

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 20.09.2024 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- As of November 30, 2024, M/S EverEnviro Resource Management Pvt. Ltd. initiated construction of a 300 TPD Bio-CNG plant at Nadarganj, Amausi, dedicated to processing segregated wet waste. Civil work progress stands at 80%, with anticipated commercial operations commencing on June 30, 2025.

In a recent development, a partnership has been established with M/S Jay Bharat Maruti Enviro Bioenergy Lucknow Pvt. Ltd. to construct another Bio-CNG plant. This 150 TPD facility, capable of producing 10 TPD of gas, will utilize cow dung, pottery waste, napier grass, and wet mandi waste as feedstock. The 7.5-acre site at shooting range Sarojini Nagar, near Kanha Upvan, has been allocated for this project. Construction is underway, with project completion slated for 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- The tender process has been finalized for the processing of 1000 TPD of Municipal Solid Waste (MSW), with the potential for expansion to 2000 TPD for both wet and dry waste. M/S Bhumi Green Energy Pvt. Ltd. has been selected as the service provider for a three-year period. A 1000 TPD waste processing unit has been installed and has successfully disposal of average 1000TPD of fresh waste. A second unit for fresh waste processing will be installed after a portion of the site is cleared of legacy waste. This unit is expected to be operational by the end of January 2025. Additionally, more than 300 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 through Material Recovery Facilities (MRFs). (Annex II)

To address long-term solid waste management challenges, the Lucknow Municipal Corporation (LMC) previously issued an Expression of Interest. National Thermal Power Corporation (NTPC) has expressed interest in establishing a 2000 TPD or larger waste-to-energy plant utilizing torrefaction technology to process municipal solid waste. As per the Memorandum of Understanding (MoU) between NTPC and the State Urban Local Body, meetings were held on 12th and 29th October 2024, under the supervision of the Government of Uttar Pradesh. To further this initiative, a meeting was held on 29th October 2024, with NTPC representatives and the Municipal Corporation team to discuss the support LMC would provide to NTPC for the waste-to-energy plant's setup and operation. A proposal outlining this partnership is currently under review by the Regional Centre for Urban & Environmental Studies (RCUES), Lucknow.

M/S Bhumi Green Energy Private Limited is currently managing the processing of approximately 18.5 lakh metric tonnes of legacy waste, which has accumulated over a significant period. The company has established a 4000 TPD processing plant in Shivri. Since March 2024, approximately 7 lakh metric tonnes of legacy waste has been processed. The by-products generated from the legacy waste processing are disposed of in accordance with 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. Another MRF situated in the Vrindavan Sec-8 manage by the private firm M/S Riddhi Enterprises Pvt. Ltd. Furthermore, five 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 at Ganga Kheda, Dayal, and Bhaisora is underway. One facility is expected to be completed by January 2025, while the remaining two will be completed by March 31, 2025. Meanwhile, construction and machinery installation at the Ghaila FCTS unit are complete, and the trial run has been successfully conducted. The facility is now fully operational. (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- Compost pits have been constructed in approximately 70% of the parks within the LMC jurisdiction. These pits facilitate the effective management of horticulture waste generated within the parks. Additionally, mulching techniques are being implemented to further enhance waste management practices in these areas. (Annex VI)

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

Current Status- Currently under the program of the “Mera Aangan Meri Hariyal” aware the people with in the LMC limit for the home and community composting and its benefits.

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: M/S Lucknow Swachhata Abhiyan Pvt. Ltd. (LSA) is responsible for door-to-door waste

collection and transportation in Zones 1, 3, 4, 6, and 7. The service utilizes a fleet of over 750 electric three- and four-wheeler vehicles, achieving approximately 90% household coverage in these zones.

For Zones 2, 5, and 8, a tender process has been completed, awarding the contract to M/S Lion Enviro Pvt. Ltd. The Letter of Intent (LOI) has been issued, and state government approvals have been secured. The company is going to initiate door-to-door collection and transportation services in these three zones.

Currently, door-to-door collection services cover over 80% of total households, reaching 607,599 households, of which 168,788 actively practice waste segregation. To enhance segregation awareness, LSA and Swachh Bharat Mission champions conduct daily IEC activities. (Annex VII)

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. In Vrindavan, the MRF facility includes a decentralized composting facility to process wet waste collected from nearby areas, producing compost.

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. 4,78,27,953.00 from 4,14,929 units over the past three months. Demand notices have already been issued to all commercial and residential areas. (Annex VIII)

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 20 additional rag pickers 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 IX)

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, Pratishtha 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.

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 X)

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.

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,

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resulting in the new 1000 workers are trained. 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 XI)

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 45,000 individuals in the past three 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 XII)

j) **Rule 15(l) 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), SBM team 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 XIII)

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: Approximately 267 TPD of Construction and Demolition (C&D) waste is generated within the LMC jurisdiction. To address this, a tender was awarded to M/s Garg & Co and Rise Eleven Ready Mix Product Pvt. Ltd. based on the lowest quoted tipping fee. They are responsible for developing and revamping the existing C&D waste processing plant under a Public-Private Partnership (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. The processed materials are being utilized in the manufacturing of precast boundary columns, panels, paver, blocks, planters, and other items.

A new 300 TPD C&D waste processing plant, based on wet processing technology, is under construction. The civil construction work has been completed, and machinery have been delivered to the site. Machinery installation is currently underway and is expected to be completed by the end of December 2024.

Additionally, the construction of eight C&D secondary collection centres has been completed. (Annex XIV)

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. Using 9.6 tons of non-recyclable plastic waste to replace 6% of bitumen, LMC has constructed approximately 2 km of road-

- **Bashiratganj- Ganeshganj:** 430 meters long, 10 meters wide
- **Rajajipuram:** 500 meters long, 10 meters wide
- **Motilal Nehru Nagar/Chandra Bhanu Gupta Nagar:** 400 meters long, 7 meters wide
- **Mahanagar:** 400 meters long, 7 meters wide
- **Kanhaiya Madhopur -2:** 350 meters long, 10 meters wide

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.

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

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 7 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. 96856.910 metric tons currently sent to cement factories.

The Lucknow Municipal Corporation (LMC) has partnered with M/S Shree Shyam Packaging to ensure proper disposal of non-recyclable plastic seized from wholesalers, in compliance with the Plastic Waste Management Rules, 2016. The company collects and shreds the seized plastic under LMC supervision. As part of the agreement, M/S Shree Shyam Packaging provides products made from the collected plastic, equivalent to 50% of its weight, back to LMC. **(Annex XV)**

LMC has also collaborated with Bisleri International Pvt. Ltd. for the "Bottles for Change" program, which raises awareness about plastic pollution and promotes recycling. This initiative includes providing recycled plastic benches, designed by artists from the Mouth and Foot Painting Artists Association, showcasing the potential of repurposed plastic waste. Bisleri has delivered 10 such benches to LMC. **(Annex XVI)**

Additionally, mixed non-recyclable plastic waste is shredded into RDF (Refuse-Derived Fuel) and disposed of scientifically in cement factories.

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 without proper manufacturing labels or markings. From April to November 2024, penalties totalling Rs.12,20,000 have been imposed, and 1,2002 kg of single-use

plastic has been seized. (Annex XVII)

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 tender process has been completed, and the L1 bidder has been selected. Further steps are currently in progress..

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 andchannelized 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 November 2024, a significant step towards effective E-waste management in the region. (Annex XVIII)

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

Activity	Status as on 01.09.2023	Target	Time line to achieved on 100% Target	Target achieved on 30.11.2024	Current status 30.11.2024
Door-to-Door collection of segregated solid waste (Rule 15 (b) of SWM Rule 2016)	381000 HH (50%)	762604 HH/User (100%)	31.12.2024	607599 HH/User (80%)	M/S Lucknow Swachhata Abhiyan Pvt. Ltd. (LSA) is responsible for door-to-door waste collection and transportation in Zones 1, 3, 4, 6,

					and 7. The service utilizes a fleet of over 750 electric three- and four-wheeler vehicles, achieving approximately 90% household coverage in these zones. For Zones 2, 5, and 8, a tender process has been completed, awarding the contract to M/S Lion Enviro Pvt. Ltd. The Letter of Intent (LOI) has been issued, and state government approvals have been secured. The company is going to initiate door-to-door collection and transportation services in these three zones.
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 (Rule 15 (m) of SWM Rule 2016)	Nil	8	31.12.2024	4 (50%)	LMC is adopting a decentralized approach to waste management by setting up composting plants in markets to process organic waste locally. This reduces the need for transportation and promotes 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, in Papermill colony to create a zero-waste colony. A public campaign was launched in March 2024 to educate RWAs on waste segregation and composting, aiming to make Lucknow a zero-waste city. In Vrindavan, the MRF facility includes a decentralized composting facility to process wet waste collected from nearby areas, producing compost. Additionally, two Bio-Gas plants with a total capacity of 550 TPD are being set up. While there may not be an immediate need for additional decentralized composting plants, the LMC's focus on decentralized waste management and community engagement is a positive step towards a sustainable future.
Enforcing waste generators to pay user fee for solid waste management. (Rule 4 (3) & 15 (f) of SWM Rule 2016)	180000 Units (Rs 1.10 Crore)	762604 Units (Rs 4.60 Crore)	31.12.2024	4,14,929 units (4.782 Cr.)	Lucknow Municipal Corporation (LMC) has collected the Rs. 4,78,27,953.00 amounts in last three months.

Integration of Rag Pickers/ Waste collectors/Kabadis/ Volunteers/CBOs/NGs (Rule15(c) of SWM Rule 2016)	1050 no. (10%)	10463 no. (100%)	31.12.2024	Total=3500 No. (33%)	Total=3500 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; (Rule 15 (d) of SWM Rule 2016)	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, Pratishtha 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 30.11.2024	Current status 30.11.2024
Setting up of Material Recovery Facilities Cum PCTS (Rule 15 (h) and Rule 22 at Sr.no.7-8 of SWM Rule 2016)	8 Nos	25 Nos	31.03.2025	09 Nos.	LMC operates eight manual Material Recovery Facilities (MRFs), with one more under construction. Additionally, a fully mechanized MRF in Gwari is run by M/S Chennai MSW Pvt. Ltd. through a Public-Private Partnership (PPP). Another MRF, located in Vrindavan, is operated by the private vendor M/S Riddhi Enterprises Pvt. Ltd. under a PPP model. This facility also includes a decentralized composting facility.

Setting up of Material Recovery Facilities Cum TS/PCTS (Rule 22 at Sr.no.7-8 of SWM Rule 2016)	35 Nos (PCTS)	60 Nos (PCTS)	31.03.2025	41 Nos.	Portable Compactor Transfer Stations (PCTS) have been installed at four locations: Paper Mill, Mitaiwala, Kailash Kunj, and Vineeth Khand. 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) (Rule 22 at Sr.no. 7-8 of SWM Rule 2016)	0 Nos	4 Nos	31.12.2024	01 No.	The construction of three MRF-cum-FCTS facilities at Ganga Kheda, Dayal, and Bhaisora is underway. One facility is expected to be completed by January 2025, while the remaining two will be completed by March 31, 2025. Meanwhile, construction and machinery installation at the Ghaila FCTS unit are complete, and the trial run has been successfully conducted. The facility is now fully operational.

1.9 Setting up Solid Waste Processing Facilities (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 30.11.2024	Current status 30.11.2024
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	1550 MT/Day (77%)	<p>The tender process has been finalized for the processing of 1000 TPD of Municipal Solid Waste (MSW), with the potential for expansion to 2000 TPD for both wet and dry waste. M/S Bhumi Green Energy Pvt. Ltd. has been selected as the service provider for a three-year period. A 1000 TPD waste processing unit has been installed and has successfully disposal of average 1000TPD of fresh waste. A second unit for fresh waste processing will be installed after a portion of the site is cleared of legacy waste. This unit is expected to be operational by the end of January 2025. Additionally, more than 300 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).</p> <p>To address long-term waste management challenges, the Lucknow Municipal Corporation (LMC) is working with NTPC to establish a 2000 TPD waste-to-energy plant using torrefaction technology. Meetings between NTPC and LMC are ongoing to finalize LMC's support for the plant's setup and operations. A detailed proposal is under review by the Regional Centre for Urban</p>

					& Environmental Studies (RCUES), Lucknow
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	31.12.20 24	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	31.03.20 25	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 (Rule 7 of SWM Rule 2016)		LMC will ensure to apply and get approval for sale of city compost			Currently under the program of the “Mera Aangan Meri Hariyali” aware the people with in the LMC limit for the home and community composting and its benefits.
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)		LMC will ensure to use the compost generated from pit.			
Integration and Incentives to informal waste recycling sector for recycling initiatives. (Rule 15 (u) of SWM Rule 2016)		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 123 kabadiwalas/ragpicker integrated into these centers. Additionally, 20 new kabadiwalas/ragpicker have been selected for training in these centers.

1.10 Setting up sanitary landfill facilities (SLFs) (Rule 22 at Sr.no.9-10)					
Activity	Status as on 01.09.2023	Target	Time line to achieved on 100% Target	Target achieved on 30.11.2024	Current status 30.11.2024
Setting up sanitary landfill facilities (SLFs) (Rule 22 at Sr.no.9-10)	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.
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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 30.11.2024	Current status 30.11.2024
Bio-remediation of old and abandoned dump sites (Rule 22 and Key Indicator byNGT in OA 606/2018)	47,959 MT	18.5 Lakh MT	31.08.2025	7 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. 7 lakh metric tons (MT) of 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; (Rule 15 (za) of SWM Rule 2016).					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 30.11.2024	Current status as on 30.11.2024
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)	Morethan 2000 Works trained so far	8000 workers	31.12.2024	6000 workers (75%)	Over 6000 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, biogas generation or community level composting; (Rule 15 (zg(v)) of SWM Rule 2016)	More than 200000HH by engaging professional agency	762604 HH (For 100% Coverage)	31.12.2024	404000 HH (52 % Coverage)	More than 400000 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 (Key Indicator by NGT in OA 606/2018)	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.

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. The processed materials are being utilized in the manufacturing of precast boundary columns, panels, blocks, planters, and other items. A new 300 TPD C&D waste processing plant, based on wet processing technology, is under construction. The civil construction work has been completed, and machinery have been delivered to the site. Machinery installation is currently underway and is expected to be completed by the end of December 2024.

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	Land has been finalized for nine secondary collection centers, with eight already completed. All facilities comply with Central Pollution Control Board (CPCB) guidelines to ensure responsible waste management. Each center has a capacity of 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	60 MT/day (22%)	More than 60 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.

C. COMPLIANCE OF PLASTIC WASTE MANAGEMENT (PWM) RULES, 2016		
Activity	Target	Current status 30.11.2024
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. LMC and LDA have successfully implemented this initiative, using plastic waste in various road construction projects in Lucknow.

Plastic waste management rule 2016 5(b)		
Activity	Target	Current status 30.11.2024
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.	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 7 Lakh metric tons of legacy waste, converting non-recyclable plastic into RDF, with approx. 96856.910 metric tons currently sent to cement factories. LMC has partnered with Bisleri International Pvt. Ltd. for their "Bottles

		<p>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. Bisleri has delivered 10 of these benches to the LMC.</p> <p>LMC has recently partnered with M/S Shree Shayam Packaging to ensure the proper disposal of non-recyclable plastic waste in compliance with the Plastic Waste Management Rules 2016. This company collects plastic waste seized by LMC officials and shreds it under the supervision of LMC representatives. Additionally, M/S Shree Shayam Packaging provides products manufactured from collected plastic to the LMC. As part of this partnership, the company provides products equivalent to 50% of the weight of the collected plastic waste to the LMC</p>
<p>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. Plastic waste management rule 2016 14(2)</p>	<p>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.</p>	<p>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. 1220000.00 have been imposed from April to November 2024 to the seizure of such non-compliant plastic materials.</p>

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 30.11.2024
<p>Provide or allocate suitable land for development of common bio-medical waste treatment facilities (Para 7 of Schedule 3 of BWM Rule 2016)</p>	<p>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.</p>	<p>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</p>

		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 30.11.2024
Urban Local Bodies shall ensure that e- waste pertaining to orphan products is collected and channelised to authorised dismantler or recycler (Rule 24 E- Waste Management Rule 2016)	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 producer for implementing the Extended Producers Responsibility (Rule 5 of E-Waste Management Rule 2016)	Lucknow Municipal Corporation will ensure its registration will seek assistance of producers under EPR framework.	Currently EPR registered companies working with the LMC for the management of the electronic and plastic waste.

