) Cameras with pan-Tilt- Zoom(PTZ) feature, minimum focal length 30X with night vision facility and temper proof mechanism at suitable locations to display all activities of processing facility, emission sources and effluent dischargepoint and connect the same with Environment Surveillance Centre, MP Pollution control board Bhopal for remote surveillance.

19. The operator of the facility shall be responsible for the safe and environmentally sound operations of the facility(SWPTDF) as per the guidelines issued by CPCB from time to time and the manual on Municipal Solid Waste Management published by the Ministry of Urban Development and updated from time to time.

20 The Board reserves the rights to amend/cancel any of the terms and conditions and or revoke the authorization as and when deemed necessary.

21. Municipal solid waste shall not be burnt at disposal site.

22. The waste needs to be dumped by earmarking the cells in the dumpsite instead of indiscriminate dumping and the older cells need to be covered as per guidelines of CPCB/Manual of urban development department to prevent burning.

23 .Options should be explored to separate the inert material from the older digested zones on the landfill (which may have been degraded to a large extent by now) and then use the separated inert material/soil for covering of the cells/fresh material. It will make space for the fresh incoming waste also

24. All the construction agencies like PWD, NHAI, DMRC, MCD etc. may be contacted for utilizing the inert material from the dumpsite in their construction as filters etc.

25 .Standard operating plan including Fire Prevention Plan should be framed to avoid instances of fire at site. Firetenders may be permanently stationed at landfill site.

26. Safety and health issues of the people at landfill site must be properly monitored and all safety equipment and PPEs shall be made available.

27. A public address system should be provided at landfill site to make announcement to prevent illegal/unauthorizedentry to the landfill site.

28. Facility shall ensure to segregate inert, C&D Waste, E-Waste, Bio Medical Waste, Hazardous Waste if any at source/ collection point and transported/ disposed off in accordance with the relevant rules notified by Govt. of India.

follows:

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(i) The date, exact place and time of sampling
(ii) The dates on which analysis were performed
(iii)Who performed the analysis?
(iv)The analytical techniques or methods used and
(v)The result of all required analysis

iii. If the applicant monitors any Pollutant more frequently as is by this Consent he shell include the results of such monitoring in the calculation and reporting of values required in the discharge monitoring reports which may be prescribed by the Board. Such increased frequency shall be indicated on the Discharge Monitoring Report Form.

iv. The applicant shall retain for a minimum of 3 years all records of monitoring activities including all records of Calibration and maintenance of instrumentation and original strip chart regarding continuous monitoring instrumentation. The period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the applicant or when requested by Central or State Board or the court.

11. Reporting of Monitoring Results:-
Monitoring Information required by this Consent shall be summarized and reported by submitting a Discharge Monitoring report on line to the Board.

12. Limitation of discharge of oil Hazardous Substance in harmful quantities:-
The applicant shall not discharge oil or other hazardous substances in quantities defined as harmful in relevant regulations into natural water course. Nothing in this Consent shall be deemed to preclude the institution of any legal action nor relive the applicant from any responsibilities, liabilities, or penalties to which the applicant is or may be subject to clauses.

13. Limitation of visible floating solids and foam:
During the period beginning date of issuance the applicant shall not discharge floating solids or visible foam.

14. Disposal of Collected Solid waste/sludge-
All hazardous waste/sludge shall be disposed of as per the Authorization issued under Hazardous & other waste (M&TM) Rules 2016. And/other Solids Sludges, dirt, silt or other pollutant separated from or resulting from treatment shall be disposed of in such a manner as to prevent any pollutant from such materials from entering any such water Any live fish, Shall fish or other animal collected or trapped as a result of intake water screening or treatment may be returned to eaters body habitat.

15. Provision for Electric Power Failure-
The applicant shall assure to the consent issuing authority that the applicant has installed or provided for an alternative electric power source sufficient to operate all facilities utilized by the applicant to maintain compliance with the terms and conditions of the Consent.

16. **Prohibition of By pass system of treatment facilities-**
The diversion or by-pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this Consent in prohibited except :
i. where unavoidable to prevent loss of life or severe property damage, or
ii. Where excessive storm drainage or run off would damage any facilities necessary for compliance with the terms and conditions of this Consent. The applicant shall immediately notify the consent issuing authorities in writing of each such diversion or by-pass in accordance with the procedure specified above for reporting non-compliance.

17. The Facility management shall submit the information online through XGN in reference to compliance of consent conditions.

Additional Water condition:-

1. The Occupier of the facility shall submit the information online through XGN in reference to compliance of consent conditions.
2. The ground water quality within 50 meter of periphery of site shall be periodically monitored to ensure that the ground water is not contaminated beyond acceptable limit. Such monitoring shall be carried out to cover different seasons in a year that is summer, monsoon and post monsoon period

CONDITIONS PERTAINING TO AIR (PREVENTION & CONTROL OF POLLUTION) ACT 1981 :-

1. The applicant shall operate and maintain air pollution control system to achieve the level of pollutants to the following standards:-

Name of section	*Capacity*	*Stack height(mtrs)*	*Fuel*	*Control equipment to be installed*	*P.M, SOX, NOX(mg/NM3)*
Boiler	*11.5 mw/hr. (msw power)*	*50*	*SOLID Waste(20 Tonnnes /hrs.)*	*Bag Filter, E.S.P, Dry Scrubbing*	*50, 200, 400*
D.G. Sets	*1450kva dg set*	*30*	*HSD*	*acoustic enclosure,Green Belt,Muffler,Not Applicable,*	*As per MoEF&CC & CPCB Guidelines*

2. The Ambient air quality norms are prescribed in MoEF gazette notification no. GSR/826(E), dated: 16/11/09. Some of the parameters are as follows:
a. Particulate Matter (less than 10 micron) - 100 µg/m³ (PM10 µg/m³ 24 hrs. basis)
b. Particulate Matter (less than 2.5 micron) - 60 µg/m³ (PM2.5 µg/m³ 24 hrs. basis)
c. Sulphur Dioxide [SO2] (24 hrs. Basis) - 80 µg/m³
d. Nitrogen Oxides [NOx] (24 hrs. Basis) - 80 µg/m³
e. Carbon Monoxide [CO] (8 hrs. Basis) - 2000 µg/m³

3. The industry shall take adequate measures for control of noise level generated from industrial activities within the premises less than 75 dB(A) during day time and 70 dB(A) during night time.

4. The industry/unit shall make the necessary arrangements for control of the fugitive emission from any source of emission/section/activities.

5. All other fugitive emission sources such as leakages, seepages, spillages etc shall be ensured to be plugged or sealed or made airtight to avoid the public nuisance.

6. The industry/ unit shall ensure all necessary arrangements for control of odour nuisance from the industrial activities or process within premises

7. All the internal roads shall be made pucca to control the fugitive emissions of particulate matter generated due to transportation and internal movements. Good housekeeping practices shall be adopted to avoid leakages, seepages, spillages etc.

8. Industry shall take effective steps for extensive tree plantation preferably in 03 rows of the local tree species with minimum spacing of 2X2 meters within or around the industry/unit premises for general improvement of environmental conditions and as stated in below..

(Minimum number of plants to be planted by the unit:-750 Nos.)

Additional Air condition:-

1. Industry shall operate and maintain Continuous Stack Emission Monitoring System (CSEMS) stations to monitor Boiler stack emission and shall provide connectivity of CSEMS with Environment Surveillance Center at the HQ of M.P. Pollution Control Board and CPCB.
2. Industry shall operate and maintain CAAQMS stations at suitable locations to monitor ambient air quality. The management shall provide suitable connectivity of CAAQMS with Environment Surveillance Centre at the HQ of M.P. Pollution Control Board for monitoring and data transmission purpose.

JABALPUR SMART CITY LIMITED

Jabalpur Smart City Limited (JSCL)

Manas Bhavan Wright Town, Jabalpur, M.P-482001,www.jscljabalpur.org,
Contact: admin@jscljabalpur.org, ceojscl@mpurban.gov.in Mob .7611136800

Ref No: JSCL/2021/161 Date 22/02/2021

Work Order

To,

M/s Pradip Hanumant Jadhav (Lead Bidder)
18/3A, Flat no 7. Vedant residency,
Gondhale nagar, Hadpsar, PUNE (Maharashtra)
in Joint Venture with
M/s Hydroindia Engineering Consultants (Consortium Partner)
plot no 25, Sacchidanand Nagar, Bodkhe layout,
Manewada road, Nagpur, 440024 (Maharashtra)

Subject: **"Mining of Legacy Waste and Recovery of Land at the Ranital Dumping Ground, Jabalpur".**

Ref.: 1. LOA: JSCL/2021/66 Dated 21.01.2021
2. Agreement dated: 19.02.2021.

Since you have executed the Agreement. You are directed to commence the work and Complete within the stipulated time period.

The Detail of work is as follows:

1	Rate of Work	:	₹ 644 per Tonne (Excluding GST)
2	Period of Work	:	360 days
3	Approximate Quantity of Waste	:	1.5 lakh Metric Ton

Executive Director
Jabalpur Smart City Limited

Copt to: -

1. Chief Executive Officer, Jabalpur Smart City Limited
2. Superintendent Engineer, Jabalpur Smart City Limited.
3. Executive Engineer, Jabalpur Smart City Limited.
4. Chief Finance Officer, Jabalpur Smart City Limited.

Executive Director
Jabalpur Smart City Limited

नोडल ऑफिसर
(स्वच्छता सेल)
नगर पालिक निगम जबलपुर

Jabalpur Smart City Limited (JSCL)
ManasBhavan Wright Town, Jabalpur, M.P-482001,www.jscljabalpur.org,
Contact:admin@jsjscljabalpur.org, ceojscl@mpurban.gov.in Mob 7611136800

Ref. no JSCL/2022-2023/1465 Date: 28/11/2022

WORK COMPLETION CERTIFICATE

1	Name of work/project & Location	"Mining of Legacy Waste and Recovery of Land at the Ranital Dumping Ground, Jabalpur on Build Operate and Transfer Basis" project under JSCL.
2	Name of Agency	**M/s Pradeep Hanumant Jadhav (M/s P H Jadhav) in Jv with M/s Hydroindia Engineering Consultants**
3	Description of contract such as : i) Technology	Mining of Legacy Waste and Recovery of Land
	ii) Processing Capacity (TPD)	1000 TPD
	iii) Bio remediation qty of legacy waste as per RFP	150000 MT
	Iv) Revised additional Bio remediation qty of legacy waste	36000 MT
	Total Bio remediation qty of legacy waste	**186000 MT**
	➢ Quantity of Enriched Soil disposal	39627 MT
	➢ Quantity of Stone disposal	30075 MT
	➢ Quantity of stone under 35mm disposal	104874 MT
	➢ Quantity of RDF co-processed/disposed to cement plant/waste to energy etc.	11424 MT
4 i)	Agreement No./Work Order No	JSCL/2021/161 on dated 22-02-2021
ii)	Revised additional quantity order No.	JSCL/2022/462 on dated 04-04-2022
5 i)	Tender Cost INR	9.66 Cr
ii)	Revised Tender Cost INR	11.97 Cr
iii)	Completion Amount INR	11.97 Cr
6	Date of Start (Work order date)	22-02-2021
7 i)	Date of Completion as per RFP	21-02-2022
ii)	Revised date of completion	30-06-2022
iii)	Actual date of completion	30-06-2022
8	Amount of compensation levied for delayed in completion, if any	Nil
9	Performance Report	Satisfactory
i)	Quality of Work	Satisfactory
ii)	Financial soundness	Satisfactory
iii)	Technical proficiency	Satisfactory
iv)	Resourcefulness	Satisfactory
v)	General Behavior	Satisfactory

24/11/22
Executive Engineer
Jabalpur Smart City Limited

Chaudhary
Received

नोडल ऑफिसर
(स्वच्छता सेल)
नगर पालिक निगम जबलपुर

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/16
Sample Description	Drain at Waste to Energy Plant Bypass, Jabalpur (MP)	Requisition No.	124
Date of sample collection	14.05.2024	Date	20.05.2024
Date of sample receipt	16.05.2024	Type of sample	Grab
Date of analysis	16.05.2024 to 19.05.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.14**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**117**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**243**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**58**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**4.6**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**6.4**	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विश्लेषक
Scientist-'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
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Central Pollution Control Board,Bhopal (M.P.)

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

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Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/17
Sample Description	5 MLD STP, Ranital, Jabalpur (MP) - Inlet	Requisition No.	124
Date of sample collection	14.05.2024	Date	20.05.2024
Date of sample receipt	16.05.2024	Type of sample	Grab
Date of analysis	16.05.2024 to 19.05.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**6.82**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**56**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**160**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**90**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	Oil & Grease	mg/L	-	APHA 5520-D
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे / Milind Kumar Nimje
वैज्ञानिक-'ग', लैब प्रमुख एवं सरकारी विश्लेषक
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Central Pollution Control Board,Bhopal (M.P.)

CPCB

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Test Report : Waste Water (Physico Chemical Parameter)

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COPY FOR LAB I/C

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/18
Sample Description	5 MLD STP, Ranital, Jabalpur (MP) - Outlet	Requisition No.	124
Date of sample collection	14.05.2024	Date	20.05.2024
Date of sample receipt	16.05.2024	Type of sample	Grab
Date of analysis	16.05.2024 to 19.05.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.16**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**15**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**49**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**20**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**2.1**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	**Phosphate (as P)**	**mg/L**	**2.48**	**APHA 4500-P-D**
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**5.9**	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	**Faecal Coliform**	**MPN/100ml**	**540**	**APHA 9221-E**
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

Laboratory Head

मिलिन्द कुमार हिंगे / Milind Kumar Hinge
वैज्ञानिक-'डी' लैब प्रमुख एवं सरकारी विश्लेषक
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Central Pollution Control Board, Bhopal (M.P.)

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

F/LAB/06/TR-02

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/19
Sample Description	32 MLD STP, Kathonda, Jabalpur (MP) - Inlet	Requisition No.	124
Date of sample collection	14.05.2024	Date	20.05.2024
Date of sample receipt	16.05.2024	Type of sample	Grab
Date of analysis	16.05.2024 to 19.05.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.55**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**42**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**76**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**32**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	Oil & Grease	mg/L	-	APHA 5520-D
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग'/प्रभारी प्रमुख एवं सरकारी विश्लेषक
Scientist 'C'/Lab Head & Government Analyst
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केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board Bhopal (M.P.)

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
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EPA Recognised Lab

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F/LAB/06/TR-02

Test Report : Waste Water (Physico Chemical Parameter)

Project Name		**NGT Case No. 606/2018**		**Test Report No.**	**WW/24-25/20**
Sample Description		**32 MLD STP, Kathonda, Jabalpur (MP) - Outlet**		**Requisition No.**	124
Date of sample collection		14.05.2024		**Date**	20.05.2024
Date of sample receipt		16.05.2024		**Type of sample**	Grab
Date of analysis		16.05.2024 to 19.05.2024		**Sample collected by**	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah
S.No.	**Parameters**	**Unit**	**Result**	**Method**	
1	Temperature	°C	-	-	
2	Odour	-	-	-	
3	Appearance	-	-	-	
4	Colour	Pt-Co Scale	-	APHA, 2120-B	
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B	
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C	
7	**pH**	**pH unit**	**7.12**	**APHA, 4500H+B**	
8	Specific Conductivity	µmho/cm	-	APHA 2510 B	
9	**Suspended Solids**	**mg/L**	**20**	**APHA 2540 D**	
10	Total Dissolved Solids	mg/L	-	APHA 2540 C	
11	Total Solids	mg/L	-	APHA 2540 B	
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E	
13	**COD**	**mg/L**	**46**	**APHA, 5220 B**	
14	**BOD (3 days, 27°C)**	**mg/L**	**16**	**IS 3025, 1993**	
15	Chloride	mg/L	-	APHA, 4500-CL-B	
16	Total Alkalinity	mg/L	-	APHA 2320-B	
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C	
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B	
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B	
20	**Oil & Grease**	**mg/L**	**2.4**	**APHA 5520-D**	
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C	
22	Turbidity	N.T.U.	-	APHA, 2130-B	
23	**Phosphate (as P)**	**mg/L**	**2.33**	**APHA 4500-P-D**	
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E	
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F	
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B	
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**12.91**	**APHA 4500-NO_3B**	
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D	
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B	
30	Potassium (as K)	mg/L	-	APHA 3500-K-B	
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B	
32	Boron (as B)	mg/L	-	APHA 4500-B-C	
33	**Faecal Coliform**	**MPN/100ml**	**4.5**	**APHA 9221-E**	
34	Total Coliform	MPN/100ml	-	APHA 9221-B	
35	Bioassay Test	% Survival	-	APHA 8910 A-C	
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37					
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Prepared by:

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EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

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Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/21
Sample Description	50 MLD STP, Kathonda, Jabalpur (MP) - Intlet	Requisition No.	124
Date of sample collection	14.05.2024	Date	21.05.2024
Date of sample receipt	16.05.2024	Type of sample	Grab
Date of analysis	16.05.2024 to 21.05.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**54**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**68**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**18**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	Oil & Grease	mg/L	-	APHA 5520-D
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
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38				

Prepared by:

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Test Report : Waste Water (Physico Chemical Parameter)

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/22
Sample Description	50 MLD STP, Kathonda, Jabalpur (MP) - Outlet	Requisition No.	124
Date of sample collection	14.05.2024	Date	21.05.2024
Date of sample receipt	16.05.2024	Type of sample	Grab
Date of analysis	16.05.2024 to 21.05.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**8.04**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**18**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**57**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**15**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**2**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	**Phosphate (as P)**	**mg/L**	**0.13**	**APHA 4500-P-D**
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**3.56**	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	**Faecal Coliform**	**MPN/100ml**	**23**	**APHA 9221-E**
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
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Prepared by:

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Test Report : Waste Water (Physico Chemical Parameter)

Project Name	**NGT Case No. 606/2018**	**Test Report No.**	**WW/24-25/23**
Sample Description	**0.55 MLD STP, Gwarighat (Naughat), Jabalpur (MP) - Inlet**	**Requisition No.**	124
Date of sample collection	15.05.2024	**Date**	21.05.2024
Date of sample receipt	16.05.2024	**Type of sample**	Grab
Date of analysis	16.05.2024 to 21.05.2024	**Sample collected by**	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**6.88**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**680**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**148**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**108**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	Oil & Grease	mg/L	-	APHA 5520-D
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
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Prepared by:

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Test Report : Waste Water (Physico Chemical Parameter)

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Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/24
Sample Description	0.55 MLD STP, Gwarighat (Naughat), Jabalpur (MP) - Outlet	Requisition No.	125
Date of sample collection	15.05.2024	Date	21.05.2024
Date of sample receipt	16.05.2024	Type of sample	Grab
Date of analysis	16.05.2024 to 21.05.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.28**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**41**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**49**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**17**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**2.8**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	**Phosphate (as P)**	**mg/L**	**0.62**	**APHA 4500-P-D**
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**2.13**	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	**Faecal Coliform**	**MPN/100ml**	**130**	**APHA 9221-E**
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
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Prepared by:

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Test Report : Waste Water (Physico Chemical Parameter)

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Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/25
Sample Description	0.1 MLD STP, Siddhaghat, Jabalpur (MP) - Intlet	Requisition No.	125
Date of sample collection	15.05.2024	Date	21.05.2024
Date of sample receipt	16.05.2024	Type of sample	Grab
Date of analysis	16.05.2024 to 21.05.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.27**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**120**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**213**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**106**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	Oil & Grease	mg/L	-	APHA 5520-D
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

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Test Report : Waste Water (Physico Chemical Parameters)

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Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/26
Sample Description	0.1 MLD STP, Siddhaghat, Jabalpur (MP) - Outlet	Requisition No.	125
Date of sample collection	15.05.2024	Date	21.05.2024
Date of sample receipt	16.05.2024	Type of sample	Grab
Date of analysis	16.05.2024 to 21.05.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	7.35	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	24	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	53	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	18	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	2.4	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	**Phosphate (as P)**	**mg/L**	1.01	**APHA 4500-P-D**
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	6.69	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	**Faecal Coliform**	**MPN/100ml**	33	**APHA 9221-E**
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',क्षेत्र प्रमुख एवं सरकारी विश्लेषक
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केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)

Laboratory Head:

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab

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Test Report : Waste Water (Physico Chemical Parameter)

Project Name		**NGT Case No. 606/2018**		**Test Report No.**	**WW/24-25/28**
Sample Description		**0.5 MLD STP, Gulaua, Jabalpur (MP) - Inlet**		**Requisition No.**	125
Date of sample collection		15.05.2024		**Date**	21.05.2024
Date of sample receipt		16.05.2024		**Type of sample**	Grab
Date of analysis		16.05.2024 to 21.05.2024		**Sample collected by**	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah
S.No.	**Parameters**	**Unit**	**Result**	**Method**	
1	Temperature	^{o}C	-	-	
2	Odour	-	-	-	
3	Appearance	-	-	-	
4	Colour	Pt-Co Scale	-	APHA, 2120-B	
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B	
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C	
7	**pH**	**pH unit**	**7.01**	**APHA, 4500H+B**	
8	Specific Conductivity	µmho/cm	-	APHA 2510 B	
9	**Suspended Solids**	**mg/L**	**32**	**APHA 2540 D**	
10	Total Dissolved Solids	mg/L	-	APHA 2540 C	
11	Total Solids	mg/L	-	APHA 2540 B	
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E	
13	**COD**	**mg/L**	**129**	**APHA, 5220 B**	
14	**BOD (3 days, $27^{o}C$)**	**mg/L**	**70**	**IS 3025, 1993**	
15	Chloride	mg/L	-	APHA, 4500-CL-B	
16	Total Alkalinity	mg/L	-	APHA 2320-B	
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C	
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B	
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B	
20	Oil & Grease	mg/L	-	APHA 5520-D	
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C	
22	Turbidity	N.T.U.	-	APHA, 2130-B	
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D	
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E	
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F	
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B	
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B	
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D	
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B	
30	Potassium (as K)	mg/L	-	APHA 3500-K-B	
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B	
32	Boron (as B)	mg/L	-	APHA 4500-B-C	
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E	
34	Total Coliform	MPN/100ml	-	APHA 9221-B	
35	Bioassay Test	% Survival	-	APHA 8910 A-C	
36					
37					
38					

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विश्लेषक
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Central Pollution Control Board Bhopal (M.P.)
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EPA Recognised Lab

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Test Report : Waste Water (Physico Chemical Parameter)

Project Name	NGT Case No. 606/2018			Test Report No.	WW/24-25/29
Sample Description	0.5 MLD STP, Gulaua, Jabalpur (MP) - Outlet			Requisition No.	125
Date of sample collection	15.05.2024			Date	21.05.2024
Date of sample receipt	16.05.2024			Type of sample	Grab
Date of analysis	16.05.2024 to 21.05.2024			Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.07**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**16**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**65**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**15**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**2.2**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	**Phosphate (as P)**	**mg/L**	**2.24**	**APHA 4500-P-D**
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**12.43**	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	**Faecal Coliform**	**MPN/100ml**	**920**	**APHA 9221-E**
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मितिन कुमार निमजे/Mitin Kumar Nimje
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EPA Recognised Lab

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Test Report : Waste Water (Physico Chemical Parameter)

Project Name	NGT Case No. 606/2018		Test Report No.	WW/24-25/27
Sample Description	Drain at Gwarighat before confluence to Maa Narmada		Requisition No.	125
Date of sample collection	14.05.2024		Date	21.05.2024
Date of sample receipt	15.05.2024		Type of sample	Grab
Date of analysis	16.05.2024 to 21.05.2024		Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar, Sh SS Kushwah

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**6.99**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**134**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**137**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**87**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**5.2**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	**Phosphate (as P)**	**mg/L**	**1.53**	**APHA 4500-P-D**
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**6.8**	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	**Faecal Coliform**	**MPN/100ml**	**920**	**APHA 9221-E**
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग' एवं प्रमुख एवं सरकारी विश्लेषक
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Central Pollution Control Board,Bhopal (M.P.)

