

# 2919

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

NEW DELHI

ORIGINAL APPLICATION NO. 654 of 2022

IN THE MATTER OF:

Priyadarshini Colony D, Residence Welfare Society Applicant

Versus

State of U.P. & Ors. Respondents

AND

Original Application No. 08/2023

IN THE MATTER OF:

Mukesh Kumar Tiwari Applicant

Versus

State of U.P. & Ors. Respondents

**Progress report by way of affidavit filed by the Lucknow Municipal Corporation (LMC) pursuant to the order dated 20.05.2024 passed by this Hon'ble Tribunal**

I, Inderjit Singh, S/o Mr. Sardha Singh, aged about 44 years, working as Municipal Commissioner, Lucknow Municipal Corporation, Lucknow, U.P., do hereby solemnly affirm and declare as under:

1. That I, the deponent, in my official capacity, is well conversant with the facts and circumstances of the case and am competent to swear this affidavit on behalf of the Respondent/Lucknow Municipal Corporation (LMC).

**PRELIMINARY SUBMISSIONS:-**

1.1 In light of **Rule 15(a) of SWM Rule 2016** Wherein Solid Waste Management (SWM) Action Plans prepared by Lucknow Municipal Corporation (LMC) has been approved by the State Government.

1.2 Further as per **Rule 22, Sr. no. 1-8 of SWM Rule 2016**, identification and procurement of sites for setting up solid waste processing and sanitary landfill facilities are as follows:

a) That on 01.09.2023, 01 Site admeasuring 10 acres has been identified at Nadarganj, Amausi for setting up a Bio-CNG plant for processing of segregated wet waste wherein the target is to be achieved by 31.01.2024.

**Current Status-**That on August 31, 2024, M/S EverEnviro Resource Management Pvt. Ltd. 300TPD Bio-CNG construction began on the 300TPD Bio-CNG plant at Nadarganj, Amausi, dedicated to processing segregated wet waste. As of now, 80% of the civil work has been completed. The plant is scheduled to commence commercial operations on March 31, 2025. Additionally, a recent agreement has been formalized with M/S Jay Bharat Maruti Enviro Bioenergy Lucknow Pvt. Ltd. for the establishment of another Bio-CNG plant. This plant, with a capacity of 150 TPD and producing 10 TPD of gas, will focus on processing cow dung, pottery waste, napier grass, and wet mandi waste. The site selected for this plant is at shooting range Sarojini Nagar, near Kanha Upvan, on a 7.5-acre land parcel. Construction work is under progress, the entire project is expected to be completed by June 2025. [Annex I](#)

b) The current status on 31.08.2024 for sanitary landfill facilities of two sites for setting up processing and sanitary landfill facilities, the target has been achieved. LMC have on operational site of area 39.5 acre at village Shivri and have identified and procured another patch of land of area 55 acre in Shivri just 500 m away from operational site. Both lands can accommodate a processing plant of 2000 MT/Day capacity and sanitary landfill sufficient for disposal of post processing residual inert material for next 15 years.

**Current Status-** Presently, LMC has a 1250 TPD capacity for processing fresh waste. After the termination of EcoGreen Energy Pvt. Ltd., a short-term tender was initiated for three months to process fresh waste. M/S HORIZON Solution Pvt. Ltd. was selected for this tender. Although the company's tenure has expired, the tender for fresh waste processing has not been finalized, which is why the company is still processing the waste.

Additionally, more than 200 TPD of municipal waste (wet, dry and recyclable waste) is being processed through various methods. Wet waste is managed in home composting facilities in over 18,000 households. Meanwhile, 63 bulk waste generators

process wet waste within their campuses, and horticulture and kitchen waste is processed in over 1,000 compost pits located in parks. Furthermore, more than 80 TPD of dry and recyclable waste is collected by ragpickers, recyclers, and Material Recovery Facilities (MRFs).

In pursuit of long-term solid waste management solutions, a previous expression of interest was issued by the LMC. National Thermal Power Corporation (NTPC) has expressed interest in installing a 2000 TPD waste-to-energy plant using torrefaction technology. As per the MoU between NTPC and the State Urban Local Body, meetings were held on 12th and 29th August 2024, under the supervision of the Government of Uttar Pradesh. It was decided that NTPC would set up a 2000 TPD or more waste-to-energy plant for processing municipal solid fresh waste. The proposal from NTPC has been approved by the LMC assembly, and further action is in progress.

Additionally, while the waste-to-energy plant is being set up, LMC has floated a tender third time for a three-year waste management contract focusing on traditional windrow composting methods. Due to limited participation from firms, this tender shall be finalized on 18.09.2024. (Annex II)

M/S Bhumi Green Energy Private Limited is managing the processing of 18.5 lakh MT of legacy waste, which is a type of waste that has accumulated over a long period. The company has established a processing plant with a capacity of 4000 TPD in Shivri. The company has processed approximately 5.1 lakh MT of legacy waste since March 2024 to till now. The by-products of the processed legacy waste are disposed of according to the guidelines provided by the CSIR-National Environmental Engineering Research Institute (NEERI), Nagpur. (Annex III)

c) The target of setting up 25 No. for Material recovery facility (MRF) cum Portable Compactor Transfer Station (PCTS) as on 01.09.2023 in first phase has been achieved (i.e. 40%) with respect to 10 MRF cum Portable compactor transfer station whereas in subsequent phase the rest i.e. 15 MRF cum portable compactor transfer station (i.e. left 60%) is to be achieved by 30.06.2024.

**Current Status-** LMC operates eight Material Recovery Facilities (MRFs) manually, with one more MRF currently under construction. Additionally, a fully mechanized MRF located in Gwari is operated by M/S Chennai MSW Pvt. Ltd. through a Special Purpose Vehicle (SPV) named Lucknow Swacchata Abhiyan Pvt. Ltd. (LSA) under a Public-Private Partnership (PPP) model. For the installation of six new PCTS, locations have been selected, and tenders have been floated. This process is expected to be completed by the end of November 2024. Furthermore, four new PCTS have already been installed at various locations within the city, and 13 refuse compactors (RCs) have been deployed for the collection and transportation of municipal waste. (Annex IV)

d) Further target for setting up 04 land for material recovery facility cum portable compactor transfer station (PCTS)/ Fixed Compactor Transfer Station (FCTS) 100% capacity is to be achieved by 30.06.2024, wherein land for Material Recovery Facility cum PCTS/FCTS (i.e.40%) is to be achieved by 31.01.2024.

**Current Status-** The construction of three MRF cum FCTS facilities in Ganga Kheda, Dayal, and Bhisora is currently underway and will be completed by the end of December 2024. The construction and machinery installation at the Ghaila FCTS unit have been completed, and its trial is currently in progress. [\(Annex V\)](#)

e) The target for setting up 1500 No. Pits Setting up of Aerobic Composting pits in parks (Rule 22 at Sr.no. 7-8) whereas 1050 No. achieved as on 01.09.2023 (i.e 70 % coverage).

**Current Status-** Over 200 new compost pits have been constructed in the last three months to facilitate effective horticulture waste management within the parks. The utilization of mulching techniques further enhances waste management practices within these areas. [\(Annex VI\)](#)

f) For Promotion of co-marketing of compost with chemical fertilizers (Rule 7 of SWM Rule2016).

**Current Status-** Currently, LMC distribute the compost products to farmers and local residents located near the city. [\(Annex VII\)](#)

1.3 Further as per Rule 15, of SWM Rule 2016, enforcing waste generator to practice segregation of waste at source are as follows:

a) The target for setting up 762604 Household (i.e 100% coverage) is to be achieved by 30.09.2024 whereas 381000 HH (i.e 50% coverage) achieved as on 01.09.2023(i.e 15% coverage)

**Current Status:** Door-to-door waste collection and transportation in Zones 1, 3, 4, 6, and 7 are currently managed by LSA. The company has procured over 750 electric three-wheeler and four-wheeler vehicles for door-to-door waste collection.

Meanwhile, the responsibility for door-to-door waste collection in Zones 2, 5, and 8 remains with the Lucknow Municipal Corporation (LMC). The tender for these zones has been finalized.

The door-to-door collection service covers over 76% of households, reaching 6,07,599 households, with 1,68,788 of these households already segregating waste. To increase the level of waste segregation, LSA and Swachh Bharat Mission champions conduct daily IEC (Information, Education, and Communication) activities. [\(Annex VIII\)](#)

b) The Aforesaid target of segregated collection of wet waste from vegetable, fruit,

flower, meat, poultry and fish market and setting up 08 decentralized compost plant is to be achieved by 30.09.2024 by LMC has started and by 31.01.2024 LMC has started three such decentralized composting center.

**Current Status:** Lucknow Municipal Corporation (LMC) is taking a comprehensive approach to waste management. LMC is setting up decentralized composting plants in vegetable, fruit, flower, meat, and fish markets. This allows organic waste to be composted right where it's generated, reducing transportation needs and promoting sustainable practices. Success stories already exist, like Virat Khand, a recognized Zero Waste colony that composts for park maintenance. Additionally, over 500 households in Parshu Nath Planet actively manage their organic waste.

For mixed waste, LMC has processing facilities like the Zone-4 plant, handling 5 tons daily. Here, wet waste is converted to compost through pits, while a plasma technology plant tackles the remaining waste. LMC is also planning a mechanized composter at Dubagga market to further increase processing capacity.

Recognizing the importance of public participation, LMC launched a campaign in March 2024 to educate Resident Welfare Associations (RWAs) about waste segregation and composting. This initiative aims to empower residents and transform Lucknow into a zero-waste city, significantly improving overall waste management practices. Currently, with two Bio-Gas plants being set up in the city with a total capacity of 550 tonnes per day (TPD), there is no further need for decentralized composting plants.

c) Enforcing waste generators to pay user fee for solid waste management (Rule 4 (3) & 15 (f) of SWM Rule, 2016) The target for setting up 762604 units (Rs 4.60 Crore) is to be achieved by 30.09.2024 whereas 267000 units achieved as on 01.09.2023 (i.e. 35%).

**Current Status:** The Lucknow Municipal Corporation (LMC) has collected Rs. 4,28,71,951.00 from 3,54,663 units over the past three months. Demand notices have already been issued to all commercial and residential areas. [\(Annex IX\)](#)

d) The target for setting up 10463 no. Integration of Rag Pickers/Waste collectors/Kabadis/Volunteers/CBOs/NGOs (Rule 15(c) of SWM Rule 2016) is to be achieved by 30.09.2024 whereas 2100 no. achieved as on 01.09.2023 (i.e. 20%). The target for setting up 50 Nos. Integration and Incentives to informal waste recycling sector for recycling initiatives. (Rule 15 (u) of SWM Rule 2016) is to be achieved by 30.09.2024 whereas 20 no. achieved as on 01.09.2023.

**Current Status:** Identified 10 additional rag pickers and kabadis to participate in training programs, bringing us closer to our goal. These individuals will be integrated into the network of RRR centers established to support rag pickers, waste collectors, and kabadis. In total, 113 individuals have now been enrolled in these centers across Lucknow Municipal Corporation areas. [\(Annex X\)](#)

e) The target for setting up 220 Nos. Facilitating formation of Self- Help Groups, provide identity cards and thereafter encourage integration in solid waste management including door to door collection of waste; (Rule 15 (d) of SWM Rule 2016) is to be achieved by 30.09.2024 whereas 132 no. achieved as on 01.09.2023 (i.e. 60%).

**Current Status:** Swachh and Swasth Swayam Sahayta Samooh, Asha Swayam Sahayta Samooh, Laxmi Bai Sahayta Samooh, Munni Self Help Group, Pratihtha Swayam Sahayta Samooh, and Roj Self Help Group (SHGs) are tied up with the Lucknow Municipal Corporation (LMC). The women from these groups are trained in Material Recovery Facility (MRF) operations and waste segregation. Some of these women have also been incorporated into the operation and maintenance of Pink Toilets. [\(Annex XI\)](#)

f) That as per Rule 04 (6) of SWM Rule 2016 for enforcing Street Vendor to keep suitable containers for storage of waste generated during the course of an individual's activity and shall deposit such waste at waste storage depot or container or vehicle as notified by the local body, the target for enforcing the a foreside target of 21000 containers for storage of waste generated during the course of individual activities is to be achieved 30.12.2024 whereas 3500 container for storage of waste generated during the course of an individual activity (i.e 17%) has been achieved as on 01.09.2023 whereas Total 6300 installed container for storage of waste generated during the course of individual activity is to be achieved by 31.01.2024 (i.e 30%).

**Current Status:** LMC is taking a significant step towards responsible waste management by enforcing the use of two separate bins for wet and dry waste by all street vendors. This initiative encourages proper waste segregation at the source. To further enhance waste collection, 100 new large bins with a capacity of 1.1 cubic meters have been strategically placed in high-waste generation areas. These include locations frequented by Bulk Waste Generators (BWGs) and Resident Welfare Associations (RWAs). 13 refuse compactors (RC) are being used for the collection and transportation of the municipal solid waste. This combined approach ensures both street vendors and areas with high waste volume have the infrastructure they need for effective waste separation. [\(Annex XII\)](#)

g) That as per Rule Phase out the use of chemical fertilizer and use compost in all parks, gardens maintained by the local body and wherever possible in other places under its jurisdiction (Rule 15 (u) of SWM Rule 2016).

**Current Status:** LMC launched the "Mera Angan Meri Hariyali" initiative under the Swachh Bharat Mission to raise awareness about the harmful effects of chemical fertilizers and promote home and community composting. This innovative approach not only reduces waste within campuses and parks but also converts it into a valuable

resource. The compost produced from park waste is used to nourish the same green spaces, creating a closed-loop system. Any surplus compost is distributed to local residents, encouraging sustainable gardening practices throughout Lucknow. This initiative reflects LMC's commitment to environmental responsibility and community engagement. [\(Annex VII\)](#)

**h)** That as per Rule 8000No. Educate workers including contract workers and supervisors for door-to-door collection of segregated waste and transporting the unmixed waste; (Rule 15 (zc) of SWM Rule 2016) is to be achieved by 30.09.2024 whereas 3200 no. achieved as on 01.09.2023 (i.e. 40%).

**Current Status:** A comprehensive training program has been conducted, facilitated by LMC and the LSA teams, resulting in the training of over 5000 workers. This initiative aims to enhance their skills in efficient waste collection and segregation, aligning with our commitment to empower our workforce with the requisite knowledge and expertise. By undertaking such strategic collaborations, our goal is to raise the bar for waste management standards in Lucknow, fostering a more sustainable and cleaner environment for all residents. [\(Annex XIII\)](#)

**i)** That as per Rule 762604 HH (For 100% coverage) Create public awareness through IEC campaign and educate the waste generators to practice home composting, vermi-composting, bio-gas generation or community level composting; (Rule 15 (zg(v)) of SWM Rule 2016) is to be achieved by 30.09.2024 whereas 40% achieved as on 31.01.2024 (i.e. 40%).

**Current Status:** In pursuit of our initial target, we have achieved an impressive milestone by educating and training over 58,000 individuals in the past four months through the collaborative efforts of the Swachh Bharat Mission (SBM) and the Lucknow Swachchhta Abhiyan Pvt. Ltd. (LSA). In all eight zones, one dedicated team per zone has been creating awareness and educating individuals in households, schools, bulk waste generators, and residential welfare associations. This extensive training program focuses on waste collection, segregation, and composting activities, underscoring our commitment to building a well-informed and skilled community. [\(Annex XIV\)](#)

**j)** **Rule 15(I) SWM rule 2016** - Establish waste deposition centers for domestic hazardous waste. (one center is setup for the area of 20 sq km) the target of 30 no. of waste deposition centers for domestic hazardous waste is to be achieved by 30.06.2024 (i.e. 100%).

**Current Status:** Presently domestic hazardous waste is collected in separate containers by door-to-door waste collecting vehicles and deposited in separate bins at secondary collection points. Every alternate day, this waste is transported to M/S SMS

Water Grace BMW Pvt. Ltd. for treatment using the incinerator method.

**Rule 4 (6) of the SWM Rules 2016** mandates the enforcement of Resident Welfare and Market Associations, in collaboration with the local body, to ensure the segregation of solid waste at its source by generators. This involves facilitating the collection of segregated waste and handing over recyclable material to authorized waste pickers or recyclers. Biodegradable waste should ideally be processed, treated, and disposed of within the premises. Any residual waste should be given to waste collectors or agencies as directed by the local body. The target is to have 350 Resident Welfare Associations (RWAs) fully engaged in garbage segregation with the assistance of LMC, to be achieved by 30.12.2024. Sub-targets include achieving 11 RWAs (3%) by 01.09.2023.

**Current Status:** Door-to-door waste collecting agency (LSA) and M/S Everenviro Resources Management Pvt. Ltd. are conducting IEC activities with Resident Welfare Associations (RWA) and Bulk Waste Generator (BWG) groups, collaborating Lucknow Municipal Corporation (LMC). This initiative facilitates the segregated collection of high-quality organic waste for a 300TPD Bio-CNG plant, with LMC making significant contributions to the collection and transportation processes. [\(Annex XV\)](#)

## **2. Compliance of Construction & Demolition Waste Management(C&D WM) Rules, 2016**

Out of total 267 MT/Day C& D waste generation, Lucknow Municipal Corporation have implemented 100 MT/Day capacity C&D waste processing facility. The target date set to establish and commission additional 200 MT capacity plant in 31.08.2024. So far add drops 40 MT is being transported separately to processing site and the timeline. Set to achieve 100% Collection transportation, and processing of C&D Waste in 31.10.2024. LMC have identified 08 sites so far setting up C&D, waste Collection centers and fixed a target to increase the quality of such collection centers to 16 by 31.10.2024. By 30.11.2023, LMC will identify two more such site.

**Current Status:** Construction and Demolition (C&D) waste generated within LMC's jurisdiction amounts to approximately 267 TPD. In response, a tender has been awarded to M/s Garg & Co and Rise Eleven Ready Mix Product Pvt. Ltd., selected based on the lowest quoted tipping fee, for the development and revamping of the existing processing plant under a PPP model. The old 100 TPD C&D waste processing plant has been handed over to the new company and is currently operating at full capacity. Construction of the new 300TPD plant based on wet processing technology, is nearing completion, with machinery ordered and expected to arrive at the installation site by the end of September 2024. Trial operations for the new plant are anticipated by the end of October 2024. The new 300TPD based on the wet processing

technology. The processed C&D waste is used to manufacture precast boundary columns, panels, blocks, planters, and other items.

Additionally, land has been finalized for nine secondary collection centers. Construction is underway, with four centers in Vrindavan Yojna Sec 9, South City, Krishna Nagar, and Rajajipuram already completed. [\(Annex XVI\)](#)

### 3. Compliance of Plastic Waste Management (PWM) Rules, 2016

3.1 Local bodies shall encourage the use of plastic waste (preferably the plastic waste which cannot be further recycled) for road construction as per Indian Road Congress guidelines or energy recovery or waste to oil etc. **Plastic waste management rule 2016 5(b)**. Lucknow Municipal Corporation within 3 months will ensure to use about 5% of generated non-recyclable plastic waste (2-to-3%-part replacement with bitumen) in road construction.

**Current Status:** The Chief Minister's Green Road Infrastructure Development Urban (CM GRID) Scheme is promoting sustainable road construction by incorporating non-recyclable plastic waste into the asphalt mix. At a state-level committee meeting on May 3, 2024, it was decided that 6-10% of bitumen in road construction projects should be replaced with non-recyclable plastic waste. To facilitate this, shredder machines will be installed in each Material Recovery Facility (MRF) center of the Lucknow Municipal Corporation (LMC). As a first step, a shredder machine has already been installed by LMC in the Gwari MRF center.

In compliance with these guidelines, the Lucknow Development Authority (LDA) has successfully used plastic waste to replace 8% of bitumen in the top surfacing (SDBC) of three roads in Gomti Nagar Vistar:

- **Sector 7:** 327 meters long, 12 meters wide
- **Basant Kunj:** 700 meters long, 7 meters wide
- **Gomti Nagar Phase II:** 535 meters long, 10.70 meters wide

These three road construction projects utilized approximately 6.36 tons of plastic waste. [\(Annex XVII\)](#)

3.2 The local body for setting up of system for plastic waste management shall seek assistance of producers. **Plastic waste management rule 2016 6(3)**. Lucknow Municipal Corporation within 3 months will ensure its registration as recycler and will ensure assistance of producers under EPR framework. In this regard two meetings are already held with Brand owner and Co-processors.