F. OTHER INITIATIVES

Sr.No.	Points	Description	Current status 30.11.2024
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. For Zones 2, 5, and 8, a tender process has been completed, awarding the contract to M/S Lion Enviro Pvt. Ltd. The Letter of Intent (LOI) has been issued, and state government approvals have been secured. The agreement process is in progress, with operations expected to commence by mid-December 2024.
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. LSA has ordered 150 electric mechanical road sweepers, of which 3 have been received. An additional 50 sweepers are expected by the end of December 2024. (Annex XIX)
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. #एक_पेड़_माँ_के_नाम #Plant4Mother as a global campaign on the occasion of World Environment Day on 5 th June, 2024. 135694 no .trees were planted in Akbarpur by LMC.
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.
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.

- The deponent is humbly request to 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.
- 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 sprit and shall continue to do so in the future.

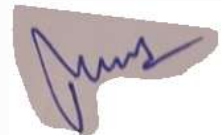

Deponent

Verification:-

Verified at Lucknow this the 2 day of December, 2024 that the contents of above affidavitare 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

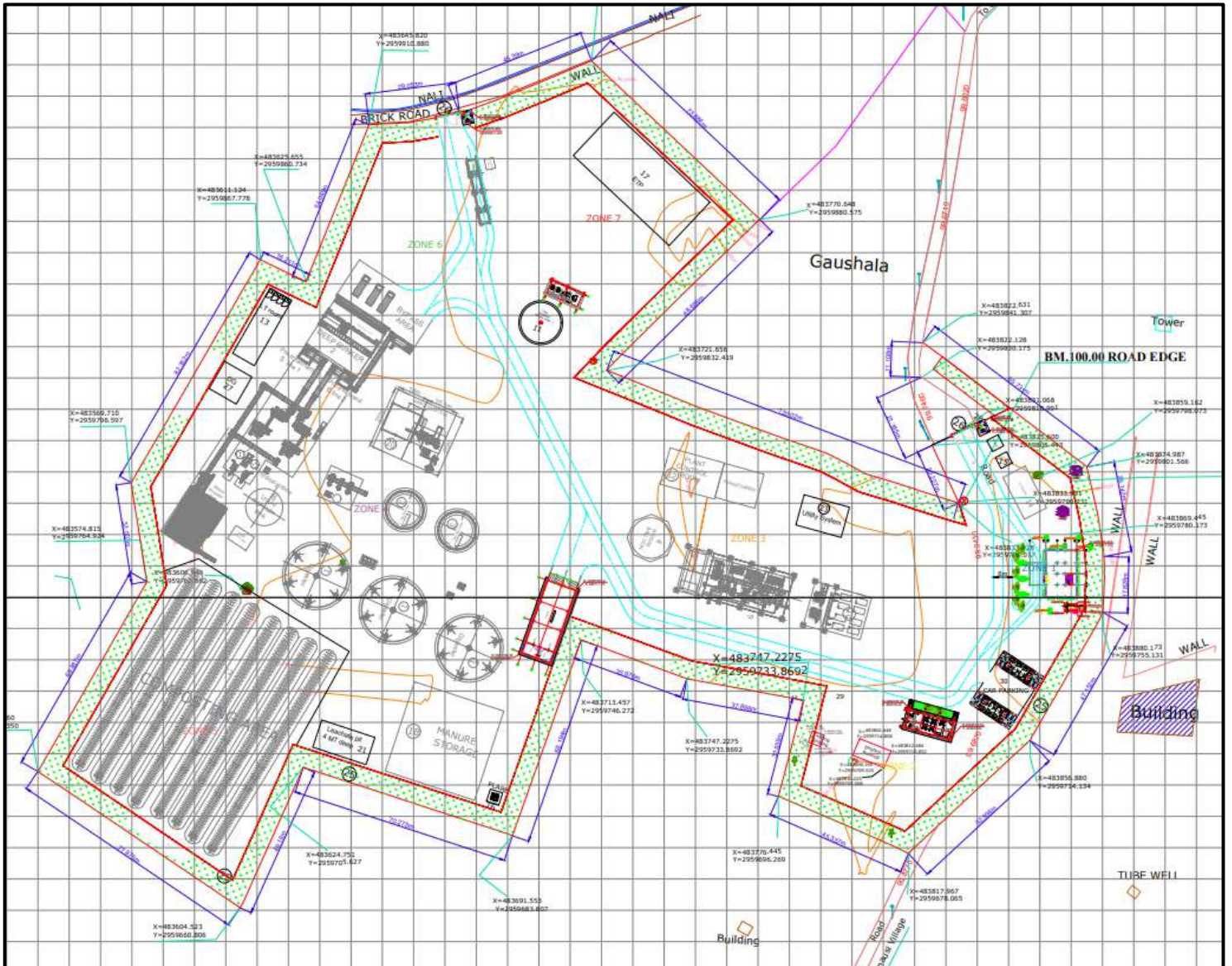
Annex I- 300 TPD Bio-CNG Plant Status Report

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 -12.5 TPD 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	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	Excavation work started
4	Plant Main Gate	Completed
5	Admin Building Work	Completed
6	Workshop Building	Completed
7	Canteen Building	90% Completed
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.

3027 Bio CNG Plant Layout



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

The tender process has been finalized for the processing of 1000 TPD of Municipal Solid Waste (MSW), with the potential for expansion to 2000 TPD for both wet and dry waste. M/S Bhumi Green Energy Pvt. Ltd. has been selected as the service provider for a three-year period. A 1000 TPD waste processing unit has been installed and has successfully disposal of average 1000TPD of fresh waste. A second unit for fresh waste processing will be installed after a portion of the site is cleared of legacy waste. This unit is expected to be operational by the end of January 2025. Additionally, more than 300 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 through Material Recovery Facilities (MRFs).

To address long-term solid waste management challenges, the Lucknow Municipal Corporation (LMC) previously issued an Expression of Interest. National Thermal Power Corporation (NTPC) has expressed interest in establishing a 2000 TPD or larger waste-to-energy plant utilizing torrefaction technology to process municipal solid waste. As per the Memorandum of Understanding (MoU) between NTPC and the State Urban Local Body, meetings were held on 12th and 29th October 2024, under the supervision of the Government of Uttar Pradesh. To further this initiative, a meeting was held on 29th October 2024, with NTPC representatives and the Municipal Corporation team to discuss the support LMC would provide to NTPC for the waste-to-energy plant's setup and operation. A proposal outlining this partnership is currently under review by the Regional Centre for Urban & Environmental Studies (RCUES), Lucknow.



1000 TPD Fresh Waste Plant

3031



नगर निगम लखनऊ

प्रेषक, पर्यावरण अभियन्ता, नगर निगम, लखनऊ।	सेवा में, M/s BHUMI GREEN ENERGY, PUNE.
पत्र संख्या :- डी/663 /पर्या0अभि0/24	दिनांक :- 29 अक्टूबर, 2024

Letter of Intent (LOI)

विषय : Letter of Intent for selection of contractor for Supply, Installation, Commissioning of 1000 TPD Municipal Solid Waste extendable up to 2000TPD (Wet & Dry) processing plant at Shivari, Lucknow and its operation & maintenance for a period of minimum 03 years.

उपरोक्त विषयक कार्य हेतु दिनांक 10.09.2024 को आमंत्रित निविदा में दी गयी न्यूनतम दर रू0 988.00 प्रति मी0टन को आप द्वारा निविदा समिति के समक्ष रू0 943.00 प्रति मी0टन पर अपनी सहर्ष सहमति प्रदान की गयी है। जिसे नगर आयुक्त महोदय की अध्यक्षता वाली कमेटी द्वारा स्वीकार कर लिया गया है।

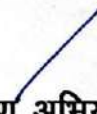
अतः उपरोक्त कार्य का अनुबन्ध रू0 100/- के जनरल स्टैम्प पेपर पर कराये जाने के साथ आर0एफ0पी0 में दिये गये प्राविधान के अनुसार एक वर्ष की अनुमानित धनराशि का 5% परफार्मेंन्स सिक्योरिटी रू0 2.60 करोड़ बैंक गारण्टी/एफ0डी0आर0 के रूप में जमा करते हुए 15 दिवस में अनुबन्ध कराया जाना सुनिश्चित करें।

भवदीय


पर्यावरण अभियन्ता
नगर निगम लखनऊ

प्रतिलिपि :

1. नगर आयुक्त महोदय को सादर सूचनार्थ।
2. अपर नगर आयुक्त महोदय को सादर सूचनार्थ।


पर्यावरण अभियन्ता
नगर निगम लखनऊ



नगर निगम लखनऊ

प्रेषक, नगर आयुक्त, नगर निगम, लखनऊ।	सेवा में, अपर निदेशक, क्षेत्रीय नगर एवं पर्यावरण अध्ययन केन्द्र, लखनऊ।
पत्र संख्या:- डी/682/अन0आ0/प0आ0/24	दिनांक :- 08 नवम्बर, 2024

विषय : नगर निगम लखनऊ सीमान्तर्गत उत्सर्जित फ्रेश वेस्ट के निस्तारण हेतु वेस्ट टू एनर्जी (Torrification Technology) प्लान्ट लगाये जाने हेतु के नगर निगम द्वारा दी जाने वाली सुविधाओं/व्यवस्थाओं के परीक्षण एवं मूल्यांकन के साथ वेटिंग कार्य के संबंध 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 द्वारा 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) प्लान्ट लगाया जाना प्रस्तावित है। तदक्रम में 2000 मी0टन प्लस कूड़े से वेस्ट टू एनर्जी प्लान्ट लगाये जाने के सम्बन्ध में दिनांक 29.10.2024 को नगर आयुक्त महोदय की अध्यक्षता में एन0टी0पी0सी0 विद्युत व्यापार निगम लिमिटेड (NVVN) के प्रतिनिधियों के साथ एक बैठक आहूत की गयी। जिसमें उक्त 30 वर्षीय परियोजना के क्रियान्वयन हेतु संस्था द्वारा लैण्ड लीज एवं म्यूनिसिपल सॉलिड वेस्ट सप्लाय कार्य के अनुबन्ध का प्रारूप विभाग में प्राप्त कराते हुए प्लान्ट की स्थापना हेतु निम्नांकित व्यवस्थाओं की मांग प्रस्तुत की गयी है :-

1. Land: 20 - 25 Acres
2. Drinking Water: 20 KLD
3. Treated STP Water: 0.5 MLD to 2MLD
4. Electricity Connection: ~3 - 4.0 MVA capacity at 11/33 KV voltage.
5. MSW: Provided free of cost as per requirement (Moisture content $\geq 25\%$, Size ≤ 50 mm; C&D Waste/ Inert $\leq 5\%$)
6. Infrastructure: Approach road, lighting, right of way, drainage, etc.
7. Inter and Process Rejects: Handled to SLF
8. Land and utilities : Provided free of cost.

उपरोक्तानुसार एन0टी0पी0सी0 विद्युत व्यापार निगम लिमिटेड (NVVN) द्वारा प्रस्तुत मांग के सम्बन्ध में वेटिंग का कार्य आपकी संस्था के माध्यम से कराया जाना अपेक्षित है। साथ ही उक्त कार्यों को कराये जाने में नगर निगम पर आने वाले व्ययभार का मूल्यांकन/गणना भी कराया जाना अपेक्षित है।

अतः कृपया एन0टी0पी0सी0 विद्युत व्यापार निगम लिमिटेड (NVVN) द्वारा प्रस्तुत उपरोक्तानुसार प्रस्तुत मांग एवं संलग्न लैण्ड लीज व म्यूनिसिपल सॉलिड वेस्ट सप्लाय कार्य के अनुबन्ध का परीक्षण एवं मूल्यांकन करते हुए वेटिंग कार्य की रिपोर्ट पर्यावरण अभियन्ता कार्यालय, नगर निगम लखनऊ को उपलब्ध कराने का कष्ट करें।

संलग्न : उपरोक्तानुसार।

भवदीय

Arvind

(डा0 अरविन्द कुमार राव)
अपर नगर आयुक्त

प्रतिलिपि :-

1. नगर आयुक्त महोदय को सादर सूचनार्थ।
2. पर्यावरण अभियन्ता को आवश्यक कार्यवाही हेतु।

(डा0 अरविन्द कुमार राव)
अपर नगर आयुक्त

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 7 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 developing in reclaim area of the dump site, and the *Canna lily* 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 96856.91 MT of RDF currently being sent to cement factories.

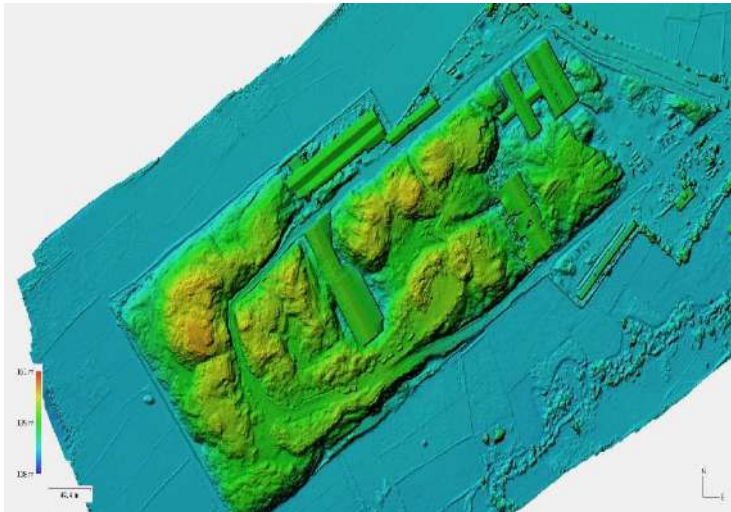
Sr. No.	Legacy Waste Summary													
	MONTH	Intake (In MT)		Net Qty Of By Products Production (In MT)					Net Qty Of By Products (Dispatched (In MT)					
		Intake Feed (In MT)	Qty Of Waste Processed (In M.T.)	Moisture loss	C&D Waste	Coarse Fraction (Below 22 mm)	Biosoil (Below 6 MM)	RDF	Total By Products (Quantity)	C&D Waste	Coarse Fraction (Below 22 mm)	Biosoil (Below 6 MM)	RDF	Total By Products Dispatched
1	14 March To 31 March-2024	30652.88	29777.88	5955.58	6848.91	10422.26	1191.12	5360.02	29777.88	1409.35	2079.56	0.00	2773.72	36040.51
2	01 April To 30 April-2024	75009.53	75118.07	15023.61	17277.16	26291.32	3004.72	13521.25	75118.07	13710.5	14822.53	80.49	11518.32	115249.91
3	1 May To 31 May-2024	110060.39	110437.05	22087.41	25400.52	38652.97	4417.48	19878.67	110437.05	12222.50	17760.00	0.00	20913.37	161332.92
4	1 June To 30 June-2024	106158.55	100300.00	20060.00	23069.00	35105.00	4012.00	18054.00	100300.00	6579.00	17040.00	382.65	15576.61	139878.26
5	1 July To 31 July-2024	109105.36	103225.00	20645.00	23741.75	36128.75	4129.00	18580.50	103225.00	27563.00	25420.00	145.63	11272.42	167626.05
6	1 Aug To 31 Aug-2024	63806.45	75010.00	15002.00	17252.30	26253.50	3000.40	13501.80	75010.00	24660.50	21360.00	1298.51	11376.88	133705.89
7	1 Sep-2024 31 Sep-2024	51540.00	43460.00	7822.80	8040.10	17818.60	2173.00	7605.50	43460.00	19887.50	39400.00	296.05	9513.74	112557.29
8	1 Oct -2024 to 31 Oct-2024	69107.70	72900.00	13122.00	13486.50	29889.00	3645.00	12757.50	72900.00	11137.00	47560.00	682.68	9232.70	141512.38
9	1 Nov -2024 to Till Date	77845.29	76640.00	13795.00	14178.40	31422.00	3832.00	13412.00	76639.40	18468.50	47760.00	1322.76	6242.10	150432.76
	GRAND TOTAL	693286.150	686868.00	133513.40	149294.64	251983.40	29404.72	122671.24	686867.40	135637.85	233202.09	4208.77	98419.86	1158335.97