Construction & Demolition Waste		
Monthly Processing Logbook (April-2024)		
Place: Kathonda		
Plant In-charge: Saurabh Soni		
S.No.	Date	Total quantity of C&D waste received for processing (in tons)
1	1-Apr-24	47.66
2	2-Apr-24	41.17
3	3-Apr-24	47.25
4	4-Apr-24	48.55
5	5-Apr-24	43.05
6	6-Apr-24	40.44
7	7-Apr-24	0.00
8	8-Apr-24	46.98
9	9-Apr-24	47.93
10	10-Apr-24	43.87
11	11-Apr-24	0.00
12	12-Apr-24	40.69
13	13-Apr-24	40.28
14	14-Apr-24	0.00
15	15-Apr-24	47.11
16	16-Apr-24	46.91
17	17-Apr-24	0.00
18	18-Apr-24	47.68
19	19-Apr-24	0.00
20	20-Apr-24	46.56
21	21-Apr-24	0.00
22	22-Apr-24	40.46
23	23-Apr-24	37.58
24	24-Apr-24	45.70
25	25-Apr-24	48.09
26	26-Apr-24	46.36
27	27-Apr-24	48.66
28	28-Apr-24	0.00
29	29-Apr-24	39.56
30	30-Apr-24	45.46
Total		**1028.00**

नोडल ऑफिसर
(स्वच्छता सेल)
नगर पालिक निगम जबलपुर

R.K. SHARMA & BROTHERS

जनवरी 1384

R. K. Sharma & Brothers

GOVERNMENT CONTRACTOR & SUPPLIER

दिनांक 06/01/24. क्रमांक 3870

समय 4:15 ☐ सुबह ☒ ~~शाम~~

वाहन नं. MP20-CA-215H.

माल Bharat Power 8x4 Red + Orange.

मात्रा 20cubes गाड़ी का नाम 407 ①

पार्टी का नाम व पता Mr. Naman Gupta ji

Bajnamath.

साईट का नाम 7566777988, 8827680229

प्राप्तकर्ता

वास्ते

R. K. Sharma & Brothers

GOVERNMENT CONTRACTOR & SUPPLIER

दिनांक 12/01/24. क्रमांक 3892

समय 1:30 ☐ सुबह ☒ ~~शाम~~

वाहन नं. MP AA 8916

माल Flower Garam Red

मात्रा 6 cubes गाड़ी का नाम Tata 709 (2)

पार्टी का नाम व पता Mr. C.O. Singh ji

Bhedaghat.

साईट का नाम 8827680229 8462074128 12/01/24

प्राप्तकर्ता

वास्ते

नोडल ऑफिसर
(स्वच्छता सेल)
नगर पालिक निगम जबलपुर

Annexure-15

April-24 Processing data

DATE	Total Waste(MT)	Total Recyables (MT)							TOTAL RDF(MT)	TOTAL COMPOST(MT)	TOTAL MOISTURE LOSS IN COMPLETE PROCESS (MT)	TOTAL INERT (MT)
		GLASS	PLASTIC	METAL	RUBBER	PAPER	CLOTH	NON RECYCLABLE				
01-04-24	294	4.998	11.76	3.822	0.588	1.47	1.176	0.294	132.3	34.692	58.8	44.1
02-04-24	327	5.559	13.08	4.251	0.654	1.635	1.308	0.327	147.15	38.586	65.4	49.05
03-04-24	355	6.035	14.2	4.615	0.71	1.775	1.42	0.355	159.75	41.89	71	53.25
04-04-24	315	5.355	12.6	4.095	0.63	1.575	1.26	0.315	141.75	37.17	63	47.25
05-04-24	341	5.797	13.64	4.433	0.682	1.705	1.364	0.341	153.45	40.238	68.2	51.15
06-04-24	328	5.576	13.12	4.264	0.656	1.64	1.312	0.328	147.6	38.704	65.6	49.2
07-04-24	342	5.814	13.68	4.446	0.684	1.71	1.368	0.342	153.9	40.356	68.4	51.3
08-04-24	391	6.647	15.64	5.083	0.782	1.955	1.564	0.391	175.95	46.138	78.2	58.65
09-04-24	354	6.018	14.16	4.602	0.708	1.77	1.416	0.354	159.3	41.772	70.8	53.1
10-04-24	337	5.729	13.48	4.381	0.674	1.685	1.348	0.337	151.65	39.766	67.4	50.55
11-04-24	337	5.729	13.48	4.381	0.674	1.685	1.348	0.337	151.65	39.766	67.4	50.55
12-04-24	377	6.409	15.08	4.901	0.754	1.885	1.508	0.377	169.65	44.486	75.4	56.55
13-04-24	352	5.984	14.08	4.576	0.704	1.76	1.408	0.352	158.4	41.536	70.4	52.8
14-04-24	380	6.46	15.2	4.94	0.76	1.9	1.52	0.38	171	44.84	76	57
15-04-24	380	6.46	15.2	4.94	0.76	1.9	1.52	0.38	171	44.84	76	57
16-04-24	353	6.001	14.12	4.589	0.706	1.765	1.412	0.353	158.85	41.654	70.6	52.95
17-04-24	351	5.967	14.04	4.563	0.702	1.755	1.404	0.351	157.95	41.418	70.2	52.65
18-04-24	328	5.576	13.12	4.264	0.656	1.64	1.312	0.328	147.6	38.704	65.6	49.2
19-04-24	360	6.12	14.4	4.68	0.72	1.8	1.44	0.36	162	42.48	72	54
20-04-24	300	5.1	12	3.9	0.6	1.5	1.2	0.3	135	35.4	60	45
21-04-24	325	5.525	13	4.225	0.65	1.625	1.3	0.325	146.25	38.35	65	48.75
22-04-24	300	5.1	12	3.9	0.6	1.5	1.2	0.3	135	35.4	60	45
23-04-24	320	5.44	12.8	4.16	0.64	1.6	1.28	0.32	144	37.76	64	48
24-04-24	290	4.93	11.6	3.77	0.58	1.45	1.16	0.29	130.5	34.22	58	43.5
25-04-24	280	4.76	11.2	3.64	0.56	1.4	1.12	0.28	126	33.04	56	42
26-04-24	260	4.42	10.4	3.38	0.52	1.3	1.04	0.26	117	30.68	52	39
27-04-24	280	4.76	11.2	3.64	0.56	1.4	1.12	0.28	126	33.04	56	42
28-04-24	290	4.93	11.6	3.77	0.58	1.45	1.16	0.29	130.5	34.22	58	43.5
29-04-24	300	5.1	12	3.9	0.6	1.5	1.2	0.3	135	35.4	60	45
30-04-24	315	5.355	12.6	4.095	0.63	1.575	1.26	0.315	141.75	37.17	63	47.25
TOTAL	9862	167.654	394.48	128.206	19.724	49.31	39.448	9.862	4437.9	1163.716	1972.4	1479.3

➢ **Rewa City: -**

- Waste Generation – 125 Ton/day
- Waste Collection – 125 Ton/day
- Processing - 125 Ton/day

➢ **Rewa Cluster: -**

- Waste Generation – 320 ton/day
- Waste Collection – 320 Ton/day
- Processing - 320 Ton/day

➢ **Compost Plant Material Balance and Process: -**

- Wet waste Received – 192 ton/day
- Process - 192 ton/day
- Inert generation - 28.80ton/day (sent to landfill)

➢ **RDF Material Balance: -**

- Waste Received – 128 ton/day
- RDF Generation – 102.40ton/day
- Inert Generation – 14.5 ton/day (sent to landfill)

➢ **WTE material balance: -**

- Waste Feed – 350 ton/day
- Fly ash Generation – 7 ton/day (sent to landfill)
- Bottom ash generation – 35 ton/day (sent to landfill)

➢ **Legacy waste site: -**

- Process Used for Remediation – Bioremediation
- Plan for future after remediation of site – Will use future MSW plants, or will decide by Commissioner RMC, Mayor and MIC members.

➢ **Where are we sending Recyclable waste: -**

- high Calorific value waste using in W2E plant. Mishra Traders takes away the Remaining recyclable waste. Municipal Corporation Rewa has an agreement with him.

➢ **RDF plant capacity is 120 ton/day and W2E plant Capacity is 350 ton/day, How we are fulfil the requirement of W2E through RDF Plant:**

- By Getting RDF from Other Legacy waste sites in India. (Like recently we are getting RDF from Prayagraj (U.P.) appx 300-400ton daily)

N.P.LIC No. 60534/BPL/S/2002

INDO WATER MANAGEMENT & POLLUTION CONTROL CORPORATION

IWMPCC

Common Bio – Medical Waste Treatment Facility (INCINERATOR) –SATNA

ISO 9001: 2015
ISO 14001: 2015

H.O Add : C-32 2nd Floor, Parijat Complex, Bittan Market , E-5 , Arera Colony Bhopal – 462016
Satna Off : Narayani Sadan , Shiv Colony ,Ahiran Mohalla, Dhawari, Satna (M.P.) 485001
CBWTF Add: Village-Barkhera,Amarpatan Road, Tahsil – Unchehra, District – Satna (M.P.) 485001
Phone: 0755-2425900, (Fax) 0755-4044000, Mob – 9301888900, 9425020301
Website: www.indocbwtf.com E-Mail: cbwtfsatna@gmail. incineratorstna@gmail.com iwmpcc@gmail.com

Ref.No.: IWMPCC/ Date ....

AGREEMENT

This Agreement made on this ~~1st~~ 4th day Day of ~~01~~ April of the year 2022 between **Municipal Corporation Rewa** (M.P.) herein after referred as the "MEMBER" and represented by Commissioner of the Frist PARTY (Which expression include their successors and assigns, unless such inclusion is inconsistent with the content or meaning thereof)

AND

Indo water Management & Pollution Control Corporation (CBMWTF_Satna) having there registered office at Narayani sadan, Shiv Colony , Ahiran Mohalla, Dhawari, Satna MP here in after referred to as the "FIRM' represented by its Director of Authorized Signatory, of the Second PARTY (Which expression include their successors and assign, unless such inclusion is inconsistent with the content or meaning thereof)

Whereas the FIRM has setup Village - Barkheda, Amarpatan Road, Post - Batanwara, Tehsil - Unchehra, Distt- Satna (M.P.) a CBMWTF (Common Bio-Medical Waste Treatment Facility) to transport, store, treat and dispose of the solid Bio- Medical Waste (BMW) (management & Handling) Rule 2016.

This Agreement Executed On 01st Day of ....

NOW THEREFORE THESE PRESENT 2 WITNESS SELL AND ITS IS HERE BY DECLERE AND AGREED BY AND BETWEEN THE PARTIES HERE TO AS FOLLOWS.

1. That the scope of services to be provided by the FIRM is limited to transportation, store, treatment and disposal of Domestic Hazardous Waste and Sanitary Wasted defined in MSW Rules 2016
2. That this Agreement shall be enforced for a period of ~~three year~~ only four months from the date of execution which can be renewed any time before its expiry by the execution of renewed Agreement.
3. The FIRM will charge 0 to 100 Kg Rs. 9000/ - Minimum Charge & 100Kg. Above Rs. 70/ (Rs. Seventy Only) Per kilogram of segregated Domestic Hazardous Waste handed over to Indo Water Management and Pollution Control Corporation by Member for collection, transportation, treatment and Disposal of Domestic Hazardous Waste from transfer station of member as per SWM Rules Member will provided waste in closed container and to be weighed at transfer station. Logbook shall be maintained transfer station for the weight Meant of the waste which shall be signed by workers of both the parties.

For: Indo Water Management & Pollution Control Corporation

Authorised Sig.

4. That second party shall be deposition sum of Rs. Xxxxxx/ - (Rupees Xxxxxx Thousand) to the FIRM i.e. as security deposit. – NA
5. That the FIRM will raise the bill to the Member on or before 10th
6. That the FIRM will pick up the waste on regular basis except if some major breakdown occur which is beyond the control. Rules By MPP.CB
7. That treatment and disposal charges shall be revised on 31st march and then after every year till the continuance of the agreement by 10% as compared to previous year charges
8. In the event any provision of the agreement is held to the illegal, invalid or unenforceable under any present of future law such provisions shall be deemed terminable and the remaining parts and portion of this jurisdiction over all the disputes arising out of this Agreement shall remain in full force & effect.
9. CBWTF (the FIRM) and member mutually agree that the courts of the Bhopal in Madhya Pradesh shall have The jurisdiction over all the disputes arising out of this agreement.
10. This agreement is valid form 01 April 2022 to 01 April 2024.

IN WITNESS WHEREOF the parties here to have set and subscribe their respective hands scales on the day month and year first above written. Furthermore, this agreement is executed in duplicate. Both copies on separate paper and will be treated as original equivalent.

For: Indo Water Management & Pollution Control Corporation
Authorised Signatory

Commissioner
Municipal Corporation/CEQ
/Nodal Officer SBM ,Rewa (M.P)
Authorized Signatory

4/4/2022
H. O

For : Indo Water Management &
Pollution Control Corporation
Authorized Signatory

Name: -
Designation:

Name:- Amal mahane
Designation: - Director

Witness: - 1
Name:- SUKHENDRA VISHWAKARMA
Address: - Vill. Post Karmeli distt. Rewa (M.P.)
Mob.No- 7389566144

Witness: - 2
Name :- Apar Singh
Address:- Vill. Itha post AJaygarh Rewa (M.P.)
Mo. - 9669432947

Annexure-17

:- MRF Log Book :-

OFFICE OF MUNICIPAL CORPORATION REWA (M.P.)

MRF/PROCESSING PLANT LOGBOOK

NAME OF PLANT/ MRF - PAHADIYA

Month:- April - 2024

ADDRESS OF PLANT/ MRF - PAHADIYA

Plant Capacity:- 50 MT/PD

Date	Qty of Dry Waste Received (MT)	Qty Dry Waste Processed (MT)	Plastic/Polythene	Rubber	Glass	Cloth	Paper	Card Board	Pakeging Material	Metal	RDF	INERT
1-Apr-24	47.99	47.99	7.24	4.18	3.74	4.3	5.02	5.94	4.94	3.61	9.54	0.4799
2-Apr-24	47.86	47.86	7.2	3.58	5.4	4.64	5.39	5.21	4.21	3.26	10.19	0.4786
3-Apr-24	48.43	48.43	7.92	3.22	4.58	4.51	4.83	5.89	4.89	3.32	9.9	0.4843
4-Apr-24	47.81	47.81	6.21	3.6	4.22	3.54	4.27	4.76	4.76	3.92	10.21	0.4781
5-Apr-24	47.85	47.85	7.2	4.21	5.17	3.81	4.27	5.7	5.4	3.33	9.73	0.4785
6-Apr-24	47.73	47.73	6.76	3.8	4.86	4.07	5.05	4.15	4.14	3.65	9.39	0.4773
7-Apr-24	48.67	48.67	7.19	3.25	4.77	4.14	4.54	4.41	4.41	3.27	9.76	0.4867
8-Apr-24	47.84	47.84	6.52	3.37	5.8	3.96	4.58	5.8	4.8	3.44	9.31	0.4784
9-Apr-24	47.39	47.39	7.71	3.23	4.17	4.18	4.06	4.17	5.17	3.47	9.46	0.4739
10-Apr-24	47.18	47.18	6.64	4.12	5.19	4.87	5.02	5.19	4.19	3.54	9.29	0.4718
11-Apr-24	47.54	47.54	7.42	3.33	5.24	4.83	4.74	5.24	4.24	4.15	10.06	0.4754
12-Apr-24	47.06	47.06	6.12	4.21	4.75	3.66	4.97	4.75	4.74	3.53	9.41	0.4706
13-Apr-24	48.02	48.02	7.6	3.3	3.97	4.39	4.16	5.97	5.27	3.57	9.42	0.4802
14-Apr-24	47.48	47.48	7.92	3.44	4.78	4.84	4.46	4.78	4.78	3.25	10.07	0.4748
15-Apr-24	47	47	7.49	3.37	4.65	3.99	5.02	4.65	4.64	3.63	9.93	0.47
16-Apr-24	48.57	48.57	7.39	3.37	4.23	4.33	5.41	4.23	4.23	3.78	9.53	0.4857
17-Apr-24	47.56	47.56	7.82	3.55	5.06	4.64	5.22	5.06	4.06	4.13	9.47	0.4756
18-Apr-24	46.98	46.98	7.41	3.29	5.19	4.36	4.3	5.19	5.19	3.42	10.01	0.4698
19-Apr-24	47.99	47.99	6.21	3.22	4.31	4.68	5.02	4.31	4.31	3.61	9.88	0.4799
20-Apr-24	48.14	48.14	6.96	3.76	5.24	4.92	4.25	5.24	4.24	3.92	9.57	0.4814
21-Apr-24	48.72	48.72	7.06	3.96	4.64	4.37	4.6	4.64	4.63	3.69	9.67	0.4872
22-Apr-24	47.21	47.21	7.72	3.8	4.8	3.55	5.37	4.8	4.8	3.95	10	0.4721
23-Apr-24	48.9	48.9	6.95	3.34	5.16	3.54	4.84	5.16	4.16	3.85	10.01	0.489
24-Apr-24	49.2	49.2	7.16	4.14	5.02	4.09	5.31	5.02	4.02	3.85	9.35	0.492
25-Apr-24	47.66	47.66	6.23	3.65	5.94	4.17	4.36	4.74	4.74	4.12	9.73	0.4766
26-Apr-24	47.59	47.59	7.19	3.55	5.21	4.64	4.69	5.4	4.4	4.1	9.83	0.4759
27-Apr-24	47.44	47.44	7.9	3.65	5.89	4.65	5.51	4.58	4.48	4.03	9.83	0.4744
28-Apr-24	48.3	48.3	6.37	3.34	3.76	4.65	4.02	4.22	4.22	3.6	9.53	0.483
29-Apr-24	48.05	48.05	6.79	4.01	3.7	3.62	4.11	5.17	4.3	3.59	10.1	0.4805
30-Apr-24	48.08	48.08	6.77	3.78	4.15	3.65	5.36	4.86	4.86	3.34	9.57	0.4808
TOTAL	1436.24	1436.24	213.07	108.62	143.59	127.59	142.75	149.23	137.22	109.92	291.75	14.3624

Annexure-18

Apr-24							
Sl. No.	Date	Generation (in KWh)	Vehicle	Wsate Consumed in MT	No. of trip	Avarge wt in each trip (MT)	Total Bottom Ash wt (MT)
1	01.04.24	0	Hywa		0	0	0
2	02.04.24	0	Hywa		0	0	0
3	03.04.24	0	Hywa		0	0	0
4	04.04.24	0	Hywa		0	0	0
5	05.04.24	0	Hywa		0	0	0
6	06.04.24	4579	Hywa	165	4	8.9	35.6
7	07.04.24	9675	Hywa	112	3	9.3	27.9
8	08.04.24	117103	Hywa	562	8	9.5	76
9	09.04.24	109988	Hywa	567	8	9.7	77.6
10	10.04.24	123772	Hywa	574	9	9.5	85.5
11	11.04.24	123645	Hywa	587	9	9.4	84.6
12	12.04.24	115460	Hywa	575	9	9.5	85.5
13	13.04.24	134630	Hywa	643	11	9.6	105.6
14	14.04.24	127069	Hywa	572	11	9.5	104.5
15	15.04.24	117317	Hywa	544	10	9.6	96
16	16.04.24	121627	Hywa	511	8	9.2	73.6
17	17.04.24	119703	Hywa	533	9	9.2	82.8
18	18.04.24	121194	Hywa	542	8	9.3	74.4
19	19.04.24	109738	Hywa	487	7	9.3	65.1
20	20.04.24	121896	Hywa	521	8	9.2	73.6
21	21.04.24	141321	Hywa	576	9	9.1	81.9
22	22.04.24	140165	Hywa	541	8	9.2	73.6
23	23.04.24	137837	Hywa	575	8	9.3	74.4
24	24.04.24	137139	Hywa	523	8	9.3	74.4
25	25.04.24	137267	Hywa	523	8	9.3	74.4
26	26.04.24	133624	Hywa	469	6	9.3	55.8
27	27.04.24	136093	Hywa	476	7	9.2	64.4
28	28.04.24	135399	Hywa	462	7	9.2	64.4
29	29.04.24	134791	Hywa	527	9	9.5	85.5
30	30.04.24	142595	Hywa	583	10	9.6	96
	Total	2953627		12750			1893.1

Annexure-19

Regional Directorate (Central)
Central Pollution Control Board

"Parivesh Bhawan" Paryawaran ParisarNagar, E-5, Arera Colony
Bhopal – 462016
Tel: 0755-2775385/86, Fax: 0755-2775587
EPA Recognized Lab-2015

TEST REPORT

Source Emission Sample Analysis Report

F/LAB/06/TR-04

Sample from :	**M/s. MSW Rewa (MP) West to Energy Plant**			**Req. No. 101**	**Test report No: 03/24-25**
Sample Description:	**Stack**			**Registration No.**	**SE/24-25/03**
Date of collection:	16.05.2024	**Type of sample:** grab/composite		**Date:**	**27.05.2023**
Date of receipt :	18.05.2024	**Sample collected By**	**Dr. Y.K. Saxena, Rupendra Kumar & Rameshwar B.**		
Date of analysis :	24.05.2024				

S. No.	Parameters	Unit	Result	Methods
1.	**Particulate Matter(PM)**	**mg/ Nm^3**	**29**	USEPA-17, 3rd Edition, 1998 (Gravimetric Method)
2.	**Sulphur Dioxide (So_2)**	**mg/ Nm^3**	**36**	USEPA- 6, 3rd Edition 1998 (Titrametric Method)
3.	**Nitrogen Dioxide (No_x)**	**mg/Nm^3**	**198**	USEPA -7, 3rd Edition, 1998 (PDS Method)
4.	Fluoride (F)	mg/Nm^3	----	USEPA-13 A , 3rd Edition 1998 (Photometric Method)
5.	Acid Mist	mg/Nm^3	--	USEPA- 8 ,3rd Edition 1998 (Titrametric Method)
6.	Other Specific Parameter	mg/Nm^3	-	USEPA- 29, 3rd Edition 1998 (AAS/ Graphite generation)

*( ) OCEMS reading during monitoring period.