**Current Status:** Under the Extended Producer Responsibility (EPR) model, transportation charges for Refuse-Derived Fuel (RDF) are being reduced. Standard Operating Procedures (SOP) for managing single-use and multilayer plastic have been finalized. Over 105 companies are registered for EPR compliance.

A significant milestone is the management of 5.1 lakh MT of legacy waste by M/S Bhumi Green Energy Private Limited. Their 4,000-ton-per-day plant converts non-recyclable plastic waste into RDF, with approx. 79890 metric tons currently sent to

cement factories.

LMC has partnered with Bisleri International Pvt. Ltd. for their "Bottles for Change" program. This initiative aims to raise awareness about plastic pollution and recycling, encouraging the public to adopt eco-friendly practices. The program also features plastic benches made from recycled waste, promoting responsible disposal and recycling. These benches, designed by artists from the Mouth and Foot Painting Artists Association, showcase the potential of repurposing plastic waste for environmental benefits. [\(Annex XVIII\)](#)

3.3 Every retailer or street vendors selling or providing commodities in, plastic carry bags or multilayered packaging or plastic sheets or like or covers made of plastic sheets which are not manufactured or labelled or marked in accordance with these rules shall be liable to pay such fines as specified under the bye-laws of the local bodies. Plastic waste management rule 2016 14(2)

**Current Status:** In compliance with the Plastic Waste Management Rules, 2016 (Rule 14(2)), the Lucknow Municipal Corporation has intensified inspections targeting retailers and street vendors using non-compliant plastic carry bags, multilayered packaging, or similar items lacking proper manufacturing labels or markings. As a result, total penalties amounting to Rs. 1,812,050.00 have been imposed over the past four months for the seizure of such non-compliant plastic materials. [\(Annex XIX\)](#)

#### 4. Compliance of Bio-Medical Waste Management (BWM) Rules, 2016

4.1 Provide or allocate suitable land for development of common bio-medical waste treatment facilities **(Para 7 of Schedule 3 of BWM Rule 2016)**.

**Current Status:** Lucknow Municipal Corporation have provided the land admeasuring 1.25 Acres for establishing the Bio-medical waste processing plant at Village-Bindova, Mohanlal Ganj by M/S SMS Water Grace Medical Waste Management Pvt. Ltd. Plant is operational and receiving waste from 1263 Health Care Facility (HCF) (9751 beds) and treating 3600 Kg/day (100%of collected waste). Through 16 Vehicle LMC collect all Municipal Solid waste from all HCFs in segregated form and dispose off accordingly.

4.2 Facilitating construction, operation& maintenance of Carcass disposal facility. Lucknow Municipal Corporation is operating Carcass plant in 4 Acres of land at Shivari in scientific way and also going to install within 6 months a new incineration plant for incineration of dead stray animals in scientific way.

**Current Status:** A carcass plant spanning 4 acres of land in Shivari, Mohan Road, has been installed using scientific methods as per the CPCB guidelines. The plant operates on electrical technology, with a capacity of processing 100 large and 100 small animals per day. But this plant goes beyond just waste disposal - it actually converts the processed materials into valuable byproducts. These byproducts include fishmeal, pottery feed, and even ingredients used in the leather industry. This innovative approach not only tackles the issue of animal carcasses but also creates

valuable resources. Looking ahead, plans are already underway for a separate gas-based pet cremation facility. The tenders have been floated, and the technical bid has been finalized, with the opening of the financial bid still pending.

## 5. Compliance of E-Waste Management (E-waste) Rules, 2016

5.1 Urban Local Bodies shall ensure that e- waste pertaining to orphan products is collected and channelized to authorized dismantler or recycler (**Rule 24 E- Waste Management Rule 2016**).

**Current Status:** Lucknow Swachchha Abhiyan Pvt. Ltd. handles door-to-door waste collection in Zones 1, 3, 4, 6, and 7. Alongside them, KaroSambhav is focusing on E-waste management following the 2016 E-waste Rules. Through a signed agreement with Lucknow Municipal Corporation (LMC), KaroSambhav has begun collecting E-waste. Their responsible approach has already yielded impressive results – over 16.24 tons of E-waste collected between May and August 2024, a significant step towards effective E-waste management in the region. (Annex XX)

Aforesaid heading with due Action Taken has been summarized in tabular form-

Table-1: Ensure door to door collection of segregated waste					
Activity	Status as on 01.09.2023	Target	Time line to achieved on 100% Target	Target achieved on 31.08.2024	Current status 31.08.2024
Door-to-Door collection of segregated solid waste ( <b>Rule 15 (b) of SWM Rule 2016</b> )	381000 HH (50%)	762604 HH/User (100%)	31.12.2024	6,07,599 HH/User (76%)	Door-to-door waste collection and transportation in Zones 1, 3, 4, 6, and 7 are currently managed by LSA. The company has procured over 750 electric three-wheeler and four-wheeler vehicles for door-to-door waste collection. Meanwhile, the responsibility for door-to-door waste collection in Zones 2, 5, and 8 remains with the Lucknow Municipal Corporation (LMC). The tender for these zones has been finalized and is awaiting a final committee decision.
Collect waste from vegetable, fruit, flower, meat, poultry and fish market on day-to-day basis and promote setting up of de-centralized compost plant or bio-methanation plant ( <b>Rule 15 (m) of SWM Rule 2016</b> )	Nil	8	31.12.2024	3 (37.5%)	The Lucknow Municipal Corporation (LMC) is adopting a decentralized approach to waste management by setting up composting plants in markets to process organic waste locally, reducing transport and promoting sustainability. Virat Khand, a Zero Waste colony, and over 500 households in Parshu Nath Planet are examples of successful waste management practices. For mixed waste, LMC operates the Zone-4 plant, processing 5 tons daily, with plans for a mechanized

					composter at Dubagga market. A public campaign was launched in March 2024 to educate RWAs on waste segregation and composting, aiming to make Lucknow a zero-waste city. Additionally, two Bio-Gas plants with a total capacity of 550 TPD are being set up. There is no immediate need for decentralized composting plants.
Enforcing waste generators to pay user fee for solid waste management. <b>(Rule 4 (3) &amp; 15 (f) of SWM Rule 2016)</b>	180000 Units (Rs 1.10 Crore)	762604 Units (Rs 4.60 Crore)	31.12.2024	354663 units (4.287 Cr.)	Lucknow Municipal Corporation (LMC) has collected the Rs. 42871951.00 amounts in last three months.
Integration of Rag Pickers/ Waste collectors/Kabadis/ Volunteers/CBOs/NGs <b>(Rule 15(c) of SWM Rule 2016)</b>	1050 no. (10%)	10463 no. (100%)	31.12.2024	Total=2713 No. (26%)	Total=2713 no. rag pickers, waste collectors, and kabadiwalas have been connected with LMC and provided with training to enhance their efficiency and effectiveness in waste management practices. This initiative signifies a proactive approach to empower and improve the capabilities of these individuals, ultimately contributing to more organized and efficient waste collection, segregation, and management within the municipal area.
Facilitating formation of Self- Help Groups, provide identity cards and thereafter encourage integration in solid waste management including door to door collection of waste; <b>(Rule 15 (d) of SWM Rule 2016)</b>	110 Nos	220 Nos	31.12.2024	138 Nos (63%)	Swachh and Swasth Swayam Sahayta Samooh, Asha Swayam Sahayta Samooh, Laxmi Bai Sahayta Samooh, Munni Self Help Group, Pratihtha Swayam Sahayta Samooh, and Roj Self Help Group (SHGs) are tied up with the Lucknow Municipal Corporation (LMC). The women from these groups are trained in Material Recovery Facility (MRF) operations and waste segregation. Some of these women have also been incorporated into the operation and maintenance of Pink Toilets.

**2. Setting up of Material Recovery Facilities or secondary storage facilities and transfer facility (Rule 15 (h) and Rule 22 at Sr.no. 7-8 of SWM Rule 2016)**

Activity	Status as on 01.09.2023	Target	Time line to achieved on 100% Target	Target achieved on 31.08.2024	Current status 31.08.2024
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Setting up of Material Recovery Facilities Cum PCTS <b>(Rule 15 (h) and Rule 22 at Sr.no.7-8 of SWM Rule 2016)</b>	8 Nos	25 Nos	31.03.2025	09 Nos.	LMC operates eight manual Material Recovery Facilities (MRFs), with one more under construction. A fully mechanized MRF in Gwari is run by M/S Chennai MSW Pvt. Ltd. through a Public-Private Partnership (PPP).
Setting up of Material Recovery Facilities Cum TS/PCTS <b>(Rule 22 at Sr.no.7-8 of SWM Rule 2016)</b>	35 Nos (PCTS)	60 Nos (PCTS)	31.03.2025	39 Nos.	Portable Compactor Transfer Stations (PCTS) have been installed at four locations: Paper Mill, Mitaiwala, Kailash Kunj, and Vineeth Khand. Six new PCTS are planned for completion by October 2024. Additionally, 13 refuse compactors (RCs) have been deployed for municipal waste collection and transportation.
Setting up of Material Recovery Facilities Cum Fixed Compactor Transfer Station (FCTS) <b>(Rule 22 at Sr.no. 7-8 of SWM Rule 2016)</b>	0 Nos	4 Nos	31.12.2024	01 No.	The construction of three MRF cum FCTS facilities in Ganga Kheda, Dindayal, and Bhaisora is currently underway and will be completed by the end of December 2024. The construction and machinery installation at the Ghaila FCTS unit have been completed, and its trial is currently in progress.

<b>1.9 Setting up Solid Waste Processing Facilities (Rule 22 at Sr.no.7-8 of SWM Rule 2016)</b>					
<b>Activity</b>	<b>Status as on 01.09.2023</b>	<b>Target</b>	<b>Time line to achieved on 100% Target</b>	<b>Target achieved on 31.08.2024</b>	<b>Current status 31.08.2024</b>
Setting up 2000 TPD Processing Plant (1000 TPD for Wet waste and 1000 TPD for dry waste)	664 MT/Day (600 MT at Shivari +64 MT Decentralise)	2000 MT/Day	31.12.2024	1450 MT/Day (73%)	LMC currently has a 1250 TPD capacity for processing fresh waste. After EcoGreen Energy Pvt. Ltd.'s termination, M/S HORIZON Solution Pvt. Ltd. was selected on a short-term tender, though their tenure has expired, and the final tender is pending. Over 200 TPD of municipal waste is processed through various methods, including home composting in 18,000 households, bulk waste generators, compost pits in parks, and 80 TPD of recyclable waste handled by ragpickers and MRFs. LMC is pursuing long-term solutions with NTPC, which plans to install a 2000 TPD waste-to-energy plant using torrefaction technology. The LMC board has approved this proposal, with further action underway. Meanwhile, a third time tender call for a three-year waste management contract focusing on windrow composting is expected to be finalized by 18.09.2024.
Setting up of Aerobic Composting pits in parks (Rule 22 at Sr.no. 7-8)	640 (Pits)/ 64 MT/day	1500 (Pits) 150 MT/day	31.12.2024	1315 (Pits) 87%	Total 1315 compost pits have been constructed for effective waste management in 600 parks. The utilization of mulching techniques further enhances waste management practices within these park areas.

Setting up 300 TPD Bio- CNG Plant	0	1	31.03.2025	0	A 300 TPD plant under construction at Nadarganj will process segregated wet waste and is expected to be operational by March 2025. Additionally, a 150 TPD plant focusing on cow dung and other organic materials is planned for Sarojini Nagar, with completion anticipated by June 2025. These facilities will significantly contribute to Lucknow's waste management efforts.
Promotion of co- marketing of compost with chemical fertilizers <b>(Rule 7 of SWM Rule 2016)</b>		LMC will ensure to apply and get approval for sale of city compost			Currently, LMC distribute the compost products to farmers and local residents located near the city.
Phase out the use of chemical fertilizer and use compost in all parks, gardens maintained by the local body and wherever possible in other places under its jurisdiction. <b>(Rule 15 (u) of SWM Rule2016)</b>		LMC will ensure to use the compost generated from pit.			
Integration and Incentives to informal waste recycling sector for recycling initiatives. <b>(Rule 15 (u) of SWM Rule2016)</b>		Approximate 50 informal waste recycling center (Kabariwala) has been identified and LMC will provide training and integrate 20 such recycling center in next 3 months and balance will be integrated in next 6 months.			A total of 109 RRR Permanent and Temporary centers have been established in LMC areas, with over 113 kabadiwalas integrated into these centers. Additionally, 10 new kabadiwalas have been selected for training in these centers.

#### 1.10 Setting up sanitary landfill facilities (SLFs) (Rule22 at Sr.no.9-10)

Activity	Status as on 01.09.2023	Target	Time line to achieved on 100% Target	Target achieved on 31.08.2024	Current status 31.08.2024
Setting up sanitary landfill facilities (SLFs) <b>(Rule22 atSr.no.9-10)</b>	1	2	31.12.2024	01	Lucknow Municipal Corporation has acquired 55 acres of land in Shivari, freed from local occupation, and has prepared it for the sanitary landfill site in accordance with CPCB guidelines. The tender for this project will be floated shortly. After the processing of the Legacy waste, dumping site retrofitting work is started.

#### 1.11 Bio-remediation of old and abandoned dump sites (Rule 22 and Key Indicator by NGT in OA 606/2018)

Activity	Status as on 01.09.2023	Target	Time line to achieved on 100% Target	Target achieved on 31.08.2024	Current status 31.08.2024
Bio-remediation of old and abandoned	47,959 MT	18.5 Lakh MT	31.08.2025	5.1 Lakh MT	M/S Bhumi Green Energy Private Limited is installing a 4,000 TPD plant to process legacy waste. In the past two months, Bhumi Green has already processed approx. 5.1 lakh metric tons (MT) of

dump sites <b>(Rule 22 and Key Indicator by NGT in OA 606/2018)</b>					legacy waste. The other legacy waste dump site in Ghaila, after processing, has been handed over to the Lucknow Development Authority (LDA). The LDA is now developing this site into a Rashtra Prerna Sthal.
1.12 prepare and submit annual report in Form IV on or before the 30th April of the succeeding year to the Commissioner or Director, Municipal Administration or designated Officer; <b>(Rule 15 (za) of SWM Rule 2016).</b>					Form was submitted.

1.13 IEC & Citizen grievance redressal; (Rule 15 (zc) of SWM Rule 2016)					
Activity	Status as on 01.09.2023	Target	Time line to achieved on 100% Target	Target achieved on 31.08.2024	Current status as on 31.08.2024
Educate workers including contract workers and supervisors for door-to-door collection of segregated waste and transporting the unmixed waste; <b>(Rule 15 (zc) of SWM Rule 2016)</b>	More than 2000 Works trained so far	8000 workers	31.12.2024	5000 workers (63%)	Over 5000 waste collection and transportation workers have received training in waste collection and segregation tasks.
Create public awareness through IEC campaign and educate the waste generators to practice home composting, vermi-composting, bio-gas generation or community level composting; <b>(Rule 15 (zg(v)) of SWM Rule 2016)</b>	More than 200000 HH by engaging professional agency	762604 HH (For 100% Coverage)	31.12.2024	319531 HH (42 % Coverage)	More than 319531 individuals have been educated and trained by SBM and LSA employees for waste collection, segregation, and composting activities. In all eight zones, one dedicated team per zone has been creating awareness and educating individuals in households, schools, bulk waste generators, and residential welfare associations. This extensive training program focuses on waste collection, segregation, and composting activities, underscoring our commitment to building a well-informed and skilled community.
Citizen Grievance Redressal through Swachh App <b>(Key Indicator by NGT in OA 606/2018)</b>	91 %	100%	31.12.2024	99%	The Citizen Grievance Redressal process facilitated by the LMC uses app and toll free no. 18001234999 for raising complaints and monitoring their resolution: the Lucknow One app, 311 app and toll free no. 18001234999. These apps and toll free no. empower citizens to efficiently address their concerns regarding cleanliness and sanitation. With a success rate of 98%, the apps enable prompt resolution of reported issues, ensuring effective and timely actions are taken to uphold

					cleanliness and hygiene standards in communities.
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**B. COMPLIANCE OF CONSTRUCTION & DEMOLITION WASTE MANAGEMENT (C&D WM) RULES, 2016**

Activity	Status as on 01.09.2023	Target	Time line to achieved on 100% Target	Target achieved on 31.08.2024	Current status as on 31.08.2024
Commissioning and implementation of Processing / Recycling facility. (C&D WM) Rules 13 Schedule-III (3), 2016)	100 TPD	300 TPD	31.10.2024	33.33%	Construction and Demolition (C&D) waste generated within LMC's jurisdiction amounts to approximately 267 TPD. In response, a tender has been awarded to M/s Garg & Co and Rise Eleven Ready Mix Product Pvt. Ltd., selected based on the lowest quoted tipping fee, for the development and revamping of the existing processing plant under a PPP model. The old 100 TPD C&D waste processing plant has been handed over to the new company and is currently operating at full capacity. Construction of the new plant is nearing completion, with machinery ordered and expected to arrive at the installation site by the end of November 2024. Trial operations for the new plant are anticipated by the end of October 2024. The processed C&D waste is used to manufacture precast boundary columns, panels, blocks, planters, and other items.
Notification of sites for collection and processing facility. (C&D Waste Rule 6(4& 5),9(2) and 13- C&D WM Rules,2016)	8 No. Collection centers	16 CC	31.10.2024	09 collection centers	The land has been finalized for nine secondary collection centers. Construction is underway, and four of these centers have already been completed All facilities adhere to Central Pollution Control Board (CPCB) guidelines to ensure responsible waste management practices. Capacity of the collection center is 50 Tons.
Get the collected waste transported to appropriate sites for processing and disposal; (Rule 6 (5)- C&D WM Rules, 2016)	Approx 40 MT is being transported separately.	267 MT	31.10.2024	50 MT/day (20%)	More than 50 metric tons per day C&D waste is collected by LMC vehicle are transported separately to the C&D waste plant, where they are processed regularly.

<b>C. COMPLIANCE OF PLASTIC WASTE MANAGEMENT (PWM) RULES, 2016</b>		
<b>Activity</b>	<b>Target</b>	<b>Current status as on 31.08.2024</b>
Local bodies shall encourage the use of plastic waste (preferably they cannot be further recycled) for road construction as per Indian Road Congress guidelines or energy recovery or waste to oil etc.	Lucknow Municipal Corporation within 3 months will ensure to use about 5% of generated non- recyclable plastic waste (2-to-3%-part replacement with bitumen) in road construction.	The Chief Minister's Green Road Infrastructure Development Urban (CM GRID) Scheme promotes sustainable road construction by replacing 6-10% of bitumen with non-recyclable plastic waste. Shredder machines will be installed in all Lucknow Municipal Corporation (LMC) Material Recovery Facilities (MRFs), with one already operational at the Gwari MRF. The Lucknow Development Authority (LDA) has successfully used 8% plastic waste in three Gomti Nagar Vistar roads, utilizing 6.36 tons of plastic.

<b>Plastic waste management rule 2016 5(b)</b>		
<b>Activity</b>	<b>Target</b>	<b>Current status as on 31.08.2024</b>
The local body for setting up of system for plastic waste management shall seek assistance of producers. <b>Plastic waste management rule 2016 6(3)</b>	Lucknow Municipal Corporation within 3 months will ensure its registration as recycler and will ensure assistance of producers under EPR framework.	Under the Extended Producer Responsibility (EPR) model, transportation costs for Refuse-Derived Fuel (RDF) are being reduced, with SOPs for managing single-use and multilayer plastic finalized. Over 105 companies are registered for EPR compliance. M/S Bhumi Green Energy Pvt. Ltd. processed 5.1 Lakh metric tons of legacy waste, converting non-recyclable plastic into RDF, with approx. 79890 metric tons sent to cement factories. LMC has also partnered with Bisleri International for the "Bottles for Change" program, promoting plastic recycling and featuring plastic benches made from recycled waste.
Every retailer or street vendors selling or providing commodities in, plastic carry bags or multilayered packaging or plastic sheets or like or covers made of plastic sheets which are not manufactured or labelled or marked in accordance with these rules shall be liable to pay such fines. <b>Plastic waste management rule 2016 14(2)</b>	Lucknow Municipal Corporation is putting a cumulative average monthly fine of Rs. 55650.00 per month and have targeted to increase the fine upto Rs. 100000.00 Lakh Per Month in next 3 months.	LMC has intensified its inspections targeting retailers and street vendors using non-compliant plastic carry bags, multilayered packaging, or similar items lacking proper manufacturing labels or markings. As a result, total penalties amounting to Rs. 18,12,050.00 have been imposed over the past four months for the seizure of such non-compliant plastic materials

**D. COMPLIANCE OF BIO-MEDICAL WASTE MANAGEMENT (BWM) RULES, 2016**

The detail of current status and Targets of compliance to Bio-Medical waste Management Rules 2016 are summarize below in Table-9.

