

BEFORE THE NATIONAL GREEN TRIBUNAL (PB)

NEW DELHI

O.A. No.108/2023

IN THE MATTER OF:

Lokesh Khurana

...Applicant

Vs

State of U.P. & Ors.

...Respondents

ADDITIONAL AFFIDAVIT OF THE MUNICIPAL CORPORATION
MEERUT

THROUGH

VIBHAV MISHRA

Counsel for the Municipal Corporation, Meerut
221, C.K. Daphtary Block Lawyers Chambers,
Supreme Court of India, New Delhi – 110001

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New Delhi

Dated: 09.04.2025

BEFORE THE NATIONAL GREEN TRIBUNAL (PB)**NEW DELHI****O.A. No.108/2023**

Sr.No - 1 - of

8-4-2025

IN THE MATTER OF:

Lokesh Khurana

...Applicant

Vs

State of U.P. & Ors.

...Respondents

AFFIDAVIT

I, Dr. Harpal Singh, s/o Shri Chetan Singh, aged about 50 years, presently posted as Nagar Swasthya Adhikari, Meerut Nagar Nigam, office at Meerut Nagar Nigam, Meerut, Uttar Pradesh and presently at Meerut, Uttar Pradesh do solemnly affirm and state on oath as under:

1. That the deponent humbly submits that in compliance of the undertaking given to this Hon'ble Tribunal vide order dated 16.07.2024 the following transfer stations are now complete and are functional:
 - i. Initially two capsules were proposed at Nauchandi, Meerut. However, it was resolved that one more capsule be added at Nauchandi. Now all three capsules in transfer station are operational at Nauchandi.
 - ii. Transfer station at Marshall Pitch – Kankarkheda is operational with two capsules.
 - iii. Transfer station at Kamela, Meerut is operational with three capsules.



- iv. Transfer station at Saraswati Lok is yet to be operationalized. This transfer station will be operational by 30.04.2025.
- v. Therefore, out of 04 proposed transfer stations, 03 are operational.

2. There are 11 MRF Centers which were identified for installation. Out of 11 MRF Centers, 07 are operational and remainder 04 MRF Centers will become operational by 30.04.2025. Each MRF is of the capacity of 10 TPD thereby making MRFs functional at a capacity of 70 TPD. The functions of the MRF has been outsourced to M/s Brijendra Energy and Research as pilot project. The certificate of re-use of material bifurcated in logbook is annexed herewith and marked as Annexure-R/1.



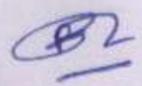
- 3. That segregation unit of the capacity $150 \times 2 = 300$ TPD is completely functional, in addition, at Gawdi.
- 4. That for $700 + 200$ TPD MSW torrefaction plant, NTPC has completed the soil testing and found the land suitable for installation of plant. NTPC will be installing the torrefaction plant as per the schedule given by the NTPC which has been recorded in the agreement. The copy of the agreement is annexed herewith and marked as Annexure-R/2.
- 5. That qua legacy waste at Lohiya Nagar, the DPR has already been sent to State of U.P. on 01.04.2025 for remediation of the legacy waste by bio-mining for a total project cost of Rs.28.69 Cr. Including RDF transportation charges and estimated bio-mining

(Handwritten signature)

cost of Rs.418.11 per metric tonne. The period for completion of the project is 24 months considering 02 months for mobilization and 04 months for Monsoon. The true copy of the DPR and letter dated 01.04.2025 sent by the Municipal Corporation Meerut to the State of U.P. is annexed herewith and marked as Annexure-R/3.

6. That in addition thereto the Municipal Corporation has issued work order dated 21.03.2025 to M/s Geron engineering Pvt. Ltd. for treatment of legacy waste through bioremediation, resource recovery and scientific reject disposal at legacy waste site at Mangatpuram, Meerut, Uttar Pradesh. The timeline for the scientific treatment of legacy waste at Mangatpuram, Meerut, Uttar Pradesh will be completed within 12 months. The true copy of the letter dated 21.03.2025 along with the agreement dated 21.03.2025 entered into by the Municipal Corporation Meerut and M/s Geron engineering Pvt. Ltd is annexed herewith and marked as Annexure-R/4.

7. That for Lohiya Nagar legacy waste site, funds of Rs.28.69 Cr has been sought from the State of U.P., the receipt of which is awaited.


DEPONENT

VERIFICATION:

Verified at Meerut, Uttar Pradesh on this 08th day of April, 2025 inter-alia stating that all contents of the present affidavit are true and correct to the





best of my knowledge derived from the records and that nothing material has been concealed herefrom.

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DEPONENT

[Handwritten signature]
[Handwritten signature]

(NARESH KUMAR SHARMA)
Advocate
9897202107 Enrollment - 441/873



Dr. Harpal Singh
Nigun Singh
Identified by N. K. Sharma
I certify the contents of this affidavit on oath
before AJAI SINGHI, Advocate Meerut
Fee Rs. 15-00 per paragraph

[Handwritten signature]
8-4-25

पत्रांक- 731 / आ0लि0-अ0न0आ0 / 2024

दिनांक 12 दिसम्बर, 2024

कार्यादेश

मै0 विजेन्द्र एनर्जी एण्ड रिसर्च,
खसरा नं0 463, निकट ग्राम भूड़ बराल
दिल्ली रोड़, मेरठ।

कृपया आपके पत्र दिनांक 30.11.2024 के क्रम में नगर निगम, मेरठ द्वारा मार्च, 2025 तक एम0आर0एफ0 सेन्टरों क्रमशः 01. अछरौंडा, 02. नूरनगर व 03. मलियाना का पायलेट बेसिस पर मैनुअली संचालन एवं मानकों के अनुसार एकत्र अपशिष्ट का निस्तारण किये जाने हेतु आपकी फर्म को निम्न शर्तों के अनुसार एम0आर0एफ0 सेन्टरों के संचालन हेतु स्वीकृति प्रदान की जाती है:-

1. एम0आर0एफ0 के संचालन में जो भी विद्युत बिल होंगे, उनका भुगतान नगर निगम, मेरठ द्वारा किया जायेगा।
2. एम0आर0एफ0 सेन्टर पर एकत्र कूड़े के सेग्रीगेशन के पश्चात् प्राप्त सामग्री का उपयोग व विक्रय करने का अधिकार आपकी फर्म का होगा।
3. एम0आर0एफ0 सेन्टर पर भार मापने वाली छोटी मशीन नगर निगम, मेरठ द्वारा उपलब्ध करायी जायेगी।
4. एम0आर0एफ0 सेन्टर पर कार्मिको हेतु आवश्यक सुरक्षा उपकरण (यथा-हैल्मेट, ग्लव्स, मास्क, गमबूट) नगर निगम, मेरठ द्वारा उपलब्ध कराये जायेंगे।

अतः उपरोक्तानुसार दिनांक 13.12.2024 से 31 मार्च, 2025 तक एम0आर0एफ0 सेन्टरों क्रमशः 01. अछरौंडा, 02. नूरनगर व 03. मलियाना का निःशुल्क संचालन मानकों के अनुसार प्रारम्भ करना सुनिश्चित करें।