Project Area Detail & Timeline for Completion

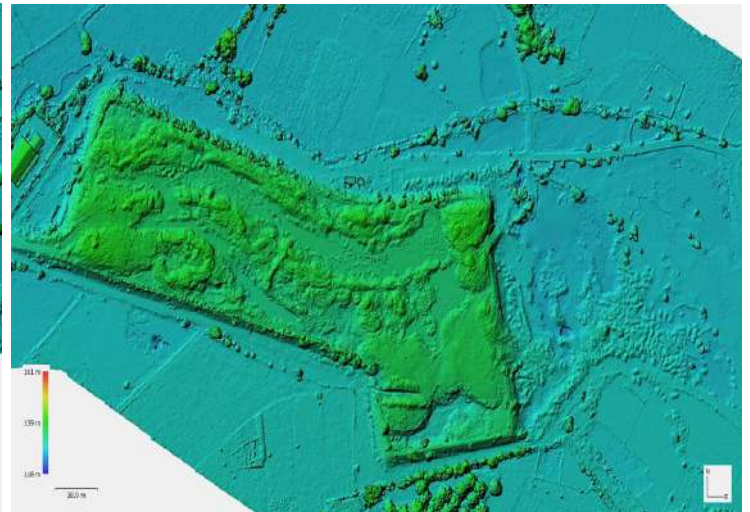
S.No.	Legacy Waste Quantity (Tonne)	Budget allocation (in Lakh)	Present Status	Estimated work Completion Timeline
1	18,49,902	10618.00	4000 TPD Processing plant is operational	June 2025



Legacy Waste Quantification



Dem for Area A



Dem for Area B

*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

Site division and Process Planning For DEM Area A



A- 2 LMT

E- 3LMT

B- 3LMT

F- 3LMT

C- 4LMT

G- 2LMT

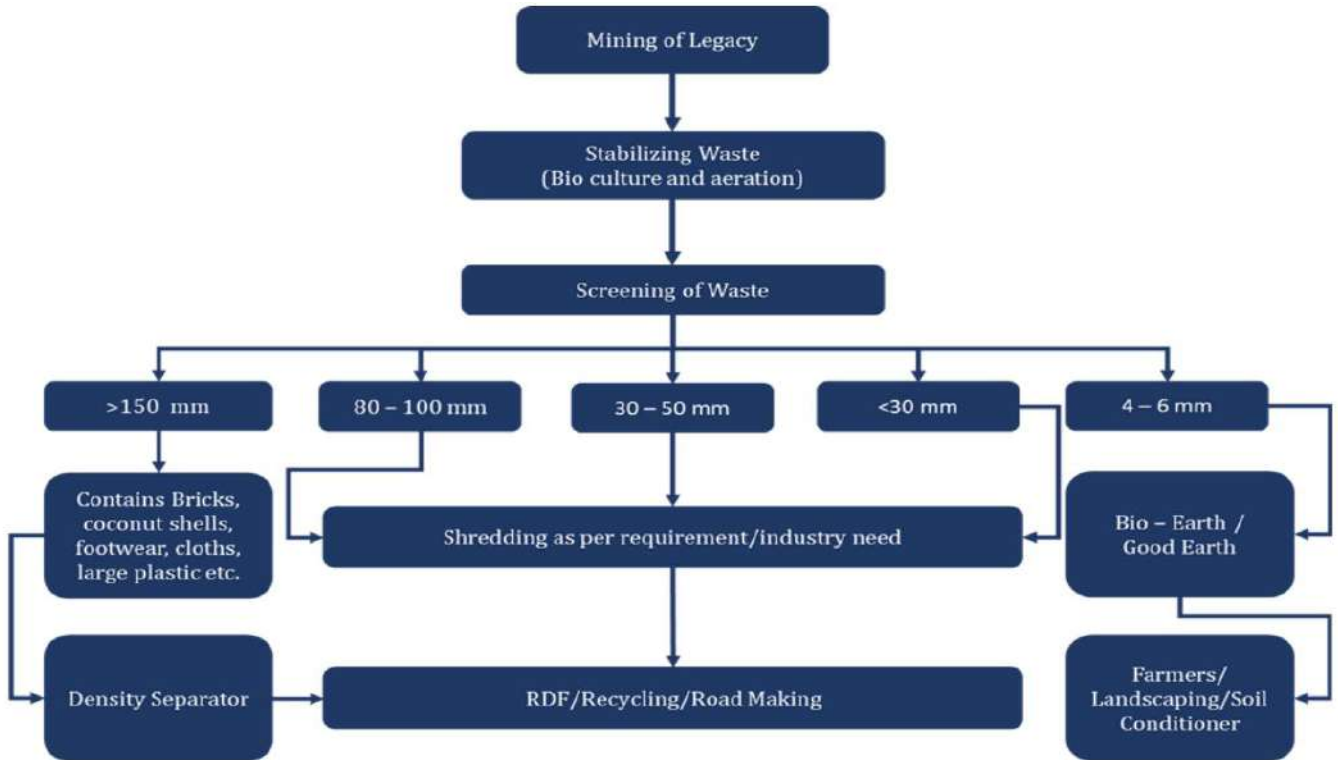
D- 2LMT

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 Phases of Implementation: Phase 1: 2000 MTPD capacity Phase2: 2000 MTPD Capacity	Remark /Current Status
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 conveyor belts	Both lines are operational with current operational processing capacity of 3500MT per Day.



Heap Treatment for Controlling Odor



Water Sprinkling for Controlling Dust

LMC processes waste pile equivalent to 3-storey bldg

Vivek Chauhan
@timesofindia.com

Lucknow: Lucknow Municipal Corporation (LMC) has reclaimed 15 acres of land at the Shivri Plant on Mohan Road through the scientific processing of approximately 7 lakh metric tonnes of legacy waste, a process that began in March this year.

In a report released on Nov 28, LMC disclosed that the Shivri plant, spanning 40.4 acres, previously housed a massive waste pile equivalent to a three-storey building. This mound, spread over 30 acres, amounted to 18.56 lakh metric tonnes of waste—about a three-storey building. The buildup was attributed to poor waste management practices by the previous contractor, M/s Eco Green Energy Pvt. Ltd., which processed only a fraction of the waste between 2016 and 2022.

To address the issue, LMC cancelled the contractor's agreement and, with govt approval, allocated Rs 96.53 crore in Jan for waste clearance.

Bhumi Green Pvt. Ltd. was appointed in March to carry out the task, with additional funds bringing the total allocation to Rs 106.18 crore for managing any surplus waste. By Nov 2024, the private firm processed 30% of the legacy waste, with work on track to clear the remaining 11.56 lakh metric tonnes within the next 12 months. The company set up facilities capable of processing 4,000 metric tonnes of waste daily using two plants with four advanced machines. To manage the leachate produced from the waste, a dedicated treatment plant was set up.

Officials said that waste is processed scientifically, with byproducts such as construction and demolition (C&D) materials, coarse soil, and other residuals being redirected for industrial and construction uses. So far, approximately 1 lakh metric tonnes of Refuse Derived Fuel (RDF) was prepared and supplied for industrial purposes. A dedicated treatment plant was also installed to manage leachate, ensuring minimal environmental impact.

Additional municipal commissioner Dr Arvind Rao said, "This project is a transformative step for the city. Not only have we successfully reduced a massive waste pile, but we've also reclaimed 15 acres of land, which is already being developed into a garden. This green space will improve the environment and serve as a model for urban development. Going forward, this reclaimed land holds the potential to be used for further urban infrastructure projects, enhancing the quality of life for residents."



Green Belt Development on Reclaimed Land

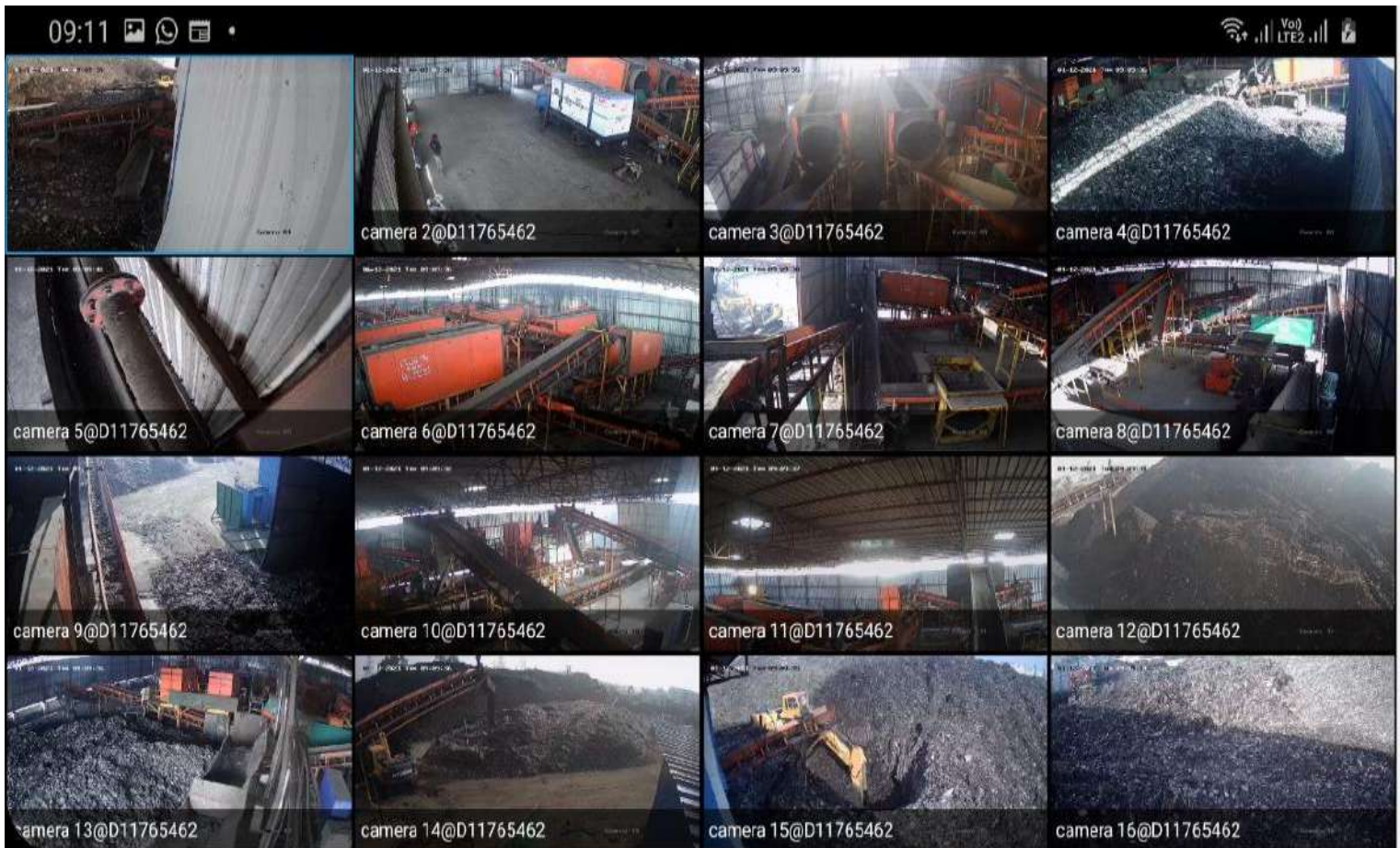
Biomining Machinery in Processing Plant



Leachate Treatment Facility



Live Monitoring



RDF Dispatch Details

BHUMI GREEN ENERGY LUCKNOW																														
Plant Add- SOLID WASTE PLANT, SHIVARI, PANKHEDA, LUCKNOW (226101) Mo N-9011100699, 9519070990																														
RDF Report With Party Wise Period Of (March -24 to 18 Nov-24)																														
Party Name (Cement Factory)																														
Sr No	Period Date	ACC Limited		Ultratech Cement		Ambuja Cement		ECOPRISM JOHNSON LIMITED		PRISM JOHNSON LIMITED		Birla CORPORATION		INDIAN AGRO ORGANICS		CHADHA PAPER MIL		MA SHEETLA VENTURES LTD.		SHAKUMBHARI PULPI & PAPER MILLS LTD.		GARG DUPLEX & PAPER MILLS		JK Cement		Dalmia Cement		Total Trip	Total Qty	
		500 KM	500 KM	780 KM	450 KM	450 KM	475 KM	376 KM	380 KM	634 KM	634 KM	450 KM	640 KM																	
		Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	
1	Mar-24	49	1533.88	39	1299.84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	2773.72
2	Apr-24	60	1885.65	120	5802.79	8	277.9	92	2975.85	0	0	0	0	1	36.49	0	0	0	0	0	0	0	0	0	77	2468.79	2	75.91	360	11518.32
3	May-24	9	296.75	225	7450.02	0	0	222	7650	35	1130.07	2	71.82	0	0	0	0	0	0	0	0	0	0	127	4345.215	0	0	618	20915.37	
4	Jun-24	27	887.01	175	6002.97	0	0	120	4294.47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121	4392.21	0	0	443	15576.61
5	Jul-24	84	2876.18	71	2497.91	0	0	56	2108.18	12	391.05	17	585.87	0	0	0	0	0	0	0	0	0	0	0	76	2813.25	0	0	316	11272.42
6	Aug-24	98	3577.51	41	1432.58	0	0	17	461.07	119	4334.13	41	1571.59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	316	11376.88
7	Sep-24	77	2854.41	16	617.03	0	0	85	3427.9	42	1672.92	23	941.48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	243	9513.74	
8	Oct-24	0	0	0	0	0	0	11	444.68	92	3651.58	22	848.26	0	0	131	4819.24	0	0	0	0	0	0	0	0	0	0	0	255	9232.7
9	Nov-24	0	0	0	0	0	0	4	147.31	26	1056.85	0	0	0	0	25	874.83	26	871.13	3	100.64	1	28.63	41	1589.76	0	0	126	4679.15	
Total-		404	13901	687	23043.1	8	278	607	21489.41	324	12246.6	105	4018.52	1	36.5	156	5194.1	26	871.13	3	100.64	1	28.63	442	15604.2	2	75.9	2765	96856.910	

Sr No	Month	JK Cement	Ultratech	REWA	Prism Johnson	CHADHA PAPER	MA SHEETLA	SHAKUMBHARI	GARG DUPLEX	Acc Cement	Total
		Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing	Co-Processing	Co-Processing	Co-Processing	Co-Processing Certificate	
1	March		546.77	0	0	0	0	0	0	814.13	
2	April	1298.1	3430.37	0	2611.66	0	0	0	0	2529.09	
3	May	5295.48	7197.08	0	4621.47	0	0	0	0	283.04	
4	June	4080.97	6313.2	6740.73	0	0	0	0	0	610.39	
5	July	0	3072.13	3467.910	1307	0	0	0	0	2485.7	
6	Aug	0	1234.91	503.880	0	0	0	0	0	3337.3	
7	Sep	0	0	0	0	0	0	0	0	0.000	
8	Oct	0	0	0	0	0	0	0	0	1.000	
Total		10644.55	21814.46	10712.520	8540.13	0	0	0	0	10058.05	61769.710
Address		Add:- Harduwanen, Tehsil- Amongani, Dist Panna 488441 (MP)	Add:- Unit Dalmia Cement Work, SH 5 Post Dalls Dist Sonbhadra 231207 (UP)		Add:- Vill Manjhari Post- Rampur Baghela Dist Satna 485111 (MP)	Add:- Bilaspur UP 244921	Sole-Dst Ishem Singh Nagar Ultratech- 263148	Add:- Shopa Road Muzaffarnagar (UP)	Add:- 8.5 KM, Bhopa Road Muzaffarnagar (UP 09)	Add:- Kymore Cement Works Kymore Dist- Katni 483880 (MP)	



3041

Coprocessing Certificates



दूर की सोच

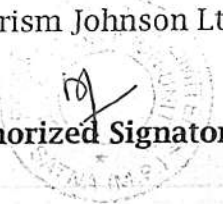
18th October 2024

RDF Waste Co-Processing Certificate

This is to certify that we have received Refused Derived Fuel (RDF) quantities 3022.11 MT for Co-process the waste send by "ECOGATEWAY PVT LTD" from Waste processing facility, M/s Bhumi Green Energy, Legacy Waste Processing Plant Shivri, Lucknow at our "Prism Johnson Limited, Satna Plant" during the period of August-2024 to September-2024.