**Table-9: current status and Targets of compliance to Bio-medical waste Management Rules 2016**

Activity	Targets	Current status as on 31.08.2024
Provide or allocate suitable land for development of common bio-medical waste treatment facilities ( <i>Para 7 of Schedule 3 of BWM Rule 2016</i> )	Lucknow Municipal Corporation have provided the land admeasuring 1.25 Acres for establishing the Bio-medical waste processing plant at Village-Bindova, Mohanlal Ganj. Plant is operational and receiving waste from 1030 HCF (9751 beds) and treating 3600 Kg/day (100% of collected waste). LMC collect all Municipal Solid waste from all HCFs in segregated form and dispose off accordingly.	Plant is operational and receiving waste from 1263 HCF (9751 beds) and treating 967160 Kg (100% of collected waste). Lucknow Municipal Corporation have provided the land admeasuring 1.25 Acres for establishing the Bio-medical wasteprocessing plant at Village-Bindova, Mohanlal Ganj by M/S SMS water grace Mediwaste management pvt.ltd. Plant is operational and receiving waste from 1263 HCF(9751 beds) and treating 3600 Kg/day (100% of collected waste).Through 16 Vehicle LMC collect all Municipal Solid waste from all HCFs in segregated form and dispose off accordingly.
Facilitating construction, operation & maintenance of Carcass disposal facility.	Lucknow Municipal Corporation is operating Carcass plant in 4 Acres of land at Shivari in scientific way and also going to install within 6 months a new incineration plant for incineration of dead stray animals in scientific way	A carcass plant spanning 4 acres of land in Shivari, Mohan Road, has been installed using scientific methods as per the CPCB guidelines. The plant operates on electrical technology, with a capacity of processing 100 large and 100 small animals per day. But this plant goes beyond just waste disposal - it actually converts the processed materials into valuable byproducts. These byproducts include fishmeal, pottery feed, and even ingredients used in the leather industry. This innovative approach not only tackles the issue of animal carcasses but also creates valuable resources. Looking ahead, plans are already underway for a separate gas-based pet cremation facility. The tenders have been floated, and the technical bid has been finalized, with the financial bid pending opening.

**E. COMPLIANCE OF E-WASTE MANAGEMENT E-WASTE RULES, 2016**

Activity	Current Status and Target	Current status as on 31.08.2024
Urban Local Bodies shall ensure that e- waste pertaining to orphan products is collected and channelised to authorised dismantler or recycler ( <i>Rule 24 E- Waste Management Rule 2016</i> )	Lucknow Municipal Corporation have engaged a private partner for collection, transportation and processing of E-waste.	Lucknow Swachchha Abhiyan Pvt. Ltd. handles door-to-door waste collection in Zones 1, 3, 4, 6, and 7. Alongside them, KaroSambhav is focusing on E-waste management following the 2016 E-waste Rules. Through a signed agreement with Lucknow Municipal Corporation (LMC), KaroSambhav has begun collecting E-waste. Their responsible approach has already yielded impressive results – over 16.24 tons of E-waste collected between May and August 2024, a significant step towards effective E-waste management in the region.
Responsibilities of the	Lucknow Municipal Corporation will	Currently EPR registered companies working


producer for implementing the Extended Producers Responsibility ( <i>Rule 5 of E-Waste Management Rule 2016</i> )	ensure its registration will seek assistance of producers under EPR framework.	with the LMC for the management of the electronic and plastic waste.
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<b>F. OTHER INITIATIVES</b>			
<b>Sr.No.</b>	<b>Points</b>	<b>Description</b>	<b>Current status as on 31.08.2024</b>
1	Zero Waste Ward	Developing zero-waste gated colonies and wards.	Virat Khand and Parshu Nath Planet have emerged as leading examples of zero-waste communities. Paper Mill ward is actively working towards becoming a zero-waste zone.
2	Efficient Waste Management	LMC took swift action to terminate the services of M/s Ecogreen, the company responsible for waste collection, due to their failure to fulfill their obligations. Subsequently, over 50% of malfunctioning primary and secondary waste collection vehicles were repaired to ensure prompt waste removal, benefiting the citizens of Lucknow.	M/s Chennai MSW Private Limited [ working under the Special Purpose Vehicles (SPV) formed Lucknow Swacchata Abhiyan Pvt. Ltd. (LSA)] started work in waste collection in zone zones 1, 3, 4, 6, and 7. For primary and secondary waste collection and transportation.
3	Solid Waste to Wealth	LMC adopted a "Waste to Wealth" strategy within its waste policy by implementing plans to recycle waste for biogas and electricity production. Additionally, the daily wages of approximately 8,500 sanitation workers were increased from ₹308 to ₹388, starting from September.	Lucknow's first waste-to-wonder park, 'UP Darshan Park', features small replicas of 16 famous state monuments made from waste materials like iron scraps, car parts, and household iron waste. Buddha Park in Chowk, developed as a 'Waste to Wonder' park by the Lucknow Development Authority (LDA), will be revamped to enhance public mental health through art, sculptures, play elements, and landscaping. LMC has partnered with JBM Company to set up a 150 TPD plant producing 10 TPD compressed biogas. LMC will supply cow dung and receive a tipping fee of Rs. 200 per metric ton, generating approximately Rs. 11,00,000.00 in monthly revenue. The plant installation is expected to be completed by March 2025. Sanjhi Rekha Self Help Group is involved in making dhoopbatti and gulaal from flowers collected from temples in Lucknow city.
4	Eco-Friendly Initiatives in Waste Collection Expansion	In line with environmental protection efforts, 700 new electric vehicles (EVs) have been purchased for primary waste collection.	Of the 750 new EVs purchased, and deployed for primary waste collection efforts.

6	Employee Safety:	In the interest of employee safety, 4,132 safety helmets, 4,132 safety goggles, and 4,132 rubber gloves were distributed.	The successful distribution of 1,000 new PPE kits to workers has been completed. Additionally, 18 grab bucket desilting machines and super suckers have been procured.
7	Secondary Waste Collection	600 different capacity dustbins were procured to facilitate secondary waste collection.	100 new bins with a capacity of 1.5 cubic meters have been installed in BWG and RWA.
8	Greenery Enhancement	The green cover of Lucknow was expanded through tree planting and the development of various parks, including Amausi, Gram Saintha, Gram Rasulpur Kayasth, and green belts along various roads.	Approximately 14 hectares of new green cover areas are currently under development in Gram Rasulpur, using Miyawaki techniques for the creation of a Nagar Van. Additionally, more than 2 lakh plantations have been undertaken across various parks and vacant lands under the Municipal Corporation. (Annex XXI)
9	Drain Cleaning	A total of 414 drains were cleaned to address water logging issues during the monsoon.	All drains have been cleaned.
10	Tree Pruning	High trees that posed a risk were pruned using tree pruners and threader and chipper machines.	Work is currently in progress.
11	Sustainability and clean energy	EV Charging Infrastructure Installation for Primary Waste Collection Vehicles	4 new EV charging stations for waste collection vehicles have been installed by LSA with a total capacity of 750 kW. (Annex XXII)
12	Central Workshop Upgrade	The central workshop of LMC is being renovated and is expected to operate with modern facilities in the near future.	Installation of the 01 No. high-tech workshop is underway. It is scheduled to be completed.


6. The deponent is humbly requesting for extension of the timeline for achieving the targets set forth in the long-term sustainable waste management plan for Lucknow. While we are committed to achieving these goals, unforeseen delays have impacted the completion of certain works within the proposed timeframe.

7. That the deponent is a responsible Government servant having the highest regards for the Hon'ble Tribunal and orders passed by it. The deponent has always made his sincerest efforts to carry out the orders passed by this Hon'ble Tribunal in its letter and spirit and shall continue to do so in the future.

  
Deponent

**VERIFICATION:-**

Verified at Lucknow on 17<sup>th</sup> day of September, 2024 that the contents of above affidavit are based on the information derived from the official record and as such true and correct as per my knowledge and belief, no part of it is false and nothing material has been concealed therefrom.

  
Deponent

**Filed by:**

MUKESH VERMA  
Advocate for respondent/  
Ch. No.50, Old Block Supreme Court of India  
New Delhi-110001 (M) 9810108098  
E-mail: mvermadv@gmail.com

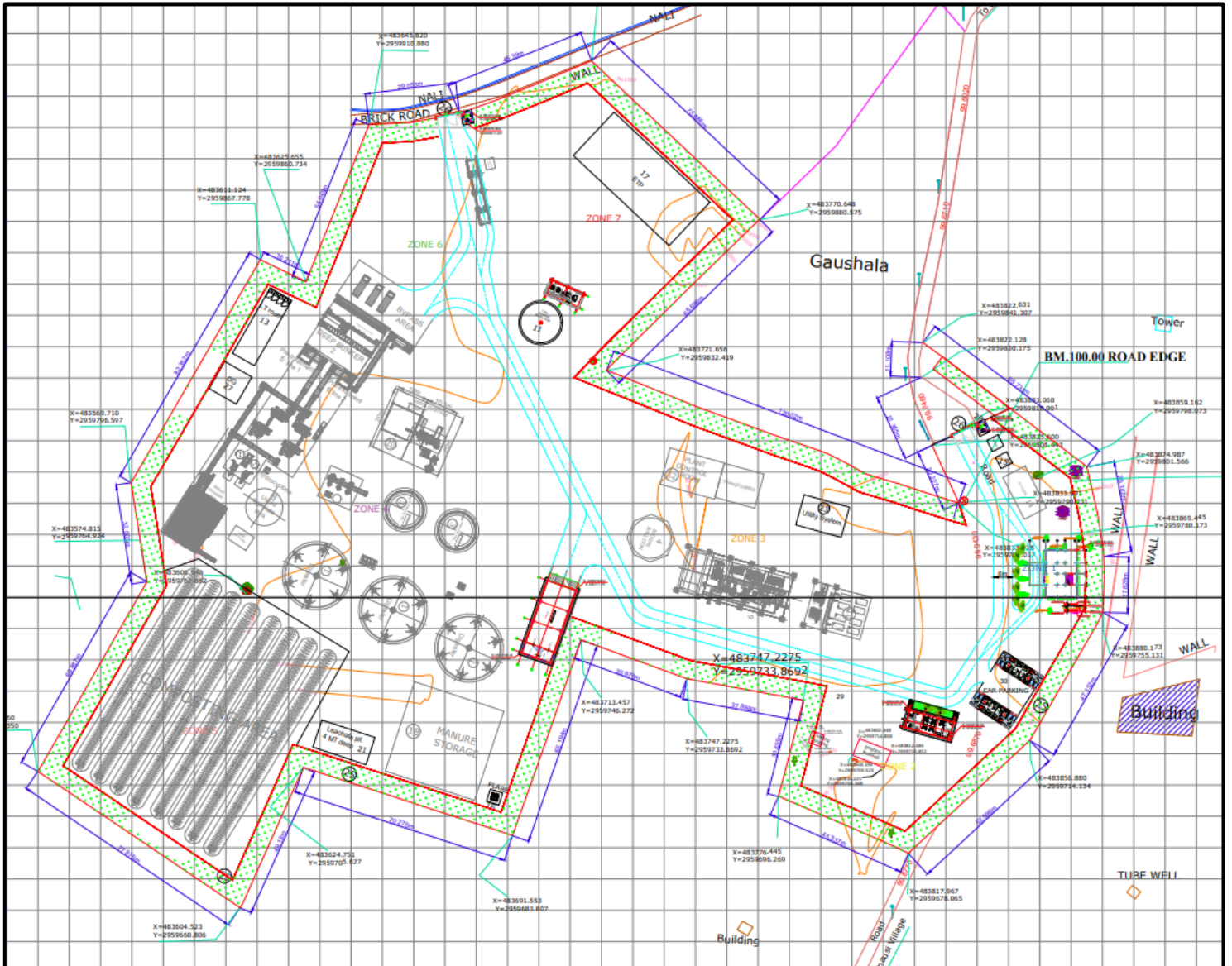
**Annex I- 300 TPD Bio-CNG Plant Status Report**

This project will have a capacity of 300 tons per day (TPD), hence the project will help in diversion of around 0.94 lac tons of organic waste from the landfills annually. The project will collectively produce more than 8,200 kilograms of Bio-CNG and Approx 50 tons of fermented organic manure on daily basis, eventually leading to mitigation of more than 0.625 lac tons of carbon dioxide and other greenhouse gases from the atmosphere annually, which will be a major contributor towards nation's vision of decarbonization. These projects will also give impetus to employment generation in the state by providing direct and indirect jobs to more than 250 people.

**300TPD Bio-CNG Project Update**

S.No.	Project Development Operation	Status
1	Topographical Survey of the Site	Completed
2	Consent to Establish	CTE Received
3	Boundary Wall Construction	Under Progress (95% Completed)
4	Internal Roads and Administration/ Utility Buildings	Design finalized, vendor onboarding under progress
5	Geotechnical Investigation	Completed
1	Basic Design Engineering	Completed
2	Detailed Design Engineering	Completed
3	Anaerobic Digesters	Design finalized Dispatch awaited
4	Plant Main Gate	26-03-2024 Finish Date
5	Admin Building Work	28-03-2024 Finish Date
6	Workshop Building	28-03-2024 Finish Date
7	Canteen Building	27-03-2024 Finish Date
8	Gas Upgradation System	Design Engineering done
9	Sampling and Testing of Organic Waste from Lucknow City	Ongoing
10	TEPC Vendor	Deployed
11	PEB Building	Structural design finalised & work in progress.

# 2941 Bio CNG Plant Layout



2942

## Current Progress Photographs



## **150 TPD Capacity CBG Project Jay Bharat Maruti Ltd.**

A recent agreement has been formalized with M/S Jay Bharat Maruti Enviro Bioenergy Lucknow Pvt. Ltd. for the establishment of a new Bio-CNG plant. This facility, with a capacity of 150 TPD and a gas production of 10 TPD, will process cow dung, pottery waste, napier grass, and wet mandi waste. The plant will be located at Suiting Range Sarojini Nagar, near Kanha Upvan, on a 7.5-acre land parcel. The project is registered with UPNEDA and under the GOBERDHAN scheme. A land lease deed has been signed with Lucknow Nagar Nigam, with the Change of Land Use (CLU) expected to be completed by September 25. The CBG offtake agreement has been signed with Torrent - GAIL, while the TPA with GGL is pending and expected to be signed by the following week's end in Lucknow. The EPC player has been finalized, with the team set to mobilize on-site by early September. The boundary wall work is nearly complete, and land for Napier farming has been leased to ensure feedstock availability. Additionally, a feedstock agreement has been signed with contract farmers. With the current schedule, the commercial operation date for the CBG plant is set for September 15, 2025, with the entire project expected to be completed by June 2025.



**Boundary Wall Photographs of CBG Plant**

## **Annex II- Fresh Waste Processing Unit**

LMC has a 1250 TPD capacity for processing fresh waste. After the termination of EcoGreen Energy Pvt. Ltd., a short-term tender was initiated for three months to process fresh waste. M/S HORIZON Solution Pvt. Ltd. was selected for this tender. Although the company's tenure has expired, the tender for fresh waste processing has not been finalized, which is why the company is still processing the waste.

Additionally, more than 200 TPD of municipal waste (wet, dry and recyclable waste) is being processed through various methods. Wet waste is managed in home composting facilities in over 18,000 households. Meanwhile, 63 bulk waste generators process wet waste within their campuses, and horticulture and kitchen waste is processed in over 1,000 compost pits located in parks. Furthermore, more than 80 TPD of dry and recyclable waste is collected by ragpickers, recyclers, and Material Recovery Facilities (MRFs).

In pursuit of long-term solid waste management solutions, a previous expression of interest was issued by the LMC. National Thermal Power Corporation (NTPC) has expressed interest in installing a 2000 TPD waste-to-energy plant using torrefaction technology. As per the MoU between NTPC and the State Urban Local Body, meetings were held on 12th and 29th August 2024, under the supervision of the Government of Uttar Pradesh. It was decided that NTPC would set up a 2000 TPD or more waste-to-energy plant for processing municipal solid fresh waste. The proposal from NTPC has been approved by the LMC assembly, and further action is in progress.

Additionally, while the waste-to-energy plant is being set up, LMC has floated a tender third time for a three-year waste management contract focusing on traditional windrow composting methods. Due to limited participation from firms, this tender shall be finalized on 18.09. 2024.

2945



## नगर निगम लखनऊ

प्रेषक, नगर आयुक्त, नगर निगम, लखनऊ।	सेवा में, उप महाप्रबन्धक, नेशनल थर्मल पावर कॉर्पोरेशन लिमिटेड
पत्र संख्या :- डी/486 / न0आ10 / प0आ0 / 24	दिनांक :- 07 सितम्बर, 2024


विषय : लखनऊ नगर निगम सीमान्तर्गत प्रतिदिन उत्सर्जित एवं विवरी स्थित सॉलिड वेस्ट प्रोसेसिंग प्लांट पर पहुँचने वाले फ्रेश वेस्ट के वैज्ञानिक निस्तारण के सम्बन्ध में वेस्ट टू एनर्जी प्लांट लगाये जाने हेतु प्रस्ताव प्रस्तुत किये जाने के सम्बन्ध में।

महोदय,

कृपया अवगत कराना है कि स्थानीय निकाय निदेशालय, उत्तर प्रदेश शासन के साथ नगरीय क्षेत्रों में कूड़े के निस्तारण के सम्बन्ध में एन0टी0पी0सी0 के साथ दिनांक 12.02.2024 को एक एम0ओ0यू0 हस्ताक्षरित किया गया है, जिसके क्रम में प्रमुख सचिव, नगर विकास विभाग, उत्तर प्रदेश शासन की अध्यक्षता में दिनांक 29.08.2024 को सम्पन्न बैठक में प्राप्त निर्देशों के क्रम में नगर निगम द्वारा Build Own Operate (BOO) के आधार पर परियोजना के अन्तर्गत वेस्ट टू एनर्जी (Torrification Technology) प्लांट लगाया जाना प्रस्तावित है। जिसके क्रम में 2000 मी0टन प्लस कूड़े से वेस्ट टू एनर्जी प्लांट लगाये जाने के सम्बन्ध में दिनांक 02.09.2024 को नगर निगम लखनऊ के मा0 सदन में प्रस्ताव रखा गया था, जिसका अनुमोदन प्राप्त हो गया है।


अतः कृपया उक्त परियोजना के क्रियान्वयन हेतु डिटेल्ड सर्वे करते हुए अपना प्रस्ताव प्रस्तुत करने का कष्ट करें। जिसके आधार पर नगर निगम लखनऊ द्वारा अग्रिम कार्यवाही हेतु आवश्यक व्यवस्थाएँ सुनिश्चित की जा सकें।

भवदीय

  
 (इन्द्रजीत सिंह)  
 नगर आयुक्त

प्रतिलिपि :-

- मा0 महापौर महोदया को सादर अवलोकनार्थ प्रेषित।
- प्रमुख सचिव, नगर विकास विभाग को सादर सूचनार्थ प्रेषित।

  
 (इन्द्रजीत सिंह)  
 नगर आयुक्त

**PROPOSAL**

**FOR**

**DEVELOPMENT**

**OF**

**MUNICIPAL SOLID WASTE**

**TO**

**TORREFIED CHARCOAL**

**PLANT FACILITY**

<b>CLIENT</b>	LUCKNOW NAGAR NIGAM
<b>DEVELOPER</b>	NTPC VIDYUT VYAPAR NIGAM (NVVN) LTD.
<b>TECHNOLOGY</b>	TORREFACTION
<b>CAPACITY</b>	1000 TPD

## PROPOSAL

### 1. COMPANY INTRODUCTION:

NTPC Vidyut Vyapar Nigam Ltd. (NVVN) was formed by NTPC Ltd in the year 2002, as its wholly owned subsidiary to tap the potential of power trading in the country. NTPC Limited is the biggest power producer in India with a total installed capacity of over 73,000 MW. In power trading business NVVN holds a highest Category 'I' trading license as per latest CERC regulation.