Prepared By:

Lab Head
Authorized Signatory

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विश्लेषक
Scientist-'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)

Consent Order

M.P. Pollution Control Board
E-5, Arera Colony
Paryavaran Parisar, Bhopal - 16 MP
Tele : 0755-2466191, Fax-0755-2463742

RED-LARGE	CCA-Renewal (A/W consent valid up to 31/03/2028, Haz. & SWM Auth. valid up to 31/03/2028)	CONSENT NO: ***	PCB ID: 128753

NO: /MPPCB/REW
Outward No:117134,02/01/2023 Consent No:AWHS-57328

To,

The Occupier,
M/s. REWA MSW ENERGY SOLUTIONS PVT. LTD.,
290,292,294.2201,2202, Pahadiya(V),,
City : Pahadiya (365),
Dist : Rewa, Tal : Raipur, SIDC : Not In SIDC, Latitude : 24.5955 Longitude : 81.3869

Subject: renewal of consent under section 25 of the **Water (Prevention & Control of Pollution) Act,1974** under section 21 of the **Air (Prevention & Control of Pollution) Act,1981** , **renewal of Authorization under Solid Waste Management Rules, 2016 & Authorization under Hazardous and other Waste (Management & Transboundary movement) Rules, 2016.**

Ref: Your Consent to Operate Application Receipt No. 1212341 Dt. 07/11/2022 .

With reference to your above application for renewal of consent to operate & Authorization under Solid Waste Management Rules & Authorization under Hazardous waste management Rules 2016 has been considered under the aforesaid Acts and existing rules therein. The M. P. Pollution Control Board has agreed to grant consent up to **31/03/2028** & authorisation up to **31/03/2028**, subject to the fulfillment of the terms & conditions, enclosed with this letter and-

SUBJECT TO THE FOLLOWING CONDITIONS :-

a. Location: 290,292,294.2201,2202, Pahadiya(V), , Pahadiya (365), Raipur, Rewa

b. The capital investment in lakhs: Rs. 17058

c. Product & Production Capacity:

Activity/ PRODUCT	*CAPACITY*
Integrated Municipal solid waste Management plant (Collection , Processing and disposal facility) for Rewa cluster (ULB's from Rewa , Satna and Sidhi districts)	***700 TON PER DAY*** *Aerobic Compost- 300 TPD* *Refused derived Fule facility (RDF)- 500 TPD* *Material recovery facility (MRF)- 14 TPD* *SANITARY LAND FILL - 175 TPD* *ANIMAL CARCASS- 200 Kg/hr*

*Note:- **For any change in above,operator of the facility shall obtain fresh consent from the Board. The unit shall have to install the waste to energy plant and C&D Waste Management Facility at the earliest.***

The validity of the consent & Authorization under Solid Waste Management Rules, 2016 valid up to 31/03/2028 and has to be renewed before expiry of consent/Authorization validity. Online application through XGN with annual license fees in thisregard shall be submitted to this office 6 months before expiry of the consent/Authorization. Board reserves the right to amend/cancel / revoke the condition in part or whole as and when required.

Enclosures:-

* Conditions under Water Act
* Conditions under Air Act
* Conditions under Hazardous Rules
* Conditions under Solid Waste Management Rules, 2016
* General conditions

By the order of Chairman, MPPCB

Signature Not Verified
Digitally Signed by : Chandra Mohan Thakur IAS
Date: 02/01/2023 12:56:52 PM

CHANDRA MOHAN THAKUR
Member Secretary

eSign Signing from UIDAI Server
Digitally Sign with Aadhaar
(Organic Authentication on AADHAR from UIDAI Server)
TPAV # 81S2J17EO2

Consent Order

M.P. Pollution Control Board
E-5, Arera Colony
Paryavaran Parisar, Bhopal - 16 MP
Tele : 0755-2466191, Fax-0755-2463742

CONDITIONS PERTAINING TO WATER (PREVENTION & CONTROL OF POLLUTION) ACT 1974 :-

1. The daily quantity of trade effluent at out fall of the unit shall not exceed 50.000 KL/day, and the daily quantity of sewage at out fall of the unit shall not exceed 8.000 KL/day

2. Trade Effluent Treatment:-

The applicant shall provide comprehensive effluent treatment system as per the proposal submitted to the Board and maintain the same properly to achieve following standards-

pH	Between	5.5 – 9.0	TDS	Not exceed	2100 mg/l.
Suspended Solids	Not exceed	100 mg/l.	Chlorides	Not exceed	1000 mg/l.
BOD_3 Days 27 °C	Not exceed	30 mg/l.			
COD	Not exceed	250 mg/l.			
Oil and grease	Not exceed	10 mg/l.			

For other parameters general standards of discharge as notified under EP Act 1986 shall be applicable.

3. **Sewage Treatment** :- The applicant shall provide comprehensive sewage treatment system as per the proposal submitted to the Board and maintain the same properly to achieve following standards-

pH	Between	5.5 – 9.0
Suspended Solids	Not exceed	100 mg/l.
BOD_3 Days 27 °C	Not exceed	30 mg/l.
COD	Not exceed	250 mg/l.
Oil and grease	Not exceed	10 mg/l.

Sr	Water Code (Qty in klpd - Kilo Ltr per Day)	WC : 200.000	WWG : 58.000	Water Source	Remark
1	Domestic Purpose	10.00	8.00	Local body	
2	Sanitary Landfill, Compost Facility& RDF Facility	5.00	0.00	Local body	
3	Animal Carcass Incinerator	10.00	6.00	Local body	
4	Plantation / Horticulture....	35.00	0.00	Local body	
5	Waste to Energy **(Proposed)**	115.00 **(Proposed)**	50.00 **(Proposed)**	Local body	

4. **The applicant shall provide adequate effluent treatment system of 50 m^3 capacity based on physico chemical treatment and & MBBR based biological treatment, ETP of 6 m^3 capacity for effluent generated from animal carcass incinerator and ETP based on RO, MEE (triple effect) and ATFD of 50 m^3 capacity for treating the leachate and WtE effluent as per its proposal at the earliest and maintain the same properly to achieve the prescribed standards. Similarly STP of adequate capacity as per its proposal shall be completed at the earliest. The effluent/sewage shall be treated up to prescribed standards and reused in the process, for cooling and for green belt devolvement/gardening within premises. Hence zero discharge condition shall be practiced. In no case treated effluent/sewage shall be discharged outside of industry premises.**

5. Water meter preferably electromagnetic/ultrasonic type with digital flow recording facilities shall be installed separately for category wise consumption of water for Industrial cooling/boiler feed, mine spray, process & domestic purposes and data shall be submitted online through XGN monthly patrak/statements. The industry/unit shall also monitor the treated wastewater flow and report the same online through monthly patrak/statements.

6. Any change in production capacity, process, raw material used etc. and for any enhancement of the above prior permission of the Board shall be obtained. All authorized discharges shall be consistent with terms and conditions of this consent. Facility expansions, production increases or process modifications which result new or increased discharges of pollutants must be reported by submission of a fresh consent application for prior permission of the Board

7. All treatment/control facilities/systems installed or used by the applicant shall be regularly maintained in good working order and operate effectively/efficiently to achieve compliance of the terms and conditions of this consent

8. The specific effluent limitations and pollution control systems applicable to the discharge permitted herein are set forth as above conditions.

M.P. Pollution Control Board
E-5, Arera Colony
Paryavaran Parisar, Bhopal - 16 MP
Tele : 0755-2466191, Fax-0755-2463742

9. Compilation of Monitoring data-

i. Samples and measurements taken to meet the monitoring requirements specified above shall be representative of the volume and nature of monitored discharge.

ii. Following promulgation of guidelines establishing test procedures for the analysis of pollutants, all sampling and analytical methods used to meet the monitoring requirements specified above shall conform to such guidelines unless otherwise specified sampling and analytical methods shall conform to the latest edition of the Indian Standard specifications and where it is not specified the guidelines as per standard methods for the examination of Water and Waste latest edition of the American Public Health Association, New York U.S.A. shall be used.

iii. The applicant shall take samples and measurement to meet the monthly requirements specified above and report online through XGN the same to the Board.

10. Recording of Monitoring Activities & Results-

i. The applicant shall make and maintain online records of all information resulting from monitoring activities by this Consent.

ii. The applicant shall record for each measurement of samples taken pursuant to the requirements of this Consent as follows:

(i) The date, exact place and time of sampling
(ii) The dates on which analysis were performed
(iii)Who performed the analysis?
(iv)The analytical techniques or methods used and
(v)The result of all required analysis

iii. If the applicant monitors any Pollutant more frequently as is by this Consent he shell include the results of such monitoring in the calculation and reporting of values required in the discharge monitoring reports which may be prescribed by the Board. Such increased frequency shall be indicated on the Discharge Monitoring Report Form.

iv. The applicant shall retain for a minimum of 3 years all records of monitoring activities including all records of Calibration and maintenance of instrumentation and original strip chart regarding continuous monitoring instrumentation. The period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the applicant or when requested by Central or State Board or the court.

11. Reporting of Monitoring Results:-

Monitoring Information required by this Consent shall be summarized and reported by submitting a Discharge Monitoring report on line to the Board.

12. Limitation of discharge of oil Hazardous Substance in harmful quantities:-

The applicant shall not discharge oil or other hazardous substances in quantities defined as harmful in relevant regulations into natural water course. Nothing in this Consent shall be deemed to preclude the institution of any legal action nor relive the applicant from any responsibilities, liabilities, or penalties to which the applicant is or may be subject to clauses.

13. Limitation of visible floating solids and foam:

During the period beginning date of issuance the applicant shall not discharge floating solids or visible foam.

14. Disposal of Collected Solid waste/sludge-

All hazardous waste/sludge shall be disposed of as per the Authorization issued under Hazardous & other waste (M&TM) Rules 2016. And/other Solids Sludges, dirt, silt or other pollutant separated from or resulting from treatment shall be disposed of in such a manner as to prevent any pollutant from such materials from entering any such water Any live fish, Shall fish or other animal collected or trapped as a result of intake water screening or treatment may be returned to eaters body habitat.

15. Provision for Electric Power Failure-

The applicant shall assure to the consent issuing authority that the applicant has installed or provided for an alternative electric power source sufficient to operate all facilities utilized by the applicant to maintain compliance with the terms and conditions of the Consent.

16. Prohibition of By pass system of treatment facilities-

The diversion or by-pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this Consent in prohibited except :

i. where unavoidable to prevent loss of life or severe property damage, or

ii. Where excessive storm drainage or run off would damage any facilities necessary for compliance with the terms and conditions of this Consent. The applicant shall immediately notify the consent issuing authorities in writing of each such diversion or by-pass in accordance with the procedure specified above for reporting non-compliance.

Consent Order

M.P. Pollution Control Board
E-5, Arera Colony
Paryavaran Parisar, Bhopal - 16 MP
Tele : 0755-2466191, Fax-0755-2463742

17. Industry/Institute/mine management shall submit the information online through XGN in reference to compliance of consent conditions.

Additional Water condition:-

1. The landfill shall be developed with 1.5 mm thick HDPE geo membrane liner, drainage media, leachate collection system as per the guidelines of **CPCB/ MoEF&CC.**

2. No ground water extraction shall be done without obtaining prior permission of the **Central Ground Water Board**.

3. The facility shall made necessary arrangements for monitoring and compliance of standards for composting, treatment of leachate as mentioned in part - A & B of Schedule -II of Solid Waste Management Rules,2016.

4. The ground water quality within 50 meter of periphery of landfill site shall be periodically monitored to ensure that the ground water is not contaminated beyond acceptable limit. Such monitoring shall be carried out to cover different seasons in a year that is summer, monsoon and post monsoon period.

5. Conditions incorporated in Prior Environmental Clearance granted by SEIAA, MP vide letter no. 1827/SEIAA/2019 dated 01-08-2019 shall e complied.

CONDITIONS PERTAINING TO AIR (PREVENTION & CONTROL OF POLLUTION) ACT 1981 :-

1. The applicant shall provide comprehensive air pollution control system consisting of control equipments as per the proposal submitted to the Board with reference to generation of emission and same shall be operated & maintained continuously so as to achieve the level of pollutants to the following standards:-

Name of section	Capacity	Stack height(mtrs)	Fuel	Control equipment to be installed	P.M, SOX, NOX(mg/NM3)
D.G. Sets	200 KVA	10	HSD 42 Lit/hr	Acoustic Enclosure	As per EPA Rules,1986 amended up to date (150,100,50)
Incinerator (Carcaas)	200 kg/h	30	Solid Waste 200 Kg	Bag Filter, Cyclone, Scrubber	50,200,400

2. Ambient air quality at the boundary of the industry/unit premises shall be monitored and reported to the Board regularly on quarterly basis: The Ambient air quality norms are prescribed in MoEF gazette notification no. GSR/826(E), dated: 16/11/09. Some of the parameters are as follows:

a. Particulate Matter (less than 10 micron) - 100 µg/m³ (PM10 µg/m³ 24 hrs. basis)
b. Particulate Matter (less than 2.5 micron) - 60 µg/m³ (PM2.5 µg/m³ 24 hrs. basis)
c. Sulphur Dioxide [SO2] (24 hrs. Basis) - 80 µg/m³
d. Nitrogen Oxides [NOx] (24 hrs. Basis) - 80 µg/m³
e. Carbon Monoxide [CO] (8 hrs. Basis) - 2000 µg/m³

3. The operator of the facility shall take adequate measures for control of noise level generated from industrial activities within the premises less than 75 dB(A) during day time and 70 dB(A) during night time.

4. The operator of the facility shall make the necessary arrangements for control of the fugitive emission from any source of

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emission/section/activities.

5. All other fugitive emission sources such as leakages, seepages, spillages etc shall be ensured to be plugged or sealed or made airtight to avoid the public nuisance.

6. The operator of the facility shall ensure all necessary arrangements for control of odour nuisance from the industrial activities or process within premises

7. All the internal roads shall be made pucca to control the fugitive emissions of particulate matter generated due to transportation and internal movements. Good housekeeping practices shall be adopted to avoid leakages, seepages, spillages etc.

8. The operator of the facility shall take effective steps for extensive tree plantation preferably in 03 rows of the local tree species with minimum spacing of 2X2 meters within or around the industry/unit premises for general improvement of environmental conditions and as stated in below.. Facility shall take effective steps for extensive tree plantation preferably of the local tree species within or around the industry premises for general improvement of environmental conditions and as stated in additional conditions.

1. The facility shall made necessary arrangements for monitoring of all the emission parameters as mentioned in part - C of Schedule -II of Solid Waste Management Rules,2016.

2. The facility shall install, operate and maintain Continuous On Line Monitoring System for monitoring of Source emission and ambient quality monitoring and connect the same with the with Environment Surveillance Centre, MP Pollution Control Board Bhopal for remote surveillance.

3. The SWPTDF shall take all preventive and other control measures to avoid odour nuisance for general public in surrounding areas during management of the MSW.

4. The Operator of facility shall operate and maintain Outdoor HD Industrial grade IP(Internet Protocol) Cameras with Pan-Tilt Zoom(PTZ) feature, minimum focal length 30X with night vision facility and temper proof mechanism at suitable location to display all emission sources and effluent discharge point and connect the same with Environment Surveillance Centre, MP Pollution control board Bhopal for remote surveillance..

5. Conditions incorporated in Prior Environmental Clearance granted by SEIAA, MP vide letter no. 1827/SEIAA/2019dated 01-08-2019 shall be complied.

Consent Order

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RENEWAL OF AUTHORISATION UNDER SOLID WASTE MANAGEMENT RULES 2016
Form II

1. Reference: Application No. 1107034 - 23/02/2022
2. To, M/s. Rewa MSW Energy Solutions Pvt. Ltd., Plot No. 290,292,294.2201,2202, village- Pahadiya, Tal –Raipur & Dist : Rewa,Pin-486114 (M.P.)
3. Authorization shall be valid for a period of one year i.e. from **01/04/2023 To 31/03/2028.**
   Authorization For : Operator of Solid Waste Processing Facility.

The MP Pollution Control Board, after examining the proposal hereby authorizes **M/s . Rewa Msw Energy Solutions Pvt. Ltd.**, having administrative office and waste processing/ recycling facility at Plot No. 290,292,294.2201,2202, village- Pahadiya, Tal – Raipur & Dist : Rewa, Pin-486114 (M.P.). The authorization is hereby granted to operate facility for processing and recycling of solid waste. The authorization is subject to the terms and conditions stated below and such conditions as may be otherwise specified in these rules and the standards laid down in Schedule I & II under these rules.

The MP Pollution Control Board may, at any time, revoke any of the conditions applicable under the authorization and shall communicate thesame in writing.

Any violation of the provision of the Solid Waste Management Rules, 2016 will attract the penal provisions of Environment (Protection) Act, 1986 (29 of 1986).

Terms & Conditions of Authorization

1. The operator of the solid Waste Processing and recycling facility shall comply with the provisions of the Solid Waste Management Rules, 2016.

2. The operator of the facility shall comply with the standards of Processing & Treatment of Solid Waste as given in Schedule 1 & Schedule IIof the Solid Waste management Rules, 2016.

3. The operator of the facility shall ensure the safe collection, segregation, storage, transportation, processing and disposal of MSW with all safety to avoid any environmental/ health problems in surrounding area due to activities of facility. Efforts shall be made to ensure completetreatment and disposal by recycling/ reuse/ sale of waste received at the site.

4. **In order to prevent pollution problems from the facility operations, the provisions shall be made for storm water drain shall be designed and constructed in such a way that the surface runoff water is diverted from the site and leachates from solid waste locations do not get mixed withthe surface runoff water. Provisions for diversion of storm water discharge drains shall be made to minimize leachate generation and prevent pollution of surface water and also for avoiding flooding and creation of marshy conditions**

5. The operator of the facility shall comply with the provisions of Rule 25 of SWM Rules, regarding immediate reporting of accidents at solid waste processing or treatment or disposal facility or landfill site to the local body and MPPCB in Form – VI and the local body shall review andissue instructions if any, to the incharge of facility.

6. The operator of the facility shall comply with the provisions of Rule 24 for submission of annual report in Form-III to the local body with acopy to the MPPCB, every year on or before 30th day of April every year.

7. The management of facility shall take all necessary steps to strictly comply with the duties mentioned in Rule19 regarding setting up of solid waste processing and treatment facility in accordance to the technical guidelines issued by CPCB in this regard from time to time and themanual on Solid Waste Management prepared by the Ministry of Urban Development.

8. The Operator of the facility shall ensure safe and environmentally sound operations of the solid waste processing and treatment facilities asper the above guidelines / manual. The Ambient Air Quality at the facility site and the vicinity shall be regularly monitored and shall meet the Standards prescribed in air consent issued under Air (Prevention & Control of Pollution) Act, 1981.

9. The operator of the facility shall take all preventive and other control measures to avoid odour nuisance for general public in surroundingareas during management of the MSW.

10. The operator of the facility shall constitute an Environmental Management Cell headed by the Senior Executive to keep the record andcarry out the works related compliance of provisions of the SWM Rules, Preferably the work should be supervised by a qualified and experienced Environmental Engineer who understand the technicality of the subject.

11. Afforestation, roadside plantation, plantations on suitable vacant land, plantation on barren land shall be carried out for

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generation improvement of the environmental and a buffer zone of suitable width shall be developed in consultation with Local body and SPCB as per siteconditions. The operator of the facility shall carried out the public awareness programs throughout the year under intimation to MPPCB amongst thecitizens in vicinity for proper management of Solid Waste.

12. The facility operator, any stake holders who violates or fails to comply with the provisions of Solid Waste Management Rules - 2016 shall be liable for penal action in accordance with Section - 15 of the Environment (Protection) Act, 1986 and shall also be liable to pay environmental compensation in terms of Sections 15 & 17 of the National Green Tribunal Act, 2010.

13. The management of facility shall comply all the conditions stipulated in consent and Authorization issued under Water Act 1974, Air Act1981.

14. The management of facility shall install, operate & maintain Outdoor HD Industrial grade IP(Internet Protocol) Cameras with pan-Tilt- Zoom(PTZ) feature, minimum focal length 30X with night vision facility and temper proof mechanism at suitable locations to display all activities of processing facility, emission sources and effluent discharge point and connect the same with Environment Surveillance Centre, MPPollution control board Bhopal for remote surveillance.

15. The operator of the facility shall be responsible for the safe and environmentally sound operations of the facility as per the guidelines issuedby CPCB from time to time and the manual on Municipal Solid Waste Management published by the Ministry of Urban Development and updated from time to time.
16. The Board reserves the rights to amend/cancel any of the terms and conditions and or revoke the authorization as and when deemed necessary.

17. Municipal solid waste shall not be burnt at disposal site. The waste needs to be stored at site by earmarking the cells in the dumpsite instead of indiscriminate dumping and the older cells need to be covered as per guidelines of CPCB/Manual of urban development department to prevent burning.

18. Standard operating plan including Fire Prevention Plan should be framed to avoid instances of fire at site.

19. Safety and health issues of the people at facility site must be properly monitored and all safety equipment and PPEs shall be made available.

20. Facility shall ensure to segregate inert, C&D Waste, E-Waste, Bio Medical Waste, Hazardous Waste if any at source/ collection point andits disposal in accordance with the relevant rules notified by Govt. of India.

21. The RDF, Plastic Granules and Lumps made by processing of the Solid Waste shall be sold / disposed to the genuine end users and a recordof the same shall be maintained.

22. The inert waste remaining after the processing of the Solid Waste shall be disposed in the land fill and the record for the same shall be provided and shall be made available to the authorized officers of the MPPCB.

23. . The facility shall install Continuous On Line Monitoring System for monitoring of Source emission and ambient quality monitoring andconnect the same with the with Environment Surveillance Centre, MP Pollution Control Board Bhopal for remote surveillance

24. The Operator of facility shall ensure all necessary arrangements for control of odour nuisance from the industrial activities or process within premises. Odour nuisance in and around the vicinity shall be controlled by developing thick green belt, boundary walland by biological means, spray of anti odour chemicals etc, reducing height of windrows to avoid anaerobic conditions.