अपर नगर आयुक्त
नगर निगम, मेरठ।

प्रतिलिपि:-

1. नगर आयुक्त महोदय की सेवा में सादर सूचनार्थ प्रेषित।
2. प्रभारी नगर स्वास्थ्य अधिकारी को आवश्यक कार्यवाही हेतु प्रेषित।

अपर नगर आयुक्त
नगर निगम, मेरठ।

कार्यालय नगर निगम, मेरठ।

पत्रांक- 725 /आ0लि0-अ0न0आ0 /2024

दिनांक 22 नवंबर, 2024

कार्यादेश

मै0 बिजेन्द्र एनर्जी एण्ड रिसर्च,
खसरा नं0 463, निकट ग्राम भूड़ बराल
दिल्ली रोड़, मेरठ।

नगर निगम, मेरठ द्वारा मार्च, 2025 तक गांवड़ी व सरस्वती लोक स्थित एम0आर0एफ0 सेन्टरों का पायलेट बेसिस पर मैनुअली संचालन एवं मानकों के अनुसार एकत्र अपशिष्ट का निस्तारण किये जाने हेतु आपकी फर्म को निम्न शर्तों के अनुसार एम0आर0एफ0 सेन्टरों के संचालन हेतु स्वीकृति प्रदान की जाती है:-

1. एम0आर0एफ0 के संचालन में जो भी विद्युत बिल होंगे, उनका भुगतान नगर निगम, मेरठ द्वारा किया जायेगा।
2. एम0आर0एफ0 सेन्टर पर एकत्र कूड़े के सेग्रीगेशन के पश्चात् प्राप्त सामग्री का उपयोग व विक्रय करने का अधिकार आपकी फर्म का होगा।
3. एम0आर0एफ0 सेन्टर पर भार मापने वाली छोटी मशीन नगर निगम, मेरठ द्वारा उपलब्ध करायी जायेगी।
4. एम0आर0एफ0 सेन्टर पर कार्मिको हेतु आवश्यक सुरक्षा उपकरण (यथा-हैल्मेट, ग्लब्स, मास्क, गमबूट) नगर निगम, मेरठ द्वारा उपलब्ध कराये जायेंगे।

अतः उपरोक्तानुसार दिनांक 23.11.2024 से 31 मार्च, 2025 तक गांवड़ी व सरस्वती लोक स्थित एम0आर0एफ0 सेन्टरों का निःशुल्क संचालन मानकों के अनुसार प्रारम्भ करना सुनिश्चित करें।

अपर नगर आयुक्त
नगर निगम, मेरठ।

प्रतिलिपि:-

1. नगर आयुक्त महोदय की सेवा में सादर सूचनार्थ प्रेषित।
2. प्रभारी नगर स्वास्थ्य अधिकारी को आवश्यक कार्यवाही हेतु प्रेषित।

अपर नगर आयुक्त
नगर निगम, मेरठ।



MRF GAWARI - NAGAR NIGAM MEERUT

Processing Plant of Dry Waste

| Sr. No. | Date | DRY WASTE - SHIRT -A & B - MRF-1 (CAPACITY 5 MT EACH) | | DRY WASTE - SHIRT -A & B - MRF-2 (CAPACITY 5 MT EACH SHIFT) | | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | | | | Quantity Utilised /Sold | Month-FEB-2025 | Sign... of Investigator |
|---------|-----------|---|--------------------|---|-------------|---|-----------------|-------------|------------|--------------|--------|--------|--------|-------------------------|----------------|-------------------------|
| | | Metal (TPD) | Packaging Material | Cardboard (TPD) | Glass (TPD) | | Cloth (TPD) | Rubber(TPD) | Paper(TPD) | Plastic(TPD) | | | | | | |
| 1 | 1-Feb-25 | 9.4 | 9.4 | 9.4 | 9.4 | 18.8 | 0.0376 | 1.5604 | 1.316 | 0.846 | 3.008 | 1.504 | 3.76 | 6.768 | 18.8 | |
| 2 | 2-Feb-25 | 9.6 | 8.4 | 8.4 | 8.4 | 18 | 0.036 | 1.494 | 1.26 | 0.81 | 2.88 | 1.44 | 3.6 | 6.48 | 18 | |
| 3 | 3-Feb-25 | 10 | 9 | 9 | 9 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | |
| 4 | 4-Feb-25 | 9.2 | 9.8 | 9.8 | 9.8 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | |
| 5 | 5-Feb-25 | 9.4 | 9 | 9 | 9 | 18.4 | 0.0368 | 1.5272 | 1.288 | 0.828 | 2.944 | 1.472 | 3.68 | 6.624 | 18.4 | |
| 6 | 6-Feb-25 | 9.6 | 9.4 | 9.4 | 9.4 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | |
| 7 | 7-Feb-25 | 9 | 8.4 | 8.4 | 8.4 | 17.4 | 0.0348 | 1.4442 | 1.218 | 0.783 | 2.784 | 1.392 | 3.48 | 6.264 | 17.4 | |
| 8 | 8-Feb-25 | 9.8 | 9 | 9 | 9 | 18.8 | 0.0376 | 1.5604 | 1.316 | 0.846 | 3.008 | 1.504 | 3.76 | 6.768 | 18.8 | |
| 9 | 9-Feb-25 | 9.4 | 9.8 | 9.8 | 9.8 | 19.2 | 0.0384 | 1.5936 | 1.344 | 0.864 | 3.072 | 1.536 | 3.84 | 6.912 | 19.2 | |
| 10 | 10-Feb-25 | 8.2 | 10 | 10 | 10 | 18.2 | 0.0364 | 1.5106 | 1.274 | 0.819 | 2.912 | 1.456 | 3.64 | 6.552 | 18.2 | |
| 11 | 11-Feb-25 | 8.6 | 9.6 | 9.6 | 9.6 | 18.2 | 0.0364 | 1.5106 | 1.274 | 0.819 | 2.912 | 1.456 | 3.64 | 6.552 | 18.2 | |
| 12 | 12-Feb-25 | 10 | 8.2 | 8.2 | 8.2 | 18.2 | 0.0364 | 1.5106 | 1.274 | 0.819 | 2.912 | 1.456 | 3.64 | 6.552 | 18.2 | |
| 13 | 13-Feb-25 | 9 | 9 | 9 | 9 | 18 | 0.036 | 1.494 | 1.26 | 0.81 | 2.88 | 1.44 | 3.6 | 6.48 | 18 | |
| 14 | 14-Feb-25 | 9.4 | 7.8 | 7.8 | 7.8 | 17.2 | 0.0344 | 1.4276 | 1.204 | 0.774 | 2.752 | 1.376 | 3.44 | 6.192 | 17.2 | |
| 15 | 15-Feb-25 | 8.4 | 6.4 | 6.4 | 6.4 | 14.8 | 0.0296 | 1.2284 | 1.036 | 0.666 | 2.368 | 1.184 | 2.96 | 5.328 | 14.8 | |
| 16 | 16-Feb-25 | 9 | 9.4 | 9.4 | 9.4 | 18.4 | 0.0368 | 1.5272 | 1.288 | 0.828 | 2.944 | 1.472 | 3.68 | 6.624 | 18.4 | |
| 17 | 17-Feb-25 | 9.8 | 9.6 | 9.6 | 9.6 | 19.4 | 0.0388 | 1.6102 | 1.358 | 0.873 | 3.104 | 1.552 | 3.88 | 6.984 | 19.4 | |
| 18 | 18-Feb-25 | 9 | 10 | 10 | 10 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | |
| 19 | 19-Feb-25 | 9.4 | 9.2 | 9.2 | 9.2 | 18.6 | 0.0372 | 1.5438 | 1.302 | 0.837 | 2.976 | 1.488 | 3.72 | 6.696 | 18.6 | |
| 20 | 20-Feb-25 | 8.4 | 9.4 | 9.4 | 9.4 | 17.8 | 0.0356 | 1.4774 | 1.246 | 0.801 | 2.848 | 1.424 | 3.56 | 6.408 | 17.8 | |
| 21 | 21-Feb-25 | 9 | 9.6 | 9.6 | 9.6 | 18.6 | 0.0372 | 1.5438 | 1.302 | 0.837 | 2.976 | 1.488 | 3.72 | 6.696 | 18.6 | |
| 22 | 22-Feb-25 | 9.8 | 9 | 9 | 9 | 18.8 | 0.0376 | 1.5604 | 1.316 | 0.846 | 3.008 | 1.504 | 3.76 | 6.768 | 18.8 | |
| 23 | 23-Feb-25 | 10 | 9.8 | 9.8 | 9.8 | 19.8 | 0.0396 | 1.6434 | 1.386 | 0.891 | 3.168 | 1.584 | 3.96 | 7.128 | 19.8 | |
| 24 | 24-Feb-25 | 9.6 | 9.4 | 9.4 | 9.4 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | |
| 25 | 25-Feb-25 | 8.2 | 8.2 | 8.2 | 8.2 | 16.4 | 0.0328 | 1.3612 | 1.148 | 0.738 | 2.624 | 1.312 | 3.28 | 5.904 | 16.4 | |
| 26 | 26-Feb-25 | 9 | 8.6 | 8.6 | 8.6 | 17.6 | 0.0352 | 1.4608 | 1.232 | 0.792 | 2.816 | 1.408 | 3.52 | 6.336 | 17.6 | |
| 27 | 27-Feb-25 | 7.8 | 10 | 10 | 10 | 17.8 | 0.0356 | 1.4774 | 1.246 | 0.801 | 2.848 | 1.424 | 3.56 | 6.408 | 17.8 | |
| 28 | 28-Feb-25 | 6.4 | 9 | 9 | 9 | 15.4 | 0.0308 | 1.2782 | 1.078 | 0.693 | 2.464 | 1.232 | 3.08 | 5.544 | 15.4 | |
| | | 254.4 | 254.4 | 254.4 | 254.4 | 508.8 | 1.0176 | 42.2304 | 35.616 | 22.896 | 81.408 | 40.704 | 101.76 | 183.168 | 508.8 | |