NVVN Limited has taken many New Initiatives to propel green technologies and to provide platforms for innovative enterprises, among which Waste to Energy is one of the verticals. Varanasi Harit Koyla Pariyojna was the milestone project and moving forward, NVVN limited has several Projects based on Municipal Waste and Agricultural Waste, in pipeline.

Waste-to-Energy projects provide a safe, technologically advanced means of waste disposal that reduces greenhouse gases, generates clean energy, and recycles metal. Waste-to-Energy (WTE) is widely recognized as a technology that can help mitigate climate change. Agro Waste based power has been included in the recent biomass policy for meeting non-solar renewable purchase obligation.

As a responsible Govt. of India Enterprise, NVVN Limited is committed to sustainable & clean energy solutions. It has taken various new initiatives in the development of green energy sources like solar, wind, co-firing biomass pellets along with coal in our conventional boilers.

#### **BUSINESS AREAS OF NVVN LIMITED:**

- a) Waste to Energy
- b) Power Trading (Domestic)
- c) Cross Border Power Trading
- d) Renewable Energy Solutions
- e) E-Mobility Solutions
- f) Consultancy & Advisory Services

## 2. AREAS OF EXPERTISE IN SOLID WASTE MANAGEMENT:

NVVN has been a pioneer for using waste in power generating units and is actively working on the innovation, incubation and development of technologies in this segment.

NVVN and NTPC with its vast engineering experience have developed the technology such that it can be implemented on a large scale. Various first of its kind initiatives like conducting open technology challenge, procuring biomass pellets, etc. have catalysed the development of technology in this industry.

Waste to Torrefied Charcoal Facility of 600 TPD Capacity is under commissioning phase at Varanasi, Uttar Pradesh. Similar Plants for Bhopal (400 TPD), Hubballi-Dharwad (200 TPD), Noida-Greater Noida (900 TPD), Gorakhpur (500 TPD) and Haldwani-Kathgodam (500 TPD) are in pipeline.

### Following are the USP's of Varanasi Plant.

- a) Swachh Bharat Abhiyan (SBM): Torrefaction process is a very clean technology ensures no harmful emissions
- b) Make in India: Complete Plant's Equipment(s) will be manufactured in India
- c) Aatma Nirbhar Bharat Abhiyan: 1<sup>st</sup> kind of WTE Facility making India a self-reliant nation in waste management.
- d) Innovation: This plant is an example of Innovation in waste management

**वाराणसी हरित कोयला  
परियोजना**

**PLANT LAYOUT FOR  
WASTE TO  
CHARCOL FACILITY**



### 3. TECHNICAL PROPOSAL FOR MUNICIPAL SOLID WASTE (MSW):

Sustainable remediation of Waste from Lucknow Nagar Nigam (LNN) and conversion to resource can be achieved by following option, being proposed by NVVN. All activities shall be ensured by NVVN to comply Solid Waste Management (SWM) Rules 2016 and its amendment from time to time.

#### 3.1.1. TORREFACTION PROCESS:

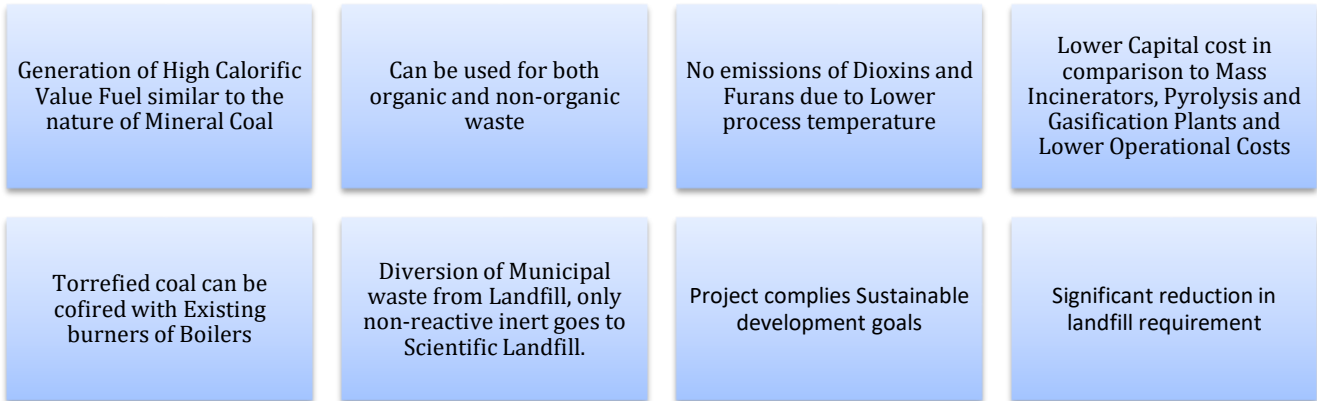
At the moment high levels of segregation cannot be achieved by authority, and thus a solution is needed which is not affected by the presence of inert fraction in Waste. NVVN proposes to install a Waste Torrefaction unit which can turn any type of waste having high Carbon Content like Plastic, Paper, Textile, Rubber, etc. into Torrefied Coal, which has been tested to be similar to Mineral Coal.

Torrefaction is a thermochemical treatment of biomass at 250 to 300 °C. It is carried out in the absence of oxygen. During the Torrefaction process, the moisture contained in the biomass as well as volatiles are released, and the final product is the remaining solid, dry, blackened material that is referred to as Torrefied coal. After the MSW is Torrefied, it can be densified, usually into briquettes or pellets which are easy to store and transport.

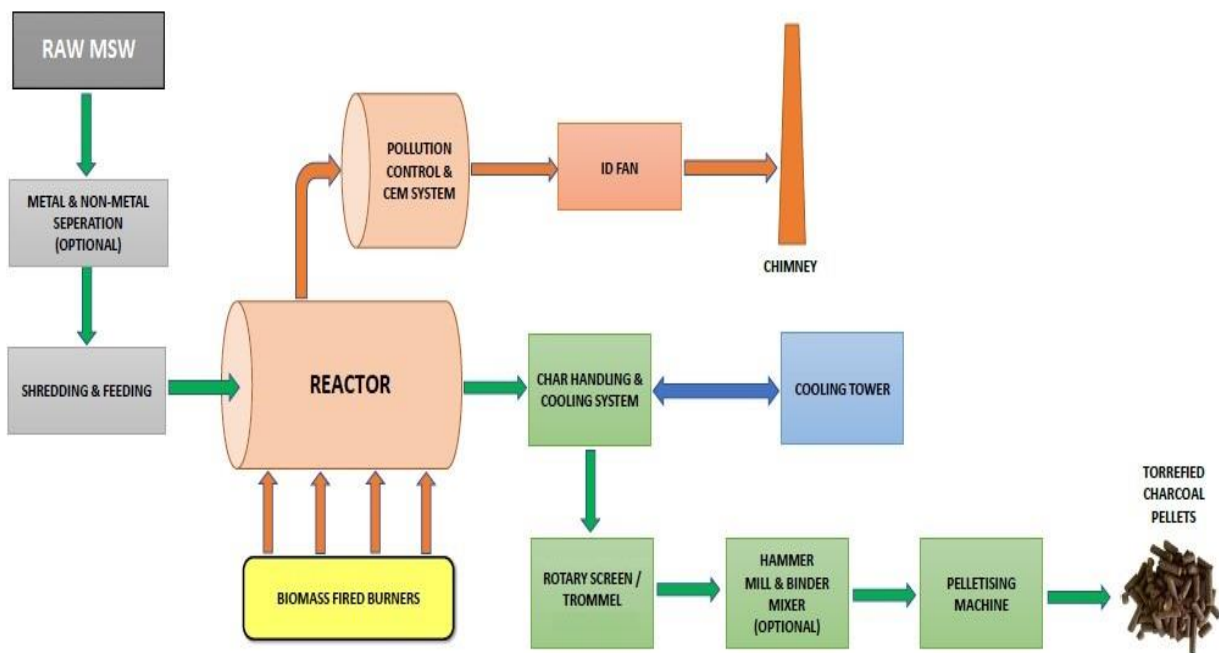
#### Required Parameters in Feedstock:

Feedstock	MSW without Inert
Segregation Efficiency	> 80%
Land Requirement	20 Acres for 1000 TPD {Preferred 300 mtr. In length} (excluding the green belt for this plant)
End Product / Output	Torrefied Coal
Gross Calorific Value (GCV) of MSW (received from LNN)	>2000 KCal/kg
Moisture Content in MSW (received from LNN)	< 20%
Water Requirement	~400 KL per day
Electricity Connection Requirement	~3 MVA

**3.1.2. ADVANTAGES OF TORREFACTION TECHNOLOGY:**



**TENTATIVE PROCESS FLOW DIAGRAM OF WASTE TORREFACTION PLANT**



#### 4. FINANCIAL VIABILITY OF PROJECT:

##### 4.1. MARKET FOR SALE FOR TORREFIED CHARCOAL

Torrefied charcoal was produced at various Pilot scales installations under incubation of NVVN where the output was tested by NABL accredited laboratories and it was observed that properties of Torrefied coal are similar to that of Mineral Coal.

Torrefied charcoal has a huge potential to be blended with mineral coal and can be fired in-house at the **Coal based plants of NTPC as well as nearby process industries.**

Assistance from Lucknow Nagar Nigam will be necessary to facilitate the sale of Torrefied charcoal in nearby industries.

#### 5. NAME OF PARTNER / GOVT. AGENCY INCLUDED:

NTPC Vidyut Vyapar Nigam Ltd. (NVVN) was formed by NTPC Ltd, as its wholly owned subsidiary and thus NVVN operates under the Umbrella of Technical and Financial Expertise of the Leading Power Generating Public Sector Undertaking of India.

Additionally, NVVN expects the support and commitment of LNN in providing following mentioned utilities for Commissioning and Stable operation of Plant through the Plant life cycle (25 Years).

##### 5.1. PRE-REQUISIT UTILITIES:

Legally binding agreements shall be signed between both the parties to ensure the following as per similar agreements signed with other Urban Local Bodies like Varanasi, Bhopal, Hubballi-Dharwad, Noida-Greater Noida, Gorakhpur and Haldwani Kathgodam:

- 5.1.1. Encumbrance and Litigation Free Land, free from water logging and above HFL of approx. 20 acre fit for installing MSW to Torrefied Charcoal Plant as per latest guidelines of MoEFCC and MoUD.
- 5.1.2. Land shall be provided for Concession period of 30 years free of cost along with boundary wall. On a mutually agreed-upon basis, the same shall be extended for similar terms and conditions.
- 5.1.3. Uninterrupted Supply of Municipal Solid Waste (MSW) at designated Waste Tipping Floor of plant premises free of cost.
- 5.1.4. Electricity Connection of ~3 MVA within Plant battery limit (min. 11 kVA) for operational period and ~150 kW within Plant battery limit for Construction Power.

- 5.1.5. Provide water supply connection for drinking water usage during plant construction and operation period within the plant battery limit.
- 5.1.6. Preferably Treated STP Water ~400 KL per day for process application during operation period and ~50 KL per day for construction activities within the plant battery limit.
- 5.1.7. Provide other basic amenities at the project site like All-weather approach road from existing road to plant boundary of minimum width 12.0 m, street lighting on approach road and outside plant premises, sewer line, Right of Way, drainage outside plant premises, and other basic facilities, etc.
- 5.1.8. LNN shall take back the unutilized contents of MSW (Inert and process rejects) for safe disposal at its own cost.
- 5.1.9. Development and maintaining of green belt (as applicable) other than 20 acre for plant facility shall be in the scope of LNN.
- 5.1.10. Diversion of any Electric Line passing through the proposed project site, cutting down the trees existing on the proposed site (if any) and their disposal and diversion of Forest Land (if any) before handing over the site to NVVN shall be done by LNN.
- 5.1.11. LNN shall obtain Environment Clearance (if applicable).
- 5.1.12. Development and maintaining Scientific Land Fill (SLF) facility (as applicable) shall be in the scope of LNN.
- 5.1.13. LNN shall provide the detailed Municipal Solid Waste characteristics report for designing of the project facility.

## **6. ROLES & RESPONSIBILITIES OF NVVN:**

- 6.1. EPC of MSW to Torrefied Charcoal Plant Facility including installation and commissioning.
- 6.2. Smooth Operation & Maintenance of plant through deployment of third-party O&M contractor for 25 years.
- 6.3. Utilization of approx. 1000 MT per day of MSW everyday while complying with CPCB guidelines.
- 6.4. Generating High Calorific Value Fuel similar to the nature of Mineral Coal for Co-firing in thermal power plants and nearby process industries.
- 6.5. NVVN shall have the ownership and right to sale all the products and by-products generated from the said plant including revenue from Carbon Credits, if any.
- 6.6. The proposed plant shall comply with latest environmental norms.

### Annex III - Bioremediation of Legacy Waste at the Shivri Dump Sites

This annex provides a comprehensive overview of the ongoing initiative for the bio-remediation of legacy waste and abandoned dump sites, with a specific focus on managing more than 18.5 lac MT of legacy waste. The tender process for this crucial waste management project has been successfully finalized, culminating in the issuance of the Letter of Award to M/S Bhumi Green Energy Private Limited.

For legacy waste management, M/S Bhumi Green Energy Private Limited has undertaken the processing of 18.5 lakh MT of waste. To accomplish this task, the company has established a processing plant with a total capacity of 4000TPD. Through diligent efforts and strict adherence to operational protocols, M/S Bhumi Green Energy Private Limited has effectively processed approximately 5.1 lakh MT of legacy waste between March 2024 to till date. The by-products of the legacy waste are disposed of according to norms as per the direction of the CSIR-National Environmental Engineering Research Institute (NEERI), Nagpur. A green belt has been established near the dump site area, and the Dubai Plant has been strategically placed to assist in controlling heavy metal pollution in the soil. Bhumi Green Energy Private Limited's RDF strategy, which converts non-recyclable plastic waste into energy, is a significant aspect, with 79890 MT of RDF currently being sent to cement factories.

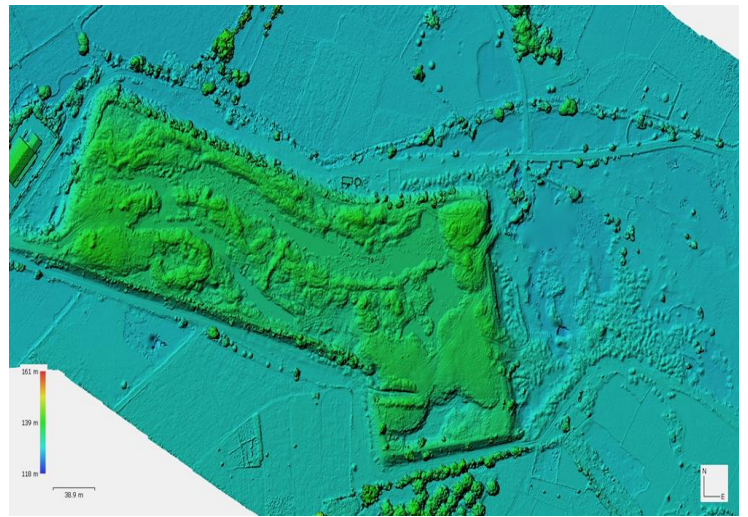
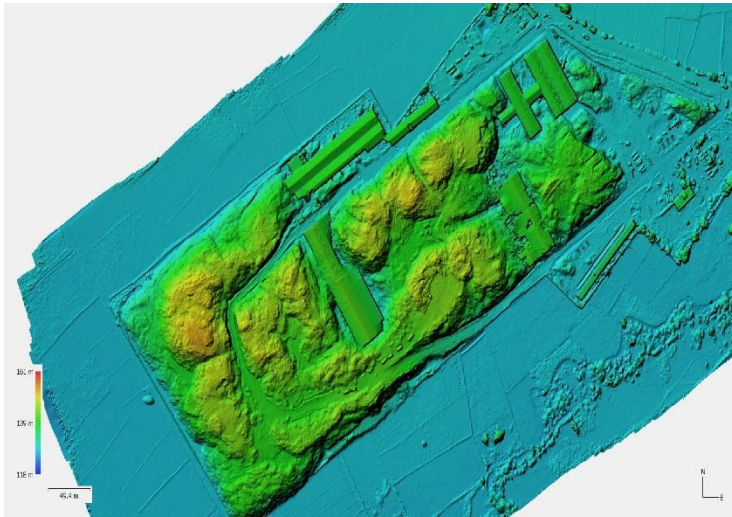
Legacy Waste Summary													
S. N.	Month	Intake (In MT)		Net Qty of By products Production (In MT)					Net Qty of By products Dispatched (In MT)				
		Intake Feed (In MT)	Qty of Waste Processed (In MT)	C&D Waste	Coarse Fraction (Below 22 mm)	BIO SOIL (below 6mm)	RDF	Total By products quantity	C&D Waste	Coarse Fraction (Below 22 mm)	BIO SOIL (below 6mm)	RDF	Total by products dispatched
1	March	30652.88	29777.88	5955.576	14293.3824	2382.2304	7146.6912	29777.88	1409.35	2079.56	0	2773.72	6262.63
2	April	75009.53	75118.15	15023.63	36056.712	6009.452	18028.356	75118.15	13710.5	14822.53	80.49	11518.32	40131.84
3	May	11006.039	11043.705	22087.414	53009.784	8834.966	26504.897	11043.7061	12222.5	17760	0	20913.375	50895.875
4	June	10615.855	10030.0	20060	48144	8024	24072	10030.0	6579	17040	382.65	15576.61	39578.26
5	July	10910.536	10322.5	20645	49548	8258	24774	10322.5	27563	25420	145.63	11272.42	64401.05
6	August	63806.45	75010	15002	36004.8	6000.8	18002.4	75010	24660.5	21360	1298.51	11376.88	58695.89
7	September	22517.69	20290	4058	9739.2	1623.2	4869.6	20290	10836	8180	201.2	3247.9	22465.1
<b>Grand Total</b>		<b>51731.0850</b>	<b>51415.8080</b>	<b>10283.1620</b>	<b>24679.5878</b>	<b>41132.648</b>	<b>12339.7944</b>	<b>51415.8091</b>	<b>96980.850</b>	<b>10666.2090</b>	<b>2108.480</b>	<b>76679.225</b>	<b>28243.0645</b>

# Project Area Detail & Timeline for Completion

Sr. No.	ULBs Name	Legacy Waste Quantity (Tonne)	Budget allocation (in Lakh)	Present Status	Estimated work Completion Timeline
1	Lucknow	18,49,902	10618 Cr.00	4000 TPD Processing plant is operational	30 December 2024



## Legacy Waste Quantification



\*Quantity of the Legacy waste confirm by the DEM – Digital Elevation Model. The final values obtained after Survey were as follows:

Name of Area	Volume
Shivari Waste Yard Part A	1922622.34 Cum
Shivari Waste Yard Part B	574828.986 Cum