For Prism Johnson Ltd

(Authorized Signatory)



Handwritten signature

PRISM JOHNSON LIMITED

(Cement Division)

Works: Village Mankahari, P.O.-Bathia, Dist. Satna - 485 111 (M.P.) India T: +91-07672-275301 / 302600

Corres. Add.: 'Rajdeep', Rewa Road, Satna - 485 001 (M.P.) India. T: +91-07672-402726

Registered Office: Prism Johnson Limited, 305, Laxmi Niwas Apartments, Ameerpet, Hyderabad - 500 016, India.

w: www.prismjohnson.in, www.cement.prismjohnson.in, E: info@prismjohnson.in

CIN: L26942TG1992PLC014033





दूर की सोच

Item : SAFR-NH-RDF LOOSE				
Supplier : Ecogateway Private Limited				
Sr No	Date	Vehicle No	Challan No	UoM (MT)
1	03/08/2024	UP71AT9787	DC/24-25/0559	31.81
2	03/08/2024	UP33CT5168	DC/24-25/0560	36.72
3	03/08/2024	UP32TN7124	DC/24-25/0561	29.36
4	07/08/2024	UP70ET1434	DC/24-25/0565	22.95
5	07/08/2024	UP70CT1224	DC/24-25/0563	22.81
6	07/08/2024	UP70CT0877	DC/24-25/0564	18.05
7	09/08/2024	UP32LN2587	DC/24-25/0562	38.50
8	13/08/2024	UP71AT1006	DC/24-25/0566	40.22
9	16/08/2024	UP33CT5259	568	38.12
10	17/08/2024	UP70FT5968	569	26.23
11	20/08/2024	UP33CT4712	DC/24-25/0573	35.37
12	21/08/2024	UP70GT0428	DC/24-25/0577	38.52
13	21/08/2024	UP33AT9757	575	40.46
14	21/08/2024	UP65GT3089	DC/24-25/0570	41.46
15	22/08/2024	UP33CT5168	571	41.98
16	22/08/2024	UP32TN7124	572	37.02
17	23/08/2024	UP77AT1553	DC/24-25/0580	34.28
18	23/08/2024	UP33CT0123	DC/24-25/0579	40.00
19	23/08/2024	UP70HT4644	DC/24-25/0578	33.18
20	23/08/2024	UP33AT8342	DC/24-25/0576	35.20
21	23/08/2024	UP33CT5477	DC/24-25/0581	34.87
22	24/08/2024	UP33CT5476	DC/24-25/0582	35.90
23	24/08/2024	UP70KT6229	DC/24-25/0584	36.02
24	24/08/2024	UP33CT5259	DC/24-25/0585	36.65
25	24/08/2024	UP70LT3070	DC/24-25/0583	42.47
26	27/08/2024	UP33CT4713	DC/24-25/0587	35.12
27	27/08/2024	UP33CT5484	DC/24-25/0591	40.47
28	28/08/2024	UP70KT4615	DC/24-25/0589	41.26
29	28/08/2024	UP70KT4617	DC/24-25/0590	35.08
30	30/08/2024	UP33CT4711	DC/24-25/0588	34.46
31	31/08/2024	UP33BT9577	586	36.55
32	31/08/2024	UP33BT0050	DC/24-25/0567	34.98
33	01/09/2024	UP33CT5477	593	36.19
34	01/09/2024	UP37AT4049	574	35.46
35	01/09/2024	MP33H1858	592	38.63
36	14/09/2024	DD03T9352	DC/24-25/0594	39.61
37	14/09/2024	RJ06GC9905	DC/24-25/0595	39.47
38	18/09/2024	UP70FT4918	DC/24-25/0596	42.25
39	19/09/2024	UP33CT4714	DC/24-25/0598	41.34
40	19/09/2024	UP71T5900	DC/24-25/0599	43.96

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41	19/09/2024	UP33CT0123	DC/24-25/0601	41.68
42	20/09/2024	UP33CT0560	DC/24-25/0604	47.55
43	20/09/2024	UP33CT0559	DC/24-25/0603	45.66
44	20/09/2024	UP71AT0607	DC/24-25/0605	41.18
45	20/09/2024	UP33AT6692	DC/24-25/0597	44.71
46	21/09/2024	MP33H1865	DC/24-25/0600	40.77
47	24/09/2024	UP70HT4644	DC/24-25/0606	38.61
48	24/09/2024	UP33CT4712	DC/24-25/0607	47.33
49	24/09/2024	UP90T5658	DC/24-25/0610	34.35
50	24/09/2024	UP37AT4049	DC/24-25/0602	42.25
51	24/09/2024	UP33CT5259	DC/24-25/0609	44.19
52	25/09/2024	UP71AT0162	608	36.21
53	26/09/2024	UP70GT6851	DC/24-25/0611	41.99
54	26/09/2024	BR03GB9304	DC/24-25/0616	42.95
55	26/09/2024	UP33CT5261	612	43.05
56	26/09/2024	UP33CT9993	DC/24-25/0619	40.99
57	26/09/2024	UP33AT9947	DC/24-25/0620	40.45
58	26/09/2024	UP33BT4270	DC/24-25/0613	43.61
59	26/09/2024	UP72AT9969	DC/24-25/0614	38.71
60	26/09/2024	UP72AT5473	DC/24-25/0615	39.45
61	26/09/2024	UP71AT0607	DC/24-25/0624	39.07
62	26/09/2024	UP33CT0559	DC/24-25/0622	42.45
63	26/09/2024	MP33H8577	DC/24-25/0617	39.76
64	27/09/2024	UP33AT6431	DC/24-25/0621	30.52
65	27/09/2024	UP32JN5000	DC/24-25/0626	43.87
66	27/09/2024	UP33AT6692	DC/24-25/0625	42.66
67	27/09/2024	UP70GT3826	DC/24-25/0623	42.85
68	27/09/2024	UP70LT7413	DC/24-25/618	30.54
69	27/09/2024	UP71BT3490	DC/24-25/0631	46.88
70	28/09/2024	MP17HH2753	DC/24-25/0630	31.84
71	28/09/2024	UP65GT3089	DC/24-25/0629	40.50
72	28/09/2024	UP33CT5476	DC/24-25/0633	45.23
73	28/09/2024	UP41AT5291	DC/24-25/0628	43.21
74	29/09/2024	UP33CT0123	DC/24-25/0632	46.58
75	29/09/2024	UP33CT5259	DC/24-25/0635	45.02
76	30/09/2024	UP70KT4615	DC/24-25/0639	44.24
77	30/09/2024	UP33BT9632	DC/24-25/0636	43.62
78	30/09/2024	UP33CT4711	DC/24-25/0643	44.60
Total Qty				3022.11



3044



CIN : U90002TG2020PTC146662

REWA MSW ENERGY SOLUTIONS PVT. LTD.
(Subsidiary of Rewa MSW Holding Limited)
(Wholly owned Subsidiary of REEL)
Add.: Vill.-Pahadiya, P.O.: Sagra,
Teh.- Raipur Karchuliyan Dist. - Rewa (M.P.)
GSTIN : 23AAKCR6515L1Z4

Co-Processing Certificate

Reference No.: Ecogateway/REW/Aug-24

Date : 31/08/2024

This is to certify that M/s Ecogateway Pvt Ltd has supplied 503.880 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 Aug-2024 for its final scientific processing and disposal.

For Rewa MSW Energy Solutions Pvt Ltd

Seal & Sign 

Details of RDF received are as follows;

Regd. & Corporate Office: 13th Floor, Ramky Grandiose, Ramky Towers, Gachibowli
Hyderabad - 500032, Telangana State, India.

Ph. No. : +91-40-23015000, E-mail : cs.reel@ramky.com

Annexure-A

Sr.No.	Supplier	Date	Vehicle No	Source	Destination	Quantity (Kg)
1	ECOGATEWAY PVT LTD	24-08-24	UP33BT9632	LUCKNOW	REWA	41,080
2	ECOGATEWAY PVT LTD	25-08-24	UP33CT5261	LUCKNOW	REWA	36,800
3	ECOGATEWAY PVT LTD	25-08-24	UP33CT0123	LUCKNOW	REWA	40,370
4	ECOGATEWAY PVT LTD	26-08-24	UP33CT4714	LUCKNOW	REWA	38,100
5	ECOGATEWAY PVT LTD	26-08-24	UP33CT4712	LUCKNOW	REWA	39,180
6	ECOGATEWAY PVT LTD	27-08-24	MP33H1860	LUCKNOW	REWA	29,660
7	ECOGATEWAY PVT LTD	29-08-24	UP33BT9632	LUCKNOW	REWA	39,850
8	ECOGATEWAY PVT LTD	29-08-24	UP33CT0123	LUCKNOW	REWA	42,420
9	ECOGATEWAY PVT LTD	29-08-24	MP33H8577	LUCKNOW	REWA	40,480
10	ECOGATEWAY PVT LTD	30-08-24	UP33CT5261	LUCKNOW	REWA	34,940
11	ECOGATEWAY PVT LTD	31-08-24	UP33CT8996	LUCKNOW	REWA	39,550
12	ECOGATEWAY PVT LTD	31-08-24	UP33BT8288	LUCKNOW	REWA	38,600
13	ECOGATEWAY PVT LTD	31-08-24	UP33CT5168	LUCKNOW	REWA	42,850
						503,880

M. Anand





Certificate of Co-processing

Certificate No.: DLCW/14/24-25

This is to certify that we have successfully co-processed the following quantities of **1234.91 MT** of Sorted MSW/Plastic Waste sent by M/s **BHUMI GREEN** on behalf of M/s **BHUMI GREEN** from **Shivri site (Lucknow)** in **Uttar Pradesh** as declared by M/s. **BHUMI GREEN** in our Cement Kiln during the period **1st August 2024 to 31st August 2024**. The certificate of the quantity mentioned is not issued to any other entity.

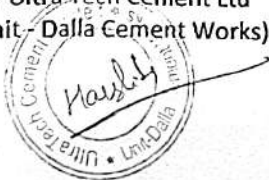
The quantities mentioned in the certificate shall not be used for availing EPR credits.

Waste Name: **Sorted MSW/Plastic Waste**
Quantity (Tons): **1234.91 MT**

Receipt details for the period **1st August 2024 to 31st August 2024** for location **Shivri site (Lucknow)** in **Uttar Pradesh** as declared by the client.

Collection State	Collection City	Vehicle Details	Date of Receipt	Quantity Received (MT)
Uttar Pradesh	Shivri (Lucknow)	UP53DT8146	27.08.2024	28.37
Uttar Pradesh	Shivri (Lucknow)	UP32LN5151	27.08.2024	30.64
Uttar Pradesh	Shivri (Lucknow)	UP41AT7568	27.08.2024	29.68
Uttar Pradesh	Shivri (Lucknow)	UP53ET8625	26.08.2024	34
Uttar Pradesh	Shivri (Lucknow)	UP42BT2734	22.08.2024	30
Uttar Pradesh	Shivri (Lucknow)	UP25FT8172	23.08.2024	35.47
Uttar Pradesh	Shivri (Lucknow)	UP25FT3291	31.08.2024	37.44
Uttar Pradesh	Shivri (Lucknow)	UP25FT0571	27.08.2024	34.83

Thanking You,
For Ultra Tech Cement Ltd
(Unit - Dalla Cement Works)



UltraTech Cement Limited
(Unit : Dalla Cement Works)

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

T : +91 5445 265778, 265801, 265802 | W : www.ultratechcement.com

Registered Office : 'B' Wing, Ahura Centre, 2nd Floor, Mahakali Caves Road, Andheri (East), Mumbai - 400 093

T : +91 22 6691 7800 | CIN : L26940MH2000PLC128420

UltraTech

Uttar Pradesh	Shivri (Lucknow)	UP41AT7568	04.08.2024	30.75
Uttar Pradesh	Shivri (Lucknow)	UP25FT1385	27.08.2024	34.16
Uttar Pradesh	Shivri (Lucknow)	BR28GB1027	31.08.2024	41.29
Uttar Pradesh	Shivri (Lucknow)	UP25FT0572	24.08.2024	34.3
Uttar Pradesh	Shivri (Lucknow)	MP66ZE1623	02.08.2024	35.66
Uttar Pradesh	Shivri (Lucknow)	UP63AT4058	29.08.2024	31.07
Uttar Pradesh	Shivri (Lucknow)	RJ42GA2201	24.08.2024	39.22
Uttar Pradesh	Shivri (Lucknow)	UP63T3141	26.08.2024	25.66
Uttar Pradesh	Shivri (Lucknow)	MP66ZE1720	29.08.2024	35.29
Uttar Pradesh	Shivri (Lucknow)	MP66ZE1710	28.08.2024	36.63
Uttar Pradesh	Shivri (Lucknow)	UP63AT6284	28.08.2024	29.33
Uttar Pradesh	Shivri (Lucknow)	MP66ZE1623	28.08.2024	36.62
Uttar Pradesh	Shivri (Lucknow)	UP43BT1230	28.08.2024	39.13
Uttar Pradesh	Shivri (Lucknow)	UP53FT8687	28.08.2024	37.21
Uttar Pradesh	Shivri (Lucknow)	UP25ET7856	28.08.2024	34.57
Uttar Pradesh	Shivri (Lucknow)	UP64AT9393	29.08.2024	27.53
Uttar Pradesh	Shivri (Lucknow)	MP66ZE1638	29.08.2024	32.74
Uttar Pradesh	Shivri (Lucknow)	UP64AT5586	03.08.2024	30.09
Uttar Pradesh	Shivri (Lucknow)	UP51AT6796	30.08.2024	42.04
Uttar Pradesh	Shivri (Lucknow)	JH03AQ2073	30.08.2024	36.73
Uttar Pradesh	Shivri (Lucknow)	JH03AQ8799	30.08.2024	38.57
Uttar Pradesh	Shivri (Lucknow)	UP65GT3044	31.08.2024	35.17
Uttar Pradesh	Shivri (Lucknow)	UP25ET1163	31.08.2024	35.84
Uttar Pradesh	Shivri (Lucknow)	UP41AT5495	29.08.2024	32.57
Uttar Pradesh	Shivri (Lucknow)	UP25FT8176	31.08.2024	36.53
Uttar Pradesh	Shivri (Lucknow)	UP25ET8069	25.08.2024	34.28
Uttar Pradesh	Shivri (Lucknow)	UP32TN4209	25.08.2024	35.97
Uttar Pradesh	Shivri (Lucknow)	UP25FT0352	24.08.2024	35.53
TOTAL (MT)			1234.91	

Thanking You,
For Ultra Tech Cement Ltd
(Unit - Dalla Cement Works)



UltraTech
CEMENT
The Engineer's Choice

UltraTech Cement Limited
(Unit : Dalla Cement Works)

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

T : +91 5445 265778, 265801, 265802 | W : www.ultratechcement.com

Registered Office : 'B' Wing, Ahura Centre, 2nd Floor, Mahakali Caves Road, Andheri (East), Mumbai - 400 093

T : +91 22 6691 7800 | CIN : L26940MH2000PLC128420

ANNEXURE - G
CERTIFICATE OF COPROCESSING

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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