For Bijendra Energy & Research

Proprietor

MRF GAWARI - NAGAR NIGAM MEERUT
Processing Plant of Dry Waste

For Name- BIJENDRA ENERGY AND RESEARCH - MEERUT

| Sr. No. | Date | DRY WASTE - SHIFT -A & B - MRF -1 (CAPACITY SMT EACH SHIFT) | DRY WASTE - SHIFT -A & B - MRF -2 (CAPACITY SMT EACH SHIFT) | Total Dry Waste Processed at Plant(TPD) | Output of Plant | | | | Month- JAN-2025 | | | | | |
|---------|--------------|---|---|--|-----------------|--------------------------------|---------------------|---------------|-----------------|---------------|----------------|----------------|---------------------------|----------------------------|
| | | | | | Metal (TPD) | Packaging Material (TPD) | Cardboard/ (TPD) | Glass(TPD) | Cloth(TPD) | Rubber(TPD) | Paper (TPD) | Plastic(TPD) | Quantity Utilised/Sold | Sign... of Investigator |
| 1 | 1-Jan-25 | 9 | 8.5 | 17.5 | 0.035 | 1.4525 | 1.225 | 0.7875 | 2.8 | 1.4 | 3.5 | 6.3 | 17.5 | |
| 2 | 2-Jan-25 | 9 | 9.5 | 18.5 | 0.037 | 1.5355 | 1.295 | 0.8325 | 2.96 | 1.48 | 3.7 | 6.66 | 18.5 | |
| 3 | 3-Jan-25 | 9.8 | 9.9 | 19.7 | 0.0394 | 1.6351 | 1.379 | 0.8865 | 3.152 | 1.576 | 3.94 | 7.092 | 19.7 | |
| 4 | 4-Jan-25 | 9.5 | 9.3 | 18.8 | 0.0376 | 1.5604 | 1.316 | 0.846 | 3.008 | 1.504 | 3.76 | 6.768 | 18.8 | |
| 5 | 5-Jan-25 | 9.3 | 9.6 | 18.9 | 0.0378 | 1.5687 | 1.323 | 0.8505 | 3.074 | 1.512 | 3.78 | 6.804 | 18.9 | |
| 6 | 6-Jan-25 | 9.2 | 9.1 | 18.3 | 0.0366 | 1.5189 | 1.281 | 0.8235 | 2.928 | 1.464 | 3.66 | 6.588 | 18.3 | |
| 7 | 7-Jan-25 | 9 | 8.9 | 17.9 | 0.0358 | 1.4857 | 1.253 | 0.8055 | 2.864 | 1.432 | 3.58 | 6.444 | 17.9 | |
| 8 | 8-Jan-25 | 9.8 | 9.8 | 19.6 | 0.0392 | 1.6268 | 1.372 | 0.882 | 3.136 | 1.568 | 3.92 | 7.056 | 19.6 | |
| 9 | 9-Jan-25 | 9.3 | 9.2 | 18.5 | 0.037 | 1.5355 | 1.295 | 0.8325 | 2.96 | 1.48 | 3.7 | 6.66 | 18.5 | |
| 10 | 10-Jan-25 | 9.8 | 9.5 | 19.3 | 0.0386 | 1.6019 | 1.351 | 0.8685 | 3.136 | 1.544 | 3.86 | 6.948 | 19.3 | |
| 11 | 11-Jan-25 | 9.2 | 8.9 | 18.1 | 0.0362 | 1.5023 | 1.267 | 0.8145 | 2.896 | 1.448 | 3.62 | 6.516 | 18.1 | |
| 12 | 12-Jan-25 | 9.5 | 10 | 19.5 | 0.039 | 1.6185 | 1.365 | 0.8775 | 3.12 | 1.56 | 3.9 | 7.02 | 19.5 | |
| 13 | 13-Jan-25 | 9.2 | 9.3 | 18.5 | 0.037 | 1.5355 | 1.295 | 0.8325 | 2.96 | 1.48 | 3.7 | 6.66 | 18.5 | |
| 14 | 14-Jan-25 | 9.3 | 9.6 | 18.9 | 0.0378 | 1.5687 | 1.323 | 0.8505 | 3.024 | 1.512 | 3.78 | 6.804 | 18.9 | |
| 15 | 15-Jan-25 | 9.8 | 9 | 18.8 | 0.0376 | 1.5604 | 1.316 | 0.846 | 3.008 | 1.504 | 3.76 | 6.768 | 18.8 | |
| 16 | 16-Jan-25 | 7.5 | 9 | 16.5 | 0.033 | 1.3695 | 1.155 | 0.7425 | 2.64 | 1.32 | 3.3 | 5.94 | 16.5 | |
| 17 | 17-Jan-25 | 9 | 9.8 | 18.8 | 0.0376 | 1.5604 | 1.316 | 0.846 | 3.008 | 1.504 | 3.76 | 6.768 | 18.8 | |
| 18 | 18-Jan-25 | 8.5 | 8.5 | 17 | 0.034 | 1.411 | 1.19 | 0.765 | 2.72 | 1.36 | 3.4 | 6.12 | 17 | |
| 19 | 19-Jan-25 | 9.5 | 9.3 | 18.8 | 0.0376 | 1.5604 | 1.316 | 0.846 | 3.008 | 1.504 | 3.76 | 6.768 | 18.8 | |
| 20 | 20-Jan-25 | 9.9 | 7.2 | 17.1 | 0.0342 | 1.4193 | 1.197 | 0.7695 | 2.736 | 1.368 | 3.42 | 6.156 | 17.1 | |
| 21 | 21-Jan-25 | 9.3 | 6 | 15.3 | 0.0306 | 1.2699 | 1.071 | 0.6885 | 2.448 | 1.224 | 3.06 | 5.508 | 15.3 | |
| 22 | 22-Jan-25 | 9.6 | 9.8 | 19.4 | 0.0388 | 1.6102 | 1.358 | 0.873 | 3.104 | 1.552 | 3.88 | 6.984 | 19.4 | |
| 23 | 23-Jan-25 | 9.1 | 9.3 | 18.4 | 0.0368 | 1.5272 | 1.288 | 0.828 | 2.944 | 1.472 | 3.68 | 6.624 | 18.4 | |
| 24 | 24-Jan-25 | 8.9 | 9.8 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 25 | 25-Jan-25 | 9.8 | 9.2 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | |
| 26 | 26-Jan-25 | 9.2 | 9.5 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 27 | 27-Jan-25 | 9.5 | 9.2 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 28 | 28-Jan-25 | 8.9 | 9.3 | 18.2 | 0.0364 | 1.5106 | 1.274 | 0.819 | 2.912 | 1.456 | 3.64 | 6.552 | 18.2 | |
| 29 | 29-Jan-25 | 10 | 9.8 | 19.8 | 0.0396 | 1.6434 | 1.386 | 0.891 | 3.168 | 1.584 | 3.96 | 7.128 | 19.8 | |
| 30 | 30-Jan-25 | 9.3 | 7.5 | 16.8 | 0.0336 | 1.3944 | 1.176 | 0.756 | 2.688 | 1.344 | 3.36 | 6.048 | 16.8 | |
| 31 | 31-Jan-25 | 9.6 | 9 | 18.6 | 0.0372 | 1.5438 | 1.302 | 0.837 | 2.976 | 1.488 | 3.72 | 6.696 | 18.6 | |
| | Total | 288.3 | 282.3 | 570.6 | 1.1412 | 47.3598 | 39.942 | 25.677 | 91.296 | 45.648 | 114.12 | 205.416 | 570.6 | |