**DEM Area A Legacy Waste Status: Before and After**



**Before**



**Current Status**

Sheveri Municipal Solid  
Waste Plant  
Date 05/08/2024  
Time-4:10

**Site division and Process Planning For DEM Area A**



**A- 2 LMT**

**E- 3LMT**

**B- 3LMT**

**F- 3LMT**

**C- 4LMT**

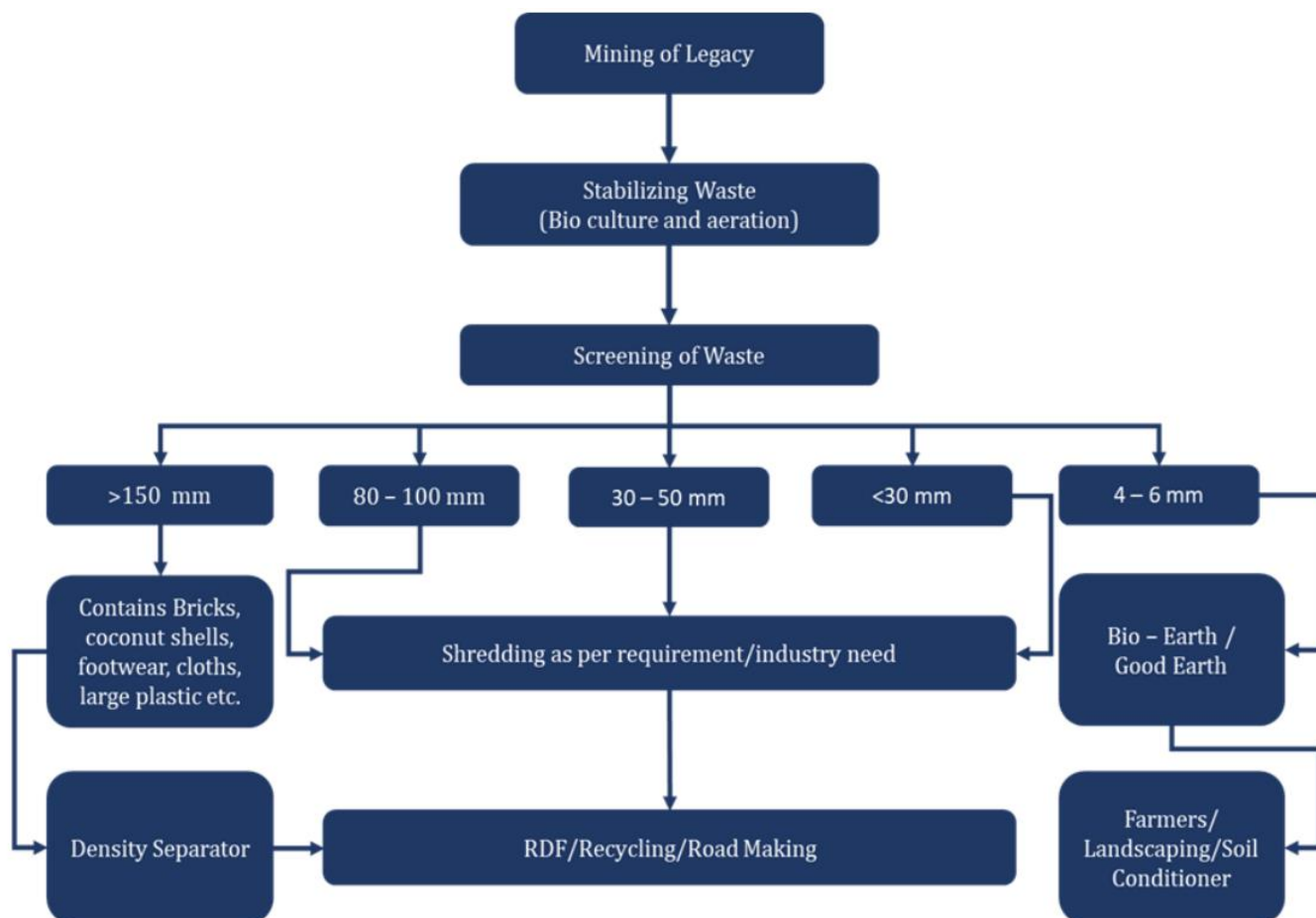
**G- 2LMT**

**D- 2LMT**

**H- 2LMT**

\* LMT is Lakh Metric Tons. Section A is completed and Section C is currently being done. Section B will be covered with sheets for monsoon 1.25LMT per month will be the pace of work. 20LMT will be completed in 16 months.

**Legacy Waste Processing Methodology as per Central Pollution Control Board (CPCB)-**



**CPCB has published a methodology/guidelines for undertaking biomining/bioremediation work.**

## **Implementation Plan**

Activity	Specification	Remark /Current Status
	<b>Phases of Implementation:</b> <b>Phase 1: 2000 MTPD capacity</b> <b>Phase2: 2000 MTPD Capacity</b>	
Waste quantification	Drone survey, contour mapping, waste characterization testing etc	DGPS based Drone survey done on 10 January 2024 and detailed report submitted
Waste stabilization and windrowing	Excavation, heap making, Culturing, aeration, drying etc.	Stabilization started on 10 January 2024 and till date about 7 to 8 lakh MT of legacy waste has been stabilized
Machinery Mobilization (Legacy waste processing)	2 lines comprising of 14 trommels, 10 ADS and 4 Ballistic Machine have deployed at site interlinked with about 120 conveyer belts	Both lines are operational with current operational processing capacity of 3500MT per Day.



**Heap Treatment for Controlling Odor**



**Water Sprinkling for Controlling Dust**



**Green belt around the Processing Site for Heavy metal Absorption**

# Biomining Machinery in Processing Plant

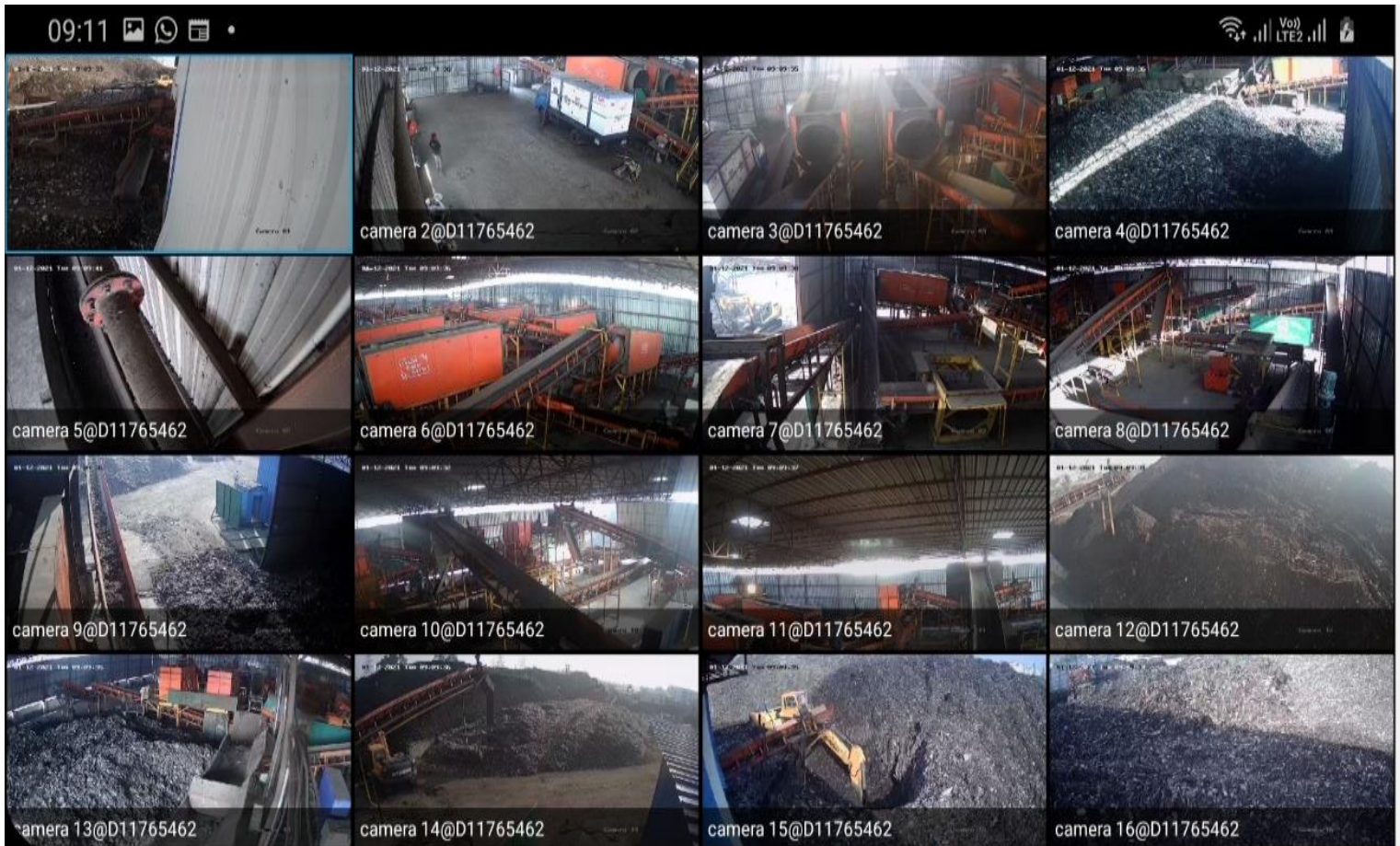


# Leachate Treatment Facility



OPPO F11 · ©omesh

# Live Monitoring



**RDF Dispatch Details****RDF DISPATCH SUMMARY**

Sr. no.	Month	ACC Limited	Ultratech Cement	Ambuja Cement	Ecoprism Johnson Limited	Prism Johnson Limited	Birla Corporation	JK Cement	Dalmia Cement	Total Qty
		Qty (Tons)	Qty (Tons)	Qty (Tons)	Qty (Tons)	Qty (Tons)	Qty (Tons)	Qty (Tons)	Qty (Tons)	Qty (Tons)
		1	March	1533.88	1239.84	0	0	0	0	0
2	April	1885.65	3802.73	277.9	2975.85	0	0	2463.79	75.91	11481.83
3	May	286.75	7450.02	0	7630	1130.07	71.32	4345.215	0	20913.375
4	June	887.01	6002.97	0	4294.47	0	0	4392.21	0	15576.66
5	July	2876.18	2497.91	0	2108.18	391.05	585.87	2813.23	0	11272.42
6	August	3577.51	1432.58	0	461.07	4334.13	1571.59	0	0	11376.88
7	September	827.08	617.03	0	0	1141.06	662.73	0	0	3247.9
<b>Total</b>		<b>11874.06</b>	<b>23043.08</b>	<b>277.9</b>	<b>17469.57</b>	<b>6996.31</b>	<b>2891.51</b>	<b>14014.445</b>	<b>75.91</b>	<b>79890.685</b>



Coprocessing Certificates

Aneexure-A



ITEM : SAFR-NH-RDF WASTE LOOSE				दूर की सोच
SUPPLIER NAME : BHUMI GREEN ENERGY				
SR No	Date	Vehicle No	Challan No	UoM (MT)
1	09/05/2024	MP19ZG9212	400	35.18
2	09/05/2024	MP19ZG9210	398	35.09
3	09/05/2024	MP19ZG9246	401	37.69
4	09/05/2024	MP19ZG9240	399	37.29
5	09/05/2024	MP19ZC6559	394	38.44
6	09/05/2024	MP19ZG9289	391	37.68
7	09/05/2024	MP19ZF6842	393	38.45
8	10/05/2024	MP19ZC2912	397	40.11
9	11/05/2024	MP19ZG4029	396	37.08
10	11/05/2024	MP19ZC2927	395	35.76
11	11/05/2024	MP19ZC5592	438	36.27
12	11/05/2024	MP19ZC3362	440	35.09
13	11/05/2024	MP19ZC5549	436	37.35
14	11/05/2024	MP19ZG3441	439	33.69
15	12/05/2024	MP19ZC2956	437	36.96
16	15/05/2024	MP19HA6747	528	36.02
17	15/05/2024	MP19HA6746	527	37.09
18	15/05/2024	MP19ZC1957	505	38.06
19	16/05/2024	MP19ZF8816	524	41.13
20	16/05/2024	MP19HA6420	526	35.71
21	16/05/2024	MP19ZG5382	525	35.88
22	18/05/2024	MP19HA6488	586	31.48
23	18/05/2024	MP19ZG3449	585	28.83
24	19/05/2024	MP19HA6418	626	30.84
25	23/05/2024	MP19HA4282	691	25.27
26	23/05/2024	MP19HA5414	692	30.18
27	23/05/2024	MP19HA5372	690	22.64
28	27/05/2024	MP19HA5613	752	25.86
29	27/05/2024	MP19HA5606	750	24.24
30	27/05/2024	MP19HA5609	751	25.11
31	27/05/2024	MP19HA6488	787	31.01
32	27/05/2024	MP19HA5618	753	26.48
33	29/05/2024	MP19ZC2912	846	37.05
34	29/07/2024	MP19ZC5505	1611	40.69
35	30/07/2024	MP19ZF6885	1622	28.32
36	30/07/2024	MP19ZF7010	1619	32.28
37	30/07/2024	MP19ZF6880	1621	31.53
38	30/07/2024	MP19ZF6413	1620	28.01
39	31/07/2024	MP19ZF8809	1626	31.24
TOTAL				1307

14/09/2024 15:40

POCO X4 PRO 5G | LOCATION



### Certificate of Co-processing

Certificate No.: DLCW/10/24-25

This is to certify that we have successfully co-processed the following quantities of 6313.20 MT of Sorted MSW/Plastic Waste sent by M/s **Bhumi Green Energy** on behalf of M/s **Bhumi Green Energy** from Shivri site (Lucknow) in Uttar Pradesh as declared by M/s. **Bhumi Green Energy** in our Cement Kiln during the period 1<sup>st</sup> June, 2024 to 30<sup>th</sup> June, 2024. The certificate of the quantity mentioned is not issued to any other entity.

The quantities mentioned in the certificate shall not be used for availing EPR credits.

**Waste Name: Sorted MSW/Plastic Waste**

**Quantity (Tons): 6313.20 MT**

Receipt details for the period 1<sup>st</sup> June 2024 to 30<sup>th</sup> June 2024 for location Shivri site (Lucknow), Uttar Pradesh as declared by the client.

Collection State	City	Vehicle details	Date of Receipt	Qty
Uttar Pradesh	Shivri Lucknow	UP41AT7316	01.06.2024	30.54
Uttar Pradesh	Shivri Lucknow	UP41AT5495	01.06.2024	31.68
Uttar Pradesh	Shivri Lucknow	UP72AT4866	01.06.2024	29.33
Uttar Pradesh	Shivri Lucknow	UP63BT0407	01.06.2024	37.07
Uttar Pradesh	Shivri Lucknow	UP72AT2768	01.06.2024	34.12
Uttar Pradesh	Shivri Lucknow	UP64AT5666	01.06.2024	29.62
Uttar Pradesh	Shivri Lucknow	UP63AT1272	01.06.2024	29.90
Uttar Pradesh	Shivri Lucknow	UP64AT2246	02.06.2024	31.79
Uttar Pradesh	Shivri Lucknow	UP64AT8980	02.06.2024	32.86
Uttar Pradesh	Shivri Lucknow	UP32LN5151	02.06.2024	32.14
Uttar Pradesh	Shivri Lucknow	UP70GT2919	02.06.2024	28.89
Uttar Pradesh	Shivri Lucknow	UP53ET8625	02.06.2024	35.22
Uttar Pradesh	Shivri Lucknow	UP72AT3235	02.06.2024	34.57
Uttar Pradesh	Shivri Lucknow	UP70NT1683	02.06.2024	36.56
Uttar Pradesh	Shivri Lucknow	UP41AT4816	02.06.2024	31.85
Uttar Pradesh	Shivri Lucknow	UP70MT7183	02.06.2024	39.54
Uttar Pradesh	Shivri Lucknow	UP72AT3202	02.06.2024	34.68
Uttar Pradesh	Shivri Lucknow	UP70MT5684	02.06.2024	35.79
Uttar Pradesh	Shivri Lucknow	RJ42GA3336	03.06.2024	40.71
Uttar Pradesh	Shivri Lucknow	UP70NT5067	03.06.2024	34.35
Uttar Pradesh	Shivri Lucknow	UP70FT4674	03.06.2024	30.64



**UltraTech**  
CEMENT  
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**UltraTech Cement Limited**

(Unit : Dalla Cement Works)

SH 5, Post : Dalla, Distt. Sonbhadra (UP) - 231207.

T : +91 5445 265778, 265801, 265802 | W : [www.ultratechcement.com](http://www.ultratechcement.com)

Registered Office: UltraTech Cement Limited, 2nd Floor, Mahakali Caves Road, Andheri (East), Mumbai - 400 093  
Abura Centre, 2nd Floor, Mahakali Caves Road, Andheri (East), Mumbai - 400 093

### Co-Processing Certificate

Reference No.: Ecogateway/REW/Jul-24

Date : 31/07/2024

This is to certify that M/s Ecogateway Pvt Ltd has supplied 445.800 MT Of RDF/Plastic Waste from M/s Bhumi Green Energy, Legacy Waste Processing Plant Shivri, Lucknow to Ms/ Rewa MSW Energy Solutions Pvt Ltd, Pahadiya Village, Raura B.O. Post Office Raipur-Karchuliyan, Tehsil Rewa, Rewa (M.P.) in the month of in the month of Jul-2024 for its final scientific processing and disposal.

For Rewa MSW Energy Solutions Pvt Ltd

Seal & Sign

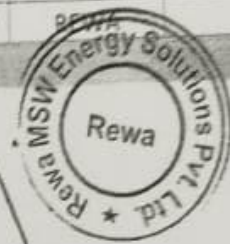


Details of RDF received are as follows;

Annexure-A

Sr.No.	Supplier	Date	Vehicle No	Source	Destination	Quantity (Kg)
1	ECOGATEWAY PVT LTD	01-07-24	UP70GT4521	LUCKNOW	REWA	37,580
2	ECOGATEWAY PVT LTD	01-07-24	UP33CT5476	LUCKNOW	REWA	42,470
3	ECOGATEWAY PVT LTD	01-07-24	UP70GT3826	LUCKNOW	REWA	35,900
4	ECOGATEWAY PVT LTD	01-07-24	UP71BT3490	LUCKNOW	REWA	41,220
5	ECOGATEWAY PVT LTD	02-07-24	UP33BT6012	LUCKNOW	REWA	38,420
6	ECOGATEWAY PVT LTD	02-07-24	UP33CT5484	LUCKNOW	REWA	40,250
7	ECOGATEWAY PVT LTD	03-07-24	UP33AT4980	LUCKNOW	REWA	37,390
8	ECOGATEWAY PVT LTD	03-07-24	UP33CT5168	LUCKNOW	REWA	41,190
9	ECOGATEWAY PVT LTD	04-07-24	UP70FT6296	LUCKNOW	REWA	30,440
10	ECOGATEWAY PVT LTD	04-07-24	UP32TN7124	LUCKNOW	REWA	36,850
11	ECOGATEWAY PVT LTD	04-07-24	UP70CT5900	LUCKNOW	REWA	29,050
12	ECOGATEWAY PVT LTD	05-07-24	UP33BT0050	LUCKNOW	REWA	35,040
						445,800

*[Handwritten Signature]*



ANNEXURE - G  
CERTIFICATE OF COPROCESSING

geoclean

## Certificate of Coprocessing

Issued To : **BHUMI GREEN ENERGY, LUCKNOW**

This is to certify that we have taken receipt of the following quantities of **RDF**, sent by **BHUMI GREEN ENERGY, LUCKNOW** for Pre and / Or Co-processing in our Cement Kiln during the period of **01-08-2024 to 31-08-2024**. The same would be safely and completely disposed-off within 90 days of receipt and thereafter will not exist.