KYMORE CEMENT WORKS

ACC KYMORE CEMENT WORKS

Supplier Name	Material Descp	Purchase Order No	Vehicle No	VR No	Transporter	Gate IN Date	Gate OUT Date	Challan Weight	GR Qty
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP95A19776	167	910038071	31-07-2024	01-08-2024	35.920	35.240
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A10718	10375	910038071	31-07-2024	01-08-2024	35.120	34.420
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP77A55425	1070	910038071	31-07-2024	01-08-2024	30.570	30.470
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A17893	169	910038071	31-07-2024	01-08-2024	25.120	25.000
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A10507	10378	910038071	31-07-2024	02-08-2024	17.980	37.010
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A10167	10377	910038071	01-08-2024	01-08-2024	13.500	37.880
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70FF6295	10384	910038071	01-08-2024	02-08-2024	29.310	29.120
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A11005	10384	910038071	01-08-2024	02-08-2024	38.890	38.770
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A18225	1612	910038071	02-08-2024	03-08-2024	26.870	26.610
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70KT2175	10389	910038071	02-08-2024	03-08-2024	35.500	35.720
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70KT4515	10385	910038071	03-08-2024	03-08-2024	35.650	35.990
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A11245	10385	910038071	03-08-2024	04-08-2024	24.220	24.810
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A19588	1656	910038071	03-08-2024	04-08-2024	38.030	37.210
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70G14521	1639	910038071	04-08-2024	04-08-2024	41.040	43.760
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70G10428	1658	910038071	04-08-2024	05-08-2024	39.640	40.150
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70HT4644	1650	910038071	05-08-2024	06-08-2024	29.350	30.690
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71919365	10395	910038071	05-08-2024	07-08-2024	29.700	29.850
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33019577	1676	910038071	06-08-2024	07-08-2024	36.730	36.580
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70G13816	10418	910038071	07-08-2024	07-08-2024	35.540	34.760
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP32KN0073	1650	910038071	07-08-2024	08-08-2024	28.600	28.450
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A19028	1684	910038071	07-08-2024	08-08-2024	28.140	28.270
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A16201	10410	910038071	07-08-2024	08-08-2024	33.160	32.870
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP330T0050	173	910038071	07-08-2024	08-08-2024	30.300	29.830
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP41A15291	171	910038071	08-08-2024	09-08-2024	34.930	34.600
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP52T6332	10404	910038071	08-08-2024	09-08-2024	31.340	31.490
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70KT4617	10415	910038071	08-08-2024	09-08-2024	33.010	32.440
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70G17278	10417	910038071	08-08-2024	10-08-2024	33.900	33.130
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70G12550	10405	910038071	09-08-2024	11-08-2024	40.570	31.570
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70F19577	10413	910038071	09-08-2024	10-08-2024	40.570	40.580
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A19707	10411	910038071	09-08-2024	10-08-2024	42.150	41.770
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33B16566	10416	910038071	10-08-2024	11-08-2024	39.230	38.890
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A19313	1697	910038071	10-08-2024	11-08-2024	32.580	32.410
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A17544	1655	910038071	10-08-2024	11-08-2024	28.200	28.400
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70KT6229	10428	910038071	11-08-2024	18-08-2024	35.750	35.700
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP7119718	10419	910038071	11-08-2024	12-08-2024	26.960	26.800
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP32N3905	10425	910038071	12-08-2024	13-08-2024	30.620	30.440
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A11245	10429	910038071	12-08-2024	14-08-2024	33.460	33.670
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70G10428	10437	910038071	13-08-2024	13-08-2024	39.650	39.650
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70HT18193	10445	910038071	13-08-2024	13-08-2024	31.410	31.370
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A19757	10445	910038071	13-08-2024	14-08-2024	36.750	36.300
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A19133	1731	910038071	13-08-2024	14-08-2024	34.180	33.150
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70G12759	1709	910038071	13-08-2024	15-08-2024	35.390	35.230
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70G16551	10442	910038071	14-08-2024	15-08-2024	36.020	36.150
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	CG04N21606	182	910038071	14-08-2024	16-08-2024	43.200	42.780
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A10191	1740	910038071	14-08-2024	15-08-2024	38.620	39.010
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A17648	181	910038071	14-08-2024	15-08-2024	27.000	26.980
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP7116156	10453	910038071	15-08-2024	16-08-2024	26.140	26.050
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A18511	184	910038071	15-08-2024	17-08-2024	30.120	30.670
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP63B14643	186	910038071	16-08-2024	18-08-2024	36.080	34.470
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A17893	185	910038071	16-08-2024	17-08-2024	30.060	29.500
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP64T8595	10464	910038071	16-08-2024	18-08-2024	34.940	34.470
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP7115500	1767	910038071	16-08-2024	18-08-2024	34.490	33.570
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70KT4617	1265	910038071	16-08-2024	19-08-2024	39.550	39.480
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70KT2175	10484	910038071	17-08-2024	19-08-2024	38.880	38.560
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70KT6229	1797	910038071	18-08-2024	19-08-2024	37.620	37.710
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP72A19560	1776	910038071	18-08-2024	19-08-2024	38.670	38.350
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A17639	1789	910038071	18-08-2024	19-08-2024	36.570	36.130
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP41A15291	188	910038071	18-08-2024	20-08-2024	34.970	34.550
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP32KN8073	189	910038071	19-08-2024	20-08-2024	30.850	30.480
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UPS0T8587	191	910038071	19-08-2024	20-08-2024	31.740	31.370
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP77AN5425	193	910038071	20-08-2024	21-08-2024	36.310	36.430
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70G14521	10560	910038071	21-08-2024	21-08-2024	42.430	41.660
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70F18428	187	910038071	21-08-2024	21-08-2024	39.970	39.020
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A19707	1221	910038071	21-08-2024	22-08-2024	39.520	39.290
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70F19577	1770	910038071	21-08-2024	22-08-2024	39.070	39.190
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A14230	180	910038071	21-08-2024	22-08-2024	27.880	28.010
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UPS2T6332	10500	910038071	22-08-2024	23-08-2024	28.760	28.750
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP330T6012	1274	910038071	23-08-2024	29-08-2024	41.570	41.720
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70G12550	10558	910038071	23-08-2024	23-08-2024	33.970	33.980
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP32G7508	195	910038071	23-08-2024	29-08-2024	26.610	26.690
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A14950	178	910038071	23-08-2024	24-08-2024	32.350	32.360
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP64A1155	1272	910038071	23-08-2024	29-08-2024	31.580	31.090
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A10718	10494	910038071	23-08-2024	24-08-2024	37.000	37.110
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70F12728	10559	910038071	24-08-2024	25-08-2024	41.360	38.560
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A19313	194	910038071	24-08-2024	29-08-2024	31.930	31.400
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A11768	10574	910038071	24-08-2024	25-08-2024	38.800	39.290
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A10162	10573	910038071	24-08-2024	25-08-2024	33.360	33.610
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A18212	197	910038071	25-08-2024	26-08-2024	31.990	32.300
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70G13455	196	910038071	25-08-2024	26-08-2024	44.070	43.570
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33B16566	1277	910038071	25-08-2024	26-08-2024	42.600	42.700
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A11006	1280	910038071	25-08-2024	26-08-2024	40.910	41.480
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A11945	10582	910038071	25-08-2024	27-08-2024	31.970	31.900
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A19757	1693	910038071	26-08-2024	27-08-2024	39.330	38.660
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A16868	1887	910038071	26-08-2024	28-08-2024	31.020	30.780
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP70KT2175	10683	910038071	26-08-2024	29-08-2024	39.810	39.840
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A10191	1283	910038071	26-08-2024	28-08-2024	39.530	39.510
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A11245	10658	910038071	27-08-2024	29-08-2024	31.320	31.730
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A11109	10589	910038071	27-08-2024	29-08-2024	35.570	35.600
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	MP18H4914	1285	910038071	27-08-2024	29-08-2024	30.230	30.490
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	RJ35GA1142	1901	910038071	27-08-2024	29-08-2024	31.170	30.860
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP1A15291	1900	910038071	28-08-2024	29-08-2024	38.590	38.930
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	MP12D8074	1913	910038071	29-08-2024	29-08-2024	24.330	24.680
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP33A18225	192	910038071	29-08-2024	29-08-2024	26.810	27.090
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP71A10607	10692	910038071	29-08-2024	30-08-2024	39.800	40.200
BHUMI GREEN ENERGY	AF-RDF-RDF	1200957293	UP90AT2268	205	910038071	30-08			

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Site Visit Report

Technical Audit of Legacy waste processing plant at Lucknow Municipal Corporation



Dr. Ganesh R. Kale
Sr. Principal Scientist



Solid and Hazardous Waste Management
CSIR-National Environmental Engineering Research
Institute
Nehru Marg, Nagpur- 440020



April 2024

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1.0 Site Visit Report

Site: Shivari Dumpsite, Lucknow

Date of Visit: April 25 2024

NEERI Team members: Dr. Ganesh R. Kale

Lucknow Municipal Corporation (LMC) Team members: LMC team

Observations:

- LMC has constructed a Bio-mining processing plant at Lucknow dumpsite in a covered shed and it is seen operational during the site visit.
- The Legacy waste is excavated, biodegradation culture is sprayed and the processed waste is brought to the plant.
- Oversize materials such as big cloth, plastic, stones, etc. are segregated manually to avoid damage to the processing machinery.
- Product separation is seen in Bio-mining mechanical operations in stages.
- The plant structure and machinery appear adequate for the Bio-mining operations.
- Products segregated from the plant are kept separately before dispatch.
- No fresh MSW is being dumped at this site.
- Workers use personal protection items like Helmet, gloves, goggles, etc.
- All product disposal records/documents are being maintained by the office.

Remarks:

- The Bio-mining operations are observed as per CPCB guidelines.
- Some product samples were collected and examined physically at the site. Other samples which require detailed characterization were collected and dispatched to NEERI by LMC officials.

Site Visit Photographs:

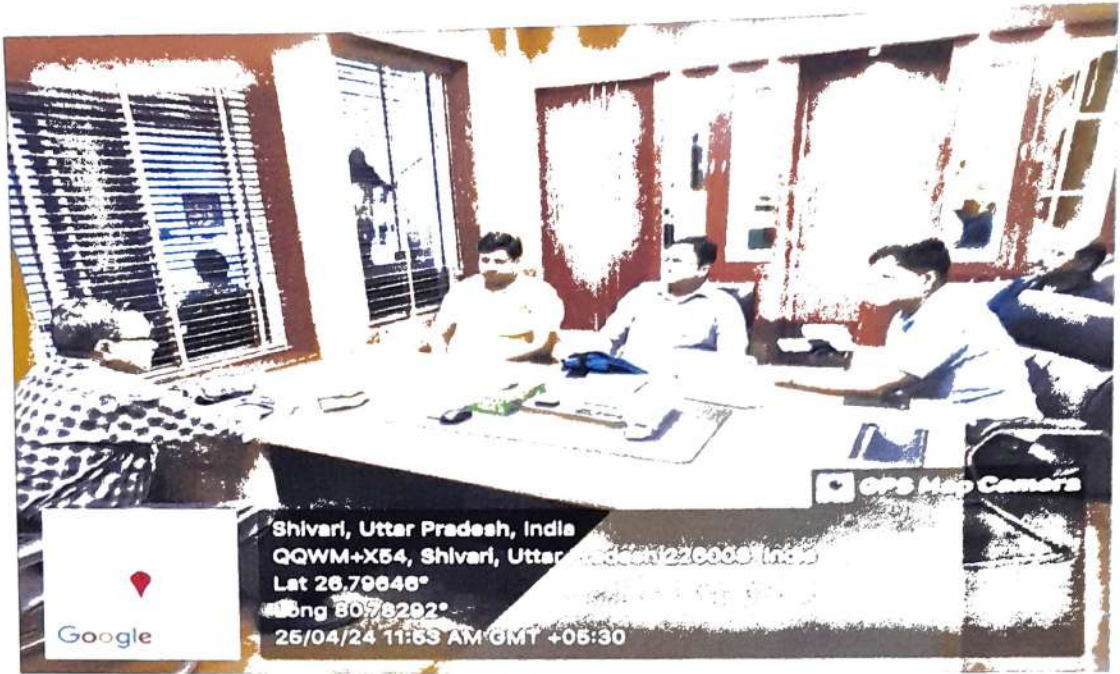


Exhibit 1: LMC Environmental Engr. welcoming CSIR-NEERI Scientist



Exhibit 2: Discussion with LMC Team Members

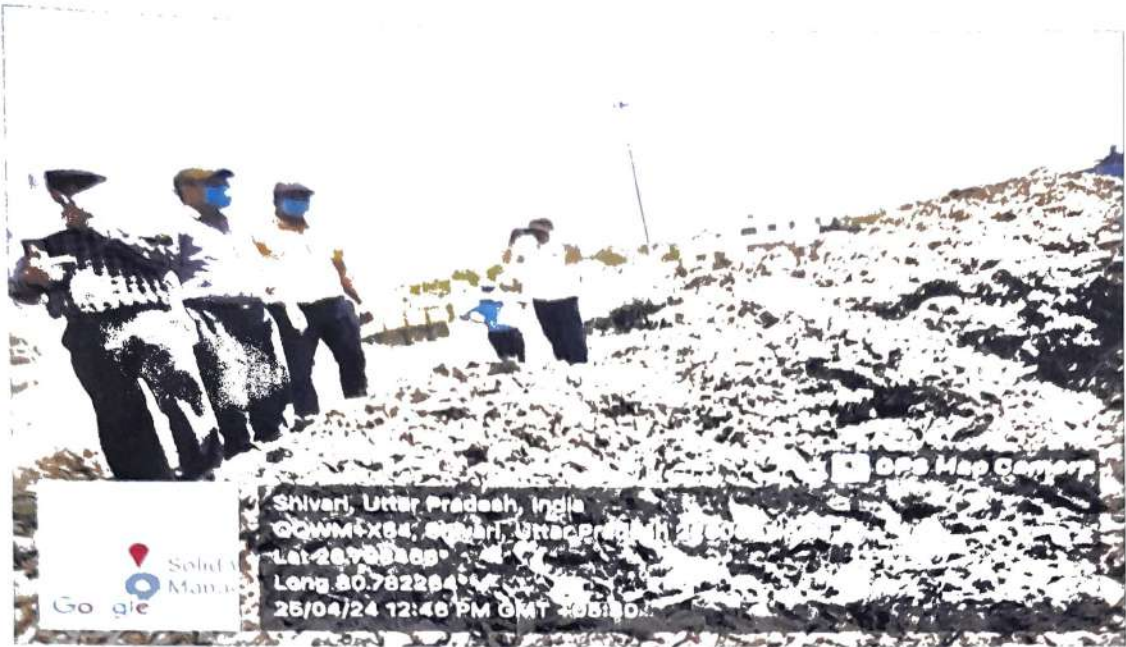


Exhibit 3: Site visit Survey by CSIR-NEERI Scientist



Exhibit 4: Process Inspection by CSIR-NEERI Scientist



Exhibit 5: Quality checking of Bio-mining Products



Exhibit 6: Collection of Biosoil Samples

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Exhibit 7: Sample collection at site

2.0 Samples examined and discarded at site:

Sr. No.	Date	Name of Samples
1.	25/04/2024	Bio-mining Oversized materials
		Bio-mining Footwear- Shoes & Chappals
		Bio-mining Recyclables – Glass, Hard Plastic
		Bio-mining Coconut Shells
		Cloth Materials
		Stones, C & D Waste
		Wood Materials

3.0 Physico-chemical Sample Analysis details:

Sr. No.	Date	Name of Samples	Codes	Number of composite samples	Total Number of samples
1.	25/04/2024	Bio-mining Bio-Soil (-6 mm)	L1_S	1	04
		Bio-mining Bio-Soil (22 mm)	L1_S1	1	
		Bio-mining C & D	L1_C&D	1	
		Bio-mining RDF	L1_R	1	
Total number of samples collected					04

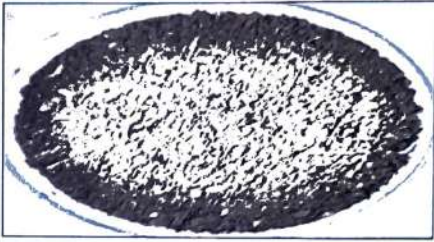



4.0 General Properties for Legacy waste samples:

Sr. No.	Physical Properties	Chemical Properties
1.	Bulk Density	Moisture Content
2.	Elasticity	Volatile Matter Content
3.	Segregation by Observation	Ash Content
4.	Recyclable & Non-recyclable	Calorific Value
5.	Magnetic & Nonmagnetic	Total Organic Content
6.		Available N
7.		Available P
8.		Available K
9.		CHNS Analysis
10.		Heavy Metal Analysis

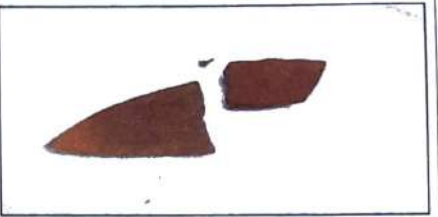

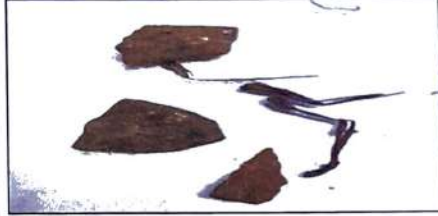

5.0 Physical Characterization (Composition) of Samples:

- Bio-mining Bio-Soil (-6 mm)

Total weight of sample = 765.94 gms


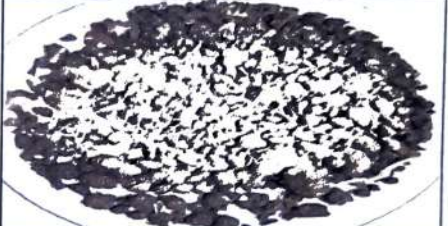


Sr. No.	Name of Components	Weight of Component (gms)	Weight %	Photo
1.	Soil	398.90	52.079	
2.	Stones	357.65	46.69	
3.	Glass	1.54	0.201	
4.	Loose Plastic	1.88	0.245	