25. The management of facility shall install, operate & maintain Outdoor HD Industrial grade IP(Internet Protocol) Cameras with pan–Tilt- Zoom (PTZ) feature, minimum focal length 30x with night vision facility and temper proof mechanism at suitable locations to display all activities of processing facility, emission sources and effluent discharge point and connect the same with Environment Surveillance Centre, MPPollution Control Board Bhopal for remote surveillance.
26. The facility shall obtain necessary permissions of various department (as applicable) mentioned in Rule, 16 (d) of Solid Waste Management Rules, 2016 and provide all the arrangement commensurate with the provisions of the Solid Waste Management, Rules 2016.

27. The industry shall install the WtE plant and the C&D facility at the earliest so as to make the facility fully functional at the earliest

Consent Order

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CONDITIONS PERTAINING TO THE HAZARDOUS AND OTHER WASTES (MANAGEMENT AND TRANSBOUNDARY MOVEMENT) RULES, 2016:-

[See rule 6 (2)] **FORM-2**

FORM FOR GRANT OR RENEWAL OF AUTHORISATION BY STATE POLLUTION CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

1. Number of authorisation and date of issue : ,

2. Reference of application (No. and date) : **COW-1212341, dt: 07/11/2022**

3. COW-1212341, dt: 07/11/2022 of **REWA MSW ENERGY SOLUTIONS PVT. LTD**. is hereby granted an authorisation based on the enclosed signed inspection report (can be seen in xgn) for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilisation, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at **290,292,294.2201,2202, Pahadiya(V), , Pahadiya (365), Raipur, Rewa,**

Details of Authorisation

Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity (ton/annum)
Used or Spent Oil(5.1)	Sold to authorized recyclers	3.600-M.T

(1) The authorisation shall be valid for a period of **01/04/2023~31/03/2028.**

(2) The authorisation is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

A. General conditions of authorisation:

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.

2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.

3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.

4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.

5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;

6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty

7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.

8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.

9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.

10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per

specific conditions of authorisation.

11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.

12. An application for the renewal of an authorisation shall be made as laid down under these Rules.

13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

15. The non hazardous solid waste arresting in the industry/unit/unit premises sweeping, etc. be disposed off scientifically so as not to cause any nuisance/pollution. The applicant shall take necessary permission from civic authorities for disposal to dumping site. If required.

B. Specific conditions:

1. The industry shall display the information on hazardous waste generated on notice board of size 6' x 4' (in Hindi & English) outside the unit main gate along with quantity and nature of hazardous chemicals being handled in the plant, including wastewater, air emission and hazardous wastes.

2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.

Additional Haz condition:-

1. The industry shall obtain insurance under Public Liability Insurance Act, if applicable and shall submit a copy to the board.

2. Any unauthorized change in production capacity, process, raw materials, personnel, equipments etc. as mentioned in the application by the person authorized shall constitute a breach of this authorisation.

3. The unit shall maintain the records of hazardous waste as per the Form-3 of rule 6(5) and shall online submit the annual return in Form-4 as per rule 6(5) 20(2) to this office on or before 30th June every year and preferably before 30th April.

4. The information regarding quantity of hazardous wastes generated and its analysis report should be sent to the Board online at least annualy.

5. Hazardous Waste Storage Site & Danger signboard shall be provided with all safety devices at the storage site.

6. The authorized person shall inform the name and address of the contact person / occupier responsible for hazardous waste management.

7. In case of importing Hazardous Waste, occupier shall apply to the M.P. Pollution Control Board, 180 days in advance in Form-6, for permission to import of the waste as per Rule 13(i) of Hazardous and other Waste (Management and Transboundary Movement) Rule 2016 as amended up to date.

8. In the event of any accident due to handling of hazardous wastes, the authorized person must inform immediately to the Regional Office & Head office of the board on fax/telephone/email-it_mppcb@rediffmail.com about the incident and detail report should be sent in Form No.5 as per Rule-10 of Hazardous and other Waste (Management and Transboundary Movement) Rule 2016 as amended upto date.

Consent Order

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GENERAL CONDITIONS:

1. The non hazardous solid waste arresting in the industry/unit/unit premises sweeping, etc. be disposed off scientifically so as not to cause any nuisance/pollution. The applicant shall take necessary permission from civic authorities for disposal to dumping site. If required.

Non Hazardous Solid wastes:-

Type of waste	Quantity	Disposal
Scrap/ Plastic packing material wood, card board, gunny begs etc		Sale to authorized party/As Per CPCB. MoEF Guide lines / Others.

2. The applicant shall allow the staff of Madhya Pradesh Pollution Control Board and/or their authorized representative, upon the representation of credentials:

a. To inspect raw material stock, manufacturing processes, reactors, premises etc to perform the functions of the Board.

b. To enter upon the applicant's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this Consent.

c. To have access at reasonable times to any records required to be kept under the terms and conditions of this Consent.

d. To inspect at reasonable times any monitoring equipment or monitoring method required in this Consent: or,

e. To sample at reasonable times any discharge or pollutants.

3. This consent / authorisation is transferable in nature, in case of any change in ownership / management, the new owner / partner / directors / proprietor shall immediately apply for the consent with new requisite information.

4. The issuance of this Consent does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorise any invasion of personal rights, nor any infringement of Central, State or local laws or regulations.

5. Industry shall install separate electric metering arrangement for running of pollution control devices and this arrangement shall be made in such fashion that any non functioning of pollution control devices shall immediately stop electric supply to the production and shall remain tripped till such time unless the pollution control device/devices are made functional. The record of electricity consumption for running of pollution control equipment shall be maintained and submitted to the Board every month

6. This consent is granted in respect of Water pollution control Act 1974 or Air Pollution Control act, 1981 or Authorization under the provisions of Hazardous and other Waste (Management & Transboundary movement) Rules 2016 only and does not relate to any other Department/Agencies. License required from other Department/Agencies have to be obtained by the unit separately and have to comply separately as per there Act / Rules.

7. Balance consent/authorisation fee, if any shall be recoverable by the Board even at a later date.

8. The applicant shall submit such information, forms and fees as required by the board not letter than 180 day prior to the date of expiration of this consent/authorisation

9. The industry/unit shall establish a separate environmental cell, headed by senior officer of the unit for reporting the environmental compliances. The industry/ Unit shall submit environmental statement for the previous year ending 31st March on or before 30th September every year to the Board.

10. Knowingly making any false statement for obtaining consent or compliance of consent conditions shall result in the imposition of criminal penalties as provided under the section 42(g) of the Water Act or section 38 (g) of the Air Act.

11. After notice and opportunity for the hearing, this consent may be modified, suspended or revoked by the Board in whole or in part during its term for cause including, but not limited to, the following :

(a) Violation of any terms and conditions of this Consent.

(b) Obtaining this Consent by misrepresentation of failure to disclose fully all relevant facts.

(c) A change in any condition that requires temporary or permanent reduction or elimination of the authorized discharge.

Consent Order

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12. On violation of any of the above-mentioned conditions the consent granted will automatically be taken as canceled and necessary action will be initiated against the industry.

Consent/authorization as required under the Water (Prevention & Control of Pollution) Act,1974 , The Air (Prevention & Control of Pollution) Act,1981, Authorization under SWM Rules 2016 and the Authorization under Hazardous Waste (Management handling & Transboundary movement) Amended Rule, 2016 is granted to your facility subject to fulfillment of all the conditions mentioned above. For renewal purpose you shall have to make an application to this Board through XGN at least Six months before the date of expiry of this consent/authorisation. The applicant without valid consent (for operation) of the Board shall not bring in to use any outlet for the discharge of effluent and gaseous emission.

For and on behalf of
M.P. Pollution Control Board

By the order of Chairman, MPPCB

eSign Signing from UIDAI Server
Digitally Sign with Aadhaar

CHANDRA MOHAN THAKUR
Member Secretary

(Organic Authentication on AADHAR from UIDAI Server)

TPAV # 81S2J17EO2

Biomining Agreement-i

1403

कार्यालय नगर पालिक निगम रीवा (म0प्र0)

क्रमांक 95/1491तक /निर्माण/SBM/न.पा.नि./2024 रीवा, दिनांक 09/5/2024

कार्यादेश

Annexure-21

प्रति,

मेसर्स मिश्रा ट्रेडर्स,
प्रो. श्री राकेश मिश्रा
नियर सीताराम पेट्रोल पम्प सिन्धी कैम्प
सतना म0प्र0
मो.न.–9774593479

विषयः– नगर पालिक निगम रीवा क्षेत्रान्तर्गत बायोरेमेडिएशन, बायोमाइनिंग एवं अवशिष्ट के निस्तारण के माध्यम से लेगेसी वेस्ट डम्पसाइट रेमेडिएशन का कार्य, निविदा लागत रू. 453.55 लाख।

संदर्भः– 1. निविदा स्वीकृति सूचना पत्र क्र 63 दिनांक 15/03/2024.
2. संचालनालय, नगरीय प्रशासन एवं विकास विभाग म0प्र0 भोपाल का पत्र क्र. शा–14/स्व. भा.मि/2024/8631 भोपाल दिनांक 09/05/2024.

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उपरोक्त विषयान्तर्गत् उल्लेखित कार्य हेतु आपके द्वारा दी गई निविदा दर 37.00% Below निविदा लागत की स्वीकृति सक्षम प्राधिकारी द्वारा स्वीकृति प्रदान की गई। जिसके दर का अनुमोदन संचालनालय, नगरीय प्रशासन एवं विकास विभाग म0प्र0 भोपाल के पत्र क्र 5602 दिनांक 15/03/2024 से प्राप्त हो चुकी है तथा मुख्य निर्वाचन पदाअधिकारी म0प्र0 भोपाल के पत्र क्र 93/एम.सी.जी.रिफरेंस/लो.स. /2024/8377 भोपाल दिनांक 05/07/2024 द्वारा जारी अनुमति उपरान्त आपके द्वारा दिनांक 09/05/2024 को अनुबंध निष्पादित किया गया है।

अतः आपको सूचित किया जाता है कि आप पत्र प्राप्ति से 7 दिवस के अंदर संबंधित उपयंत्री/सहायक यंत्री से संपर्क कर ले– आउट प्राप्त करें तथा उक्त कार्य को निर्धारित समयावधि में कार्य को समय से प्रारंभ कर निर्धारित मानक एवं ड्राइंग डिजाइन तथा गुणवत्ता अनुसार पूर्ण किया जाना सुनिश्चित करें। साथ ही कार्य पूर्णता उपरान्त अनुबंधानुसार संचालन एवं सधारण का कार्य निर्वहन करें।

किये गये कार्य का भुगतान अनुबंध में उल्लेखित अनुसार चरणबद्ध तरिके से निम्नानुसार किया जावेगा।

Milestone	Cumulative Physical Progress (WP)	Time of Completion	Milestone based % release of Contract Value (VM)
First Milestone	30% Land Reclaimed out of total Waste Spread Area	1.5 months	20%
Second Milestone	50% Land Reclaimed out of total Waste Spread Area	1.5 months	20%
Third Milestone	65% Land Reclaimed out of total Waste Spread Area	1 months	15%
Fourth Milestone	80% Land Reclaimed out of total Waste Spread Area	1.5 months	20%
Fifth Milestone	100% Land Reclaimed out of total Waste Spread Area	1.5 months	25%

कार्य का संपादन निविदा में निविदा प्रपत्र एवं अनुबंध विहित शर्तो में प्रावधानों के तहत किया जावेगा।

निविदा स्वीकृत दर 37.00% Below निविदा लागत
कार्य की अनुमानित लागत SOR दर पर (GST सहित) – रू. 457.68 लाख।
निविदा स्वीकृत दर अनुसार कार्य की अनुमानित लागत (GST रहित) रू. 2,85,73,650.00 (Say-Rs.285.74) लाख।
कार्य की अनुमानित लागत स्वीकृत निविदा दर पर (GST सहित) – 337.17/– लाख।
कार्य पूर्णता हेतु निर्धारित समयावधि – 07 माह(वर्षाकाल सहित)
<u>(आयुक्त महोदय द्वारा अनुमोदित)।</u>

09.05.2024

कार्यपालन यंत्री/नोडल अधिकारी
(SBM)
नगर पालिक निगम
रीवा(म0प्र0)
पेज क्र–01

09.05.2024

O/C

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पृ0क्रमांक.....954/V निर्माण SBM / न.पा.नि. / 2024 रीवा, दिनांक 09/5/2024
प्रतिलिपि,

1. मान्.महापौर, नगर पालिक निगम रीवा की ओर सादर सूचनार्थ प्रेषित।
2. आयुक्त, नगरीय प्रशासन एवं विकास विभाग म0प्र0 भोपाल की ओर सादर सूचनार्थ प्रेषित।
3. कलेक्टर, जिला रीवा की ओर सादर सूचनार्थ प्रेषित।
4. मिशन संचालन, (स्वच्छ भारत मिशन) नगरीय प्रशासन एवं विकास विभाग म0प्र0 भोपाल की ओर सूचनार्थ प्रेषित।
5. आयुक्त, नगर पालिक निगम रीवा के आदेश क्र. 59 दिनांक 01.03.2024 के परिपालन में सादर सूचनार्थ प्रेषित।
6. सहायक यंत्री (स्वच्छ भारत मिशन) नगर पालिक निगम रीवा की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु।
7. उपयंत्री, (स्वच्छ भारत मिशन) नगर पालिक निगम रीवा की ओर भेजकर लेख है कि मेसर्स Voyants Solutions PVT. LTD.-Tide Technocrats PVT. LTD से संपर्क कर कार्य निर्धारित समयावधि में पूर्ण करायें।
8. लेखाशाखा / आवासीय संपरीक्षा, नगर पालिक निगम रीवा की ओर सूचनार्थ।
9. मेसर्स Voyants Solutions PVT. LTD.-Tide Technocrats PVT. LTD की ओर सूचनार्थ एवं कार्यादेश के परिपालन में कार्य स्थल उपलब्ध कराकर कार्य प्रारंभ कराने की आवश्यक कार्यवाही हेतु।

09.05.2024

कार्यपालन यंत्री / नोडल अधिकारी
(SBM)
नगर पालिक निगम
रीवा(म0प्र0)

-; Legacy waste details:-

OFFICE OF THE MUNICIPAL CORPORATION, REWA (M.P.)

Legacy Waste Dumpsite Kosta, Rewa

Details of dumpsite:-		
S.No.	**Particular**	**Implementation**
i.	Time of operation	07 Month
ii.	Quantity of legacy waste as survey on	82464.42 MT
iii.	Permission for dumpsite remediation (implementation date for consultant)	13.05.2022 (UADD Letter No. 8819)
iv.	Date of DPR preparation/final submission	12 September 2022
v.	**Tender details:-** ➢ Start of tender (1st call) ➢ Number of call- ➢ Finalization of tender - ➢ Issue of LOA- ➢ Permission by ECI – ➢ Date of work order- ➢ Date of start of work-	 April 2023 3rd 15.03.2024 15.03.2024 09.05.2024 09.05.2024 13.05.2024
vi.	Location of RDF disposal-	Waste To Energy Plant Pahadiya, Raipur karchuliyan
vii.	Tentative date of competition	07 Month

Annexure-22

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

CUSTOMER COPY
MASTER COPY
COPY FOR LAB I/C

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/31
Sample Description	Leachate Sanitary Landfill No. 01, Waste to Energy Plant, Rewa (MP)	Requisition No.	126
Date of sample collection	16.05.2024	Date	25.05.2024
Date of sample receipt	18.05.2024	Type of sample	Grab
Date of analysis	18.05.2024 to 25.05.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.85**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**359**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**4408**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**910**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**5.8**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निगम / Milind Kumar Nigam
वैज्ञानिक-'ए',लैब प्रमुख एवं सरकारी विश्लेषक
Scientist 'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

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COPY FOR LAB I/C.....

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/32
Sample Description	Solar Evaporation Pond, Waste to Energy Plant, Rewa (MP)	Requisition No.	126
Date of sample collection	16.05.2024	Date	25.05.2024
Date of sample receipt	18.05.2024	Type of sample	Grab
Date of analysis	18.05.2024 to 25.05.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**8.67**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**149**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**1550**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**204**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**4.2**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार मिश्र / Milind Kumar Mishra
वैज्ञानिक 'ग',क्षेत्र प्रमुख एवं सरकारी विश्लेषक
Scientist 'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)
Laboratory Head

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab

Annexure-23

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MASTER COPY ~~F/LAB/06/TR-02~~
COPY FOR LAB I/C

Test Report : Waste Water (Physico Chemical Parameter)

Project Name		**NGT Case No. 606/2018**		**Test Report No.**	**WW/24-25/30**
Sample Description		**Ghoghar Nallah near Babaghat before confluence to Beehar River, Rewa (MP)**		**Requisition No.**	126
Date of sample collection		16.05.2024		**Date**	25.05.2024
Date of sample receipt		18.05.2024		**Type of sample**	Grab
Date of analysis		18.05.2024 to 25.05.2024		**Sample collected by**	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar
S.No.	**Parameters**	**Unit**	**Result**	**Method**	
1	Temperature	^{o}C	-	-	
2	Odour	-	-	-	
3	Appearance	-	-	-	
4	Colour	Pt-Co Scale	-	APHA, 2120-B	
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B	
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C	
7	**pH**	**pH unit**	**6.57**	**APHA, 4500H+B**	
8	Specific Conductivity	µmho/cm	-	APHA 2510 B	
9	**Suspended Solids**	**mg/L**	**73**	**APHA 2540 D**	
10	Total Dissolved Solids	mg/L	-	APHA 2540 C	
11	Total Solids	mg/L	-	APHA 2540 B	
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E	
13	**COD**	**mg/L**	**163**	**APHA, 5220 B**	
14	**BOD (3 days, 27°C)**	**mg/L**	**41**	**IS 3025, 1993**	
15	Chloride	mg/L	-	APHA, 4500-CL-B	
16	Total Alkalinity	mg/L	-	APHA 2320-B	
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C	
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B	
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B	
20	**Oil & Grease**	**mg/L**	**2.4**	**APHA 5520-D**	
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C	
22	Turbidity	N.T.U.	-	APHA, 2130-B	
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D	
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E	
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F	
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B	
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**0.97**	**APHA 4500-NO_3B**	
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D	
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B	
30	Potassium (as K)	mg/L	-	APHA 3500-K-B	
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B	
32	Boron (as B)	mg/L	-	APHA 4500-B-C	
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E	
34	Total Coliform	MPN/100ml	-	APHA 9221-B	
35	Bioassay Test	% Survival	-	APHA 8910 A-C	
36					
37					
38					

Prepared by:

Laboratory Incharge
Central Pollution Control Board, Bhopal (M.P.)

Annexure-24

Ratlam Municipal Corporation, Ratlam (M.P.)

ULB Code : 802222

केंद्रीकृत कम्पोस्ट प्लांट लॉग बुक (मासिक)
(Wet Waste -Monthly)

एम्.आर.एफ. स्थल का नाम :	Compost plant julvaniya ratlam, Dist - Ratlam(M.P.)	Month - JUL 24
एम्.आर.एफ. स्थल प्रभारी का नाम :	राजेश पाटीदार	No. of Ward - 49

क्र	Date	प्राप्त गीला कचरे की मात्रा (मि.ट. में)	प्रसंस्कृत गीला कचरे की मात्रा (मि.ट. में)	कुल उत्पन्न खाद की मात्रा (मि.ट. में)	उत्सर्जित / लैंडफिल पर प्रेषित इनर्ट की मात्रा (मि.ट. में)
1	1-Jul-2024	65.97	65.97	11.66	1.85
2	2-Jul-2024	69.70	69.70	12.32	1.95
3	3-Jul-2024	69.00	69.00	12.20	1.93
4	4-Jul-2024	67.50	67.50	11.93	1.89
5	5-Jul-2024	63.83	63.83	11.28	1.79
6	6-Jul-2024	69.46	69.46	12.28	1.94
7	7-Jul-2024	68.03	68.03	12.03	1.90
8	8-Jul-2024	65.09	65.09	11.51	1.82
9	9-Jul-2024	70.39	70.39	12.44	1.97
10	10-Jul-2024	68.83	68.83	12.17	1.93
11	11-Jul-2024	64.31	64.31	11.37	1.80
12	12-Jul-2024	65.70	65.70	11.62	1.84
13	13-Jul-2024	66.44	66.44	11.75	1.86
14	14-Jul-2024	66.85	66.85	11.82	1.87
15	15-Jul-2024	65.60	65.60	11.60	1.84
16	16-Jul-2024	65.92	65.92	11.65	1.85
17	17-Jul-2024	67.17	67.17	11.88	1.88
18	18-Jul-2024	70.11	70.11	12.39	1.96
19	19-Jul-2024	68.91	68.91	12.18	1.93
20	20-Jul-2024	71.17	71.17	12.58	1.99
21	21-Jul-2024	67.11	67.11	11.86	1.88
22	22-Jul-2024	66.30	66.30	11.72	1.86
23	23-Jul-2024	66.79	66.79	11.81	1.87
24	24-Jul-2024	66.05	66.05	11.68	1.85
25	25-Jul-2024	64.85	64.85	11.47	1.82
26	26-Jul-2024	70.59	70.59	12.48	1.98
27	27-Jul-2024	69.16	69.16	12.23	1.94
28	28-Jul-2024	67.72	67.72	11.97	1.90
29	29-Jul-2024	67.48	67.48	11.93	1.89
30	30-Jul-2024	69.41	69.41	12.27	1.94
31	31-Jul-2024	68.14	68.14	12.05	1.91
Total		2093.58	2093.58	370.14	58.62

हस्ताक्षर
प्रसंस्करण स्थल प्रभारी

Annexure-25

Nagar palik nigam ratlam, Dist - Ratlam (M.P.)