Waste Name - **RDF/MSW (segregated fraction)**

Quantity (MT) - **3337.30 MT**

Authorized Signatory

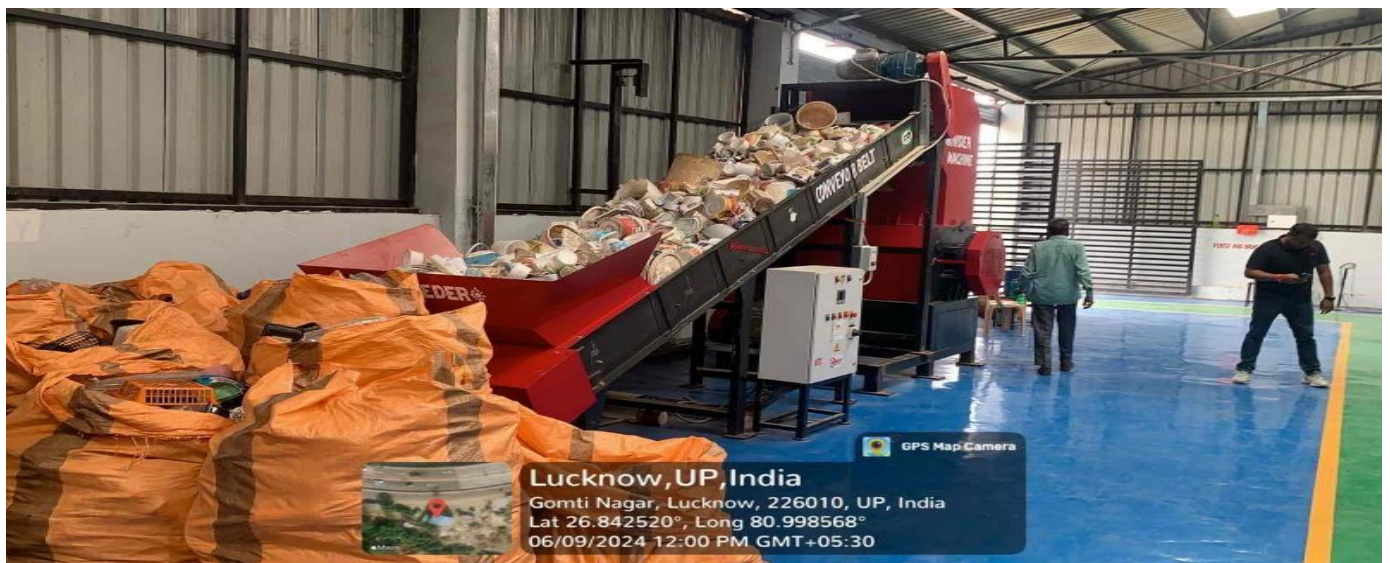
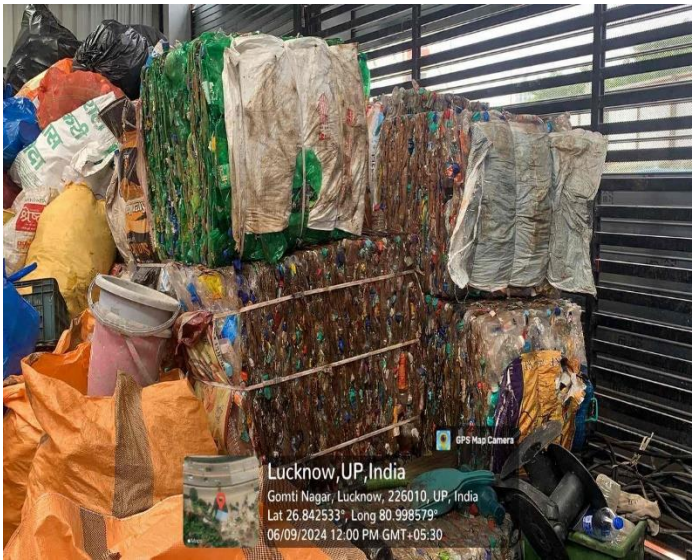
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ACC KYMORE CEMENT WORKS

## Annex IV- Construction Update - Material Recovery Facilities and PCTS

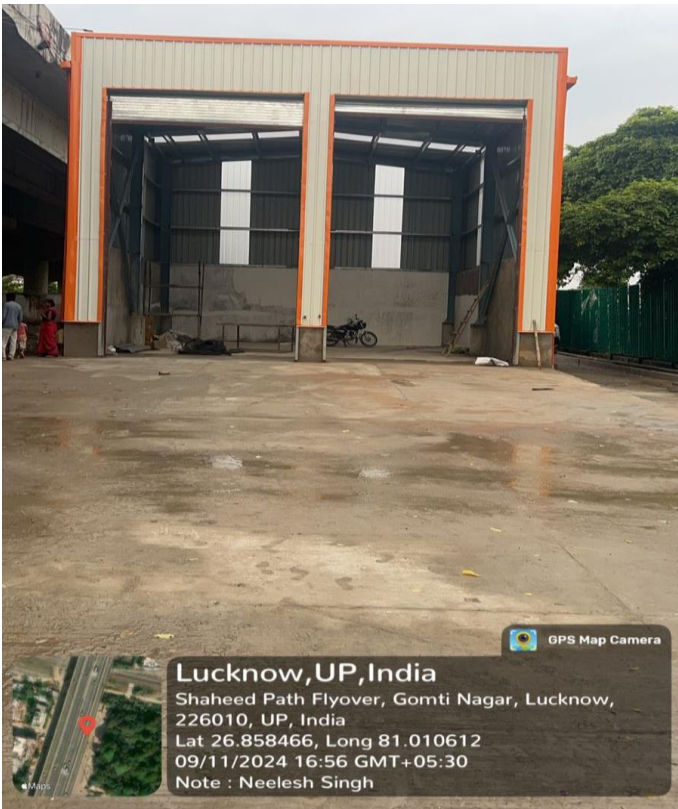
LMC operates eight Material Recovery Facilities (MRFs) manually, with one more MRF currently under construction. Additionally, a mechanized MRF located in Gwari is operated by M/S Chennai MSW Pvt. Ltd. through a Special Purpose Vehicle (SPV) named Lucknow Swacchata Abhiyan Pvt. Ltd. (LSA) under a Public-Private Partnership (PPP) model. For the installation of six new PCTS, locations have been selected, and tenders have been floated. This process is expected to be completed by the end of November 2024. Furthermore, four new PCTS have already been installed at various locations within the city.









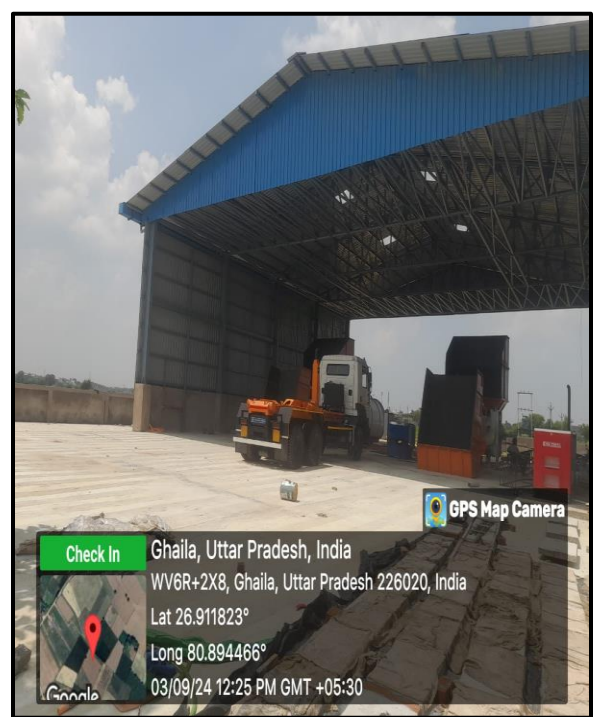
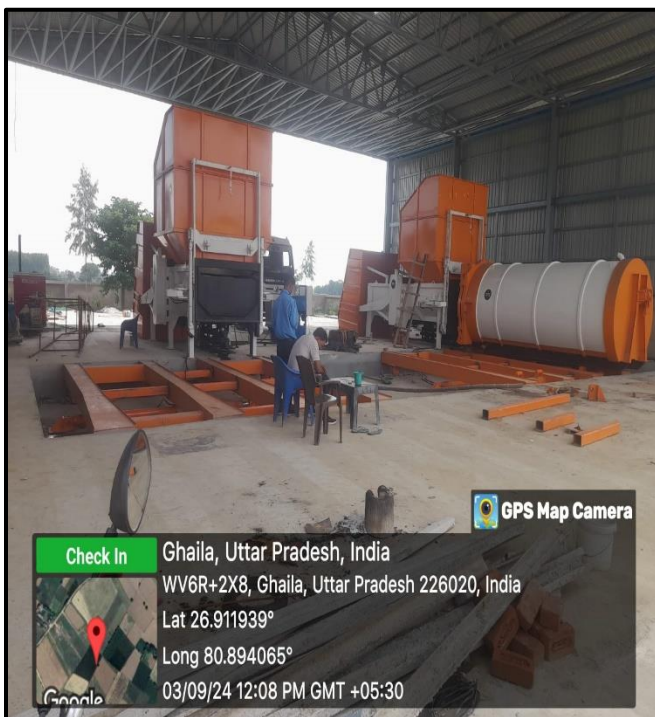


## Annex V: Construction Update - Fixed Compactor Transfer Station (FCTS)

In the Ghaila Zone-3 of Faizulla Ganj-4, significant strides have been made in waste management infrastructure. The Lucknow Municipal Corporation (LMC) has successfully liberated the land previously occupied by local bodies, paving the way for transformative developments. Construction activities are well underway for the Transfer Station (TS) Cum Fixed Compactor Transfer Station (FCTS). The project has reached key milestones, including the completion of the layout design and successful execution of excavation and boring tasks.

As part of the ongoing progress, Plain Cement Concrete (PCC) work is currently in motion at the site, emphasizing the dedication to robust construction practices.

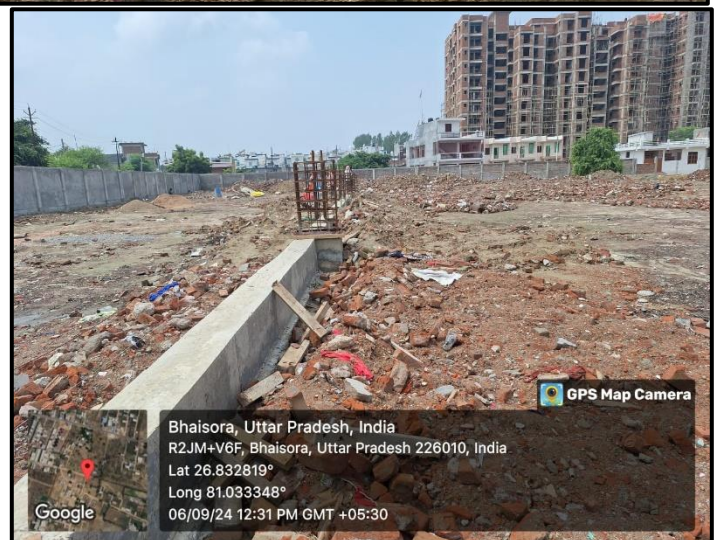
### Ghaila Fixed Compactor Transfer Station (FCTS)



**Ganga khera Fixed Compactor Transfer Station (FCTS)**

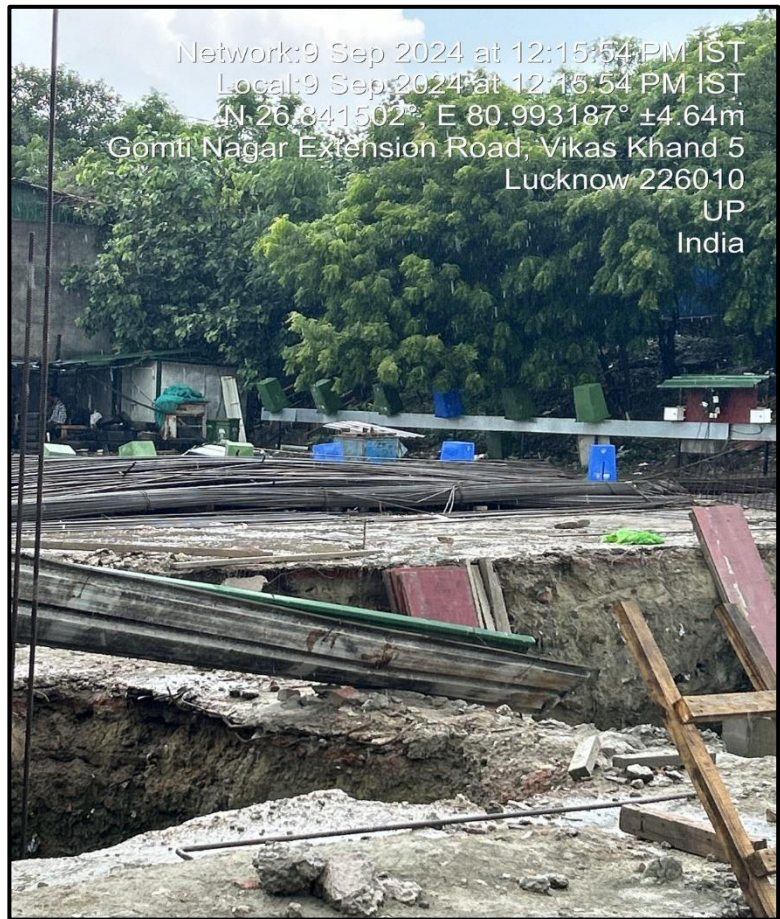


**Bhaishora Fixed Compactor Transfer Station (FCTS)**



# 2973

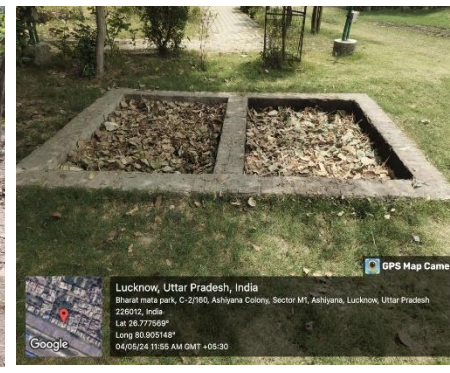
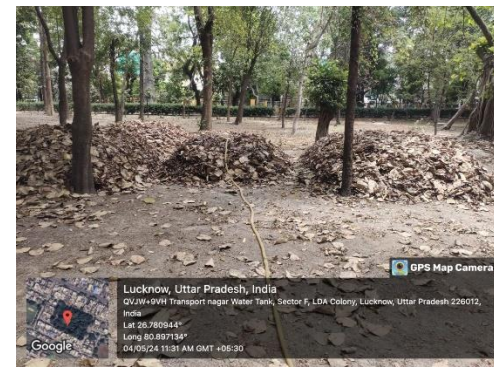
## Dayal Fixed Compactor Transfer Station (FCTS)



## Annex VI - Setting up of Aerobic Composting pits in parks

In the last three months, over 200 compost pits have been successfully constructed to enhance waste management practices in parks. Additionally, the implementation of mulching techniques has been incorporated to further augment waste management within these park areas. Detailed information are given in table-

S.No.	Zone	Total No. of Parks	Total No. of New Compost Pits
1	Zone-1	62	34
2	Zone-2	311	25
3	Zone-3	1208	28
4	Zone-4	409	21
5	Zone-5	51	20
6	Zone-6	91	19
7	Zone-7	548	23
8	Zone-8	536	32
<b>Total</b>		<b>3216</b>	<b>202</b>



## Annex VII- Promotion of Compost and Phasing Out the Use of Chemical Fertilizers

The Lucknow Municipal Corporation (LMC) introduced the "Mera Angan Meri Hariyali" initiative as part of the Swachh Bharat Mission, with the aim of educating the public about the negative impacts of chemical fertilizers and promoting the benefits of home and community composting. This forward-thinking initiative seeks to address waste management challenges by encouraging residents to compost organic waste at home or in communal spaces, thus reducing the amount of waste that enters landfills.

The initiative creates a sustainable, closed-loop system by collecting organic waste, such as leaves and garden clippings from parks and campuses, and turning it into nutrient-rich compost. This compost is then used to enhance the very green spaces where the waste originated, improving soil health and fostering vibrant, healthy plant growth.

Beyond benefiting parks and gardens, any excess compost produced is shared with local residents, helping to promote sustainable gardening practices across Lucknow. By providing this resource, LMC empowers citizens to cultivate their own green spaces without relying on harmful chemical fertilizers, fostering a more environmentally conscious community.

Overall, "Mera Angan Meri Hariyali" showcases LMC's dedication to both environmental sustainability and community involvement, demonstrating how local governments can drive impactful change through innovative waste management solutions.



### **Annex VIII - Door-to-Door waste collection and segregation**

Door-to-door waste collection and transportation in Zones 1, 4, 3, 6, and 7 are currently managed by LSA. The company has procured over 700 three-wheeler and four-wheeler electrical vehicles for this purpose, with 450 vehicles already delivered and working. However, the responsibility for door-to-door waste collection in Zones 2, 5, and 8 remains with Lucknow Municipal Corporation (LMC). The tender for these zones is undergoing retendering processes and has not been finalized yet. The door-to-door collection service spans **6,07,599** households, with **1,68,788** houses already provided with segregated waste facilities.

The responsibility for door-to-door waste collection in zones 2, 5, and 8 has been continue by the Lucknow Municipal Corporation (LMC). Presently, the LMC is overseeing both the planning and execution phases of the door-to-door waste collection initiative within these remaining zones. The tender for these zones are finalised and wating for the final decision of the committee.

Door to door collection and report of the following is in tabular form.

S.No	Zone	Total HH/Comm	Coverage Report till 01.09.2023	Coverage report till 30.04.2024	Current Coverage report till 31.08.2024	Coverage %	No. of HH/Comm Source Segregation
1	Zone-1	98338	34798	50258	78963	80.2975452	7161
2	Zone-2	54550	24650	31900	31900	58.47846013	2849
3	Zone-3	134975	56419	86778	108342	80.26819781	44675
4	Zone-4	71865	46719	67634	57645	80.21289919	35796
5	Zone-5	66907	33922	53425	53425	79.84964204	5607
6	Zone-6	158737	83546	105476	122286	77.03685971	31760
7	Zone-7	103874	49392	69200	85863	82.66072357	14394
8	Zone-8	101550	56600	69175	69175	68.11915313	26546
	<b>Total</b>	<b>790796</b>	<b>386046</b>	<b>533846</b>	<b>607599</b>	<b>76.83384843</b>	<b>168788</b>

Major scope of works executed by the Chennai MSW Pvt Ltd in the city are as listed below:

- Door to Door Collection of Segregated MSW from Household, commercial, institutional and other area and its transportation to the MRF/designated site on daily basis.
- Design, Develop, construct and Operate & Maintain MRF cum Transfer station/PCTS/FCTS and recovery of recyclables. LMC shall provide all machinery and equipments required for MRF cum PCTS, MRF cum FCTS, MRF cum Static Compactor Transfer Station including compactor bins & Compactor machines excluding Hook Loader.
- Secondary Transportation of wet and dry waste separately to designated processing site. Design and layout are finalised as per requirement and availability of land.

- d. Manual Road/Street /pavement / footpath / paved path /cycle track sweeping, and Removal of garbage, litter, silt and blockages from street sides and transportation of sweeping Waste to designated disposal site/collection centres.
- e. Cleaning of drain size upto 45cm shall be done on a weekly basis, and drains above 45 cm and up to 1.0 meter shall be cleaned once every 15 days and are required to transport the collected silt to designated disposal sites or collection centres. Drains covered with sone or slab shall also be cleaned periodically by manual/mechanical system.
- f. Collection & Transportation of Horticulture Waste to designated processing site.
- g. Collection & Storage of Domestic Hazardous Waste to designated collection center.
- h. User fee shall be decided by LMC and shall be provided to concessionaire after bidding process. Collection of user charges from households, commercial establishment, institutional establishment & BWG's on behalf of Lucknow Municipal Corporation and deposit it into Escrow account of Lucknow Municipal Corporation.
- i. Build, Operate & Maintain workshop for maintenance of vehicle/equipment.
- j. Setup a command-and-control centre cum control room for online monitoring and equipped with emergency response mechanism

The Project also entails the Concessionaire to obtain all necessary statutory consent and clearances required for implementation of the Project, carry out IEC Activities, and ensure Environmental Health and Safety (EHS) compliance and safe handing over of the DHW to the authorized agency.