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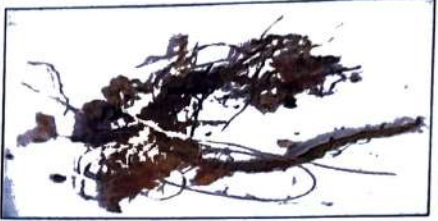
5.	Hard Plastic	1.90	0.248	
6.	Wood	2.01	0.262	
7.	Coconut shells	1.36	0.177	
8.	Cardboard	0.70	0.09	

- Bio-mining Bio-Soil (22 mm)

Total weight of sample = 663.24 gms

Sr. No.	Name of Component	Weight of Component (gms)	Weight %	Photo
1.	Soil	412.48	62.191	
2.	Stones	219.32	33.067	
3.	Loose Plastic	5.52	0.832	
4.	Rubber	0.07	0.01	

5.	Wood	4.72	0.711	
6.	Coconut shells	1.79	0.269	
7.	Hard Plastic	2.53	0.381	
8.	Ceramic	7.15	1.078	
9.	Glass	9.20	1.387	

10.	E-waste	0.15	0.02	
11.	Strings	0.31	0.046	

6.0 Analysis Results:

Bio-soil (-6mm)

Sr.No.	Sample Code	Phosphate Rich Organic Compost Standard FCO (2013)	Min.	Max.
1.	Bulk density (kg/m ³)	<1600 (kg/m ³)	813.25	973.25
2.	Moisture content (%)	25.0 %	18.3337	
3.	Volatile matter content (%)		13.3144	
4.	pH	Maximum 6.7	6~7	
5.	Total carbon (%)		0.16	
6.	C/N ratio	Less than 20:1	-	
7.	Sodium (ppm)		113	
8.	Potassium (ppm)	0.4 % by weight	104	
9.	Calcium (ppm)		89.7	
10.	Nitrate (ppm)		ND	
11.	Phosphate (ppm)	0.4 % by weight	27.71	

Sr.No.	Sample Code	Phosphate Rich Organic Compost Standard FCO (2013)	L1_S	
			Min.	Max.
1.	Bulk density (kg/m ³)	<1600 (kg/m ³)	813.25	973.25
2.	Moisture content (%)	25.0 %	18.3337	
3.	Volatile matter content (%)		13.3144	
4.	pH	Maximum 6.7	6~7	
5.	Total carbon (%)		0.16	
6.	C/N ratio	Less than 20:1	-	
7.	Sodium (ppm)		113	
8.	Potassium (ppm)	0.4 % by weight	104	
9.	Calcium (ppm)		89.7	
10.	Nitrate (ppm)		ND	
11.	Phosphate (ppm)	0.4 % by weight	27.71	

Heavy Metals Analysis Results - Bio-soil (-6mm)

Sr. No.	Heavy Metals (ppm)	Phosphate Rich Organic Compost Standard FCO (2013) (ppm)	Results
	Sample Code		L1_S
1.	Aluminum		4.54
2.	Arsenic	10.00	ND
3.	Cadmium	5.00	0.008
4.	Cobalt		0.013
5.	Chromium	50.00	0.059
6.	Copper	300.00	0.323
7.	Iron		0.243
8.	Manganese		0.896
9.	Nickel	50.00	0.04
10.	Lead	100.00	ND
11.	Zinc	1000	0.931
12.	Mercury	0.15	ND

*ND- Not Detected

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Characterization Results – Bio-mining Bio-soil (22 mm)

Sample Code		Phosphate Rich Organic Compost Standard FCO (2013)	L1_S1 Results	
			Min.	Max.
1.	Bulk density (kg/m ³)	<1600 (kg/m ³)	703.3	904.3
2.	Moisture content (%)	25.0 %	24.3641	
3.	Volatile matter content (%)		14.4195	
4.	pH	Maximum 6.7	6~7	
5.	Total carbon (%)		0.15	
6.	C/N ratio	Less than 20:1	-	
7.	Sodium (ppm)		106	
8.	Potassium (ppm)	0.4 % by weight	75.1	
9.	Calcium (ppm)		103	
10.	Nitrate (ppm)		ND	
11.	Phosphate (ppm)	0.4 % by weight	1.90	

Heavy Metals Analysis Results - Bio-mining Bio-soil (22 mm) *ND- Not Detected

Sample Code		Phosphate Rich Organic Compost Standard FCO (2013) (ppm)	L1_S1 Results
1.	Aluminum		7.124
2.	Arsenic	10.00	ND
3.	Cadmium	5.00	0.011
4.	Cobalt		0.013
5.	Chromium	50.00	0.046
6.	Copper	300.00	0.284
7.	Iron		0.069
8.	Manganese		0.747
9.	Nickel	50.00	0.053
10.	Lead	100.00	ND
11.	Zinc	1000	0.954
12.	Mercury	0.15	ND

Characterization Results – Bio-mining RDF

Sr. No.	Parameters Sample Code	Results	
		Min.	Max
1.	Bulk density(kg/m ³)	144.05	288.6
2.	Moisture content (%)	29.2857	
3.	Volatile matter content (%)	47.00	
4.	Calorific value (cal/gm)	4658	

7.0 Bio-mining Product disposal as per 2019 Biomining rules

Sr. No.	Types of Bio-mining Process Products	Disposal/Utilization
1.	Oversized Material	Needs to be shredded manually and disposed as suitable methods given below
2.	Bio-soil (-6mm)	Daily covers, Soil covers for capping sanitary landfills/ secure landfill, Structural filling materials for Road subways, filling land (away from water bodies), Spraying on land for Plantations (non-edible purpose)
3.	RDF	Substitute of fuels in Cement plants, Thermal processes such as pyrolysis, gasification, incineration ^[2]
4.	Footwear	Recycled to Footwear industries.
5.	C&D Waste	C&D Waste Recycling plants, Filling the low-lying areas, Engineered sanitary landfills, Road construction as per the recommendation of civil department. ^[1,6]
6.	Loose Plastics	Co-processing in cement kilns and used as additives in bitumen for road constructions ^[3]
7.	Hard Plastics	Recycling - HDPE Pipes
8.	Glass	Glass recycling industry
9.	Clothes/Goni/Textile material	Recycling in textiles industries.
10.	Wood	As fuel in boiler and other industries.
11.	Metals	Metal scrap recycling industries.
12.	Rubber	Rubber recycling industries
13.	Rejects	Sanitary Landfill
14.	Coconut Shells	As fuel for boilers, used as a raw material in concrete ^[7]
15.	Ceramics Materials	Recycling and also for enhancing concrete properties ^[8]

8.0 References:

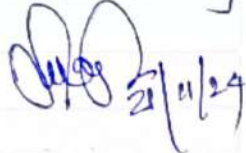
1. <https://cpcb.nic.in/displaypdf.php?id=d2FzdGUvQyZEX3J1bGVzXzlwMTYucGRm>
2. <http://www.swachhbharaturban.gov.in/writereaddata/SBM%20RDF%20Guidelines.pdf?id=00kc3kdpbdamh8b5#:~:text=Clause%2021%3A%20Criteria%20for%20waste,for%20preparing%20refuse%20derived%20fuel.>
3. <http://swachhbharaturban.gov.in/writereaddata/Manual.pdf>
4. <http://swachhbharaturban.gov.in/writereaddata/Manual.pdf>
5. <https://doi.org/10.1016/j.esr.2020.100064>
6. https://cpcb.nic.in/uploads/LegacyWasteBiomining_guidelines_29.04.2019.pdf
7. T. Radha, K. Kamal, S.P Hemant, G. "A comprehensive study of waste coconut shell aggregate as raw material in concrete", 2020, pp -1.
8. K. G. Rajat, A. Vinay, G. Rajesh, R. Kusum, S. Prakash "Optimum utilization of ceramic tile waste for enhancing concrete properties", 2021, pp-1.

Visitor's Book

Date	Name & Address	Contact No. & E-mail	Your Valued Comments
12/11/2024	AMI Biogas/Helge Tryfi	helge.tryfi@gmail.com	<p>Thank you for your hospitality. It was a pleasure to see your sight. We were impressed by your systematic way of working and that the sight was almost smell free. We wish you all the best with your work to clear the plot for alternative use. All the best. JET</p>
12/11/24	Madhuri Singh Enviro Enablers India	madhuri@climatecircle.com	<p>Amazing experience at the landfill. The team is doing wonderful experience work on ground. All the best & Kudos! Thanks for all facilitation during the site visit.</p>

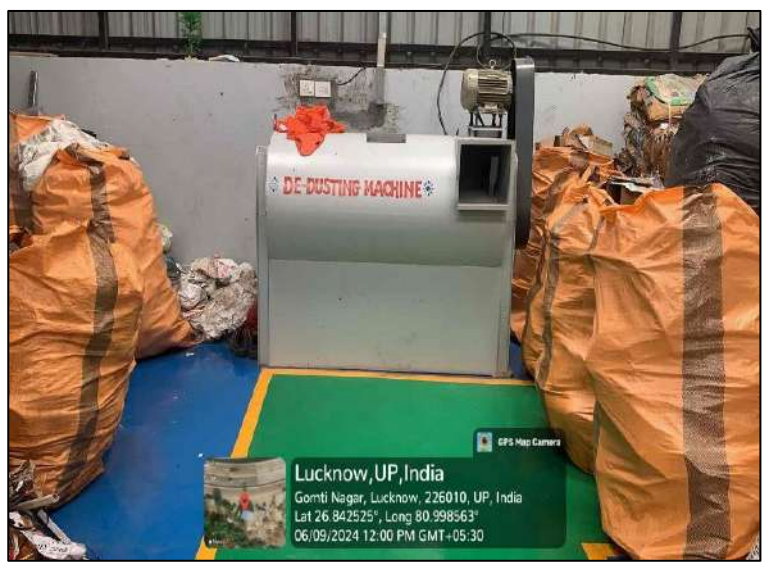
Visitor's Book

Sangam®

Sl. No.	Date	Name & Address	Contact No.	Remarks
22	21/11/24	Smittha Chatterjee, F.E. SUDA, W.B.	9432803552	Work equipped with modern technology & well maintained.
23	21/11/24	Barun Kumar Halder EE, SUDA, WB	9732638235	
24	21/11/24	Subir Nag, S.E, Urban Development Deptt. Govt. of West Bengal.	9434303322	nicely implemented the project and running successfully. Environment friendly, impressed from explanation through Power Point presentation and try to implement in west Bengal also. Expect for future success of the implementing agency.
				 21/11/24

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 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. Another MRF situated in the Vrindavan Sec-8 manage by the private firm M/S Riddhi Enterprises Pvt. Ltd. Furthermore, five 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.



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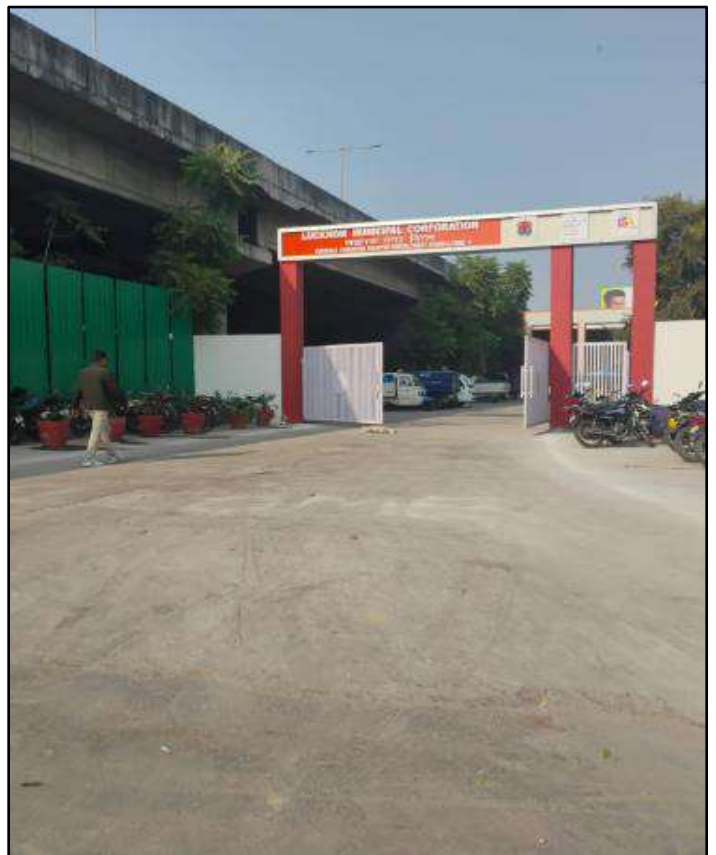
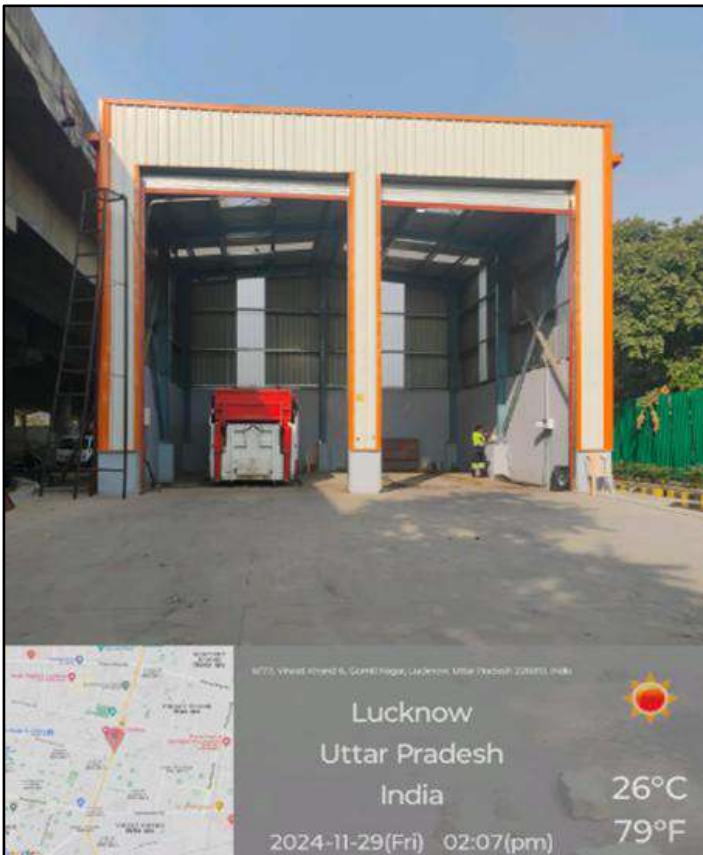


VRINDAVAN SECTOR - 8C, Zone-8





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

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.

Current Status of FCTS Projects:

In Ghaila FCTS all the civil and mechanical work is completed and all the testing of mechanical part of Transfer station is done and it is in process of handing over to LSAPL currently working for door-to-door waste collection in Zone 3.

In Ganga Kheda FCTS Structural Steel work of Truss and Pre-Engineered Building of Shed is currently under the progress. The Mechanical items and machines have arrived and will be installed after the complete Civil work.

In Dayal FCTS piling work and foundation is completed and at current columns are being casted on the site.

In Bhaisora FCTS civil structure of shed and boundary wall around the FCTS is completed, Plain Cement Concrete (PCC) work is currently in motion at the site.

Ghaila Fixed Compactor Transfer Station (FCTS)



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Ganga khera Fixed Compactor Transfer Station (FCTS)



Dayal Fixed Compactor Transfer Station (FCTS)



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Bhaisora Fixed Compactor Transfer Station (FCTS)



Annex VI - Setting up of Aerobic Composting pits in parks

Total 1315 No. 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.



Annex VII - 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.

For Zones 2, 5, and 8, a tender process has been completed, awarding the contract to M/S Lion Enviro Pvt. Ltd. The Letter of Intent (LOI) has been issued, and state government approvals have been secured. The agreement process is in progress, with operations expected to commence by mid-December 2024.

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
	Total	790796	386046	533846	607599	76.83384843	168788

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 VIII- 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 April to November 2024 is presented in the table-

Lucknow Municipal Corporation							
USER CHARGE PROJECT - MONTH-WISE COLLECTION REPORT From 1st APR'24 to 30th NOV'24 TILL 11:50AM							
ZONE	MONTH	UCC BILL CUT	UCC Amount	KCC BILL CUT	KCC Amount	TOTAL BILL CUT	TOTAL Amount
ALL ZONES	APRIL	103189	7417861	2980	4833062	106169	12250923
	MAY	79315	5685502	2848	5324691	82163	11010193
	JUNE	96453	7082126	2995	5459706	99448	12541832
	JULY	117729	8861215	3370	5840712	121099	14701927
	AUGUST	130522	9465633	3595	6163559	134117	15629192
	SEPTEMBER	154612	10915016	4436	7390828	159048	18305844
	OCTOBER	159806	11176843	4939	6918043	164745	18094886
	NOVEMBER	87724	6505579	3412	4921644	91136	11427223
TOTAL		929350	67109775	28575	46852245	957925	113962020

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

Recently, 20 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.