For Bijendra Energy & Research
Prasmieter



| MRF GAWARI - NAGAR NIGAM MEERUT | | | | | | | | | | | | | | |
|---------------------------------|-----------|--|---|---|-----------------|--------------------------------|--------------------|----------------|----------------|-----------------|---------------------|------------------|----------------------------|--------------------------------|
| Processing Plant of Dry Waste | | | | | | | | | | | | | | |
| Sr. No. | Date | DRY WASTE - SHIFT -A & B - MRF -1 (CAPACITY 5 MT EACH SHIFT) | DRY WASTE - SHIFT -A & B - MRF -2 (CAPACITY 5 MT EACH SHIFT) | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | | | Month- December, 24 | | Sign... of Investigator | |
| | | | | | Metal (TPD) | Packaging Material (TPD) | Cardboard(TPD) | Glass (TPD) | Cloth (TPD) | Rubber(T PD) | Paper(TP D) | Plastic(TP D) | | Quantity Utilised /Solid |
| 1 | 1-Dec-24 | 9.2 | 8.5 | 17.7 | 0.0354 | 1.4691 | 1.239 | 0.7965 | 2.832 | 1.416 | 3.54 | 6.372 | 17.7 | |
| 2 | 2-Dec-24 | 9.3 | 9.4 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 3 | 3-Dec-24 | 9.8 | 9.1 | 18.9 | 0.0378 | 1.5687 | 1.323 | 0.8505 | 3.024 | 1.512 | 3.78 | 6.804 | 18.9 | |
| 4 | 4-Dec-24 | 9.3 | 9.3 | 18.6 | 0.0372 | 1.5438 | 1.302 | 0.837 | 2.976 | 1.488 | 3.72 | 6.696 | 18.6 | |
| 5 | 5-Dec-24 | 9.3 | 9.6 | 18.9 | 0.0378 | 1.5687 | 1.323 | 0.8505 | 3.024 | 1.512 | 3.78 | 6.804 | 18.9 | |
| 6 | 6-Dec-24 | 8.4 | 8.8 | 17.2 | 0.0344 | 1.4276 | 1.204 | 0.774 | 2.752 | 1.376 | 3.44 | 6.192 | 17.2 | |
| 7 | 7-Dec-24 | 8.6 | 8.9 | 17.5 | 0.035 | 1.4525 | 1.225 | 0.7875 | 2.8 | 1.4 | 3.5 | 6.3 | 17.5 | |
| 8 | 8-Dec-24 | 9.8 | 9.8 | 19.6 | 0.0392 | 1.6268 | 1.372 | 0.882 | 3.136 | 1.568 | 3.92 | 7.056 | 19.6 | |
| 9 | 9-Dec-24 | 9.3 | 9.2 | 18.5 | 0.037 | 1.5555 | 1.295 | 0.8325 | 2.96 | 1.48 | 3.7 | 6.66 | 18.5 | |
| 10 | 10-Dec-24 | 9.6 | 9.5 | 19.1 | 0.0382 | 1.5853 | 1.337 | 0.8595 | 3.056 | 1.528 | 3.82 | 6.876 | 19.1 | |
| 11 | 11-Dec-24 | 9.2 | 8.9 | 18.1 | 0.0362 | 1.5023 | 1.267 | 0.8145 | 2.896 | 1.448 | 3.62 | 6.516 | 18.1 | |
| 12 | 12-Dec-24 | 9.5 | 9.8 | 19.3 | 0.0386 | 1.6019 | 1.351 | 0.8685 | 3.088 | 1.544 | 3.86 | 6.948 | 19.3 | |
| 13 | 13-Dec-24 | 9.2 | 9.5 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 14 | 14-Dec-24 | 9.2 | 8.7 | 17.9 | 0.0358 | 1.4857 | 1.253 | 0.8055 | 2.864 | 1.432 | 3.58 | 6.444 | 17.9 | |
| 15 | 15-Dec-24 | 9 | 9.2 | 18.2 | 0.0364 | 1.5106 | 1.274 | 0.819 | 2.912 | 1.456 | 3.64 | 6.552 | 18.2 | |
| 16 | 16-Dec-24 | 7.5 | 9.3 | 16.8 | 0.0336 | 1.3944 | 1.176 | 0.756 | 2.688 | 1.344 | 3.36 | 6.048 | 16.8 | |
| 17 | 17-Dec-24 | 9 | 9.8 | 18.8 | 0.0376 | 1.5604 | 1.316 | 0.846 | 3.008 | 1.504 | 3.76 | 6.768 | 18.8 | |
| 18 | 18-Dec-24 | 8.5 | 9.3 | 17.8 | 0.0356 | 1.4774 | 1.246 | 0.801 | 2.848 | 1.424 | 3.56 | 6.408 | 17.8 | |
| 19 | 19-Dec-24 | 9.4 | 9.3 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 20 | 20-Dec-24 | 9.1 | 8.4 | 17.5 | 0.035 | 1.4525 | 1.225 | 0.7875 | 2.8 | 1.4 | 3.5 | 6.3 | 17.5 | |
| 21 | 21-Dec-24 | 9.3 | 8.6 | 17.9 | 0.0358 | 1.4857 | 1.253 | 0.8055 | 2.864 | 1.432 | 3.58 | 6.444 | 17.9 | |
| 22 | 22-Dec-24 | 9.6 | 9.8 | 19.4 | 0.0388 | 1.6102 | 1.358 | 0.873 | 3.104 | 1.552 | 3.88 | 6.984 | 19.4 | |
| 23 | 23-Dec-24 | 8.8 | 9.3 | 18.1 | 0.0362 | 1.5023 | 1.267 | 0.8145 | 2.896 | 1.448 | 3.62 | 6.516 | 18.1 | |
| 24 | 24-Dec-24 | 8.9 | 8.6 | 17.5 | 0.035 | 1.4525 | 1.225 | 0.7875 | 2.8 | 1.4 | 3.5 | 6.3 | 17.5 | |
| 25 | 25-Dec-24 | 9.8 | 9.2 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | |
| 26 | 26-Dec-24 | 9.2 | 9.5 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 27 | 27-Dec-24 | 9.5 | 9.2 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 28 | 28-Dec-24 | 8.9 | 9.2 | 18.1 | 0.0362 | 1.5023 | 1.267 | 0.8145 | 2.896 | 1.448 | 3.62 | 6.516 | 18.1 | |
| 29 | 29-Dec-24 | 9.8 | 8 | 17.8 | 0.0356 | 1.4774 | 1.246 | 0.801 | 2.848 | 1.424 | 3.56 | 6.408 | 17.8 | |
| 30 | 30-Dec-24 | 9.5 | 7.5 | 17 | 0.034 | 1.411 | 1.19 | 0.765 | 2.72 | 1.36 | 3.4 | 6.12 | 17 | |
| 31 | 31-Dec-24 | 8.7 | 9 | 17.7 | 0.0354 | 1.4691 | 1.239 | 0.7965 | 2.832 | 1.416 | 3.54 | 6.372 | 17.7 | |
| | total | 284.2 | 282.2 | 566.4 | 1.1328 | 47.0112 | 39.648 | 25.488 | 90.624 | 45.312 | 113.28 | 203.904 | 566.4 | |