ULB Code : 802222

एम्.आर.एफ. सुविधा / स्थलों लॉग प्रपत्र
(Dry Waste - Monthly)

एम्.आर.एफ. स्थल का नाम :	MRF center julvaniya ratlam, Dist - Ratlam(M.P.)	माह - जुलाई 2024
एम्.आर.एफ. स्थल प्रभारी का नाम :	राजेश पाटीदार	वार्ड - 49

क्र.	दिनांक	प्राप्त सूखे कचरे की कुल मात्रा (टन में)	प्रसंस्कृत सूखे कचरे की कुल मात्रा (टन में)	प्राप्त सूखे कचरे में से पृथकीकृत किये गए कचरे की मात्रा (श्रेणी वार) (टन में)								
				प्लास्टिक (Plastic)	पुट्ठा (Cardboard)	गत्ते / कागज़ (Paper)	कांच (Glass)	रबर (Rubber) (टायर / सोल आदि)	धातु (Metal)	कपड़ा (Cloth)	Packaging Materials	निष्क्रिय (Inert)
				ग्राम	ग्राम	ग्राम	ग्राम	ग्राम	ग्राम	ग्राम	ग्राम	ग्राम
1	1-Jul-2024	43.98	43.98	4.84	4.46	4.99	4.22	5.05	2.65	5.90	4.70	7.17
2	2-Jul-2024	46.47	46.47	5.11	4.72	5.27	4.46	5.33	2.80	6.23	4.97	7.58
3	3-Jul-2024	46.00	46.00	5.06	4.67	5.22	4.41	5.28	2.77	6.17	4.92	7.50
4	4-Jul-2024	45.00	45.00	4.95	4.57	5.10	4.32	5.17	2.71	6.03	4.81	7.34
5	5-Jul-2024	42.55	42.55	4.68	4.32	4.83	4.08	4.89	2.57	5.71	4.55	6.94
6	6-Jul-2024	46.30	46.30	5.09	4.70	5.25	4.44	5.32	2.79	6.21	4.95	7.55
7	7-Jul-2024	45.35	45.35	4.99	4.60	5.14	4.35	5.21	2.73	6.08	4.85	7.40
8	8-Jul-2024	43.39	43.39	4.77	4.40	4.92	4.16	4.98	2.62	5.82	4.64	7.08
9	9-Jul-2024	46.93	46.93	5.16	4.76	5.32	4.50	5.39	2.83	6.29	5.02	7.65
10	10-Jul-2024	45.89	45.89	5.05	4.66	5.20	4.40	5.27	2.77	6.15	4.91	7.48
11	11-Jul-2024	42.87	42.87	4.72	4.35	4.86	4.11	4.92	2.59	5.75	4.58	6.99
12	12-Jul-2024	43.80	43.80	4.82	4.45	4.97	4.20	5.03	2.64	5.87	4.68	7.14
13	13-Jul-2024	44.29	44.29	4.87	4.50	5.02	4.25	5.08	2.67	5.94	4.74	7.22
14	14-Jul-2024	44.57	44.57	4.90	4.52	5.05	4.27	5.12	2.69	5.98	4.76	7.27
15	15-Jul-2024	43.73	43.73	4.81	4.44	4.96	4.19	5.02	2.64	5.86	4.68	7.13
16	16-Jul-2024	43.94	43.94	4.83	4.46	4.98	4.21	5.04	2.65	5.89	4.70	7.17
17	17-Jul-2024	44.78	44.78	4.93	4.55	5.08	4.29	5.14	2.70	6.00	4.79	7.30
18	18-Jul-2024	46.74	46.74	5.14	4.74	5.30	4.48	5.37	2.82	6.27	5.00	7.62
19	19-Jul-2024	45.94	45.94	5.05	4.66	5.21	4.41	5.27	2.77	6.16	4.91	7.49
20	20-Jul-2024	47.45	47.45	5.22	4.82	5.38	4.55	5.45	2.86	6.36	5.07	7.74
21	21-Jul-2024	44.74	44.74	4.92	4.54	5.07	4.29	5.14	2.70	6.00	4.78	7.30
22	22-Jul-2024	44.20	44.20	4.86	4.49	5.01	4.24	5.07	2.67	5.93	4.72	7.21
23	23-Jul-2024	44.53	44.53	4.90	4.52	5.05	4.27	5.11	2.68	5.97	4.76	7.26
24	24-Jul-2024	44.03	44.03	4.84	4.47	4.99	4.22	5.05	2.66	5.90	4.71	7.18
25	25-Jul-2024	43.23	43.23	4.76	4.39	4.90	4.15	4.96	2.61	5.80	4.62	7.05
26	26-Jul-2024	47.06	47.06	5.18	4.78	5.34	4.51	5.40	2.84	6.31	5.03	7.68
27	27-Jul-2024	46.11	46.11	5.07	4.68	5.23	4.42	5.29	2.78	6.18	4.93	7.52
28	28-Jul-2024	45.15	45.15	4.97	4.58	5.12	4.33	5.18	2.72	6.05	4.83	7.36
29	29-Jul-2024	44.99	44.99	4.95	4.57	5.10	4.31	5.16	2.71	6.03	4.81	7.34
30	30-Jul-2024	46.27	46.27	5.09	4.70	5.25	4.44	5.31	2.79	6.21	4.95	7.55
31	31-Jul-2024	45.43	45.43	5.00	4.61	5.15	4.36	5.22	2.74	6.09	4.86	7.41
Total		**1395.72**	**1395.72**	**153.53**	**141.67**	**158.27**	**133.85**	**160.23**	**84.16**	**187.17**	**149.20**	**227.64**

प्रसंस्करण स्थल प्रभारी

Annexure-26

रजिस्ट्रीकरण एवं स्टाम्प विभाग
मध्य प्रदेश

स्टाम्प शुल्क का प्रमाण पत्र

ई स्टाम्प विवरण

ई स्टाम्प कोड	0101312005202401520 9		
ई स्टाम्प राशि (रुपए)	500		
शासकीय स्टाम्प ड्यूटी (रुपए)	500	नगर पालिका ड्यूटी (रुपए)	0
जनपद ड्यूटी (रुपए)	0	उपकर राशि (रुपए)	0
छूट दी गई राशि (रुपए)	0		
ई स्टाम्प का प्रकार	गैर न्यायिक		
निर्गमन तिथि एवं समय	20/05/2024 15:56:07		
यूजर आईडी / जारीकर्ता	varsha ji pitliya/SP013144004201600261		
एस पी / एस आर ओ / डी आर ओ / एच ओ विवरण	1, रिसालागली पेलेस रोड रतलाम रतलाम रतलाम		

डीड विवरण

विलेख का प्रकार	करार या करार का ज्ञापन
लिखत	(ज) यदि अन्यथा उपबंधित नहीं किया गया हो.- पांच सौ रूपए.
उद्देश्य	करार या करार का ज्ञापन

पहले पक्ष के विवरण

नाम	हिमान्शु जी पुत्र/पुत्री/पत्नी/द्वारा इश्वरी दत जी
पता	रतलाम रतलाम मध्य प्रदेश भारत
व्यक्तियों की संख्या	1

दूसरे पक्ष के विवरण

संगठन का नाम	मेसर्स यूनिक इको रिसायकल इंदोर
पता	इंदोर जिला इंदोर इंदौर मध्य प्रदेश भारत
व्यक्तियों की संख्या	1

NOTARY • Govt. of M.P. • SARWAR ALI ZAIDI Reg. No. M.P.-35/02/06/21-ब(दो)2020 • RATLAM (M.P.) • 21, SAMTA NAGAR, RATLAM

NOTARIAL NOTARIAL NOTARIAL NOTARIAL NOTARIAL

UNIQUE ECO RECYCLE INDORE

स्वास्थ्य अधिकारी
नगर पालिक निगम रतलाम (म.प्र.)

Digitally signed by VARSHA
Date: 2024.05.20 15:56:10 IST

ATTESTED

Identified by me

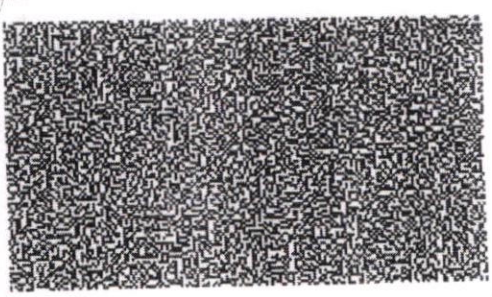
Name

Address

Signature

SARWAR ALI ZAIDI
Advocate & Notary
12, Samta Nagar. Ratlam (M.P.)
Mob.-9329310586
Reg. No. M.P.-35/02/06/21-ब(दो)2020

10 JUN 2024



अनुबंध–पत्र

पक्ष कमांक 01 :– **प्रबंधक**
बायोमेडिकल वेस्ट मेनेजमेंट सिस्टम
बंजली सेजावता बॉयपास ग्राम बंजली रतलाम
जिला रतलाम (म.प्र.)

पक्ष कमांक 02 :– **आयुक्त नगर पालिक निगम**
01, कॉलेज रोड़ रतलाम (म.प्र.)

— हम पक्ष कमांक 01 संचालक **बायोमेडिकल वेस्ट** मेनेजमेंट सिस्टम **बंजली सेजावता बॉयपास ग्राम बंजली** रतलाम एवं 02 आयुक्त नगर पालिक निगम 01, कॉलेज रोड़ रतलाम (म.प्र.) इस बात पर आपसी सहमति से लिखित में यह अनुबंध करते है कि पक्ष कमांक 02 द्वारा जो भी घरेलू हानिकारक अपशिष्ट पक्ष कमांक 01 के स्वामित्व वाले **बायोमेडिकल वेस्ट मेनेजमेंट सिस्टम बंजली सेजावता बॉयपास ग्राम बंजली** स्थान पर उपलब्ध कराया जाता है। उसका उपचार विधि अनुसार पक्ष कमांक 01 द्वारा निम्नलिखित शर्तो के आधार पर निशुल्क किया जावेगा। इस कार्य के सफल कियान्वयन् के संबंध में निम्नलिखित शर्तो का पालन दोनो पक्षो द्वारा किया जाना अनिवार्य होगा।

1. पक्ष कमांक 02 को समस्त घरेलू हानिकारक जैव अपशिष्ट स्वयं के वाहन के माध्यम से पक्ष कमांक 01 इस कार्य विशेष के लिये सैलाना रोड़ स्थित संयत्र पर उपलब्ध कराना होगा।
2. पक्ष कमांक 02 द्वारा घरेलू हानिकारक जैव अपशिष्ट प्रातः 10:00 बजे से लेकर सायं 05:00 के मध्य उपलब्ध कराना अनिवार्य होगा। सायं 05:00 बजे पश्चात् उपरोक्त अपशिष्ट नही लिया जावेगा।
3. कार्य में प्रयुक्त होने वाले समस्त आवश्यक सामग्री का व्यय पक्ष कमांक 02 को वहन करना होगा।
4. इस कार्य में सहयोग हेतु पक्ष कमांक 02 को इस कार्य में तकनीकी रूप से दक्ष एक व्यक्ति को संबंधित संयंत्र पर नियुक्त करना होगा।
5. इस संयंत्र पर प्रतिदिन भेजे जाने वाले घरेलू हानिकारक अपशिष्ट की मात्रा का रिकार्ड पक्ष कमांक 01 व 02 को सम्मिलित रूप से संधारित करना होगा।

BIOMEDICAL WASTE MANAGEMENT SYSTEM RATLAM (M.P.)

नोडल अधिकारी
स्वच्छ भारत मिशन
नगर पालिक निगम, रतलाम (म.प्र.)

1

6. इस कार्य के कियान्वयन् के संबंध में किसी भी शासकीय विभाग से अनापत्ति प्रमाणपत्र प्राप्त करना अनिवार्य होने की दशा में यह कार्य पक्ष कमांक 02 को करना होगा। इसमे पक्ष कमांक 01 से किसी भी प्रकार का सहयोग अपेक्षित नही होगा।

7. उक्त अपशिष्ट के भस्मीकरण यंत्र के माध्यम से निपटान किये जाने के उपरांत प्राप्त होने वाले अंतिम उत्पाद को पक्ष कमांक 02 के स्वामित्व वाले जुलवानिया ठोस अपशिष्ट प्रसंस्करण केन्द्र ग्राम जुलवानिया पर सुरक्षित रूप से डम्प किये जाने का दायित्व पक्ष कमांक 02 का रहेगा।

8. यह अनुबंध इस अनुबंध संपादन की दिनांक से 1 वर्ष तक की अवधि के लिये प्रभावशील रहेगा।

9. दोनो पक्ष आपसी सहमति से किसी भी समय इस अनुबंध को समाप्त करने के लिये स्वतंत्र होंगे।

10. उक्त अपशिष्ट का सुरक्षित निपटान जनस्वास्थ्य एवं पर्यावरण की सुरक्षा के दृष्टिगत् किये जाने के कारण इसे पक्ष कमांक 01 द्वारा निशुल्क किया जावेगा।

11. उक्त अपशिष्ट को 10 किलो क्षमता की 100 माइकोन से अधिक की प्लास्टिक की थैलीयों मे भरकर पक्ष कमांक 01 संयंत्र स्थल पर उपलब्ध कराना होगा।

12. कार्य के दौरान पक्ष कमांक 01 के परिसर में सफाई एवं अन्य व्यवस्थाएं पूर्वानुसार बनाये रखने का दायित्व पक्ष कमांक 01 का रहेगा।

13. संयत्र के संचालन में पक्ष कमांक 01 द्वारा परोक्ष रूप से किसी भी प्रकार का भाग नही लिया जावेगा।

14. अपशिष्ट के निपटान उपरांत निकलने वाले अंतिम उत्पाद को सुरक्षित स्थान पर डम्प करने हेतु पक्ष कमांक 02 को अपना स्वयं का वाहन संयत्र स्थल पर उपलब्ध कराना होगा।

15. संयत्र के खराब होने की स्थिति में पक्ष कमांक 02 को उक्त अपशिष्ट का निपटान अपने स्तर से करना होगा।

16. यह सुविधा पक्ष कमांक 01 द्वारा रतलाम नगर को स्वच्छ एवं स्वस्थ बनाये रखने के उद्देश्य से पक्ष कमांक 02 को उपलब्ध कराई जा रही है, एवं इसमे किसी भी प्रकार का वित्तिय लेन–देन किया जाना प्रस्तावित नही है।

BIOMEDICAL WASTE MANAGEMENT SYSTEM

नोडल अधिकारी
स्वच्छ भारत मिशन
नगर पालिक निगम, रतलाम (म.प्र.)

17. पक्ष कमांक 01 द्वारा घरेलू हानिकारक जैव अपशिष्ट जैसे डॉईपर, सेनेटरी पेड्स, पट्टिया एवं इस प्रकार के अन्य अपशिष्टो का ही उपचार किया जावेगा।

इति दिनांक :– 01/4/2024
वार :– सोमवार

1. गवाह :–

.....

अनवर कुरैशी

पक्ष कमांक 01 :–

BIOMEDICAL WASTE MANAGEMENT SYSTEM
RATLAM (M.P.)

प्रबंधक
बायोमेडिकल वेस्ट मेनेजमेंट
सिस्टम

.....

2. गवाह :–

.....

पुष्पेन्द्र सिंह पंवार

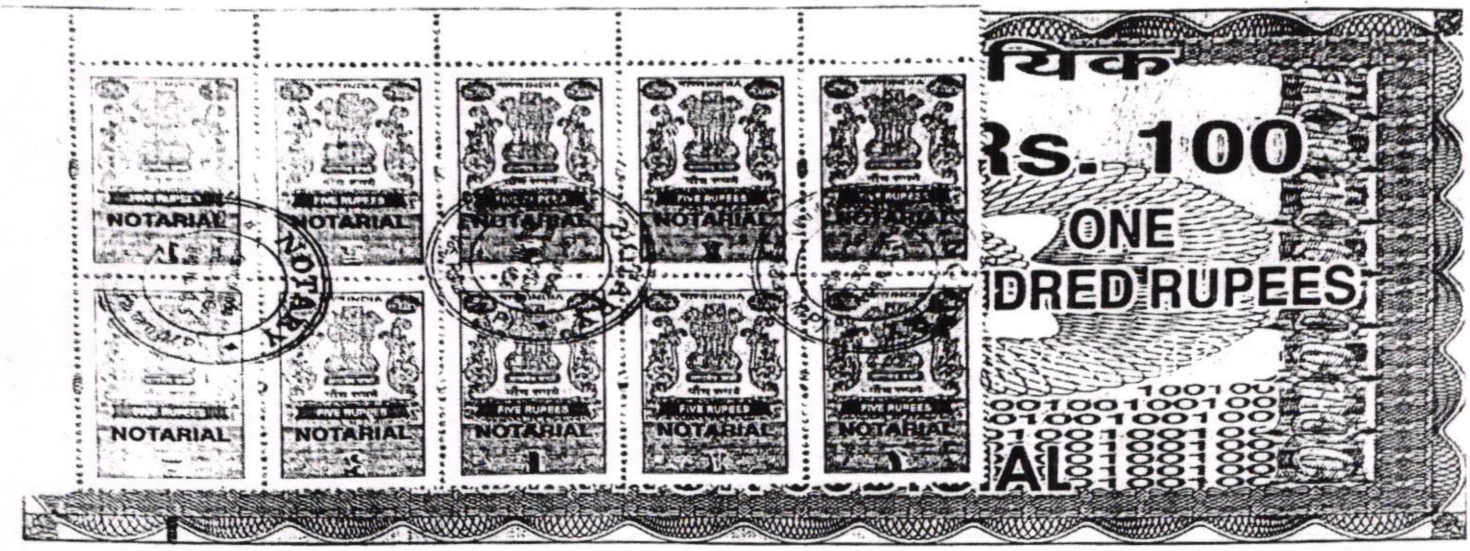
.....

पक्ष कमांक 02 :–

नोडल अधिकारी
स्वच्छ भारत मिशन
नगर पालिक निगम, रतलाम (म.प्र.)

नोडल अधिकारी
नगर पालिक निगम रतलाम

Annexure-27



मध्य प्रदेश MADHYA PRADESH BZ 632542

- 8 JAN 2024

SELF DECLARATION

I, **HEMRAJ S/O KANA JI Resident of 170 , GRAM GULRI PADA POST BANJALI DIST. RATLAM (M.P.)** Do hereby solemnly affirm and declare as under:

1. That we are the owners in possession of agricultural land situated at **GRAM JULWANIYA DIST. RATLAM SURVEY NO- 224/2 ME SE**

2. That the land in question is low in level and AAKANKSHA ENTERPRISES is ready to provide/fill the soil, inert & C&D material in the land except chemical, concrete to level the said land up to road level which is the output material of bio-remediation work allotted to them at Municipal Council/corporation dumpsite **RATLAM.**

3. That I as owner of the land have no objection, if the said company fill the land up to road level, with above said material without any chemical and the purpose for fill up the said land is to make the land as fertile i.e., for cultivation purpose and the company is also aware about the materials.

हेमराज
Deponents/Declarant/s

ATTESTED

Verification :-

Verified that the contents of above declaration are true and correct to the best of our knowledge and belief. Nothing has been concealed therein.

DATE – 08/01/2024
PLACE – RATLAM

हेमराज
Deponents/Declarant/s

ATTESTED

2024

Ramswaroop Gurjar
Advocate & Notary
Reg. No. 4706
RATLAM Mob 9907533311

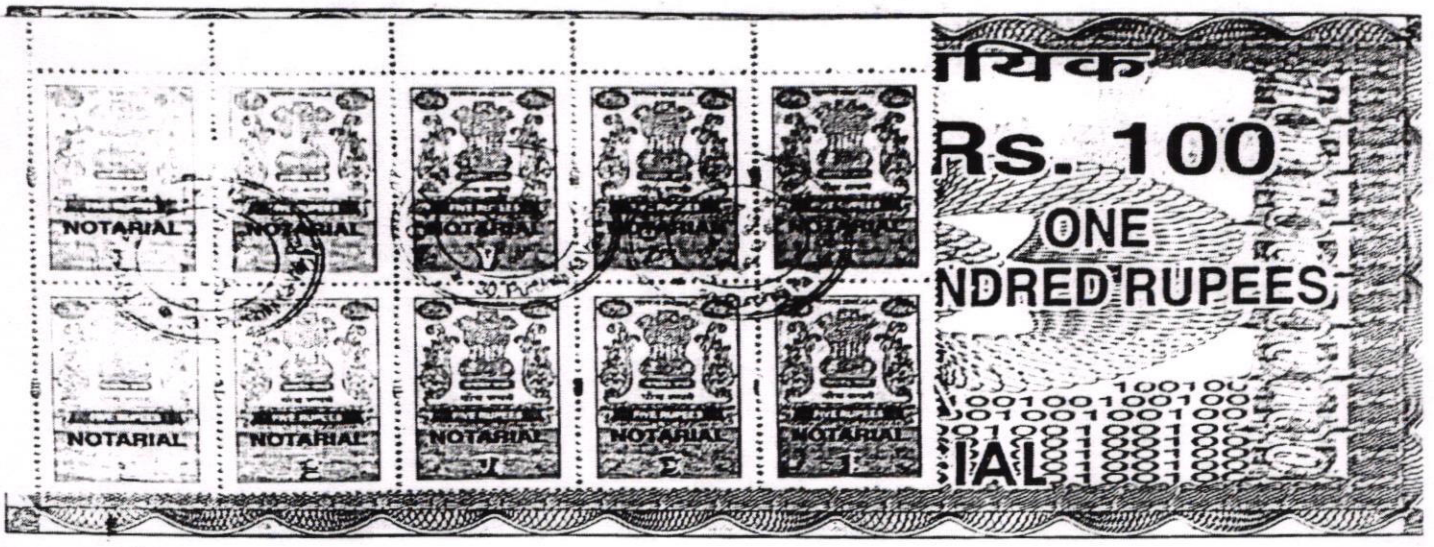
नाम
पता
हस्ताक्षर

1954
8-1-2024

NOTARY
Govt. of India
Ramswaroop Gurjar
Reg. No. 4206
30, Purohitji Ka Vas, Ratlam (M.P.)

शपथ पत्र हेतु

अर्पित मण्डवारिया
स्टाम्प वेण्डर, रतलाम
मो.-9098036366



मध्य प्रदेश MADHYA PRADESH BZ 632543

- 8 JAN 2024

SELF DECLARATION

I, **SAMRATHLAL S/O SHALIGRAM Resident of GRAM BIBDOD DIST. RATLAM (M.P.)** Do hereby solemnly affirm and declare as under:

1. That we are the owners in possession of agricultural land situated at **GRAM BIBDOD DIST. RATLAM SURVEY NO- 1006**

2 That the land in question is low in level and AAKANKSHA ENTERPRISES is ready to provide/fill the soil, inert & C&D material in the land except chemical, concrete to level the said land up to road level which is the output material of bio-remediation work allotted to them at Municipal Council/corporation dumpsite **RATLAM.**

3. That I as owner of the land have no objection, if the said company fill the land up to road level, with above said material without any chemical and the purpose for fill up the said land is to make the land as fertile i.e., for cultivation purpose and the company is also aware about the materials.

ATTESTED Deponents/Declara

Verification :-

Verified that the contents of above declaration are true and correct to the best of our knowledge and belief. Nothing has been concealed therein.

DATE – 08/01/2024

PLACE – RATLAM

8 JAN 2024 ATTESTED Deponents/Decla

1955
8-1-2024

NOTARY
Govt. of India
Ramswaroop Gurjar
Reg. No. 6506
30, Purohitji Ka Vas, Ratlam (M.P.)