Rag Pickers/Waste Collectors/Kabadis List				
S.No	Ward	Name	Address	Mobile no.
1	J C BOSE	Mohammad Nushad	115/11 bagh monu girish chandra road ghasiyaarimandi Lucknow	8574909928
2		Sunil Kumar	115/11 bagh monu girish chandra road ghasiyari mandi lucknow	9839320895
3		Asif Nashim shah	106/108 bagh monu girish chandra road ghodiyana lucknow	9919399658
4		Bablu	115/1112 bagh monu girish chandra road ghodiyana lucknow	9415998974
5		Mohd Naki	117/22 Jambur kahana machli Mohala	9115060131
6	Vikaram Aditya	Shkantula	Nahar kinare	7355872410
7		Bajrangi	Nahar kinare	7784876468
8		Tasleem	Nahar kinare	6386046384
9	Yadunath Sanyal	Mohd Iqbal	97/017, 8 kasaibada yadunath sanyal	9336772181
10		Subash Pandit	Kulbhaskar Complex near Sadana Latouch road	9839365173

11		Om prakash Yadav	Devpur para Nai basti near rajajipuram karya sthal ganne wali gali	9919368680
12	Maulviganj	Mohd Ali	Aminabad	7317773430
13		Sabhajit Yadav	Aminabad	9839271293
14		Shariq Ali	Aminabad	
15		Bablu Kabbadi	Aminabad	9839375123
16	Hajratganj Ramtheerath	Raja gupta	Sikandar nagar Basti	9005328205
17		Lale	Sikandar nagar Basti	9026724084
18		Pundu Kashayap	bhuyain devi marg	9450113030
19		Lal Parikashyap	Narahi	8052558011
20		Raju Kashyap	Narahi	



Annex X- 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 XI- 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 Swachhata 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 1000 new workers.



Annex XII- 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 45,000 people, contributing to heightened awareness and community engagement in sustainable waste management practices.





Annex XIII- 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	Chinhat 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	IBRAHIMPUR I	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	Marraige 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	26.7759	80.9489		
10	VIDYAWATI I	Tourist Areas	BUDDHA RESORTS PRIVATE LIMITED	Vidhyawati 1	26.7913	80.9043	Md Zehran	9598980640
11	HAZRATGANJ RAMTIRTH	Hotels & Restaurants	Carlton Hotel	Hazaratganj ramtirth	26.8564	80.9475	Shivani	9598980640
12	HAZRATGANJ RAMTIRTH	Offices	Chief Post Master General -Pradhan Post Office	Hazaratganj ramtirth	26.8514	80.94	Ajay Yadav	9369335410

13	RAFI AHMAD KIDWAI	Offices	E-City Real Estate Pvt. Limited	Rafi ahmed kidwai	26.8457	80.9879	Divyansh Awasthi	9839090203
14	AYODHYADAS I	Offices	Eldeco Housing And Industries Ltd	Ayodhyadas 1	26.8947	80.9363	Pradeep Pandey	9839090203
15	AYODHYADAS I	Offices	Eldeco housing and industries ltd. site-Eldeco city	Ayodhyadas 1	26.9185	80.9378	Rishabh Mishra	7985092465
16	IBRAHIMPUR I	RWAs	Eldeco Saubhagyam	Ibrahimpur	26.7683	80.9612		
17	MAHAKAVI JAISHANKAR PRASAD	Hotels & Restaurants	Richi Richi	Janki Vihar	26.8953	80.9421	Dheeraj Makhijani	8090862527
18	MAHANAGAR	Hospitals/Nursing Homes	Fatima Hospital	Mahanagr	26.8713	80.9521	Harendra	8318915196
19	SAROJINI NAGAR II	Offices	Gajanan Agro Food Pvt Ltd	Sarojni nagar 2	26.7758	80.8689	Pawan Kumar Yadav	9936335335
20	RAJA BIJLI PASI I	Others	Gangotri Enclave	Raja bijli passi 1	26.7691	80.9865	Harendra	8574409314
21	HAZRATGANJ RAMTIRTH	Hotels & Restaurants	Gemini Continental	Hazaratganj ramtirth	26.8531	80.9367	Shipra Mishra	9415002035
22	CHINHAT II	Hotels & Restaurants	Fairfield by Marriot	Chinhat 2	26.8681	81.0095	Shipra Mishra	7376902191
23	HINDNAGAR	Others	Gold Star Apartment	Hind nagar	26.7985	80.8942	Sunil Kumar Gautam	9415019962
24	LALKUAN	Hotels & Restaurants	GOLDEN TULIP	Lal kuan	26.8387	80.9345	Surikshit singh	7355019484
25	CHINHAT II	Hotels & Restaurants	Lineage Hotel	Chinhat -3	26.8618	81.0102	khusbhoo Srivastav	9151703101
26	HAZRATGANJ RAMTIRTH	Offices	Halwasiya Center Maintenance Services LIP	Hazaratganj ramtirth	26.8646	81.012	Surya Prakash	9336083688
27	CHINHAT II	Hotels & Restaurants	Hilton Garden Inn	Chinhat 2	26.8639	81.0084	Vivek Kumar	9838170712
28	IBRAHIMPUR I	RWAs	Himalaya Enclave Phase 3rd	Ibrahimpur 1	26.7986	80.9018		
29	AISHBAGH	Offices	Kela Godam	Aishbagh	26.8473	80.9086	Raj Kumar Singh	9454410846
30	IBRAHIMPUR I	RWAs	Himalaya Enclave-Phase-1 and 2	Ibrahimpur	26.7991	80.8975		
31	IBRAHIMPUR II	Malls/Cinema Buildings	LULU Mall	Ibrahimpur 2	26.7842	80.9914	Ashok	7475633593
32	HAZRATGANJ RAMTIRTH	Educational Institutes	Hindi Sansthan	Hazratganj	26.8519	80.9392	Khusbhoo Srivastav	6392843064
33	CHINHAT II	Hotels & Restaurants	Hotel Comfort Inn	Chinhat 2	26.8657	80.9966	Mohd Sharukh	9648615007
34	ALIGANJ	Educational Institutes	IHM	Aliganj	26.8938	80.9508	Priyanka Soni	7652096729
35	KHARIKA II	Hospitals/Nursing Homes	Medanta	Kharika 2	26.7774	80.9477	Raj Kumar Singh	9453958727
36	HAZRATGANJ RAMTIRTH	Malls/Cinema Buildings	India Housing	Hazaratganj ramtirth	26.8558	80.9453	Kamlesh Pal	7355302133

37	AYODHYADAS I	Educational Institutes	Integral University	Ayodhyadas 1	26.9583	80.998	Raj Kumar Singh	9454410846
38	CHINHAT I	Educational Institutes	Jaipuria Institute of management	Chinhat -1	26.8514	81.0105	Amar Tiwari	9598980640
39	BHARTENDU HARISHCHANDRA	Hotels & Restaurants	SHALIMAR GALLANT	Bhartendu harishchandra	26.8991	80.9449	Ranjeet yadav	9454783242
40	J.C.BOSE	Others	Kaiserbagh bus stand	J.C.Boss	26.8531	80.9286	Vinay Siddhartha	6392843064
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	VIKRAMADITYA	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	gomti nagar	26.8514	81.0241	Pawan kumar	9936335335
47	CHINHAT II	Hotels & Restaurants	Hyyat Regency	Chinhat 2	26.8658	81.0059	Vivek Kumar	7985092465
48	GOMTI NAGAR	Hotels & Restaurants	TAJ HOTEL	gomti nagar	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	Chinhat 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	Vivekanand puri	26.8184	80.9069	Pawan kumar	9936335335
53	GOMTI NAGAR	Malls/Cinema Buildings	WAVE INFRA TECH PVT LTD	Gomti Nagar	26.8699	80.9962	Vivek Kumar	7985092465
54	GOMTI NAGAR	Hotels & Restaurants	Madhurima Sweets	gomti nagar	26.8656	80.9963	Rishabh Mishra	8840445968
55	J.C.BOSE	Hospitals/Nursing Homes	Mahanideshak, Chikitsa evam swasth sewayen	J.C.Boss	26.8568	80.9319	khusbhoo 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 passi 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 XIV - C&D waste plant and Collection centres

Approximately 267 TPD of Construction and Demolition (C&D) waste is generated within the LMC jurisdiction. To address this, a tender was awarded to M/s Garg & Co and Rise Eleven Ready Mix Product Pvt. Ltd. based on the lowest quoted tipping fee. They are responsible for developing and revamping the existing C&D waste processing plant under a Public-Private Partnership (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. The processed materials are being utilized in the manufacturing of precast boundary columns, panels, paver, blocks, planters, and other items.

A new 300 TPD C&D waste processing plant, based on wet processing technology, is under construction. The civil construction work has been completed, and machinery have been delivered to the site. Machinery installation is currently underway and is expected to be completed by the end of December 2024.

Additionally, the construction of eight C&D secondary collection centres has been completed.



Sector 9 Vrindavan



South City



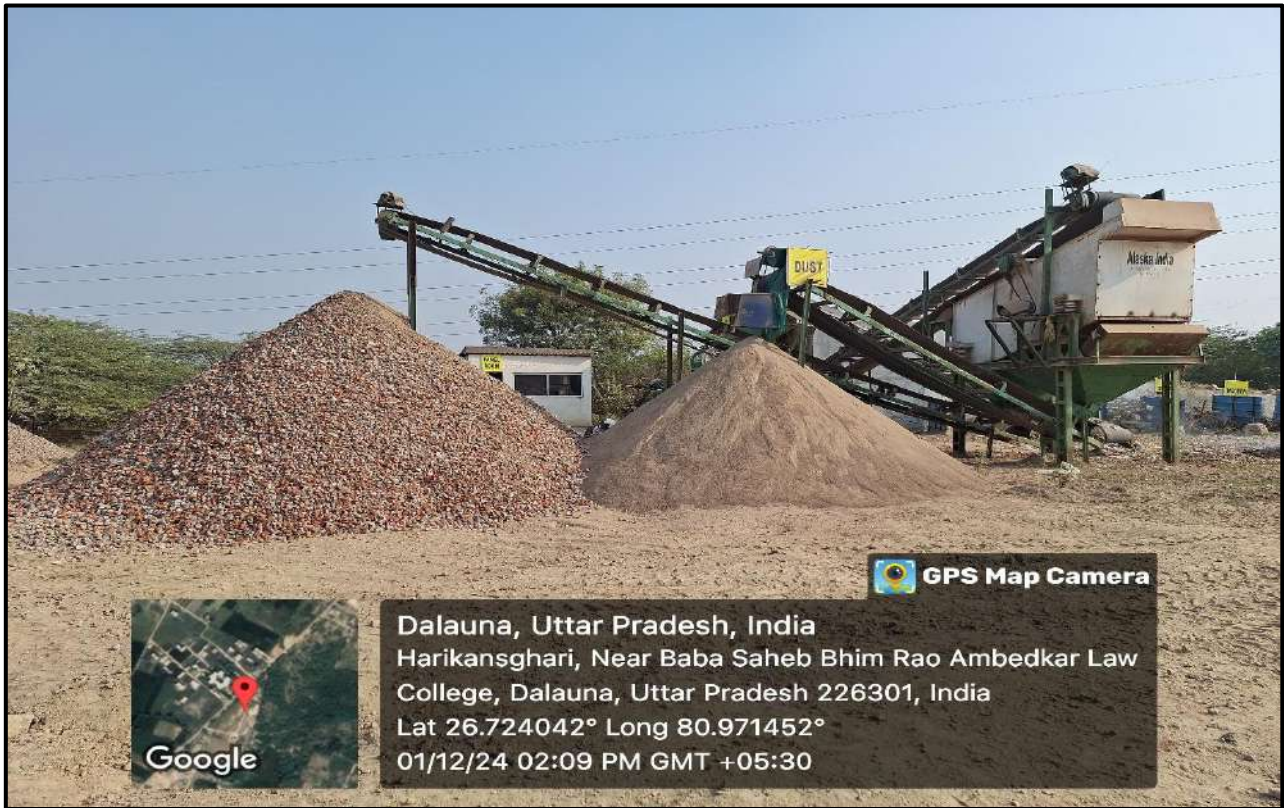
Rajajipuram, Near Bus stand



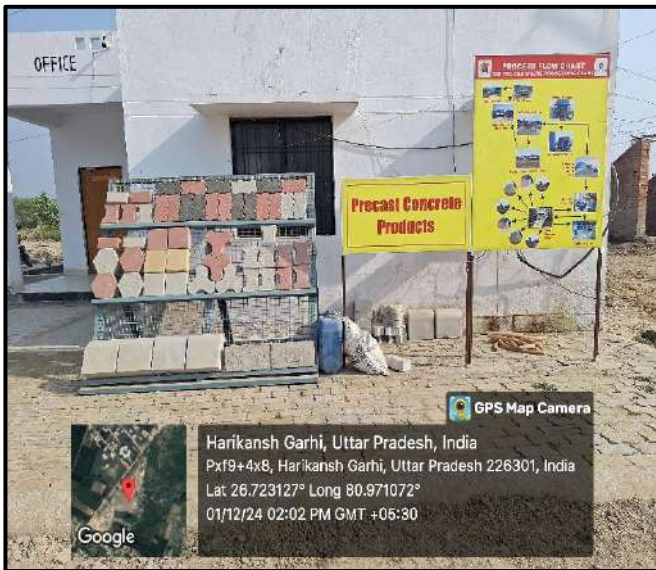
Near Krishna Nagar Metro Station

3096

100TPD C&D waste processing plant

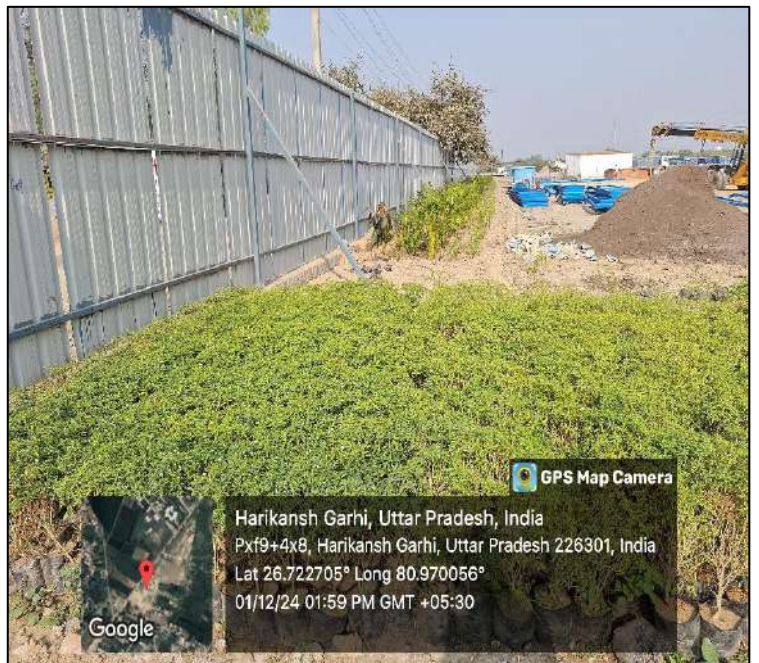
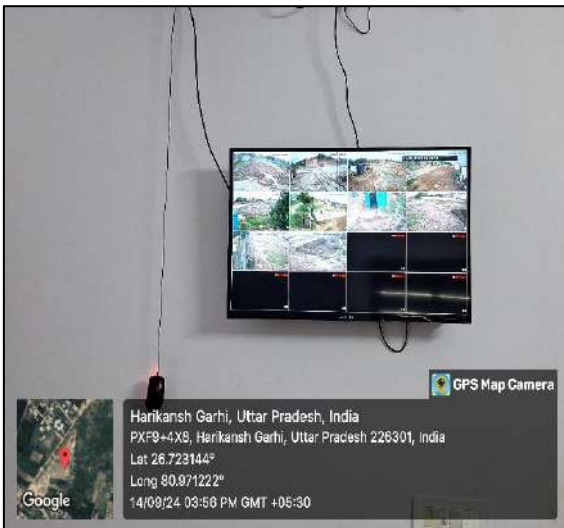
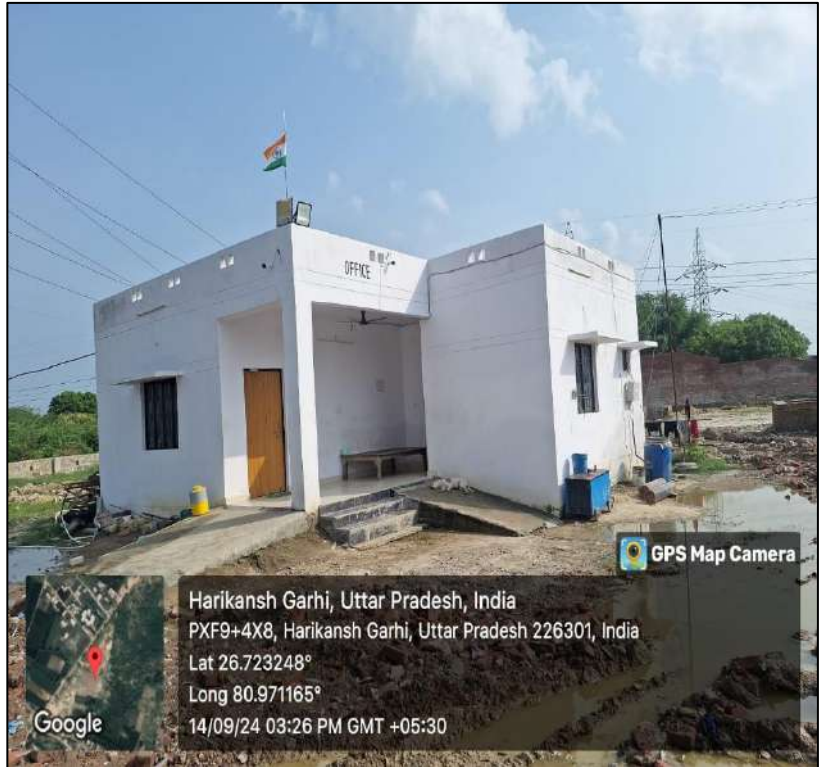