**Annex IX- User Charge collection**

The user charge collection is conducted jointly by the Lucknow Municipal Corporation (LMC) and the EIRMEN agency. The agency provides the provision, operation, and maintenance of hardware and software required for user charge collection in both residential and commercial properties. Currently, the collection is managed by LMC employees, and after the commencement of work by M/s Chennai MSW Pvt. Ltd., the user charge collection will be handled by the selected agency. The user charge collection in May to August 2024 is presented in the table-

<b>Sr.No</b>	<b>Zone</b>	<b>Total Amount (in Rs) Received in May to August 2024</b>
1	Zone-1	<b>4911273.00</b>
2	Zone-2	<b>3599557.00</b>
3	Zone-3	<b>6805671.00</b>
4	Zone-4	<b>13694535.00</b>
5	Zone-5	<b>6133895.00</b>
6	Zone-6	<b>7061275.00</b>
7	Zone-7	<b>3248984.00</b>
8	Zone-8	<b>8394954.00</b>
<b>Total</b>		<b>53850144.00</b>

**Annex X- Integration of Rag Pickers/Waste collectors/ Kabadis/ Volunteers/ CBOs/ NGOs**

Recently, 10 rag pickers, waste collectors, and kabadiwalas have been successfully integrated into the Material Recovery Facility (MRF) and Resource Recovery and Recycling (RRR) centre in Lucknow Municipal Corporation. Currently, they are undergoing comprehensive training programs aimed at enhancing their skills in waste segregation, recycling techniques, and ensuring occupational safety.

To support this integration, a series of Information, Education, and Communication (IEC) activities have been conducted. These initiatives include awareness campaigns within the local community, educating these individuals about the advantages of their involvement in the MRF and RRR centers. The IEC activities emphasize the benefits of steady income, improved working conditions, and enhanced access to resources.

The training programs are not only designed to boost the capabilities of the waste workers but also to align them with legal standards and regulations, ensuring a compliant and fair working environment. Additionally, efforts have been made to provide proper infrastructure, including modern waste sorting and recycling facilities, as well as safety gear to promote secure working conditions.

As part of the integration process, incentive systems will be established, acknowledging the contribution of these individuals based on the quantity and quality of materials they handle. Financial incentives, health benefits, and other perks have been incorporated to motivate their active participation in the recycling process.

RRR LIST									
S.N	ZONE	WARD	ADDRESS	STAKEHOLDER ORGANISATIONS (NGOS ETC)			TIE UP WITH RECYCLERS (KABADI WALE SE TIE UP)		Items Details
				ORGANIZATION NAME	MOBILE No.	ORGANIZATION ADDRESS	NAME	CONTACT NUMBER	
1	5	Sarojini Nagar I	Rajesh	Ram Vilas	8724030053	Jairaj puri	Rajesh	8724030053	Chashma Bank, Furniture Bank,
2	5	Chitragupta nagar	Shyam Sundar	9956123148	New Ashutos h Nagar	Rajendra Kumar	Shyam Sundar	9956123148	

3	5	Chitragupta nagar	lal Moham med	7275155931	Indrapuri	Navihasan	lal Moham med	7275155931	<b>Electronic Bank, Book Bank, Shoe Bank, Colth Bank, Guthli Bank, Katrina Bank, Thaila Bank, Barton Bank, Chikara Bank</b>
4	8	Vidyawati I	Anita kashyap	9839982550	Sector M paaniki tanki	Vidyawati I	Anita kashyap	9839982550	
5	8	Shardanagar II	Sanjay Kashyap	9335057590	Uthratiya underpass south city	Shardanagar II	Sanjay Kashyap	9335057590	
6	8	Shardanagar II	Ganju	9919946174	1/254 ruchikh and	S.09 Vigyanpuri Mahanagar, Near Gulab Vitika Park	Ganju	9919946174	
7	8	Ibrahimpur II	Aatmarakashyap	9554860433	Hawett mau Mawiya	Ibrahimpur II	Aatmarakashyap	9554860433	
8	3	Daliganj Niralanagar	Mohd. Umar	7307565002	Sitapur branch road	7307565002	Sitapur branch road	7307565002	
9	3	Lalajpat Rai	Lalji	8318558752	Sitapur branch road	Lalajpat Rai	Lalji	8318558752	
10	2	Tilak Nagar	Ajay Kumar	8317024708	kundari rakabganj hanuman mandir	Ajay Kumar	kundari rakabganj hanuman mandir	8317024708	

## Annex XI - Self-Help Groups (SHGs) for Waste Management

The Lucknow Municipal Corporation (LMC) has partnered with several Self-Help Groups (SHGs) to enhance waste management efforts in the city. These groups include:

- Swachh and Swasth Swayam Sahayta Samooh
- Asha Swayam Sahayta Samooh
- Laxmi Bai Sahayta Samooh
- Munni Self Help Group
- Pratishtha Swayam Sahayta Samooh
- Roj Self Help Group

The women members of these SHGs have received training in **Material Recovery Facility (MRF) operations** and **waste segregation**. This empowers them to play a vital role in the waste management process, contributing to a cleaner and more sustainable city.

Additionally, some of these women have been actively involved in the **operation and maintenance of Pink Toilets** in Lucknow. Their participation in this initiative demonstrates their commitment to improving public sanitation and providing essential facilities for women.

By partnering with SHGs, the LMC is not only promoting **women's empowerment** but also fostering a **community-based approach to waste management**. This collaboration has proven to be effective in improving waste collection, segregation, and recycling rates, ultimately contributing to a healthier and more sustainable Lucknow.



## Annex XII- Enforcing street vendor to keep suitable containers

LMC is taking a significant step towards responsible waste management by enforcing the use of two separate bins for wet and dry waste by all street vendors. This initiative encourages proper waste segregation at the source. To further enhance waste collection, 100 new large bins with a capacity of 1.1 cubic meters have been strategically placed in high-waste generation areas. These include locations frequented by Bulk Waste Generators (BWGs) and Resident Welfare Associations (RWAs). 13 refuse compactors (RC) are being used for the collection and transportation of the municipal solid waste. This combined approach ensures both street vendors and areas with high waste volume have the infrastructure they need for effective waste separation.



**Annex XIII- Capacity Building**

This annexure report provides an overview and evaluation of the waste management practices implemented by the Lucknow Municipal Corporation (LMC) in accordance with Rule 15 (zc) and Rule 15 (zg(v)) of the Solid Waste Management (SWM) Rules, 2016.

Under the agreement between LMC and Lucknow Swachchhata Abhiyan Pvt. Ltd. (LSA), the company has been actively conducting regular training sessions on various aspects of waste management. These sessions cover topics such as Swachh Vayu Sarvekshan, household waste collection procedures, and waste transportation methods. Through these training initiatives, LSA has successfully educated more than 5,000 workers.



## Annex XIV- Public awareness through IEC Campaign

This annexure report provides an overview and assessment of the waste management practices implemented by Lucknow Municipal Corporation (LMC), specifically in accordance with Rule 15 (zc) and Rule 15 (zg(v)) of the Solid Waste Management (SWM) Rule 2016. As per the agreement between LMC and Lucknow Swachchhata Abhiyan Pvt. Ltd., the company has been actively conducting Information, Education, and Communication (IEC) activities ward-wise on a regular basis.

### **Overview of LMC Initiatives in the Last Three Months:**

**Training and Education:** LMC has been actively involved in educating workers, including contract workers and supervisors, with a focus on ensuring effective door-to-door collection of segregated waste and proper transportation of unmixed waste.

**Information, Education, and Communication (IEC) Campaign:** A robust IEC campaign has been implemented to educate waste generators on sustainable practices such as home composting, vermi-composting, bio-gas generation, and community-level composting, aligning with Rule 15 (zg(v)).

**Key Initiatives:** LMC has undertaken various initiatives in the last two months, including Door-to-Door waste segregation awareness, Soil Day public awareness, cleanliness champion and cleanup drive.

**Community Engagement Events:** Events organized by LMC, such as swachchh tirath mahotsav and swachchh Kite events, have successfully reached over 58,000 people, contributing to heightened awareness and community engagement in sustainable waste management practices.



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**Annex XV- Collaborative Initiatives with Resident Welfare Associations and Bulk Waste Generator Groups**

This annexure outlines the cooperative endeavours between waste generators and collectors to ensure compliance with the Solid Waste Management Rule of 2016. Everenviro Resources Management Pvt. Ltd. is currently in the process of installing a 300TPD bio CNG plant, a key component of ongoing sustainable initiatives.

Everenviro Resources Management Pvt. Ltd. has actively collaborated with Resident Welfare Associations (RWA) and Bulk Waste Generator (BWG) groups, in conjunction with Lucknow Municipal Corporation (LMC), to facilitate the segregated collection of high-quality organic waste. LMC has played a significant role in the collection and transportation of waste, contributing to the success of these initiatives.

Additionally, both LMC and Everenviro Resources Management Pvt. Ltd. have undertaken educational outreach programs aimed at enlightening the community on effective waste segregation and management practices. This educational effort, conducted through a partnership between LMC and Everenviro Resources Management Pvt. Ltd., aims to instill a sense of responsibility and awareness among residents.

The following list outlines the Resident Welfare Associations and Bulk Waste Generator groups that are involved in this collaborative initiative:

S.No.	Ward Name	Type	Name of bulk waste generator	Locality	Latitude	Longitude	Name of In-charge of the BWG	Mobile No of the Incharge
1	CHINHAT I	Malls/Cinema Buildings	Phoenix Palassio	Chinhhat 1	26.8515	81.0241	Rajesh	7795400102
2	INDIRA NAGAR	Hotels & Restaurants	Hotel Grand Inn	Indira Nagar Sector 11, 15	26.8832	80.9978	Vikash kumar	8090862527
3	ALIGANJ	RWAs	Akanksha Colony open dumping	Aliganj	26.9158	80.9513		
4	SAROJINI NAGAR II	Industries	AKSHAY PATRA	Sarojni nagar 2	26.7673	80.8465	Shiddharth Bajpai	7007077702
5	MOTILAL NEHRU-CHANDRABHANU GUPT	Hotels & Restaurants	Amber Hotel, Naka Hindola	Motilal Nehru	26.8357	80.9209	Vaishnavi Soni	8299027962
6	IBRAHIMPURI	RWAs	Asra-Sapna Enclave	Ibrahimpur 1	26.7491	80.9621		
7	MALVIYA NAGAR	Malls/Cinema Buildings	Balaji Cam Services LLP Site	Malviya nagar	26.8386	80.9091	Piyush kumar	9935429429
8	HAZRATGANJ RAMTIRTH	Marriage Halls	Balrampur Garden	Hazaratganj ramtirth	26.8548	80.9508	Jacob Dan	9453958727

9	RAJA BIJLI PASI I	RWAs	Bhagirathi Enclave Appartment Resident Welfare Society	Raja Bijli Pasi	26.77 59	80.948 9		
10	VIDYAWATI I	Tourist Areas	BUDDHA RESORTS PRIVATE LIMITED	Vidhyawati 1	26.79 13	80.904 3	Md Zehran	9598980 640
11	HAZRATGANJ RAMTIRTH	Hotels & Restaurants	Carlton Hotel	Hazaratganj ramtirth	26.85 64	80.947 5	Shivani	9598980 640
12	HAZRATGANJ RAMTIRTH	Offices	Chief Post Master General - Pradhan Post Office	Hazaratganj ramtirth	26.85 14	80.94	Ajay Yadav	9369335 410
13	RAFI AHMAD KIDWAI	Offices	E-City Real Estate Pvt. Limited	Rafi ahmed kidwai	26.84 57	80.987 9	Divyansh Awasthi	9839090 203
14	AYODHYADASI	Offices	Eldeco Housing And Industries Ltd	Ayodhyadas 1	26.89 47	80.936 3	Pradeep Pandey	9839090 203
15	AYODHYADASI	Offices	Eldeco housing and industries ltd. site-Eldeco city	Ayodhyadas 1	26.91 85	80.937 8	Rishabh Mishra	7985092 465
16	IBRAHIMPURI	RWAs	Eldeco Saubhagyam	Ibrahimpur	26.76 83	80.961 2		
17	MAHAKAVI JAISHANKAR PRASAD	Hotels & Restaurants	Richi Richi	Janki Vihar	26.89 53	80.942 1	Dheeraj Makhijani	8090862 527
18	MAHANAGAR	Hospitals/Nursing Homes	Fatima Hospital	Mahanagar	26.87 13	80.952 1	Harendra	8318915 196
19	SAROJINI NAGAR II	Offices	Gajanan Agro Food Pvt Ltd	Sarojini nagar 2	26.77 58	80.868 9	Pawan Kumar Yadav	9936335 335
20	RAJA BIJLI PASI I	Others	Gangotri Enclave	Raja bijli passi 1	26.76 91	80.986 5	Harendra	8574409 314
21	HAZRATGANJ RAMTIRTH	Hotels & Restaurants	Gemini Continental	Hazaratganj ramtirth	26.85 31	80.936 7	Shipra Mishra	9415002 035
22	CHINHAT II	Hotels & Restaurants	Fairfield by Marriot	Chinhat 2	26.86 81	81.009 5	Shipra Mishra	7376902 191
23	HINDNAGAR	Others	Gold Star Apartment	Hindnagar	26.79 85	80.894 2	Sunil Kumar Gautam	9415019 962

24	LALKUAN	Hotels & Restaurants	GOLDEN TULIP	Lal kuan	26.83 87	80.934 5	Suriksh it singh	7355019 484
25	CHINHAT II	Hotels & Restaurants	Lineage Hotel	Chinhat - 3	26.86 18	81.010 2	khusbh oo Srivast av	9151703 101
26	HAZRATGA NJ RAMTIRTH	Offices	Halwasiya Center Maintenance Services LIP	Hazaratg anj ramtirth	26.86 46	81.012	Surya Prakas h	9336083 688
27	CHINHAT II	Hotels & Restaurants	Hilton Garden Inn	Chinhat 2	26.86 39	81.008 4	Vivek Kumar	9838170 712
28	IBRAHIMPU R I	RWAs	Himalaya Enclave Phase 3rd	Ibrahimp ur 1	26.79 86	80.901 8		
29	AISHBAGH	Offices	Kela Godam	Aishbagh	26.84 73	80.908 6	Raj Kumar Singh	9454410 846
30	IBRAHIMPU R I	RWAs	Himalaya Enclave- Phase-1 and 2	Ibrahimp ur	26.79 91	80.897 5		
31	IBRAHIMPU R II	Malls/Cine ma Buildings	LULU Mall	Ibrahimp ur 2	26.78 42	80.991 4	Ashok	7475633 593
32	HAZRATGA NJ RAMTIRTH	Educational Institutes	Hindi Sansthan	Hazratga nj	26.85 19	80.939 2	Khusbh oo Srivast av	6392843 064
33	CHINHAT II	Hotels & Restaurants	Hotel Comfort Inn	Chinhat 2	26.86 57	80.996 6	Mohd Sharuk h	9648615 007
34	ALIGANJ	Educational Institutes	IHM	Aliganj	26.89 38	80.950 8	Priyank a Soni	7652096 729
35	KHARIKA II	Hospitals/N ursing Homes	Medanta	Kharika 2	26.77 74	80.947 7	Raj Kumar Singh	9453958 727
36	HAZRATGA NJ RAMTIRTH	Malls/Cine ma Buildings	India Housing	Hazaratg anj ramtirth	26.85 58	80.945 3	Kamles h Pal	7355302 133
37	AYODHYAD AS I	Educational Institutes	Integral University	Ayodhya das 1	26.95 83	80.998	Raj Kumar Singh	9454410 846
38	CHINHAT I	Educational Institutes	Jaipuria Institute of management	Chinhat - 1	26.85 14	81.010 5	Amar Tiwari	9598980 640
39	BHARTENDU HARISHCHA NDRA	Hotels & Restaurants	SHALIMAR GALLANT	Bhartend u harishcha ndra	26.89 91	80.944 9	Ranjeet yadav	9454783 242
40	J.C.BOSE	Others	Kaiserbagh bus stand	J.C.Boss	26.85 31	80.928 6	Vinay Siddhar tha	6392843 064

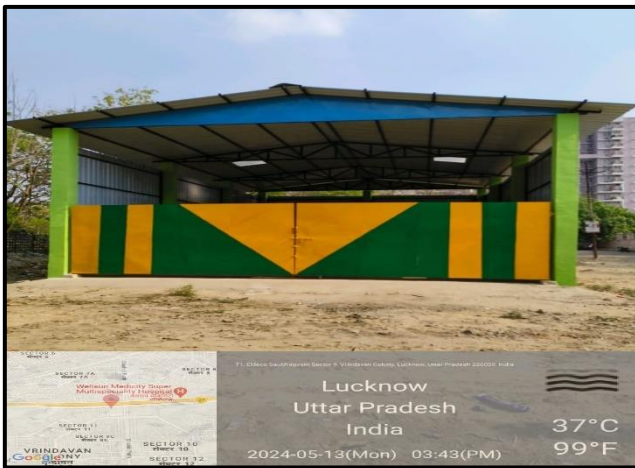
41	JANKIPURAM 2ND	RWAs	Kendriya Vihar Colony	Jankipuram 2	26.8982	80.94		
42	RAFI AHMAD KIDWAI	Malls/Cinema Buildings	SRS Mall	Gomti Nagar	26.8105	81.0153	Vikash Kumar	9452776245
43	VIKRAMADI TYA	Others	LEBUA SARACA ESTATE	vikramaditya	26.8341	80.9475	Pawan Kumar	8400477793
44	HAZRATGANJ RAMTIRTH	Offices	sidbi	Mallpur	26.8518	80.9485	Vivek Kumar	7705957847
45	COLVIN COLLEGE NISHATGANJ	RWAs	Police line	Nishatganj	26.8692	80.9446		
46	GOMTI NAGAR	Hotels & Restaurants	Novotel Hotel	gomtinagar	26.8514	81.0241	Pawan kumar	9936335335
47	CHINHAT II	Hotels & Restaurants	Hyyat Regency	Chinhath 2	26.8658	81.0059	Vivek Kumar	7985092465
48	GOMTI NAGAR	Hotels & Restaurants	TAJ HOTEL	gomtinagar	26.8516	80.9726	Amaan ahmad ansari	8090681476
49	GOMTI NAGAR	Hospitals/Nursing Homes	Dr. Ram Manohar Lohia Institute of Medical Sciences	Gomti Nagar	26.8684	81.0023	Raj Kumar Singh	9453958727
50	CHINHAT II	Hotels & Restaurants	The Grand JBR	Chinhath 2	26.8534	81.0266	Ranjeet yadav	9454783242
51	GOMTI NAGAR	Hotels & Restaurants	The Grand Savvy Hotel	Gomti Nagar	26.8656	80.9963	Vikash Kumar	9452776245
52	VIVEKANAND PURI	Educational Institutes	VIVEKANANDA POLYCLINIC IMS	Vivekandan puri	26.8184	80.9069	Pawan kumar	9936335335
53	GOMTI NAGAR	Malls/Cinema Buildings	WAVE INFRATECH PVT LTD	Gomti Nagar	26.8699	80.9962	Vivek Kumar	7985092465
54	GOMTI NAGAR	Hotels & Restaurants	Madhurima Sweets	gomtinagar	26.8656	80.9963	Rishabh Mishra	8840445968
55	J.C.BOSE	Hospitals/Nursing Homes	Mahanideshak, Chikitshevam swasth sewayen	J.C.Boss	26.8568	80.9319	khusboo Srivastav	9369335410
56	SAROJINI NAGAR II	Industries	Mehrab Logistics And Aviation Ltd: Novotel Hotel	Sarojni nagar 2	26.8092	81.0116	Mayank Pratap Singh	9452040521

57	CHINHAT II	Offices	Metro Cash Carry India Pvt Ltd	Chinhat 2	26.8541	81.022	Surikshit Singh	8090862527
58	RAJA BIJLI PASI I	RWAs	Neelgiri Enclave	Raja bijli pass 1	26.7457	80.9572		
59	RAFI AHMAD KIDWAI	Hotels & Restaurants	Neelkanth Sweets Pvt Ltd	Rafi ahmed kidwai	26.858	80.9978	Rahul Yadav	8400000947
60	CHINHAT II	Offices	Omaxe Heights	Chinhat 2	26.8652	81.0097	Vikash Kumar	8299027962
61	RAJAJIPURAM	Hospitals/Nursing Homes	Rani Laxmibai Hospital	Rajaji Puram A,B,C,D block	26.8309	80.8919	Sunil Kumar Gautam	8299027962
62	RAFI AHMAD KIDWAI	Hotels & Restaurants	Renaissance Hotel	Rafi ahmed kidwai	26.8527	80.9727	Pawan Kumar Yadav	6388569347



## Annex XVI - C&D waste plant and Collection centres

Construction and Demolition (C&D) waste generated within LMC's jurisdiction amounts to approximately 267 TPD. In response, a tender has been awarded to M/s Garg & Co and Rise Eleven Ready Mix Product Pvt. Ltd., selected based on the lowest quoted tipping fee, for the development and revamping of the existing processing plant under a PPP model. The old 100 TPD C&D waste processing plant has been handed over to the new company and is currently operating at full capacity. Construction of the new 300TPD plant based on wet processing technology, is nearing completion, with machinery ordered and expected to arrive at the installation site by the end of September 2024. Trial operations for the new plant are anticipated by the end of October 2024. The new 300TPD based on the wet processing technology. The processed C&D waste is used to manufacture precast boundary columns, panels, blocks, planters, and other items. Additionally, land has been finalized for nine secondary collection centers. Construction is underway, with four centers in Vrindavan Yojna Sec 9, South City, Krishna Nagar, and Rajajipuram already completed.