For Bijendra Energy & Research

Proprietor



MRF SARASWATI LOK - NAGAR NIGAM MEERUT

Processing Plant of Dry Waste

Supervisor Name- BIJENDRA ENERGY AND RESEARCH - MEERUT

| Sr. No. | Date | DRY WASTE - SHIFT -A & B- MRF -1 (CAPACITY 5 MT EACH) | DRY WASTE- SHIFT -A & B- MRF -2 (CAPACITY 5 MT EACH)SHIFT) | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | | | Quantity Utilised /Sold | Sign... of Investigator | Month-FEB-2025 | | |
|---------|-----------|---|--|---|-----------------|--------------------|------------------|---------------|---------------|---------------|-------------------------|-------------------------|----------------|-------------|---------------|
| | | | | | Metal (TPD) | Packaging Material | Cardboard d(TPD) | Glass (TPD) | Cloth (TPD) | Rubber(T PD) | | | | Paper(TP D) | Plastic(TP D) |
| 1 | 1-Feb-25 | 9.4 | 9 | 18.4 | 0.0368 | 1.5272 | 1.288 | 0.828 | 2.944 | 1.472 | 3.68 | 6.624 | 18.4 | | |
| 2 | 2-Feb-25 | 8.4 | 9.8 | 18.2 | 0.0364 | 1.5106 | 1.274 | 0.819 | 2.912 | 1.456 | 3.64 | 6.552 | 18.2 | | |
| 3 | 3-Feb-25 | 9 | 9 | 18 | 0.036 | 1.494 | 1.26 | 0.81 | 2.88 | 1.44 | 3.6 | 6.48 | 18 | | |
| 4 | 4-Feb-25 | 9.8 | 9.4 | 19.2 | 0.0384 | 1.5936 | 1.344 | 0.864 | 3.072 | 1.536 | 3.84 | 6.912 | 19.2 | | |
| 5 | 5-Feb-25 | 9 | 8.4 | 17.4 | 0.0348 | 1.4442 | 1.218 | 0.783 | 2.784 | 1.392 | 3.48 | 6.264 | 17.4 | | |
| 6 | 6-Feb-25 | 9.4 | 9 | 18.4 | 0.0368 | 1.5272 | 1.288 | 0.828 | 2.944 | 1.472 | 3.68 | 6.624 | 18.4 | | |
| 7 | 7-Feb-25 | 8.4 | 9.8 | 18.2 | 0.0364 | 1.5106 | 1.274 | 0.819 | 2.912 | 1.456 | 3.64 | 6.552 | 18.2 | | |
| 8 | 8-Feb-25 | 9 | 10 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | | |
| 9 | 9-Feb-25 | 9.8 | 9.6 | 19.4 | 0.0388 | 1.6102 | 1.358 | 0.873 | 3.104 | 1.552 | 3.88 | 6.984 | 19.4 | | |
| 10 | 10-Feb-25 | 10 | 8.2 | 18.2 | 0.0364 | 1.5106 | 1.274 | 0.819 | 2.912 | 1.456 | 3.64 | 6.552 | 18.2 | | |
| 11 | 11-Feb-25 | 9.6 | 9 | 18.6 | 0.0372 | 1.5438 | 1.302 | 0.837 | 2.976 | 1.488 | 3.72 | 6.696 | 18.6 | | |
| 12 | 12-Feb-25 | 8.2 | 7.8 | 16 | 0.032 | 1.328 | 1.12 | 0.72 | 2.56 | 1.28 | 3.2 | 5.76 | 16 | | |
| 13 | 13-Feb-25 | 9 | 6.4 | 15.4 | 0.0308 | 1.2782 | 1.078 | 0.693 | 2.464 | 1.232 | 3.08 | 5.544 | 15.4 | | |
| 14 | 14-Feb-25 | 7.8 | 7.8 | 15.6 | 0.0312 | 1.2948 | 1.092 | 0.702 | 2.496 | 1.248 | 3.12 | 5.616 | 15.6 | | |
| 15 | 15-Feb-25 | 6.4 | 6.4 | 12.8 | 0.0256 | 1.0624 | 0.896 | 0.576 | 2.048 | 1.024 | 2.56 | 4.608 | 12.8 | | |
| 16 | 16-Feb-25 | 9 | 9.4 | 18.4 | 0.0368 | 1.5272 | 1.288 | 0.828 | 2.944 | 1.472 | 3.68 | 6.624 | 18.4 | | |
| 17 | 17-Feb-25 | 9.8 | 9.6 | 19.4 | 0.0388 | 1.6102 | 1.358 | 0.873 | 3.104 | 1.552 | 3.88 | 6.984 | 19.4 | | |
| 18 | 18-Feb-25 | 9 | 10 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | | |
| 19 | 19-Feb-25 | 9.4 | 9.2 | 18.6 | 0.0372 | 1.5438 | 1.302 | 0.837 | 2.976 | 1.488 | 3.72 | 6.696 | 18.6 | | |
| 20 | 20-Feb-25 | 8.4 | 9.4 | 17.8 | 0.0356 | 1.4774 | 1.246 | 0.801 | 2.848 | 1.424 | 3.56 | 6.408 | 17.8 | | |
| 21 | 21-Feb-25 | 9 | 9.6 | 18.6 | 0.0372 | 1.5438 | 1.302 | 0.837 | 2.976 | 1.488 | 3.72 | 6.696 | 18.6 | | |
| 22 | 22-Feb-25 | 9.8 | 9 | 18.8 | 0.0376 | 1.5604 | 1.316 | 0.846 | 3.008 | 1.504 | 3.76 | 6.768 | 18.8 | | |
| 23 | 23-Feb-25 | 10 | 9.8 | 19.8 | 0.0396 | 1.6434 | 1.386 | 0.891 | 3.168 | 1.584 | 3.96 | 7.128 | 19.8 | | |
| 24 | 24-Feb-25 | 9.6 | 9.4 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | | |
| 25 | 25-Feb-25 | 8.2 | 8.2 | 16.4 | 0.0328 | 1.3612 | 1.148 | 0.738 | 2.624 | 1.312 | 3.28 | 5.904 | 16.4 | | |
| 26 | 26-Feb-25 | 9 | 8.6 | 17.6 | 0.0352 | 1.4608 | 1.232 | 0.792 | 2.816 | 1.408 | 3.52 | 6.336 | 17.6 | | |
| 27 | 27-Feb-25 | 7.8 | 10 | 17.8 | 0.0356 | 1.4774 | 1.246 | 0.801 | 2.848 | 1.424 | 3.56 | 6.408 | 17.8 | | |
| 28 | 28-Feb-25 | 6.4 | 9 | 15.4 | 0.0308 | 1.2782 | 1.078 | 0.693 | 2.464 | 1.232 | 3.08 | 5.544 | 15.4 | | |
| | | 248.6 | 250.8 | 499.4 | 0.9988 | 41.4502 | 34.958 | 22.473 | 79.904 | 39.952 | 99.88 | 179.784 | 499.4 | | |