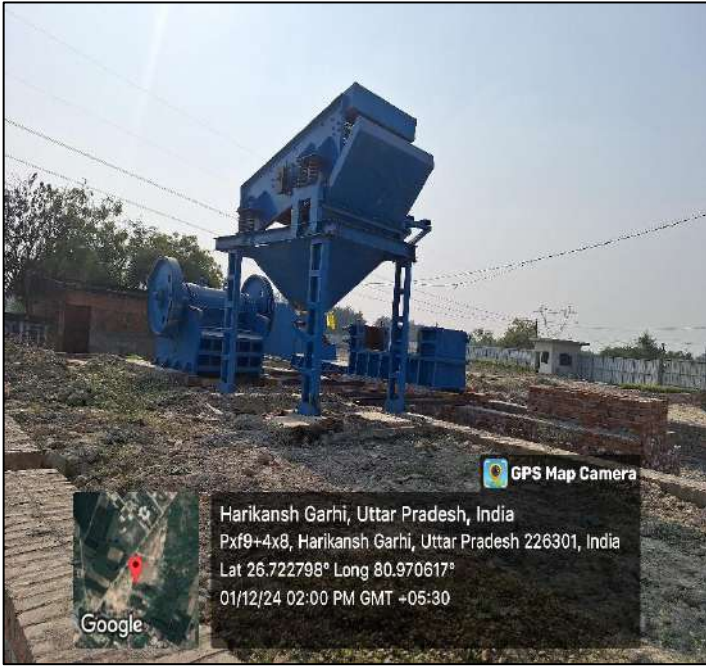
C&D Waste by Product Manufacturing



3097




300TPD C&D waste plant Status





Annex XV- LMC's Innovative Approach to Plastic Waste Disposal

LMC has recently partnered with M/S Shree Shayam Packaging to ensure the proper disposal of non-recyclable plastic waste in compliance with the Plastic Waste Management Rules 2016. This company collects plastic waste seized by LMC officials and shreds it under the supervision of LMC representatives. Additionally, M/S Shree Shayam Packaging provides products manufactured from collected plastic to the LMC. As part of this partnership, the company provides products equivalent to 50% of the weight of the collected plastic waste to the LMC.

 नगर निगम लखनऊ	
प्रेषक पर्यावरण अभियन्ता, नगर निगम, लखनऊ।	सेवा में, मसर्स श्री श्याम पैकेजिंग, 117/130-ए, सर्वोदय नगर, कानपुर।
पत्र संख्या:-डी/ 745 /40310/24	दिनांक :- 27 / 11 / 2024
विषय- नगर निगम सीमाक्षेत्र में जब्त किये गये सिंगल यूज प्लास्टिक के निस्तारण के सम्बन्ध में।	
<p>कृपया उपर्युक्त विषयक आपकी संस्था द्वारा प्रस्तुत प्रस्ताव का संदर्भ ग्रहण करने का कष्ट करें, जिसके माध्यम से नगर निगम सीमाक्षेत्र में जनित सिंगल यूज प्लास्टिक, जो कि पर्यावरणीय दृष्टिकोण से आम जनमानस पर प्रतिकूल प्रभाव डालते हैं। भारत सरकार के नियमावली एवं केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा निर्गत नियमों के अनुसार नगर निगम लखनऊ द्वारा सिंगल यूज प्लास्टिक पर लगाये गये प्रतिबन्ध को प्रभावी रूप से लागू कराये जाने हेतु बाध्य है। सिंगल यूज प्लास्टिक एवं नॉन बायोलोगिकल प्लास्टिक को वैज्ञानिकी विधि से प्लास्टिक अपशिष्ट को संग्रहीत करते हुए उसके पुर्नचक्रण (रिसायकल) कर उत्कृष्ट वस्तुएं जैसे- बेंच, कुर्सी, टेबल इत्यादि फर्नीचर का निर्माण करने का प्रस्ताव दिया गया है, जो निम्नानुसार प्रक्रिया अपनाते हुए कराया जाना प्रस्तावित है-</p> <ul style="list-style-type: none"> • Collection: Propose to collaborate with Lucknow Nagar Nigam for the collection of Singal Use Plastic (SuP) waste from designated collection points across the city. • Transportation: Fleet of vehicles equipped for waste transportation will ensure the timely and safe transfer of collected SuP waste to their (M/s Shree Shyam Packging) Recycling Plant. • Product Creation: The Recycled material will be utilized to manufacture a range of eco-friendly product, including furniture, thus contributing to sustainable living practices. <p>अतः उपरोक्तानुसार जनहित एवं कार्यहित को दृष्टिगत रखते हुए ठोस अपशिष्ट प्रबंधन प्लाण्ट पर नियमित रूप से प्राप्त होने वाले सिंगल यूज प्लास्टिक/नॉन बायोलोगिकल प्लास्टिक के निस्तारण/पुर्नचक्रण सम्बन्धी कार्य प्लास्टिक वेस्ट मैनेजमेन्ट नियमावली-2016 में निहित नियम व शर्तों के अनुरूप कराया जाना सुनिश्चित करेंगे। निर्माण किये गए उत्पादों जैसे- बेंच, कुर्सी, टेबल आदि के अतिरिक्त वैज्ञानिक निस्तारण किये जाने का प्रमाण-पत्र एवं ई0पी0आर0 का क्रेडिट नगर निगम को बिना किसी अतिरिक्त भुगतान के प्रदान किया जायेगा एवं इस प्रक्रिया में होने वाले समस्त व्ययभार का वहन संस्था मेसर्स श्री श्याम पैकेजिंग द्वारा ही किया जायेगा।</p>	
 पर्यावरण अभियन्ता नगर निगम, लखनऊ	
प्रतिलिपि :- <ol style="list-style-type: none"> 1. नगर आयुक्त महोदय को सादर अवलोकनार्थ। 2. अपर नगर आयुक्त महोदय को सादर अवलोकनार्थ। 	
 पर्यावरण अभियन्ता नगर निगम, लखनऊ	

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

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 7 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. 96856.910 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. Bisleri has delivered 10 of these benches to the LMC.

BHUMI GREEN ENERGY LUCKNOW																																
Plant Add- SOLID WASTE PLANT, SHIVARI, PANKHEDA, LUCKNOW (226101) Mo N-9011100699, 9519070990																																
RDF Report With Party Wise Period Of (March -24 to 18 Nov-24)																																
Party Name (Cement Factory)																																
Sr No	Period Date	ACC Limited		Ultratech Cement		Ambuja Cement		ECOPRISM JOHNSON LIMITED		PRISM JOHNSON LIMITED		Birla CORPORATION		INDIAN AGRO ORGANICS		CHADHA PAPER MIL		MA SHEETLA VENTURES LTD.		SHAKUMBHARI PULPI & PAPER MILLS LTD.		GARG DUPLEX & PAPER MILLS		JK Cement		Dalmia Cement		Total Trip	Total Qty			
		500 KM	500 KM	780 KM	450 KM	450 KM	475 KM	376 KM	380 KM	634 KM	634 KM	450 KM	640 KM	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty	Trip	Qty			Trip	Qty	
1	Mar-24	49	1533.88	89	1189.84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	2773.72
2	Apr-24	60	1885.85	120	3802.75	8	277.9	92	2975.85	0	0	0	0	1	36.49	0	0	0	0	0	0	0	0	0	77	2468.79	2	75.91	860	11518.32		
3	May-24	9	286.75	225	7450.02	0	0	222	7650	33	1130.07	2	71.32	0	0	0	0	0	0	0	0	0	0	0	127	4345.215	0	0	618	20913.37		
4	Jun-24	27	887.01	175	6002.97	0	0	120	4294.47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121	4392.21	0	0	443	15576.61		
5	Jul-24	84	2876.18	71	2497.91	0	0	56	2108.18	12	391.05	17	585.87	0	0	0	0	0	0	0	0	0	0	0	76	2813.23	0	0	316	11272.42		
6	Aug-24	98	3577.51	41	1432.58	0	0	17	461.07	119	4534.13	41	1571.59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	316	11376.88		
7	Sep-24	77	2854.41	16	617.05	0	0	85	3427.9	42	1672.92	25	941.48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	243	9513.74			
8	Oct-24	0	0	0	0	0	0	11	444.88	92	3651.58	22	848.28	0	0	131	4819.24	0	0	0	0	0	0	0	0	0	0	0	255	9232.7		
9	Nov-24	0	0	0	0	0	0	4	147.31	26	1066.85	0	0	0	0	25	874.83	26	871.13	3	100.64	1	28.63	41	1589.76	0	0	126	4679.15			
Total-		404	13901	687	23043.1	8	278	607	21489.41	324	12246.6	105	4018.52	1	36.5	156	5194.1	26	871.13	3	100.64	1	28.63	442	15604.2	2	75.9	2765	96856.910			

Sr No	Month	JK Cement		UltraTech		REWA		Prism Johnson		CHADHA PAPER		MA SHEETLA		SHAKUMBHARI		GARG DUPLEX		Acc Cement		
		Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	Co-Processing Certificate	
1	March			346.77		0		0		0		0		0		0			814.13	
2	April		1268.1	3430.37		0		2611.66		0		0		0		0			2529.09	
3	May		5295.48	7197.08		0		4621.47		0		0		0		0			283.44	
4	June		4080.97	6313.2		6740.73		0		0		0		0		0			610.39	
5	July		0	3072.13		3467.910		1507		0		0		0		0			2489.7	
6	Aug		0	1234.91		503.880		0		0		0		0		0			3337.3	
7	Sep		0							0		0		0		0			0.000	
8	Oct		0							0		0		0		0			1.000	
Total			10634.55	21814.46		10712.520		8540.13		0		0		0		0			10058.05	
Address		Add:- Harduwaren, Tehsil- Amanganj, Dist Panna 488441 (MP)			Add:- Unit Dalia Cement Work, SH 5 Post Dalia Dist Sonebhadra 231207 (UP)			Add:- Vill Mankhari Post- Rampur Baghela Dist Satna 485111 (MP)			Add:- Bilaspur UP, 244921		Add:- Dist Uthman Singh Nagar Utraanchal- 263148		Add:- Bhopa Road Muzaffarnagar (UP)		Add:- 8.5 KM, Bhopa Road Muzaffarnagar (UP 09)		Add:- Kymore Cement Works Kymore Dist- Katni 483880 (MP)	



RDF Loading

Bisleri's 'Bottles for Change' Initiative: Recycled Plastic Benches



Annex XVII-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. 1220000.00** have been imposed for the seizure of such non-compliant plastic materials from April to November 2024.

Despite fines, seizures, city struggles to curb plastic, polythene

Animesh Mishra
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LUCKNOW: Though the Lucknow Municipal Corporation (LMC) has collected fines totalling about ₹12.22 lakh and seized 12,002 kg of banned single-use plastic across its eight zones, the city continues to struggle with rampant polythene use in the state capital.

The fine amount was collected between April this year and November 26.

The LMC's weekly enforcement drives, held every second day of the week, are yet to make an impact as vendors and residents openly flout the ban imposed by the ministry of environment. Low quality polythene remains widely available.

The environmental and health consequences are alarming. Plastic is the leading cause of clogged drains and nallahs, exacerbating sanitation issues in the city.

Additionally, vendors often use it to wrap food items, which endangers human health and poses severe risks to animals that inadvertently consume it.

Meanwhile, residents from various areas of the city have expressed concern about the inadequacy of LMC's approach.

Mrityunjay Pandey, emphasised the need to address the root of the problem by targeting the transportation and manufacture of polythene. He suggested that stricter laws and higher



VENDORS OFTEN USE IT TO WRAP FOOD ITEMS, WHICH ENDANGERS HUMAN HEALTH

fines could act as stronger deterrents.

According to a resident Vikas, the focus of LMC's enforcement drives, limited to small vendors and overlooking larger supply chains that facilitate the circulation of banned polythene, needs to change completely for its drives to have any effect.

Responding to these concerns, Sanjeev Pradhan, LMC's environment officer, stated that zonal in-charges have been directed to intensify the enforcement of the ban. He said the ban is imposed on single use plastic as it cannot be recycled which also creates threats to the environment, he said.

Another LMC official said that addressing polythene usage requires not only stricter enforcement but also collaboration between authorities, businesses, and the public.



प्रेस नोट

नगर आयुक्त महोदय द्वारा दिये गये निर्देशों के अनुपालन में आज दिनांक- 11.11.2024 को जोन-05 क्षेत्रान्तर्गत **आलमबाग कानपुर रोड** जन जागरूकता अभियान चलते हुए गन्दगी करने वाले एवं प्रतिबन्धित पॉलीथिन का प्रयोग करने वाले दुकानदारों को गन्दगी न फैलाने एवं प्रतिबन्धित पॉलीथिन का प्रयोग न किये जाने हेतु जागरूक किया गया। साथ ही अभियान के दौरान गन्दगी करने वाले व्यक्तियों पर **04 चालान व ₹0-400.00** का जुर्माना एवं प्रतिबन्धित पॉलीथिन का प्रयोग कर रहे दुकानदारों पर **3 चालान व ₹0-5000.00** इस प्रकार कुल **7 चालान व ₹0-5400.00 का जुर्माना** वसूल किया गया एवं लगभग **1.8** कि०ग्रा० प्रतिबन्धित पॉलीथिन जप्त की गई, अभियान के दौरान की जी०पी०एस० फोटोग्राफ निम्नवत :-


जोनल सेनेटरी अधिकारी, जोन-5
नगर निगम लखनऊ।

Annex XVIII- E-Waste Management

Lucknow Swachhcha 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 November 2024, a significant step towards effective E-waste management in the region.



Annex XIX – Battery-Powered Road Sweepers

In a significant step towards improving air quality and reducing PM10 levels, the M/S Lucknow Swachhata Abhiyan Pvt. Ltd. has initiated the deployment of 150 electric mechanical road sweepers. This initiative aligns with the broader goal of controlling air pollution and enhancing environmental sustainability.

To date, 3 of these advanced sweepers have been successfully deployed, and an additional 50 are anticipated to be operational by the end of December 2024. These electric sweepers, coupled with the implementation of wet brooming techniques, will play a crucial role in efficiently cleaning roads and significantly reducing particulate matter emissions, particularly PM10.



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