**Sector 9 Vrindavan**



**South City**



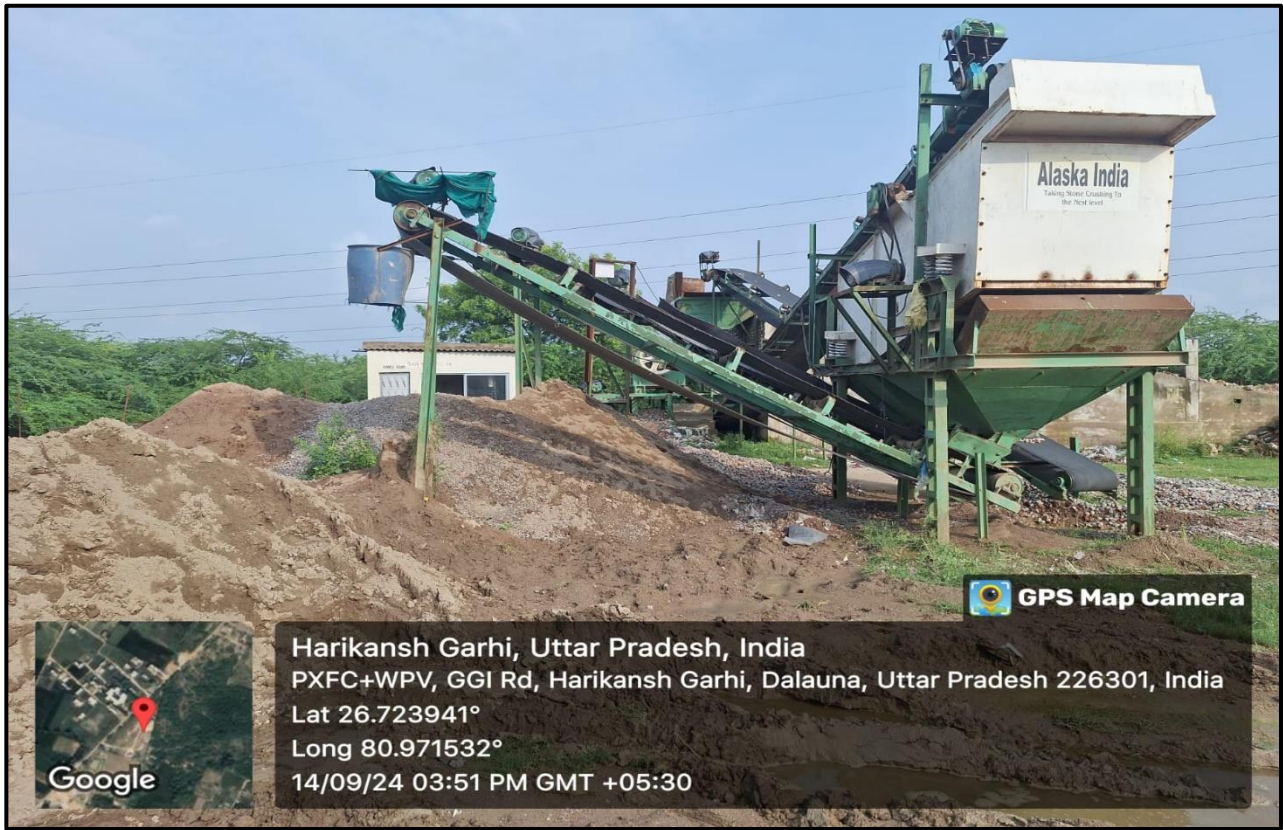
**Rajajipuram, Near Bus stand**



**Near Krishna Nagar Metro Station**

# 2992

## 100TPD C&D waste processing plant

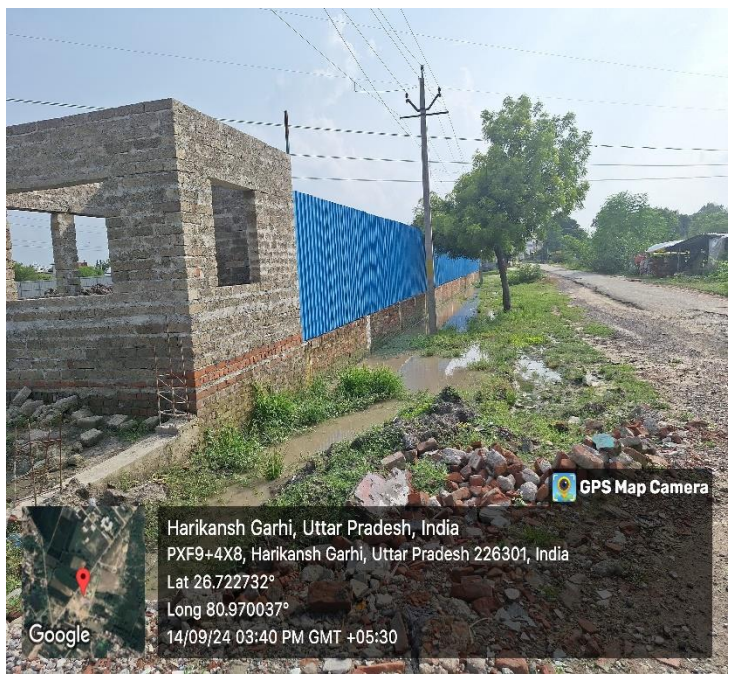
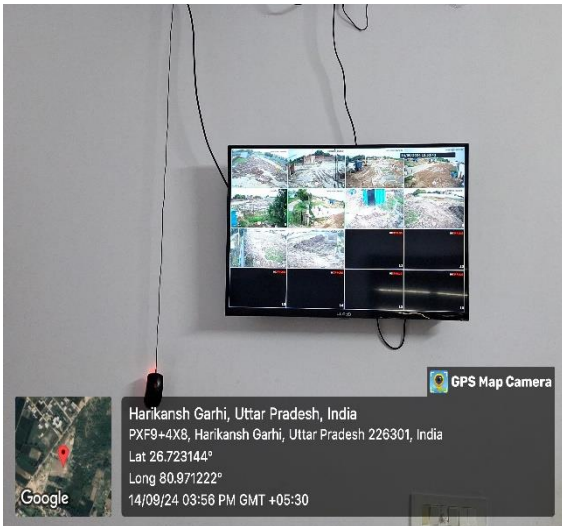


### C&D Waste by Product Manufacturing



# 2993

## 300TPD C&D waste plant Status



## Annex XVII- Plastic waste management rule 2016 5(b). Use non-recyclable plastic waste (5 to 6%-part replacement with bitumen) in road construction

Chief Minister's Green Road Infrastructure Development Urban (CM GRID) Scheme is promoting sustainable road construction by incorporating non-recyclable plastic waste into the asphalt mix. At a state-level committee meeting on May 3, 2024, it was decided that 6-10% of bitumen in road construction projects should be replaced with non-recyclable plastic waste. To facilitate this, shredder machines will be installed in each Material Recovery Facility (MRF) center of the Lucknow Municipal Corporation (LMC). As a first step, a shredder machine has already been installed by LMC in the Gwari MRF center.

In compliance with these guidelines, the Lucknow Development Authority (LDA) has successfully used plastic waste to replace 8% of bitumen in the top surfacing (SDBC) of three roads in Gomti Nagar Vistar:

- **Sector 7:** 327 meters long, 12 meters wide
- **Basant Kunj:** 700 meters long, 7 meters wide
- **Gomti Nagar Phase II:** 535 meters long, 10.70 meters wide

These three road construction projects utilized approximately 6.36 tons of plastic waste.



**Non-recyclable plastic used  
in Road construction**

**Annex XVIII- Initiative to Establish EPR-Based Business Models for Plastic Waste**

Plans are underway to reduce transportation charges under the Extended Producer Responsibility (EPR) model for Refuse-Derived Fuel (RDF). Standard Operating Procedures (SOP) for managing single-use plastic and multilayer plastic have been finalized. Currently, 105 companies are registered under the EPR for single-use plastic disposal. The management of more than 18 lakh MT of legacy waste by M/S Bhumi Green Energy Private Limited marks a significant milestone. The company has installed a 4000TPD capacity legacy waste processing plant. Bhumi Green Energy Private Limited's RDF strategy, which converts non-recyclable plastic waste into energy, is a significant aspect, with **79890.68 Tons** of RDF currently being sent to cement factories. This endeavor represents a substantial leap toward reducing plastic waste, promoting a circular economy, and fostering environmentally responsible plastic waste management.

LMC has partnered with Bisleri International Pvt. Ltd. for their "Bottles for Change" program. This initiative aims to raise awareness about plastic pollution and recycling, encouraging the public to adopt eco-friendly practices. The program also features plastic benches made from recycled waste, promoting responsible disposal and recycling. These benches, designed by artists from the Mouth and Foot Painting Artists Association, showcase the potential of repurposing plastic waste for environmental benefits.

<b>RDF DISPATCH SUMMARY</b>										
<b>Sr. no.</b>	<b>Month</b>	<b>ACC Limited</b>	<b>Ultratec h Cement</b>	<b>Ambuja Cement</b>	<b>Ecopris m Johnson Limited</b>	<b>Prism Johnson Limited</b>	<b>Birla Corpora tion</b>	<b>JK Cement</b>	<b>Dalmia Cement</b>	<b>Total Qty</b>
		<b>Qty (Tons)</b>	<b>Qty (Tons)</b>	<b>Qty (Tons)</b>	<b>Qty (Tons)</b>	<b>Qty (Tons)</b>	<b>Qty (Tons)</b>	<b>Qty (Tons)</b>	<b>Qty (Tons)</b>	<b>Qty (Tons)</b>
<b>1</b>	March	1533.88	1239.84	0	0	0	0	0	0	2773.72
<b>2</b>	April	1885.65	3802.73	277.9	2975.85	0	0	2463.79	75.91	11481.83
<b>3</b>	May	286.75	7450.02	0	7630	1130.07	71.32	4345.215	0	20913.37
<b>4</b>	June	887.01	6002.97	0	4294.47	0	0	4392.21	0	15576.66
<b>5</b>	July	2876.18	2497.91	<b>0</b>	2108.18	391.05	585.87	2813.23	0	11272.42
<b>6</b>	August	3577.51	1432.58	0	461.07	4334.13	1571.59	0	0	11376.88
<b>7</b>	Septem ber	827.08	617.03	0	0	1141.06	662.73	0	0	3247.9
<b>Total</b>		<b>11874.06</b>	<b>23043.08</b>	<b>277.9</b>	<b>17469.57</b>	<b>6996.31</b>	<b>2891.51</b>	<b>14014.44</b>	<b>75.91</b>	<b>79890.68</b>

**LUCKNOW MUNICIPAL CORPORATION, LUCKNOW**

Reference No.: D/ 26 VEE/24-25

Dated: ...14/06/24

To  
Mr. Byju Kurian  
Manager, CSR  
Bisleri International Pvt. Ltd.  
60, Shivaji Marg, New Delhi-15

**Subject:** Permission to Implement Bisleri International Pvt. Ltd.'s CSR Program "Bottles for Change" Initiative in Lucknow Municipal Corporation

**Reference:** Your letter dated 07th June 2024 on the subject mentioned above.

Dear Mr. Kurian,

In response to your letter dated 07th June 2024, permission is hereby granted to carry out the activities of Bisleri's "Bottles for Change" program in Lucknow city, Uttar Pradesh.

As per your letter, the aim of this program is to raise awareness about not treating plastic as waste and highlight the importance of recycling plastic. It also seeks to educate the public on plastic pollution and the importance of recycling, encouraging them to adopt practices that contribute to a cleaner and greener environment for all. There would be no financial implication of this program on Lucknow Municipal Corporation.

We look forward this program will be beneficial for Lucknow's residents and contribute to a more sustainable future.

Your Sincerely

Sanjeev Pradhan  
Environmental Engineer  
Lucknow Municipal Corporation

**Copy To-**

1. Municipal Commissioner, LMC.
2. Additional Municipal Commissioner (A.R.), LMC.

Dated: 1st August, 2024

To,  
 Shri. Inderjeet Singh, IAS  
 Commissioner  
 Municipal Corporate of Lucknow,  
 Lucknow, Uttar Pradesh

**Subject: Required permission letter to setup for installing 20 Recycled Plastic Benches in Lucknow City.**

Respected Sir,

Greetings from Bisleri International Pvt. Ltd.

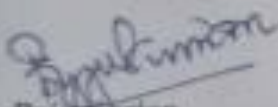
Bisleri 'BOTTLES FOR CHANGE', initiative under Corporate Social Responsibility aims to sensitize citizens about not treating plastic as WASTE and highlighting the importance of recycling plastic in our lives. The idea is to 'Be The Change, You Want to See', to lead by example for disposing and recycling plastic responsibly and make contribution to the cleaner environment whereby channelizing all kinds of used clean plastic for recycling.

In line with our commitment to environmental sustainability and responsible waste management, Bisleri International proposes the installation of 20 Recycled Plastic Benches inside the premises of **UP Dharshan and Ambedkar Park**. These benches are meticulously crafted from low value plastic waste: such as multilayer plastic covers, Single use plastics and polythene carry bags etc., embodying our dedication to repurposing plastic waste for the betterment of the environment. It not only provide durable and eco-friendly seating solutions for visitors at important sites but also the awareness on used plastic is not a waste, it can be recycled.

These creatives pasted in the benches are made the artist from The Mouth and Foot Painting Artists Association (MFAA) which is an international registered society of disabled artists, who due to a disability to their hands, create art with their mouth or foot.

I kindly request you to kindly provide a permission letter to setup benches in the designated areas.

Warm regards,

  
 Byju Korian  
 Head North CSR  
 Bisleri International Pvt Ltd.



a) 9453 44 2233

Shubam Mishra

b) Byju Korian

Golden  
 28702555

## Annex XIX-Plastic Waste Management Rules of 2016 (Rule14(2)) Penalties

In compliance with the Plastic Waste Management Rules of 2016 (Rule 14(2)), Lucknow Municipal Corporation has intensified its inspections targeting retailers and street vendors using non-compliant plastic carry bags, multilayered packaging, or similar items lacking proper manufacturing labels or markings. As a result, penalties totaling **Rs. 1812050.00** have been imposed for the seizure of such non-compliant plastic materials from February to April 2024.

S.No.	Zone	Quantity of Plastic Seize (in Kg)	Recovery/Penalty (in Rs.)
1	Zone-1	89.1	376700
2	Zone-2	204.15	122900
3	Zone-3	100.8	307200
4	Zone-4	5418.5	157450
5	Zone-5	2077.5	144000
6	Zone-6	233.45	258350
7	Zone-7	60.8	173850
8	Zone-8	4598.2	271600
<b>Total</b>		<b>12782.5</b>	<b>1812050</b>



जोनल सेनेटरी अधिकारी जोन-3, नगर निगम लखनऊ।

प्रेस नोट दिनांक-11.07.2024

नगर आयुक्त महोदय द्वारा दिए गये निर्देशों के अनुपालन में आज दिनांक-10.07.2024 को जोन-03 क्षेत्रान्तर्गत गोल मार्केट चौराहा से पुरनिया होते सीतापुर रोड तक जन जागरूकता अभियान चलाते हुए गन्धनी करने वाले एवं प्रतिबन्धित पॉलीथिन का प्रयोग करने वाले दुकानदारों को गन्धनी न फैलाने एवं प्रतिबन्धित पॉलीथिन का प्रयोग न किये जाने हेतु जागरूक किया गया। माथ ही अभियान के दौरान गन्धनी करने वाले व्यक्तियों पर 03 चालान रुपया-3500/- का जुर्माना एवं प्रतिबन्धित पॉलीथिन का प्रयोग कर रहे दुकानदारों पर 05 चालान रुपया-5,000/- इस प्रकार कुल-08 चालान व रुपया-8500/- का जुर्माना वसूल किया गया एवं 1.7 किलोग्राम प्रतिबन्धित पॉलीथिन जब्त की गई, अभियान के दौरान की जी0पी0एम0 फोटोग्राफ निम्नवत् है:-



सफाई एवं खाद्य निरीक्षक

जोनल सेनेटरी अधिकारी

**Details**

Lucknow Municipal Corporation  
Lucknow Municipal Corporation Head Office, Trilokinath Marg, Lalbagh  
Lucknow (U.P.)-01  
HEALTH DEPARTMENT

Book No: \_\_\_\_\_ Challan No: 2024071591469

**REPORT UNDER SECTION - SWM Rules**

Whereas, during inspection of the under mentioned area by the undersigned on **15 Jul 2024** at **5:03 PM** that **Shri Sanjay (8354935691) Son of Shri None** resident of **Samar vihar** has been found **Polythene** under rule **Polythene** at the above mentioned date and time; and

Whereas, the above action of the said **Shri Sanjay (8354935691)** is an offence under **Section SWM Rules of the Lucknow Municipal Corporation;**

Therefore after informing above-noted offence committed by the above-name offender, he is to compound the above noted offence and pay spot fine of Rs 1000.

(Challenging Inspector)  
Full Name **Preeti Yadav**  
Designation **SEI**  
Municipal Prosecutor

Date: \_\_\_\_\_

Site Photo

Powered By EverythingCivic.com



**Annex XX- E-Waste Management**

Lucknow Municipal Corporation (LMC) and KaroSambhav Private Limited have collaborated on e-waste collection and disposal. KaroSambhav, known for its responsible approach to electronic waste management, actively contributes to establishing sustainable practices and fostering a circular economy in India. Their efforts involve efficient collection systems and promoting eco-friendly disposal methods for e-waste. This aligns with global sustainability goals, reducing the environmental impact of electronic waste.

In May to August 2024, KaroSambhav collected over 16.24 tons of e-waste from Lucknow, showcasing their commitment to responsible waste management.



## Annex XXI- Lucknow's Green Transformation: Expanding Urban Forests and Promoting Greenery

Green Cover Enhancement in Lucknow City outlines the significant efforts being made to increase the green cover in Lucknow. The city is actively working to create new green spaces and expand existing ones, contributing to a healthier and more sustainable environment.

### Key Initiatives:

- **Nagar Van Development:** Approximately **14 hectares** of land in **Gram Rasulpur** are being transformed into a **Nagar Van** (urban forest) using the innovative **Miyawaki techniques**. This approach involves planting a dense mix of native tree species to create a thriving forest ecosystem in a short period.
- **Large-Scale Plantations:** Over **2 lakh** trees have been planted across various **parks and vacant lands** within the **Municipal Corporation** area. This extensive tree-planting campaign has significantly enhanced the city's green cover.
- **Global Campaign Participation:** Lucknow actively participated in the **#एक\_पेड़\_माँ\_के\_नाम** **#Plant4Mother** global campaign on **World Environment Day (June 5, 2024)**. As part of this initiative, **135694 trees** were planted in **Akbarpur** by the **LMC** (presumably the Lucknow Municipal Corporation).



# एक पेड़ माँ के नाम #Plant4Mother Plantation, Kukrail Riverfront



**Miyawaki afforestation at Rasoolpur kayastha**



**Annex XXII- E-Charging Stations**

Lucknow Schchhata Aabhiyan Pvt. Ltd. has made a noteworthy contribution to environmental sustainability by installing four new electric vehicle (EV) charging stations tailored for door-to-door waste collection vehicles. This initiative aligns with the growing trend of electrifying transportation to reduce carbon emissions and promote cleaner cities.

**S. D. Palace Charging Station**



**Mallpur Charging Station**



3004

**Vikas Nagar Charging Station**



**Dayal Charging Station**