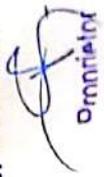
For Bijendra Energy & Research

 Proprietor



MRF SARASWATI LOK - NAGAR NIGAM MEERUI
Processing Plant of Dry Waste

| Sr. No. | Date | DRY WASTE - MRF-1 (CAPACITY SMT EACH SHIFT) | | DRY WASTE - MRF-2 (CAPACITY SMT EACH SHIFT) | | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | | | Month- JAN -2025 | | | |
|--------------|-----------|---|--------------------|---|--------------|---|-----------------|----------------|--------------|-------------------------|-------------------------|---------------|------------------|-------------|------|--|
| | | Metal (TPD) | Packaging Material | Cardboard(TPD) | Glass(TPD) | | Rubber(TPD) | Paper (TPD) | Plastic(TPD) | Quantity Utilised /Sold | Sign... of Investigator | | | | | |
| 1 | 1-Jan-25 | 8.5 | 9 | 8.5 | 9 | 17.5 | 0.035 | 1.4525 | 1.225 | 0.7875 | 2.8 | 1.4 | 3.5 | 6.3 | 17.5 | |
| 2 | 2-Jan-25 | 9.5 | 8.5 | 9.5 | 8.5 | 18 | 0.036 | 1.494 | 1.26 | 0.81 | 2.88 | 1.44 | 3.6 | 6.48 | 18 | |
| 3 | 3-Jan-25 | 9.9 | 9.5 | 9.9 | 9.5 | 19.4 | 0.0388 | 1.6102 | 1.358 | 0.873 | 3.104 | 1.552 | 3.88 | 6.984 | 19.4 | |
| 4 | 4-Jan-25 | 9.3 | 9.9 | 9.3 | 9.9 | 19.2 | 0.0384 | 1.5936 | 1.344 | 0.864 | 3.072 | 1.536 | 3.84 | 6.912 | 19.2 | |
| 5 | 5-Jan-25 | 9.6 | 9.3 | 9.6 | 9.3 | 18.9 | 0.0378 | 1.5687 | 1.323 | 0.8505 | 3.024 | 1.512 | 3.78 | 6.804 | 18.9 | |
| 6 | 6-Jan-25 | 9.1 | 9.6 | 9.1 | 9.6 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 7 | 7-Jan-25 | 8.9 | 9.1 | 8.9 | 9.1 | 18 | 0.036 | 1.494 | 1.26 | 0.81 | 2.88 | 1.44 | 3.6 | 6.48 | 18 | |
| 8 | 8-Jan-25 | 9.8 | 8.9 | 9.8 | 8.9 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 9 | 9-Jan-25 | 9.2 | 9.8 | 9.2 | 9.8 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | |
| 10 | 10-Jan-25 | 9.5 | 9.2 | 9.5 | 9.2 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 11 | 11-Jan-25 | 8.9 | 9.5 | 8.9 | 9.5 | 18.4 | 0.0368 | 1.5272 | 1.288 | 0.828 | 2.944 | 1.472 | 3.68 | 6.624 | 18.4 | |
| 12 | 12-Jan-25 | 10 | 8.9 | 10 | 8.9 | 18.9 | 0.0378 | 1.5687 | 1.323 | 0.8505 | 3.024 | 1.512 | 3.78 | 6.804 | 18.9 | |
| 13 | 13-Jan-25 | 9.3 | 10 | 9.3 | 10 | 19.3 | 0.0386 | 1.6019 | 1.351 | 0.8685 | 3.088 | 1.544 | 3.86 | 6.948 | 19.3 | |
| 14 | 14-Jan-25 | 9.6 | 9.3 | 9.6 | 9.3 | 18.9 | 0.0378 | 1.5687 | 1.323 | 0.8505 | 3.024 | 1.512 | 3.78 | 6.804 | 18.9 | |
| 15 | 15-Jan-25 | 9 | 9.6 | 9 | 9.6 | 18.6 | 0.0372 | 1.5438 | 1.302 | 0.837 | 2.976 | 1.488 | 3.72 | 6.696 | 18.6 | |
| 16 | 16-Jan-25 | 9 | 9 | 9 | 9 | 18 | 0.036 | 1.494 | 1.26 | 0.81 | 2.88 | 1.44 | 3.6 | 6.48 | 18 | |
| 17 | 17-Jan-25 | 9 | 9.8 | 9 | 9.8 | 18.8 | 0.0376 | 1.5604 | 1.316 | 0.846 | 3.008 | 1.504 | 3.76 | 6.768 | 18.8 | |
| 18 | 18-Jan-25 | 8.5 | 8.5 | 8.5 | 8.5 | 17 | 0.034 | 1.411 | 1.19 | 0.765 | 2.72 | 1.36 | 3.4 | 6.12 | 17 | |
| 19 | 19-Jan-25 | 9.5 | 9.3 | 9.5 | 9.3 | 18.8 | 0.0376 | 1.5604 | 1.316 | 0.846 | 3.008 | 1.504 | 3.76 | 6.768 | 18.8 | |
| 20 | 20-Jan-25 | 9.9 | 7.2 | 9.9 | 7.2 | 17.1 | 0.0342 | 1.4193 | 1.197 | 0.7695 | 2.736 | 1.368 | 3.42 | 6.156 | 17.1 | |
| 21 | 21-Jan-25 | 9.3 | 6 | 9.3 | 6 | 15.3 | 0.0306 | 1.2699 | 1.071 | 0.6885 | 2.448 | 1.224 | 3.06 | 5.508 | 15.3 | |
| 22 | 22-Jan-25 | 9.6 | 9.8 | 9.6 | 9.8 | 19.4 | 0.0388 | 1.6102 | 1.358 | 0.873 | 3.104 | 1.552 | 3.88 | 6.984 | 19.4 | |
| 23 | 23-Jan-25 | 9.1 | 9.3 | 9.1 | 9.3 | 18.4 | 0.0368 | 1.5272 | 1.288 | 0.828 | 2.944 | 1.472 | 3.68 | 6.624 | 18.4 | |
| 24 | 24-Jan-25 | 8.9 | 9.8 | 8.9 | 9.8 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 25 | 25-Jan-25 | 9.8 | 9.2 | 9.8 | 9.2 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | |
| 26 | 26-Jan-25 | 9.2 | 9.5 | 9.2 | 9.5 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 27 | 27-Jan-25 | 9.5 | 9.2 | 9.5 | 9.2 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 28 | 28-Jan-25 | 8.9 | 9.3 | 8.9 | 9.3 | 18.2 | 0.0364 | 1.5106 | 1.274 | 0.819 | 2.912 | 1.456 | 3.64 | 6.552 | 18.2 | |
| 29 | 29-Jan-25 | 10 | 9.8 | 10 | 9.8 | 19.8 | 0.0396 | 1.6434 | 1.386 | 0.891 | 3.168 | 1.584 | 3.96 | 7.128 | 19.8 | |
| 30 | 30-Jan-25 | 9.3 | 7.5 | 9.3 | 7.5 | 16.8 | 0.0336 | 1.3944 | 1.176 | 0.756 | 2.688 | 1.344 | 3.36 | 6.048 | 16.8 | |
| 31 | 31-Jan-25 | 9.6 | 9 | 9.6 | 9 | 18.6 | 0.0372 | 1.5438 | 1.302 | 0.837 | 2.976 | 1.488 | 3.72 | 6.696 | 18.6 | |
| Total | | 289.2 | 282.3 | 571.5 | 1.143 | 47.4345 | 40.005 | 25.7175 | 91.44 | 45.72 | 114.3 | 205.74 | 671.5 | 18.6 | | |