शपथ पत्र हेतु
अर्पित मण्डवारिया
स्टाम्प वेण्डर, रतलाम
मो.-9098036366

न्यायिक

Rs. 100

ONE HUNDRED RUPEES

INDIA NON JUDICIAL

NOTARIAL

मध्य प्रदेश MADHYA PRADESH BZ 632544

SELF DECLARATION

JAN 2024

I, **REKHA W/O UNKAR DAMAR Resident of GRAM JULWANIYA POST BANJALI DIST. RATLAM (M.P.)** Do hereby solemnly affirm and declare as under:

1. That we are the owners in possession of agricultural land situated at **GRAM BIBDOD DIST. RATLAM SURVEY NO-207/3**

2. That the land in question is low in level and AAKANKSHA ENTERPRISES is ready to provide/fill the soil, inert & C&D material in the land except chemical, concrete to level the said land up to road level which is the output material of bio-remediation work allotted to them at Municipal Council/corporation dumpsite **RATLAM.**

3. That I as owner of the land have no objection, if the said company fill the land up to road level, with above said material without any chemical and the purpose for fill up the said land is to make the land as fertile i.e., for cultivation purpose and the company is also aware about the materials.

Deponents/Declarant/s

Verification :-

Verified that the contents of above declaration are true and correct to the best of our knowledge and belief. Nothing has been concealed therein.

DATE – 08/01/2024

PLACE – RATLAM

ATTESTED

– 8 JAN 2024

Deponents/Declarant/s

कार्यालय नगर पालिक निगम, रतलाम (म.प्र.)
01, कॉलेज रोड, रतलाम (Pin-457001)
Email-commratlam@mpurban.gov.in | Contact:07412-270555 | Website- www.rmcratlam.in | ULB Code- 802222

क्रमांक ...52...../स्व.भा.मि./2023 रतलाम, दिनांक ...08/03/2023...

:: कार्यादेश ::

Annexure-28

प्रति,

Aakanksha Enterprises
C-108, Mahavir Vihar, Sector-1, Dwarka
New Delhi – 110045

विषय - स्वच्छ भारत मिशन अंतर्गत जुलवानिया ठोस अपशिष्ट प्रसंस्करण केन्द्र पर उपलब्ध लेगसी वेस्ट का उपचार बायोरेमिडेशन एवं बायोमाईनिंग पद्धति के आधार पर सम्पूर्ण कचरे का निष्पादन किया जाकर कचरे से ढकी हुई 100% भूमि को कचरा मुक्त करने के संबंध में।

विषयान्तर्गत लेख है कि स्वच्छ भारत मिशन अंतर्गत जुलवानिया ठोस अपशिष्ट प्रसंस्करण केन्द्र पर उपलब्ध लेगसी वेस्ट का उपचार बायोरेमिडेशन एवं बायोमाईनिंग पद्धति के आधार पर सम्पूर्ण कचरे का निष्पादन किया जाकर कचरे से ढकी हुई 100% भूमि को कचरा मुक्त करने हेतु आमंत्रित द्वितीय ई-निविदा क्रमांक 270763 दिनांक 25.04.2023 में आपके द्वारा भाग लिया जाकर निविदा राशि रू. 17,41,78,950/- के विरूद्ध राशि रू. 11,58,29,001.750 की दर प्रस्तुत की गयी जो कि न्युनतम होकर निविदा दर से 33.50 प्रतिशत कम है। आपके द्वारा प्रस्तुत न्युनतम दर MIC ठहराव क्रमांक 119 दिनांक 24.07.2023 से स्वीकृत की गयी है।

अतएव आप अनुबंध की शर्तो के अनुसार स्थल सर्वे कर 3 दिवस के भीतर आवश्यक टूल्स एवं प्लांट्स स्थापित कर उपयंत्री एवं सहायक यंत्री से सम्पर्क कर उनके निर्देशानुसार कार्य प्रारंभ कर निर्धारित समयावधी 06 माह में पूर्ण किया जाना सुनिश्चित करें।

8.9.23

नोडल अधिकारी
स्वच्छ भारत मिशन
नगरपालिक निगम, रतलाम

निरंतर .....

कार्यालय नगर पालिक निगम, रतलाम (म.प्र.)

01, कॉलेज रोड, रतलाम (Pin-457001)

Email-commratlam@mpurban.gov.in | Contact:07412-270555 | Website- www.rmcratlam.in | ULB Code- 802222

पृ.क्र./ 52 /स्व.भा.मि./2023 रतलाम, दिनांक 08/09/2023

प्रतिलिपि :-

1. माननीय महापौर महोदय, नगर पालिक निगम, रतलाम।
2. मिशन संचालक महोदय, स्वच्छ भारत मिशन (शहरी), नगरीय प्रशासन एवं विकास, म.प्र. भोपाल।
3. संभागीय संयुक्त संचालक, नगरीय प्रशासन एवं विकास, उज्जैन संभाग उज्जैन।
4. अधीक्षण यंत्री, कार्यालय संयुक्त संचालक, नगरीय प्रशासन एवं विकास, उज्जैन संभाग उज्जैन।
5. आयुक्त महोदय, नगर पालिक निगम, रतलाम।
6. संयुक्त संचालक, स्थानीय निधि संपरिक्षा, नगर पालिक निगम, रतलाम।
7. लेखाधिकारी, नगर पालिक निगम, रतलाम।
8. प्र. स्वास्थ्य अधिकारी, नगर पालिक निगम, रतलाम।
9. श्री अनवर कुरैशी, प्र. सहायक यंत्री, नगर पालिक निगम, रतलाम की ओर पालनार्थ।
10. श्री राजेश पाटीदार एवं श्री शिवम गुप्ता, उपयंत्री, नगर पालिक निगम, रतलाम की ओर पालनार्थ।
11. योजना सलाहकार मार्स प्लानिंग एवं इंजिनीरिंग सर्वीसेज प्रा.लि., अहमदाबाद।

8.9.23

नोडल अधिकारी

स्वच्छ भारत मिशन

नगरपालिक निगम, रतलाम

Annexure-29

Ratlam Out Put Breakup		
Material	**Qty in MT**	**Percentage**
Good Soil	43957	45.9
Inert	27007	28.2
C & D	9768	10.2
Others/Misc	6129	6.4
RDF	8906	9.3
	95768	**100**

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COPY FOR LAB

Annexure-30

F/LAB/06/TR-02

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

Project Name	**NGT Case No. 606/2018**	**Test Report No.**	**WW/24-25/79**
Sample Description	**21.5 MLD STP, Karmadi, Ratlam (MP) - Inlet**	**Requisition No.**	133
Date of sample collection	10.07.2024	**Date**	21.07.2024
Date of sample receipt	11.07.2024	**Type of sample**	Grab
Date of analysis	11.07.2024 to 20.07.2024	**Sample collected by**	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**6.72**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**55**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**149**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**51**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	Oil & Grease	mg/L	-	APHA 5520-D
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',क्षेत्र प्रमुख एवं सरकारी विश्लेषक
Scientist-'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)

Laboratory Head

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

CUSTOMER COPY .....
MASTER COPY F/LAB/06/TR-02
COPY FOR LAB I/C.....

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/80
Sample Description	21.5 MLD STP, Karmadi, Ratlam (MP) - Outlet	Requisition No.	133
Date of sample collection	10.07.2024	Date	21.07.2024
Date of sample receipt	11.07.2024	Type of sample	Grab
Date of analysis	11.07.2024 to 20.07.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.07**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**22**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**20**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**8**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**3**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	**Phosphate (as P)**	**mg/L**	**1.5**	**APHA 4500-P-D**
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**2.24**	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	**Faecal Coliform**	**MPN/100ml**	**130**	**APHA 9221-E**
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विश्लेषक
Scientist-'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)

Laboratory Head:

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COPY FOR LAB I/C

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab

F/LAB/06/TR-02

Test Report : Waste Water (Physico Chemical Parameter)

Project Name		**NGT Case No. 606/2018**		**Test Report No.**	**WW/24-25/81**
Sample Description		**16 MLD STP, Khetalpur, Ratlam (MP) - Inlet**		**Requisition No.**	133
Date of sample collection		10.07.2024		**Date**	21.07.2024
Date of sample receipt		11.07.2024		**Type of sample**	Grab
Date of analysis		11.07.2024 to 20.07.2024		**Sample collected by**	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar
S.No.	**Parameters**	**Unit**	**Result**	**Method**	
1	Temperature	^{o}C	-	-	
2	Odour	-	-	-	
3	Appearance	-	-	-	
4	Colour	Pt-Co Scale	-	APHA, 2120-B	
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B	
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C	
7	**pH**	**pH unit**	**7.47**	**APHA, 4500H+B**	
8	Specific Conductivity	µmho/cm	-	APHA 2510 B	
9	**Suspended Solids**	**mg/L**	**74**	**APHA 2540 D**	
10	Total Dissolved Solids	mg/L	-	APHA 2540 C	
11	Total Solids	mg/L	-	APHA 2540 B	
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E	
13	**COD**	**mg/L**	**192**	**APHA, 5220 B**	
14	**BOD (3 days, $27^{o}C$)**	**mg/L**	**44**	**IS 3025, 1993**	
15	Chloride	mg/L	-	APHA, 4500-CL-B	
16	Total Alkalinity	mg/L	-	APHA 2320-B	
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C	
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B	
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B	
20	Oil & Grease	mg/L	-	APHA 5520-D	
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C	
22	Turbidity	N.T.U.	-	APHA, 2130-B	
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D	
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E	
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F	
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B	
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B	
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D	
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B	
30	Potassium (as K)	mg/L	-	APHA 3500-K-B	
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B	
32	Boron (as B)	mg/L	-	APHA 4500-B-C	
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E	
34	Total Coliform	MPN/100ml	-	APHA 9221-B	
35	Bioassay Test	% Survival	-	APHA 8910 A-C	
36					
37					
38					

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विश्लेषक
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Central Pollution Control Board,Bhopal (M.P.)

Laboratory Head:

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab

Test Report : Waste Water (Physico Chemical Parameter)

Project Name		**NGT Case No. 606/2018**		**Test Report No.**	**WW/24-25/82**
Sample Description		**16 MLD STP, Khetalpur, Ratlam (MP) - Outlet**		**Requisition No.**	133
Date of sample collection		10.07.2024		**Date**	21.07.2024
Date of sample receipt		11.07.2024		**Type of sample**	Grab
Date of analysis		11.07.2024 to 20.07.2024		**Sample collected by**	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar
S.No.	**Parameters**	**Unit**	**Result**	**Method**	
1	Temperature	°C	-	-	
2	Odour	-	-	-	
3	Appearance	-	-	-	
4	Colour	Pt-Co Scale	-	APHA, 2120-B	
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B	
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C	
7	**pH**	**pH unit**	**7.28**	**APHA, 4500H+B**	
8	Specific Conductivity	µmho/cm	-	APHA 2510 B	
9	**Suspended Solids**	**mg/L**	**15**	**APHA 2540 D**	
10	Total Dissolved Solids	mg/L	-	APHA 2540 C	
11	Total Solids	mg/L	-	APHA 2540 B	
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E	
13	**COD**	**mg/L**	**21**	**APHA, 5220 B**	
14	**BOD (3 days, 27°C)**	**mg/L**	**12**	**IS 3025, 1993**	
15	Chloride	mg/L	-	APHA, 4500-CL-B	
16	Total Alkalinity	mg/L	-	APHA 2320-B	
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C	
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B	
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B	
20	**Oil & Grease**	**mg/L**	**2**	**APHA 5520-D**	
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C	
22	Turbidity	N.T.U.	-	APHA, 2130-B	
23	**Phosphate (as P)**	**mg/L**	**1.6**	**APHA 4500-P-D**	
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E	
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F	
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B	
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**2.18**	**APHA 4500-NO_3B**	
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D	
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B	
30	Potassium (as K)	mg/L	-	APHA 3500-K-B	
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B	
32	Boron (as B)	mg/L	-	APHA 4500-B-C	
33	Faecal Coliform	MPN/100ml	280	APHA 9221-E	
34	Total Coliform	MPN/100ml	-	APHA 9221-B	
35	Bioassay Test	% Survival	-	APHA 8910 A-C	
36					
37					
38					

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विशलेषक
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केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)

Laboratory Head:

Annexure-31

Data is based on the Presentation/Report submitted by UADD vide their letter No. S.No./S-14/SBM-U/2024/8446 dated 03/05/2024

Status of Solid Waste Management in Municipal Corporation Gwalior

S/No.	Particulars	Nov-22	Current status	Joint committee findings
1.	Generation (Tons)	355.65	550 TPD	Generation of waste is 550 TPD (Average)
2.	Processing (Tons)	355.65	181 TPD	• Processing of Dry waste is 100 TPD available • Processing of Wet is 80 TPD available • Processing of Sanitary and domestic hazardous waste is 1 TPD available
3.	Processing Gap(Tons)	0	369 TPD	• Processing Gap in dry waste is 199 TPD • Processing gap in wet waste is 170 TPD
4.	Dumpsite Status	Remediated	Remediated	• Bara Dumpsite is already remediated and a park is also developed on the particular site • Remediation of Dump site at kedarpur is under progress by Bio remediation and Bio minning process and work of dump site remediation at site budhha park yet to be start by Contractor
5.	Status of door to door collection (Tons) / (%)	85	92	60 More D2D vehicles have been proposed for the 100% door-to-door collection of waste

13/09/2024 AE

DC & N.O. (SBM)

अपर आयुक्त नगर निगम ग्वालियर

Page 1

कार्यालय आयुक्त,नगर पालिक निगम ग्वालियर म.प्र.

(नारायण शेजवलकर भवन, तरण पुष्कर के पास, सिटी सेन्टर, ग्वालियर दूरभाष :0751–2438300)

क्र. 1/24/2/10/स्व.भा.मि./अ.आ./2024/SBM/327 ग्वा. दिनांक 13.09.2024

प्रति,

क्षेत्रीय निदेशक,
केन्द्रीय प्रदूषण नियंत्रण बोर्ड
बिठ्ठल मार्केट, पर्यावरण परिसर ई–5
अरेरा कॉलोनी भोपाल म.प्र. पिन– 462016

विषय– ठोस अपशिष्ट एवं तरल प्रबंधन की आपके द्वारा चाही गई जानकारी।

–0–

माननीय राष्ट्रीय हरित अधिकरण भारत सरकार के निर्देश पर निरीक्षण दल द्वारा दिनांक 05 एवं 06 अगस्त 2024 को नगर निगम ग्वालियर अंतर्गत ठोस एवं तरल अपशिष्ट प्रबंधन हेतु किये गये निरीक्षण के दौरान आपेक्षित जानकारी हेतु निरीक्षण दल द्वारा उपलब्ध कराये गये प्रपत्र में तैयार होकर संलग्न आपकी ओर प्रेषित है।

संलग्न– उपरोक्तानुसार

अपर आयुक्त
नगर पालिक निगम,
ग्वालियर(म.प्र.)

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Annexure-32

कार्यालय आयुक्त,नगर पालिक निगम ग्वालियर म.प्र.

क्र. 163/23/2/10/एस.बी.एम./न.नि./27786-27791 ग्वा. दिनांक 29.9.2023

–: कार्य आदेश:–

प्रति,

मैसर्स दया चरण एण्ड कम्पनी
डी–2/96, डी–2 ब्लॉक, जनकपुरी,
वेस्ट दिल्ली, दिल्ली, 110058
जॉइंट बेंचर मैसर्स श्री बाँके बिहारी उद्योग,
10/9 बी कटरा वजीर खान, रामबाग,
आगरा उत्तर प्रदेश 292006

विषयः– स्वच्छ भारत मिशन 2.0 के अन्तर्गत लीगेसी वेस्ट, डम्प साइट रेमेडियेशन कार्य के क्रियान्वयन हेतु ऑनलाईन निविदा क्रमांक 2022_UAD_231999_3 में कार्यादेश जारी करने के सम्बन्ध में।

सन्दर्भः– (1) इस कार्यालय का LOA क्रमांक 686 दिनांक 06/09/2023।
(2) आपके द्वारा सम्पादित अनुबन्ध क्रमांक 708 दिनांक 26/09/2023 ।

उपरोक्त विषयान्तर्गत लेख है, कि स्वच्छ भारत मिशन (शहरी) 2.0 के अन्तर्गत लीगेसी वेस्ट डम्प साईट रेमेडियेशन कार्य के क्रियान्वयन हेतु ऑनलाईन निविदा क्रमांक 2022_UAD_231999_3 दिनांक 07/07/2023 को आमंत्रित की गई थी। जिसमें आपकी संस्था की दर प्राक्कलन राशि पर न्यूनतम @13.270% कम अनुसार रूपये @ Rs 477.015 प्रति MT है। लीगेसी वेस्ट की अनुमानित मात्रा 6,03,089 MT है। जिसके अनुसार राशि रूपये 28,76,82,499/– तथा जी.एस.टी राशि रूपये 05,17,82,850/– के साथ सकल राशि रूपये 33,94,65,349/– की व्यय स्वीकृती एम.आई.सी दवारा दिनांक 31/08/2023 को दी गई है। इस कार्यालय दवारा जारी LOA के अंतर्गत आपके दवारा अनुबंध दिनांक 26/09/2023 को किया जा चुका है।

अतः आप अनुबन्ध की शर्तो अनुसार आगामी 07 दिवसों में लीगेसी वेस्ट डम्प साईट रेमेडियेशन के कार्य की विस्तृत कार्य योजना तैयार कर कार्यालय में प्रस्तुत कर नोडल अधिकारी (एस.बी.एम.) , सहायक यंत्री (एस. डब्ल्यू.एम.) सह इंजीनियर–इन–चार्ज तथा प्रभारी अधिकारी ISWM प्लांट केदारपुर के निर्देशन में कार्य प्रारम्भ करना सुनिश्चित करें।

अपर आयुक्त
(एस.बी.एम.)
नगर निगम ग्वालियर
ग्वा. दिनांक 29.9.2023

पृ.क्र. 163/23/2/10/एस.बी.एम./न.नि./
प्रतिलिपिः–

1. आयुक्त, नगर निगम, ग्वालियर।
2. नोडल अधिकारी, (एस.बी.एम) नगर निगम, ग्वालियर ।
3. सहायक यंत्री (एस.डब्लू.एम) नगर निगम, ग्वालियर ।
4. प्रभारी अधिकारी, आई.एस.डब्लू.एम. प्लांट केदारपुर, नगर निगम, ग्वालियर ।

अपर आयुक्त
(एस.बी.एम.)
नगर निगम ग्वालियर

2023 ankit 108

Annexure-33

M/S DAYA CHARAN AND COMPANY IN JV WITH SHREE BANKEY BHIARI UDYOG

Legacy Waste Dumpsite Redemption Kedarpur, Gwalior		
Gwalior Municipal Corporation		
DETAILS		**REMARKS**
Contractor	**Daya charan & Company JV shree Bankey Bihari Udyog**	
Dumpsite Location	Kedarpur Dumpsite	
	Buddha Park	
Total Legacy Waste at site	Kedarpur Dumpsite	as per RFP
	581462 MT	
	Buddha Park	
	21627 MT	
Total	**603089 MT**	
Revised waste Quantity	Kedarpur Dumpsite	as per contractor survey
	1030894.125 cu.mt	
	Density 0.85	
	876260 MT	
	Buddha Park	
	89026.549 cu.mt.	
	Density 0.85	
	75672.5 MT	
Total	**951932.5 MT**	
Waste Spred area at site as per RFP	Kedarpur Dumpsite	
	154529 Sq. mt.	
	Buddha Park	
	11731 sq.mt.	
Project Cost	Rs 331698950	as per RFP
Approved Project Cost	Rs 287682499	as per work order
Third Party (Consultant)	Mars planning & Engineering services Pvt. Ltd. In joint venture with pivotal planning services.	
Total fraction Processed	244735 MT	
Total fraction Dispatch	**126155 MT**	
Good Earth	72158.140 MT	Bara Gaon Bohdapur site provided by GMC
C&D	8649.810 MT	C&D Plant & stored at site
Inert	41022 MT	SLF site provided by GMC
RDF	4320.960 MT	Cement Plant Agreement Attached
Metal	4.5 MT	
Land Reclaimed	46328sq.mt.	
No. of Trommels Installed	6	Total site is divided into 3 parts each part have 2 trommels & 1 ADS
Trommel Capacity	1000 MT	density of waste may vary the performance
Excavators	12	
Dumpers	27	
Backhoe loaders	5	
Start date	29.09.2023	
Completion Timeline	300 days from the commencment of work	We have requested time extension vide letter no. dt. In reference to the diificulties faced in the working.

For Daya Charan And Company
JV Shree Bankey Bihari Udyog

Authorised Signator

Annexure-34

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

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F/LAB/06/TR-02

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/98
Sample Description	145 MLD STP, Jalalpur, Gwalior (MP) - Inlet	Requisition No.	142
Date of sample collection	06.08.2024	Date	21.08.2024
Date of sample receipt	08.08.2024	Type of sample	Grab
Date of analysis	08.08.2024 to 20.08.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**6.99**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**122**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**258**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**116**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	Oil & Grease	mg/L	-	APHA 5520-D
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विशलेषक
Scientist-'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)

Laboratory Head

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

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COPY FOR LAB I/C

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/99
Sample Description	145 MLD STP, Jalalpur, Gwalior (MP) - Outlet	Requisition No.	142
Date of sample collection	06.08.2024	Date	21.08.2024
Date of sample receipt	08.08.2024	Type of sample	Grab
Date of analysis	08.08.2024 to 20.08.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.08**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**12**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**49**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**15**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**2.6**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	**Phosphate (as P)**	**mg/L**	**0.5836**	**APHA 4500-P-D**
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**4.38**	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	**Faecal Coliform**	**MPN/100ml**	**>1600**	**APHA 9221-E**
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विश्लेषक
Scientist-'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)

Laboratory Head

CPCB

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Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab

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COPY FOR LAB I/C.....

Test Report : Waste Water (Physico Chemical Parameter)

Project Name	**NGT Case No. 606/2018**	**Test Report No.**	**WW/24-25/96**
Sample Description	**65 MLD STP, Laltipura, Gwalior (MP) - Inlet**	**Requisition No.**	142
Date of sample collection	06.08.2024	**Date**	21.08.2024
Date of sample receipt	08.08.2024	**Type of sample**	Grab
Date of analysis	08.08.2024 to 20.08.2024	**Sample collected by**	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.36**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**196**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**449**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**182**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	Oil & Grease	mg/L	-	APHA 5520-D
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
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38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विश्लेषक
Scientist-'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
...l Pollution Control Board,Bhopal (M.P.)

Laboratory Head:

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EPA Recognised Lab

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COPY FOR LAB I/C.....

Test Report : Waste Water (Physico Chemical Parameter)

Project Name	**NGT Case No. 606/2018**	**Test Report No.**	**WW/24-25/97**
Sample Description	**65 MLD STP, Laltipura, Gwalior (MP) - Outlet**	**Requisition No.**	142
Date of sample collection	06.08.2024	**Date**	21.08.2024
Date of sample receipt	08.08.2024	**Type of sample**	Grab
Date of analysis	08.08.2024 to 20.08.2024	**Sample collected by**	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.23**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**16**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**31**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**14**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**2.5**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	**Phosphate (as P)**	**mg/L**	**0.3209**	**APHA 4500-P-D**
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**5.18**	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	**Faecal Coliform**	**MPN/100ml**	**540**	**APHA 9221-E**
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विशलेषक
Scientist-'C' Lab Head & Government Analyst
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केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Pollution Control Board,Bhopal (M.P.)

Laboratory Head

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

CUSTOMER COPY
MASTER COPY F/LAB/06/TR-02
COPY FOR LAB I/C

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/94
Sample Description	8 MLD STP, Satabdipuram, Morar, Gwalior (MP) - Inlet	Requisition No.	142
Date of sample collection	06.08.2024	Date	21.08.2024
Date of sample receipt	08.08.2024	Type of sample	Grab
Date of analysis	08.08.2024 to 20.08.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.42**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**164**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**275**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**142**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	Oil & Grease	mg/L	-	APHA 5520-D
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विश्लेषक
Scientist-'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)

Laboratory Head:

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

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COPY FOR LAB I/C .....

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/95
Sample Description	8 MLD STP, Satabdipuram, Morar, Gwalior (MP) - Outlet	Requisition No.	142
Date of sample collection	06.08.2024	Date	21.08.2024
Date of sample receipt	08.08.2024	Type of sample	Grab
Date of analysis	08.08.2024 to 20.08.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.62**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**15**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**38**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**12**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**2**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	**Phosphate (as P)**	**mg/L**	**0.4061**	**APHA 4500-P-D**
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**0.96**	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	**Faecal Coliform**	**MPN/100ml**	**2**	**APHA 9221-E**
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निगजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विश्लेषक
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Central Pollution Control Board, Bhopal (M.P.)

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EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

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COPY FOR LAB I/C

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/92
Sample Description	4 MLD STP, Laliyapura,Lashkar, Gwalior (MP) - Inlet	Requisition No.	142
Date of sample collection	06.08.2024	Date	21.08.2024
Date of sample receipt	08.08.2024	Type of sample	Grab
Date of analysis	08.08.2024 to 20.08.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**6.84**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**154**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**313**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**140**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	Oil & Grease	mg/L	-	APHA 5520-D
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विशलेषक
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Central Pollution Control Board,Bhopal (M.P.)

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F/LAB/06/TR-02

Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/93
Sample Description	4 MLD STP, Laliyapura,Lashkar, Gwalior (MP) -Outlet	Requisition No.	142
Date of sample collection	06.08.2024	Date	21.08.2024
Date of sample receipt	08.08.2024	Type of sample	Grab
Date of analysis	08.08.2024 to 20.08.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.21**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**14**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**42**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**12**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**2**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	**Phosphate (as P)**	**mg/L**	**0.2783**	**APHA 4500-P-D**
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**1.28**	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	**Faecal Coliform**	**MPN/100ml**	**170**	**APHA 9221-E**
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विश्लेषक
Scientist-'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)

Laboratory Head:

कार्यालय नगर पालिक निगम मुरैना जिला - मुरैना (म. प्र.)
स्वच्छ भारत मिशन

स्वच्छ सर्वेक्षण 2024

Annexure-35

ULB CODE - 802083

केंद्रीकृत कम्पोस्ट प्लांट लॉग बुक (मासिक)
(Wet Waste -Monthly)

एम्.आर.एफ. स्थल का नाम : पुराना बस स्टैण्ड, मुरैना

एम्.आर.एफ. स्थल प्रभारी का नाम : अभिषेक पोद्दार

माह अगस्त

कुल वार्ड 47

क्र	Date	प्राप्त गीला कचरे की मात्रा (मि.ट. में)	प्रसंस्कृत गीला कचरे की मात्रा (मि.ट. में)	उपयोग किये जाने वाले EM solution की मात्रा (लीटर में)	कुल उत्पन्न खाद की मात्रा (मि.ट. में)	उत्सर्जित / लैंडफिल पर प्रेषित इनर्ट की मात्रा (मि.ट. में)	खाद किस को बेची गयी	विक्रय द्वारा प्राप्त राशि
01	01/08/24	46	46	46	9.20	1.38	स्वयं उपयोग	—
02	02/08/24	45	45	45	9.000	2.25	स्वयं उपयोग	—
03	03/08/24	40	40	40	8.00	1.20	स्वयं उपयोग	—
04	04/08/24	45	45	45	9.000	2.25	स्वयं उपयोग	—
05	05/08/24	47	47	47	9.40	1.88	स्वयं उपयोग	—
कुल								

हस्ताक्षर
प्रसंस्करण स्थल प्रभारी

Annexure-36

कार्यालय नगर पालिक निगम मुरैना जिला - मुरैना (म. प्र.)

स्वच्छ भारत मिशन

स्वच्छ सर्वेक्षण ....

ULB CODE - 802083

एम.आर.एफ. सुविधा / स्थलों लॉग प्रपत्र

(Dry Waste - Monthly)

एम.आर.एफ. स्थल का नाम : पुराना बस स्टेण्ड, मुरैना

एम.आर.एफ. स्थल प्रभारी का नाम : अभिषेक [illegible]

माह: अगस्त

कुल वार्ड: 47

S.No.	Date	प्राप्त सूखे कचरे की कुल मात्रा (टन में)	प्रसंस्कृत सूखे कचरे की कुल मात्रा (टन में)	प्राप्त सूखे कचरे में से पृथकीकृत किये गए कचरे की मात्रा (श्रेणी वार) (टन में)													
				मोटा प्लास्टिक (HD)	पन्नी / पोलिथीन (LD)	पुट्ठा	रद्दी / कागज़	कांच	रबर (टायर / सोल आदि)	धातु	कपड़ा	अन्य	इनर्ट / गैर उपयोगी	प्राप्त उपयोगी कचरे की कुल मात्रा (टन में)	माह में कुल बेचीं गई सूखा कचरा की मात्रा (मि.ट. में)	विक्रय से प्राप्त कुल राशि
				प्राप्त	प्राप्त	प्राप्त	प्राप्त	प्राप्त	प्राप्त	प्राप्त	प्राप्त					
01	01/08/24	32	32	4.5	0.5	3.2	5.8	0.9	8.1	6.5	0.5		2	30		
02	02/08/24	31	31	3	2	5	4	1	6	7	1		2	29		
03	03/08/24	30	30	2.1	1.9	4.5	5.5	0.8	6.2	5.5	2.5		1.5	28.5		
04	04/08/24	32	32	3.5	1.5	2.5	5.5	2.5	9.5	6.3	0.2		0.5	31.5		
05	05/08/24	28	28	2	1	3.1	4.9	1	5	6	1		4	24		
06	06/08/24	29	29	1.2	0.8	4.5	3.2	3.3	6.5	5.5	0.5		3.5	25.5		
कुल																

हस्ताक्षर

प्रसंस्करण स्थल प्रभारी

1441

कार्यालय नगरपालिक निगम मुरैना (म.प्र.)

मुरैना,दिनाक– 29/12/2023

क्रमाक / पी.आई.यू. / 2024 / 3046 //कार्यादेश//

Annexure-37

प्रति,

मैसर्स कोर प्रोजैक्ट
इंजीनियरिंग एण्ड कंसल्टैण्ट
प्रा0लि0 अमरावती

विषयः– नगरीय क्षेत्र मुरैना में लीगेसी वेस्ट डम्प साइट रेमेडिएशन एवं रेजीडयूअल वेस्ट का डिस्पोजल कार्य हेतु कार्यादेश।

संदर्भः– नगर निगम मुरैना द्वारा वर्णित कार्य हेतु ऑनलाईन निविदा क्र. 261462–1 दिनाक 17.03.2023।

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विषयान्तर्गत नगर पालिक निगम मुरैना द्वारा आमत्रित ऑन लाईन निविदा क्रमाक 2614621–1 मे लीगेसी वेस्ट डम्प साइट रेमेडिएशन कार्य हेतु आपके द्वारा प्रस्तुत निविदा दर राशि रू. 5,15,24,165.00 (पांच करोड़ पन्द्रह लाख चौबीस हजार एक सौ पैसठ मात्र) सक्षम प्राधिकारी द्वारा स्वीकृत की गई है। कार्य पूर्ण करने की अवधि 07 माह निर्धारित है।

अनुबध मे वर्णित शर्तो के अनुरूप कार्य संपादित किए जाने हेतु आपको कार्यादेश दिया जाता है।

आयुक्त
नगरपालिक निगम मुरैना

पृ.क्रमाक / पी.आई.यू. / 2024 / मुरैना,दिनाक– 29/12

प्रतिलिपिः–

1. मिशन संचालक, स्वच्छ भारत मिशन म0प्र0 भोपाल की ओर सूचनार्थ।
2. कार्यपालन यंत्री, नगर पालिक निगम मुरैना की ओर सूचनार्थ।
3. नोड़ल अधिकारी, स्वच्छ भारत मिशन नगर पालिक निगम मुरैना की ओर आवश्यक कार्यवाही हेतु ।

आयुक्त
नगर पालिक निगम मुरैना

Annexure-38

CORE PROJECT ENGINEERS & CONSULTANT PVT LTD

Processing Details NIVI Site

Sr. No.	Date	Segregation per day (cu.m)	Segregation per day (MT)	Approx Soil (cu.m)	Approx Soil (MT)	Approx Inert & C & D (cu.m)	Approx Inert & C & D (MT)	Approx RDF (cu.m)	Approx RDF (MT)
1	13-02-2024	320.0	294.4	249.6	227.1	48.0	28.3	22.4	6.7
2	21-02-2024	480.0	441.6	374.4	340.7	72.0	42.5	33.6	10.1
3	22-02-2024	640.0	588.8	499.2	454.3	96.0	56.6	44.8	13.4
4	23-02-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
5	25-02-2024	640.0	588.8	499.2	454.3	96.0	56.6	44.8	13.4
6	26-02-2024	880.0	809.6	686.4	624.6	132.0	77.9	61.6	18.5
7	27-02-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
8	07-03-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
9	08-03-2024	880.0	809.6	686.4	624.6	132.0	77.9	61.6	18.5
10	09-03-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
	Total Waste	7040.00	6476.80	5491.20	4996.99	1056.00	623.04	492.80	147.84
19	18-03-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
20	19-03-2024	880.0	809.6	686.4	624.6	132.0	77.9	61.6	18.5
21	20-03-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
22	21-03-2024	880.0	809.6	686.4	624.6	132.0	77.9	61.6	18.5
23	22-03-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
24	23-03-2024	880.0	809.6	686.4	624.6	132.0	77.9	61.6	18.5
25	24-03-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
26	26-03-2024	720.0	662.4	561.6	511.1	108.0	63.7	50.4	15.1
27	27-03-2024	880.0	809.6	686.4	624.6	132.0	77.9	61.6	18.5
28	28-03-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
29	29-03-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
30	30-03-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
31	31-03-2024	960.0	883.2	748.8	681.4	144.0	85.0	67.2	20.2
	Total Waste	10800.00	9936.00	8424.00	7665.84	1620.00	955.80	756.00	226.80
32	01-04-2024	640.0	588.8	499.2	454.3	96.0	56.6	44.8	13.4

CORE PROJECT ENGINEERS & CONSULTANT PVT LTD

Processing Details NIVI Site

Sr. No.	Date	Segregation per day (cu.m)	Segregation per day (MT)	Approx Soil (cu.m)	Approx Soil (MT)	Approx Inert & C & D (cu.m)	Approx Inert & C & D (MT)	Approx RDF (cu.m)	Approx RDF (MT)
33	02-04-2024	960.0	883.2	748.8	681.4	144.0	85.0	67.2	20.2
34	03-04-2024	960.0	883.2	748.8	681.4	144.0	85.0	67.2	20.2
35	04-04-2024	880.0	809.6	686.4	624.6	132.0	77.9	61.6	18.5
36	05-04-2024	1120.0	1030.4	873.6	795.0	168.0	99.1	78.4	23.5
37	06-04-2024	960.0	883.2	748.8	681.4	144.0	85.0	67.2	20.2
38	07-04-2024	960.0	883.2	748.8	681.4	144.0	85.0	67.2	20.2
39	08-04-2024	960.0	883.2	748.8	681.4	144.0	85.0	67.2	20.2
40	09-04-2024	1080.0	993.6	842.4	766.6	162.0	95.6	75.6	22.7
41	10-04-2024	960.0	883.2	748.8	681.4	144.0	85.0	67.2	20.2
42	11-04-2024	960.0	883.2	748.8	681.4	144.0	85.0	67.2	20.2
43	12-04-2024	720.0	662.4	561.6	511.1	108.0	63.7	50.4	15.1
44	13-04-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
	Total Waste	11960.00	11003.20	9328.80	8489.21	1794.00	1058.46	837.20	251.16
45	14-04-2024	960.0	883.2	748.8	681.4	144.0	85.0	67.2	20.2
46	15-04-2024	960.0	883.2	748.8	681.4	144.0	85.0	67.2	20.2
47	16-04-2024	840.0	772.8	655.2	596.2	126.0	74.3	58.8	17.6
48	17-04-2024	800.0	736.0	624.0	567.8	120.0	70.8	56.0	16.8
49	18-04-2024	640.0	588.8	499.2	454.3	96.0	56.6	44.8	13.4
50	19-04-2024	640.0	588.8	499.2	454.3	96.0	56.6	44.8	13.4
51	20-04-2024	560.0	515.2	436.8	397.5	84.0	49.6	39.2	11.8
52	21-04-2024	640.0	588.8	499.2	454.3	96.0	56.6	44.8	13.4
53	22-04-2024	560.0	515.2	436.8	397.5	84.0	49.6	39.2	11.8
54	23-04-2024	560.0	515.2	436.8	397.5	84.0	49.6	39.2	11.8
55	24-04-2024	160.0	147.2	124.8	113.6	24.0	14.2	11.2	3.4
56	25-04-2024	640.0	588.8	499.2	454.3	96.0	56.6	44.8	13.4

CORE PROJECT ENGINEERS & CONSULTANT PVT LTD

Processing Details NIVI Site

Sr. No.	Date	Segregation per day (cu.m)	Segregation per day (MT)	Approx Soil (cu.m)	Approx Soil (MT)	Approx Inert & C & D (cu.m)	Approx Inert & C & D (MT)	Approx RDF (cu.m)	Approx RDF (MT)
57	26-04-2024	720.0	662.4	561.6	511.1	108.0	63.7	50.4	15.1
58	27-04-2024	320.0	294.4	249.6	227.1	48.0	28.3	22.4	6.7
59	28-04-2024	480.0	441.6	374.4	340.7	72.0	42.5	33.6	10.1
60	29-04-2024	320.0	294.4	249.6	227.1	48.0	28.3	22.4	6.7
61	30-04-2024	560.0	515.2	436.8	397.5	84.0	49.6	39.2	11.8
	Total Waste	10360.00	9531.20	8080.80	7353.53	1554.00	916.86	725.20	217.56
Total		**40160.0**	**36947.2**	**31324.8**	**28505.6**	**6024.0**	**3554.2**	**2811.2**	**843.4**

Manoj M. Belgamwar
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CORE PROJECT ENGINEERS & CONSULTANT PVT LTD

Processing Details NIVI Site

Sr. No.	Date	Segregation per day (cu.m)	Segregation per day (MT)	Approx Soil (cu.m)	Approx Soil (MT)	Approx Inert & C & D (cu.m)	Approx Inert & C & D (MT)	Approx RDF (cu.m)	Approx RDF (MT)
1	01-05-2024	0	0	0	0	0	0	0	0
2	02-05-2024	400	368	312	283.92	60	57	28	8.4
3	03-05-2024	400	368	312	283.92	60	57	28	8.4
4	04-05-2024	720	662.4	561.6	511.056	108	102.6	50.4	15.12
5	05-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
6	06-05-2024	320	294.4	249.6	227.136	48	45.6	22.4	6.72
7	07-05-2024	400	368	312	283.92	60	57	28	8.4
8	08-05-2024	320	294.4	249.6	227.136	48	45.6	22.4	6.72
9	09-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
10	10-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
11	11-05-2024	640	588.8	499.2	454.272	96	91.2	44.8	13.44
12	12-05-2024	0	0	0	0	0	0	0	0
	Total Waste	4720.00	4342.40	3681.60	3350.26	708.00	672.60	330.40	99.12
13	13-05-2024	320	294.4	249.6	227.136	48	45.6	22.4	6.72
14	14-05-2024	640	588.8	499.2	454.272	96	91.2	44.8	13.44
15	15-05-2024	400	368	312	283.92	60	57	28	8.4
16	16-05-2024	800	736	624	567.84	120	114	56	16.8
17	17-05-2024	720	662.4	561.6	511.056	108	102.6	50.4	15.12
18	18-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
19	19-05-2024	160	147.2	124.8	113.568	24	22.8	11.2	3.36
20	20-05-2024	640	588.8	499.2	454.272	96	91.2	44.8	13.44
21	21-05-2024	240	220.8	187.2	170.352	36	34.2	16.8	5.04
22	22-05-2024	240	220.8	187.2	170.352	36	34.2	16.8	5.04
23	23-05-2024	400	368	312	283.92	60	57	28	8.4
	Total Waste	5040.00	4636.80	3931.20	3577.39	756.00	718.20	352.80	105.84

Sr. No.	Date	Segregation per day (cu.m)	Segregation per day (MT)	Approx Soil (cu.m)	Approx Soil (MT)	Approx Inert & C & D (cu.m)	Approx Inert & C & D (MT)	Approx RDF (cu.m)	Approx RDF (MT)
24	24-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
25	25-05-2024	640	588.8	499.2	454.272	96	91.2	44.8	13.44
26	26-05-2024	800	736	624	567.84	120	114	56	16.8
27	27-05-2024	240	220.8	187.2	170.352	36	34.2	16.8	5.04
28	28-05-2024	320	294.4	249.6	227.136	48	45.6	22.4	6.72
29	29-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
30	30-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
31	31-05-2024	720	662.4	561.6	511.056	108	102.6	50.4	15.12
32	01-06-2024	320	294.4	249.6	227.136	48	45.6	22.4	6.72
33	02-06-2024	0	0	0	0	0	0	0	0
34	03-06-2024	80	73.6	62.4	56.784	12	11.4	5.6	1.68
35	04-06-2024	240	220.8	187.2	170.352	36	34.2	16.8	5.04
	Total Waste	4960.00	4563.20	3868.80	3520.61	744.00	706.80	347.20	104.16
Total		**14720.00**	**13542.40**	**11481.60**	**10448.26**	**2208.00**	**2097.60**	**1030.40**	**309.12**

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CORE PROJECT ENGINEERS & CONSULTANT PVT LTD

Processing Details RTO Site (Old Machine)

Sr. No.	Date	Segregation per day (cu.m)	Segregation per day (MT)	Approx Soil (cu.m)	Approx Soil (MT)	Approx Inert & C & D (cu.m)	Approx Inert & C & D (MT)	Approx RDF (cu.m)	Approx RDF (MT)
1	18-04-2024	0	0	0	0	0	0	0	0
2	19-04-2024	0	0	0	0	0	0	0	0
3	20-04-2024	320	294.4	249.6	227.136	48	45.6	22.4	6.72
4	21-04-2024	520	478.4	405.6	369.096	78	74.1	36.4	10.92
5	22-04-2024	440	404.8	343.2	312.312	66	62.7	30.8	9.24
6	23-04-2024	280	257.6	218.4	198.744	42	39.9	19.6	5.88
7	24-04-2024	440	404.8	343.2	312.312	66	62.7	30.8	9.24
8	25-04-2024	600	552	468	425.88	90	85.5	42	12.6
9	26-04-2024	640	588.8	499.2	454.272	96	91.2	44.8	13.44
10	27-04-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
11	28-04-2024	520	478.4	405.6	369.096	78	74.1	36.4	10.92
12	29-04-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
	Total Waste	4800.00	4416.00	3744.00	3407.04	720.00	684.00	336.00	100.80
13	30-04-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
14	01-05-2024	0	0	0	0	0	0	0	0
15	02-05-2024	400	368	312	283.92	60	57	28	8.4
16	03-05-2024	440	404.8	343.2	312.312	66	62.7	30.8	9.24
17	04-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
18	05-05-2024	600	552	468	425.88	90	85.5	42	12.6
19	06-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
20	07-05-2024	440	404.8	343.2	312.312	66	62.7	30.8	9.24
21	08-05-2024	520	478.4	405.6	369.096	78	74.1	36.4	10.92
22	09-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
23	10-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08

Sr. No.	Date	Segregation per day (cu.m)	Segregation per day (MT)	Approx Soil (cu.m)	Approx Soil (MT)	Approx Inert & C & D (cu.m)	Approx Inert & C & D (MT)	Approx RDF (cu.m)	Approx RDF (MT)
24	11-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
25	12-05-2024	400	368	312	283.92	60	57	28	8.4
	Total Waste	5920.00	5446.40	4617.60	4202.02	888.00	843.60	414.40	124.32
26	13-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
27	14-05-2024	360	331.2	280.8	255.528	54	51.3	25.2	7.56
28	15-05-2024	520	478.4	405.6	369.096	78	74.1	36.4	10.92
29	16-05-2024	680	625.6	530.4	482.664	102	96.9	47.6	14.28
30	17-05-2024	640	588.8	499.2	454.272	96	91.2	44.8	13.44
31	18-05-2024	520	478.4	405.6	369.096	78	74.1	36.4	10.92
32	19-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
33	20-05-2024	280	257.6	218.4	198.744	42	39.9	19.6	5.88
34	21-05-2024	240	220.8	187.2	170.352	36	34.2	16.8	5.04
35	22-05-2024	520	478.4	405.6	369.096	78	74.1	36.4	10.92
36	23-05-2024	200	184	156	141.96	30	28.5	14	4.2
37	24-05-2024	200	184	156	141.96	30	28.5	14	4.2
	Total Waste	5120.00	4710.40	3993.60	3634.18	768.00	729.60	358.40	107.52
38	25-05-2024	600	552	468	425.88	90	85.5	42	12.6
39	26-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
40	27-05-2024	640	588.8	499.2	454.272	96	91.2	44.8	13.44
41	28-05-2024	320	294.4	249.6	227.136	48	45.6	22.4	6.72
42	29-05-2024	160	147.2	124.8	113.568	24	22.8	11.2	3.36
43	30-05-2024	80	73.6	62.4	56.784	12	11.4	5.6	1.68
44	31-05-2024	0	0	0	0	0	0	0	0
45	01-06-2024	160	147.2	124.8	113.568	24	22.8	11.2	3.36
46	02-06-2024	160	147.2	124.8	113.568	24	22.8	11.2	3.36
47	03-06-2024	80	73.6	62.4	56.784	12	11.4	5.6	1.68

Sr. No.	Date	Segregation per day (cu.m)	Segregation per day (MT)	Approx Soil (cu.m)	Approx Soil (MT)	Approx Inert & C & D (cu.m)	Approx Inert & C & D (MT)	Approx RDF (cu.m)	Approx RDF (MT)
48	04-06-2024	640	588.8	499.2	454.272	96	91.2	44.8	13.44
	Total Waste	3400.00	3128.00	2652.00	2413.32	510.00	484.50	238.00	71.40
Total		19240.00	17700.80	15007.20	13656.55	2886.00	2741.70	1346.80	404.04

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CORE PROJECT ENGINEERS & CONSULTANT PVT LTD

Processing Details RTO Site (New Machine)

Sr. No.	Date	Segregation per day (cu.m)	Segregation per day (MT)	Approx Soil (cu.m)	Approx Soil (MT)	Approx Inert & C & D (cu.m)	Approx Inert & C & D (MT)	Approx RDF (cu.m)	Approx RDF (MT)
1	08-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
2	09-05-2024	400	368	312	283.92	60	57	28	8.4
3	10-05-2024	400	368	312	283.92	60	57	28	8.4
4	11-05-2024	320	294.4	249.6	227.136	48	45.6	22.4	6.72
5	12-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
6	13-05-2024	400	368	312	283.92	60	57	28	8.4
7	14-05-2024	320	294.4	249.6	227.136	48	45.6	22.4	6.72
8	15-05-2024	400	368	312	283.92	60	57	28	8.4
9	16-05-2024	720	662.4	561.6	511.056	108	102.6	50.4	15.12
10	17-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
	Total Waste	4560.00	4195.20	3556.80	3236.69	684.00	649.80	319.20	95.76
11	18-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
12	19-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
13	20-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
14	21-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
15	22-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
16	23-05-2024	80	73.6	62.4	56.784	12	11.4	5.6	1.68
17	24-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
18	25-05-2024	720	662.4	561.6	511.056	108	102.6	50.4	15.12
19	26-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
20	27-05-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
21	28-05-2024	400	368	312	283.92	60	57	28	8.4
22	29-05-2024	400	368	312	283.92	60	57	28	8.4
23	30-05-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08

Sr. No.	Date	Segregation per day (cu.m)	Segregation per day (MT)	Approx Soil (cu.m)	Approx Soil (MT)	Approx Inert & C & D (cu.m)	Approx Inert & C & D (MT)	Approx RDF (cu.m)	Approx RDF (MT)
	Total Waste	6400.00	5888.00	4992.00	4542.72	960.00	912.00	448.00	134.40
24	31-05-2024	320	294.4	249.6	227.136	48	45.6	22.4	6.72
25	01-06-2024	640	588.8	499.2	454.272	96	91.2	44.8	13.44
26	02-06-2024	560	515.2	436.8	397.488	84	79.8	39.2	11.76
27	03-06-2024	400	368	312	283.92	60	57	28	8.4
28	04-06-2024	480	441.6	374.4	340.704	72	68.4	33.6	10.08
	Total Waste	2400.00	2208.00	1872.00	1703.52	360.00	342.00	168.00	50.40
Total		**13360.00**	**12291.20**	**10420.80**	**9482.93**	**2004.00**	**1903.80**	**935.20**	**280.56**

Manoj M. Belgamwar
Name & Sign
CPECPL Authority

CORE PROJECT ENGINEERS & CONSULTANT PVT LTD

Processing Details ITI Site

Sr. No.	Date	Segregation per day (cu.m)	Segregation per day (MT)	Approx Soil (cu.m)	Approx Soil (MT)	Approx Inert & C & D (cu.m)	Approx Inert & C & D (MT)	Approx RDF (cu.m)	Approx RDF (MT)
1	09-04-2024	600	552	468	425.88	90	53.1	42	12.6
2	10-04-2024	920	846.4	717.6	653.016	138	81.42	64.4	19.32
3	11-04-2024	800	736	624	567.84	120	70.8	56	16.8
4	12-04-2024	960	883.2	748.8	681.408	144	84.96	67.2	20.16
5	13-04-2024	720	662.4	561.6	511.056	108	63.72	50.4	15.12
6	14-04-2024	880	809.6	686.4	624.624	132	77.88	61.6	18.48
7	15-04-2024	960	883.2	748.8	681.408	144	84.96	67.2	20.16
8	16-04-2024	960	883.2	748.8	681.408	144	84.96	67.2	20.16
9	17-04-2024	840	772.8	655.2	596.232	126	74.34	58.8	17.64
Total		**7640.0**	**7028.8**	**5959.2**	**5422.9**	**1146.0**	**676.1**	**534.8**	**160.4**

Manoj M. Belgamwar
Name & Sign
CPECPL Authority

CORE PROJECT ENGINEERS & CONSULTANT PVT LTD

Soil , Inert and C & D Disposal data from RTO SITE

Sr. NO.	DATE	VEHICLE'S TYPE	TRIPS	VOLUME (CU.M.)	TOTAL VOLUME
1	14-05-2024	TRACTOR	17	3.532	60.044
2	14-05-2024	TRACTOR	19	3.881	73.739
3	14-05-2024	TRACTOR	20	3.556	71.12
4	14-05-2024	TRACTOR	18	3.885	69.93
5	14-05-2024	TRACTOR	21	4.012	84.252
6	14-05-2024	TRACTOR	19	3.987	75.753
7	14-05-2024	TRACTOR	18	3.99	71.82
8	14-05-2024	TRACTOR	21	4.02	84.42
9	15-05-2024	TRACTOR	33	3.532	116.556
10	15-05-2024	TRACTOR	38	3.881	147.478
11	15-05-2024	TRACTOR	41	3.556	145.796
12	15-05-2024	TRACTOR	40	3.885	155.4
13	15-05-2024	TRACTOR	43	4.012	172.516
14	15-05-2024	TRACTOR	42	3.987	167.454
15	15-05-2024	TRACTOR	39	3.99	155.61
16	15-05-2024	TRACTOR	42	4.02	168.84
	TOTAL				**1820.73**
	TOTAL VOLUME =1820.73CU.M.				

Manoj M. Belgamwar
Name & Sign
CPECPL Authority

CORE PROJECT ENGINEERS & CONSULTANT PVT LTD

Soil , Inert and C & D Disposal data from RTO SITE

Sr. NO.	DATE	VEHICLE'S TYPE	TRIPS	VOLUME (CU.M.)	TOTAL VOLUME
1	16-05-2024	TRACTOR	14	3.532	49.448
2	16-05-2024	TRACTOR	14	3.881	54.334
3	16-05-2024	TRACTOR	14	3.556	49.784
4	16-05-2024	TRACTOR	14	3.885	54.390
5	16-05-2024	TRACTOR	14	4.012	56.168
6	16-05-2024	TRACTOR	14	3.987	55.818
7	16-05-2024	TRACTOR	14	3.99	55.860
8	17-05-2024	TRACTOR	18	3.532	63.576
9	17-05-2024	TRACTOR	18	3.881	69.858
10	17-05-2024	TRACTOR	18	3.556	64.008
11	17-05-2024	TRACTOR	18	3.885	69.930
12	17-05-2024	TRACTOR	18	4.012	72.216
13	17-05-2024	TRACTOR	18	3.987	71.766
14	17-05-2024	TRACTOR	18	3.99	71.820
15	17-05-2024	TRACTOR	18	4.02	72.360
16	19-05-2024	TRACTOR	15	3.532	52.980
17	19-05-2024	TRACTOR	15	3.881	58.215
18	19-05-2024	TRACTOR	15	3.556	53.340
19	19-05-2024	TRACTOR	15	3.885	58.275
20	19-05-2024	TRACTOR	15	4.012	60.180
21	19-05-2024	TRACTOR	15	3.987	59.805
22	19-05-2024	TRACTOR	15	3.99	59.850
23	19-05-2024	TRACTOR	15	4.02	60.300
24	21-05-2024	TRACTOR	14	3.532	49.448
25	21-05-2024	TRACTOR	14	3.881	54.334
26	21-05-2024	TRACTOR	14	3.556	49.784
27	21-05-2024	TRACTOR	14	3.885	54.390
28	21-05-2024	TRACTOR	14	4.012	56.168
29	21-05-2024	TRACTOR	14	3.987	55.818
30	21-05-2024	TRACTOR	14	3.99	55.860
31	21-05-2024	TRACTOR	14	4.02	56.280
32	23-05-2024	TRACTOR	17	3.532	60.044
33	23-05-2024	TRACTOR	17	3.881	65.977
34	23-05-2024	TRACTOR	17	3.556	60.452
35	23-05-2024	TRACTOR	17	3.885	66.045
36	23-05-2024	TRACTOR	17	4.012	68.204
37	23-05-2024	TRACTOR	17	3.987	67.779
38	23-05-2024	TRACTOR	17	3.99	67.830
39	23-05-2024	TRACTOR	17	4.02	68.340
40	25-05-2024	TRACTOR	20	3.532	70.640
41	25-05-2024	TRACTOR	20	3.881	77.620
42	25-05-2024	TRACTOR	20	3.556	71.120
43	25-05-2024	TRACTOR	20	3.885	77.700
44	25-05-2024	TRACTOR	20	4.012	80.240

Sr. NO.	DATE	VEHICLE'S TYPE	TRIPS	VOLUME (CU.M.)	TOTAL VOLUME
45	25-05-2024	TRACTOR	20	3.987	79.740
46	25-05-2024	TRACTOR	20	3.99	79.800
47	25-05-2024	TRACTOR	20	4.02	80.400
48	27-05-2024	TRACTOR	13	3.532	45.916
49	27-05-2024	TRACTOR	13	3.881	50.453
50	27-05-2024	TRACTOR	13	3.556	46.228
51	27-05-2024	TRACTOR	13	3.885	50.505
52	27-05-2024	TRACTOR	13	4.012	52.156
53	27-05-2024	TRACTOR	13	3.987	51.831
54	27-05-2024	TRACTOR	13	3.99	51.870
55	27-05-2024	TRACTOR	13	4.02	52.260
56	29-05-2024	TRACTOR	15	3.532	52.980
57	29-05-2024	TRACTOR	15	3.881	58.215
58	29-05-2024	TRACTOR	15	3.556	53.340
59	29-05-2024	TRACTOR	15	3.885	58.275
60	29-05-2024	TRACTOR	15	4.012	60.180
61	29-05-2024	TRACTOR	15	3.987	59.805
62	29-05-2024	TRACTOR	15	3.99	59.850
63	29-05-2024	TRACTOR	15	4.02	60.300
64	01-06-2024	TRACTOR	17	3.532	60.044
65	01-06-2024	TRACTOR	18	3.881	69.858
66	01-06-2024	TRACTOR	18	3.556	64.008
67	01-06-2024	TRACTOR	18	3.885	69.930
68	01-06-2024	TRACTOR	20	4.012	80.240
69	01-06-2024	TRACTOR	18	3.987	71.766
70	01-06-2024	TRACTOR	18	3.99	71.820
71	01-06-2024	TRACTOR	18	4.02	72.360
72	04-06-2024	TRACTOR	14	3.532	49.448
73	04-06-2024	TRACTOR	14	3.881	54.334
74	04-06-2024	TRACTOR	14	3.556	49.784
75	04-06-2024	TRACTOR	14	3.885	54.390
76	04-06-2024	TRACTOR	14	4.012	56.168
77	04-06-2024	TRACTOR	14	3.987	55.818
78	04-06-2024	TRACTOR	14	3.99	55.860
79	04-06-2024	TRACTOR	14	4.02	56.280
80	07-06-2024	TRACTOR	20	3.532	70.640
81	07-06-2024	TRACTOR	20	3.881	77.620
82	07-06-2024	TRACTOR	20	3.556	71.120
83	07-06-2024	TRACTOR	20	3.885	77.700
84	07-06-2024	TRACTOR	20	4.012	80.240
85	09-06-2024	TRACTOR	15	3.532	52.980
86	09-06-2024	TRACTOR	15	3.881	58.215
87	09-06-2024	TRACTOR	15	3.556	53.340
88	09-06-2024	TRACTOR	15	3.885	58.275
89	09-06-2024	TRACTOR	15	4.012	60.180
90	09-06-2024	TRACTOR	15	3.987	59.805
91	12-06-2024	TRACTOR	14	3.532	49.448

Sr. NO.	DATE	VEHICLE'S TYPE	TRIPS	VOLUME (CU.M.)	TOTAL VOLUME
92	12-06-2024	TRACTOR	14	3.881	54.334
93	12-06-2024	TRACTOR	14	3.556	49.784
94	12-06-2024	TRACTOR	14	3.885	54.390
95	12-06-2024	TRACTOR	14	4.012	56.168
96	12-06-2024	TRACTOR	14	3.987	55.818
97	15-06-2024	TRACTOR	16	3.532	56.512
98	15-06-2024	TRACTOR	16	3.881	62.096
99	15-06-2024	TRACTOR	16	3.556	56.896
100	15-06-2024	TRACTOR	16	3.885	62.160
101	15-06-2024	TRACTOR	16	4.012	64.192
102	15-06-2024	TRACTOR	16	3.99	63.840
103	17-06-2024	TRACTOR	17	3.532	60.044
104	17-06-2024	TRACTOR	17	3.881	65.977
105	17-06-2024	TRACTOR	17	3.556	60.452
106	17-06-2024	TRACTOR	17	3.885	66.045
107	17-06-2024	TRACTOR	17	4.012	68.204
	TOTAL				**6551.04**
	TOTAL VOLUME =6551.04 CU.M.				

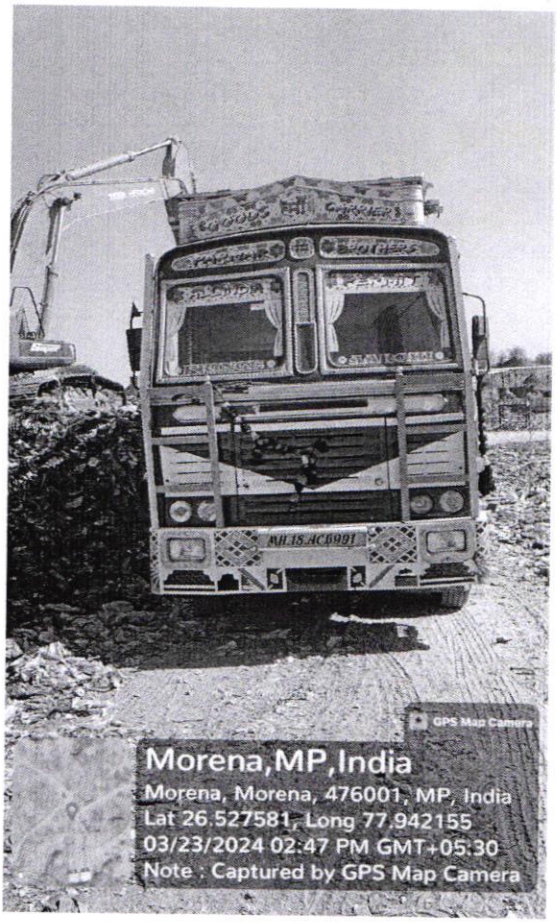
Manoj M. Belgamwar
Name & Sign
CPECPL Authority

INDEX

Sr.No	Date	Truck No.	"Net Weight In tonnes"
1	23-03-2024	RJ 11 GB 3493	31.440
2	23-03-2024	MH 18 AC 6991	36.520
3	24-03-2024	RJ 11 GB 1537	26.020
4	24-03-2024	MP 07 HB 9489	24.30
5	28-03-2024	MP 07 HB 6481	25.860
6	28-03-2024	RJ 09 GD 8209	30.640
7	05-05-24	RJ 09 GE 0311	26.260
8	15-05-2024	RJ 11 GB 5688	30.545
9	23-05-2024	MP 07 HB 6350	17.780
10	31-05-2024	MP 09 HH 4289	22.555
11	01-06-2024	MP 07 HB 7783	24.740
12	03-06-2024	RJ 11 GB 0930	22.345
13	29-06-2024	MP33H7093	22.840
14	29-06-2024	RJ11GC6555	30.360
15	16-07-2024	MP33H2046	24.805
16	17-07-2024	MP33H7093	26.440
17	31-07-2024	CG04NU8277	27.610
18	01-08-2024	BR 02 GA 6227	29.030
19	02-08-2024	MP35HA0426	28.770
		Total	508.86

Core Projects Engineers & Consultant Pvt. Ltd. Amravati

RDF Truck Loading Morena



UltraTech Cement Limited, Vikram Cement Works

Weighment Slip

Slip No :	1897077227			Date & Time :	27/03/2024 04:13:57
DI No :				DI Date & Time :	
Truck No :	MH18AC6991			Transporter Code :	0000607260
Transporter Name :	CORE PROJECT ENGINEERS			Transporter Order No :	4600101517
PO No :	1520500930			Supplier :	CORE PROJECT ENGINEERS CONSULTANT
Challan No :	002	Challan Qty :	36.93	Challan Date :	24/03/2024
LR No :	002			Product Type :	AFPLASTICWASTE
In Date :	26/03/2024	In Time :	15:49:53	Gross WT :	49.26 MT
Out Date :	27/03/2024	Out Time :	04:13:29	Tare WT :	12.74 MT
				Net WT :	36.52 MT

Authorised Signature :

OUT 27/03/24 04:18 MATERIAL GATE

VIKRAM CEMENT WORKS SECURITY KHOR M.P.

Core Project Engineers & Consultant Pvt. Ltd. Amravati

Annexure-39

F/LAB/06/TR-02

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab
Test Report : Waste Water (Physico Chemical Parameter)

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Project Name	NGT Case No. 606/2018	Test Report No.	WW/24-25/100
Sample Description	25 MLD STP, Ward No-4, Murena, (MP) - Inlet	Requisition No.	143
Date of sample collection	07.08.2024	Date	21.08.2024
Date of sample receipt	08.08.2024	Type of sample	Grab
Date of analysis	08.08.2024 to 20.08.2024	Sample collected by	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.54**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**34**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**94**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**28**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	Oil & Grease	mg/L	-	APHA 5520-D
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	Phosphate (as P)	mg/L	-	APHA 4500-P-D
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	Nitrate Nitrogen (as NO_3)	mg/L	-	APHA 4500-NO_3B
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	Faecal Coliform	MPN/100ml	-	APHA 9221-E
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

Prepared by:

मिलिन्द कुमार निमजे/Milind Kumar Nimje
वैज्ञानिक-'ग',लैब प्रमुख एवं सरकारी विश्लेषक
Scientist-'C' Lab Head & Government Analyst
क्षेत्रीय निदेशालय / Regional Directorate
केन्द्रीय प्रदूषण नियंत्रण बोर्ड,भोपाल (म.प्र.)
Central Pollution Control Board,Bhopal (M.P.)

Laboratory Head

CPCB

Central Pollution Control Board
Regional Directorate (Central)
"Parivesh Bhawan"
Paryavaran Parisar, E-5, Arera Colony, Bhopal
EPA Recognised Lab

1460

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COPY FOR LAB F/LAB/06/TR-02

Test Report : Waste Water (Physico Chemical Parameter)

Project Name	**NGT Case No. 606/2018**	**Test Report No.**	**WW/24-25/101**
Sample Description	**25 MLD STP, Ward No-4, Murena, (MP) - Outlet**	**Requisition No.**	143
Date of sample collection	07.08.2024	**Date**	21.08.2024
Date of sample receipt	08.08.2024	**Type of sample**	Grab
Date of analysis	08.08.2024 to 20.08.2024	**Sample collected by**	Dr. Y K Saxena, Sh. R Kumar, Sh. R Bandewar

S.No.	Parameters	Unit	Result	Method
1	Temperature	°C	-	-
2	Odour	-	-	-
3	Appearance	-	-	-
4	Colour	Pt-Co Scale	-	APHA, 2120-B
5	Residual Chlorine	mg/L	-	APHA 4500-Cl-B
6	Dissolved Oxygen	mg/L	-	APHA 4500-O-C
7	**pH**	**pH unit**	**7.41**	**APHA, 4500H+B**
8	Specific Conductivity	µmho/cm	-	APHA 2510 B
9	**Suspended Solids**	**mg/L**	**14**	**APHA 2540 D**
10	Total Dissolved Solids	mg/L	-	APHA 2540 C
11	Total Solids	mg/L	-	APHA 2540 B
12	Fixed Dissolved Solid	mg/L	-	APHA 2540 E
13	**COD**	**mg/L**	**35**	**APHA, 5220 B**
14	**BOD (3 days, 27°C)**	**mg/L**	**13**	**IS 3025, 1993**
15	Chloride	mg/L	-	APHA, 4500-CL-B
16	Total Alkalinity	mg/L	-	APHA 2320-B
17	T. Hardness (as $CaCO_3$)	mg/L	-	APHA 2340-C
18	Ca Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Ca-B
19	Mg Hardness (as $CaCO_3$)	mg/L	-	APHA 3500-Mg-B
20	**Oil & Grease**	**mg/L**	**2.67**	**APHA 5520-D**
21	Total Kjehdal Nitrogen	mg/L	-	APHA 4500-Norg-C
22	Turbidity	N.T.U.	-	APHA, 2130-B
23	**Phosphate (as P)**	**mg/L**	**0.6958**	**APHA 4500-P-D**
24	Sulphate (as SO_4)	mg/L	-	APHA 4500-SO_4-E
25	Ammo. Nitrogen (as NH_3)	mg/L	-	APHA 4500-NH_3-F
26	Nitrite Nitrogen (as NO_2)	mg/L	-	APHA 4500-NO_2-B
27	**Nitrate Nitrogen (as NO_3)**	**mg/L**	**1.26**	**APHA 4500-NO_3B**
28	Fluoride (as F)	mg/L	-	APHA 4500-F-D
29	Sodium (as Na)	mg/L	-	APHA 3500-Na-B
30	Potassium (as K)	mg/L	-	APHA 3500-K-B
31	Chromium (as Cr^{+6})	mg/L	-	APHA 3500-Cr B
32	Boron (as B)	mg/L	-	APHA 4500-B-C
33	**Faecal Coliform**	**MPN/100ml**	**>1600**	**APHA 9221-E**
34	Total Coliform	MPN/100ml	-	APHA 9221-B
35	Bioassay Test	% Survival	-	APHA 8910 A-C
36				
37				
38				

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