| MRF SARASWATI LOK - NAGAR NIGAM MEERUT | | | | | | | | | | | | | | |
|--|-----------|--|---|---|-----------------|--------------------------------|--------------------|----------------|----------------|-----------------|---------------------|------------------|----------------------------|-------------------------------|
| Processing Plant of Dry Waste | | | | | | | | | | | | | | |
| Supervisor Name- BIJENDRA ENERGY AND RESEARCH - MEERUT | | | | | | | | | | | | | | |
| Sr. No. | Date | DRY WASTE- SHIFT -A & B- MRF -1 (CAPACITY 5 MT EACH SHIFT) | DRY WASTE- SHIFT -A & B- MRF -2 (CAPACITY 5 MT EACH SHIFT) | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | | | Month- December, 24 | | Sign... of Investigator | |
| | | | | | Metal (TPD) | Packaging Material (TPD) | Cardboard(TPD) | Glass (TPD) | Cloth (TPD) | Rubber(T PD) | Paper(TP D) | Plastic(TP D) | | Quantity Utilised /Sold |
| 1 | 1-Dec-24 | 8.9 | 7.5 | 16.4 | 0.0328 | 1.3612 | 1.148 | 0.738 | 2.624 | 1.312 | 3.28 | 5.904 | 16.4 | |
| 2 | 2-Dec-24 | 7.9 | 9.1 | 17 | 0.034 | 1.411 | 1.19 | 0.765 | 2.72 | 1.36 | 3.4 | 6.588 | 17 | |
| 3 | 3-Dec-24 | 9.8 | 8.5 | 18.3 | 0.0366 | 1.5189 | 1.281 | 0.8235 | 2.928 | 1.464 | 3.66 | 6.588 | 18.3 | |
| 4 | 4-Dec-24 | 9.3 | 9.4 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 5 | 5-Dec-24 | 9.2 | 9.1 | 18.3 | 0.0366 | 1.5189 | 1.281 | 0.8235 | 2.928 | 1.464 | 3.66 | 6.588 | 18.3 | |
| 6 | 6-Dec-24 | 8.4 | 9.3 | 17.7 | 0.0354 | 1.4691 | 1.239 | 0.7965 | 2.832 | 1.416 | 3.54 | 6.372 | 17.7 | |
| 7 | 7-Dec-24 | 9.4 | 9.6 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | |
| 8 | 8-Dec-24 | 8.8 | 8.8 | 17.6 | 0.0352 | 1.4608 | 1.232 | 0.792 | 2.816 | 1.408 | 3.52 | 6.336 | 17.6 | |
| 9 | 9-Dec-24 | 8.7 | 8.9 | 17.6 | 0.0352 | 1.4608 | 1.232 | 0.792 | 2.816 | 1.408 | 3.52 | 6.336 | 17.6 | |
| 10 | 10-Dec-24 | 9.6 | 9.8 | 19.4 | 0.0388 | 1.6102 | 1.358 | 0.873 | 3.104 | 1.552 | 3.88 | 6.984 | 19.4 | |
| 11 | 11-Dec-24 | 9.2 | 9.2 | 18.4 | 0.0368 | 1.5272 | 1.288 | 0.828 | 2.944 | 1.472 | 3.68 | 6.624 | 18.4 | |
| 12 | 12-Dec-24 | 8.7 | 9.5 | 18.2 | 0.0364 | 1.5106 | 1.274 | 0.819 | 2.912 | 1.456 | 3.64 | 6.552 | 18.2 | |
| 13 | 13-Dec-24 | 9.2 | 8.9 | 18.1 | 0.0362 | 1.5023 | 1.267 | 0.8145 | 2.896 | 1.448 | 3.62 | 6.516 | 18.1 | |
| 14 | 14-Dec-24 | 9.2 | 9.8 | 19 | 0.038 | 1.577 | 1.33 | 0.855 | 3.04 | 1.52 | 3.8 | 6.84 | 19 | |
| 15 | 15-Dec-24 | 8.8 | 9.5 | 18.3 | 0.0366 | 1.5189 | 1.281 | 0.8235 | 2.928 | 1.464 | 3.66 | 6.588 | 18.3 | |
| 16 | 16-Dec-24 | 7.5 | 8.7 | 16.2 | 0.0324 | 1.3446 | 1.134 | 0.729 | 2.592 | 1.296 | 3.24 | 5.832 | 16.2 | |
| 17 | 17-Dec-24 | 9.1 | 8.9 | 18 | 0.036 | 1.494 | 1.26 | 0.81 | 2.88 | 1.44 | 3.6 | 6.48 | 18 | |
| 18 | 18-Dec-24 | 8.5 | 7.9 | 16.4 | 0.0328 | 1.3612 | 1.148 | 0.738 | 2.624 | 1.312 | 3.28 | 5.904 | 16.4 | |
| 19 | 19-Dec-24 | 9.4 | 9.8 | 19.2 | 0.0384 | 1.5936 | 1.344 | 0.864 | 3.072 | 1.536 | 3.84 | 6.912 | 19.2 | |
| 20 | 20-Dec-24 | 9.1 | 9.3 | 18.4 | 0.0368 | 1.5272 | 1.288 | 0.828 | 2.944 | 1.472 | 3.68 | 6.624 | 18.4 | |
| 21 | 21-Dec-24 | 9.3 | 9.2 | 18.5 | 0.037 | 1.5355 | 1.295 | 0.8325 | 2.96 | 1.48 | 3.7 | 6.66 | 18.5 | |
| 22 | 22-Dec-24 | 8.9 | 8.4 | 17.3 | 0.0346 | 1.4359 | 1.211 | 0.7785 | 2.768 | 1.384 | 3.46 | 6.228 | 17.3 | |
| 23 | 23-Dec-24 | 8.8 | 9.4 | 18.2 | 0.0364 | 1.5106 | 1.274 | 0.819 | 2.912 | 1.456 | 3.64 | 6.552 | 18.2 | |
| 24 | 24-Dec-24 | 8.9 | 8.8 | 17.7 | 0.0354 | 1.4691 | 1.239 | 0.7965 | 2.832 | 1.416 | 3.54 | 6.372 | 17.7 | |
| 25 | 25-Dec-24 | 9.8 | 8.7 | 18.5 | 0.037 | 1.5355 | 1.295 | 0.8325 | 2.96 | 1.48 | 3.7 | 6.66 | 18.5 | |
| 26 | 26-Dec-24 | 9.2 | 9.6 | 18.8 | 0.0376 | 1.5604 | 1.316 | 0.846 | 3.008 | 1.504 | 3.76 | 6.768 | 18.8 | |
| 27 | 27-Dec-24 | 9.5 | 9.2 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 28 | 28-Dec-24 | 8.9 | 9.5 | 18.4 | 0.0368 | 1.5272 | 1.288 | 0.828 | 2.944 | 1.472 | 3.68 | 6.624 | 18.4 | |
| 29 | 29-Dec-24 | 8.8 | 9.2 | 18 | 0.036 | 1.494 | 1.26 | 0.81 | 2.88 | 1.44 | 3.6 | 6.48 | 18 | |
| 30 | 30-Dec-24 | 9.5 | 9.2 | 18.7 | 0.0374 | 1.5521 | 1.309 | 0.8415 | 2.992 | 1.496 | 3.74 | 6.732 | 18.7 | |
| 31 | 31-Dec-24 | 8.7 | 8.8 | 17.5 | 0.035 | 1.4525 | 1.225 | 0.7875 | 2.8 | 1.4 | 3.5 | 6.3 | 17.5 | |
| | total | 279 | 281.5 | 560.5 | 1.121 | 46.5215 | 39.235 | 25.2225 | 89.68 | 44.84 | 112.1 | 201.78 | 560.5 | |

MRF ACHHARAUNDA - NAGAR NIGAM MEERUT

Processing Plant of Dry Waste

Supervisor Name- BIJENDRA ENERGY AND RESEARCH - MEERUT

| Sr. No. | Date | DRY WASTE - SHIRT - A (CAPACITY 5 MT EACH SHIRT) | DRY WASTE - SHIRT - B (CAPACITY 5 MT EACH SHIRT) | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | | | | Quantity Utilised /Sold | Sign... of Investigator | |
|---------|-----------|--|--|---|-----------------|--------------------|-----------------|---------------|---------------|---------------|--------------|-------------------------|-------------------------|--------------|
| | | | | | Metal (TPD) | Packaging Material | Cardboard (TPD) | Glass(TPD) | Cloth(TPD) | Rubber (TPD) | Paper(TPD) | | | Plastic(TPD) |
| 1 | 1-Feb-25 | 4.2 | 4.1 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 2 | 2-Feb-25 | 4.1 | 4.5 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 3 | 3-Feb-25 | 4.5 | 4.3 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 4 | 4-Feb-25 | 4.3 | 4.4 | 8.7 | 0.0174 | 0.7221 | 0.609 | 0.3915 | 1.392 | 0.696 | 1.74 | 3.132 | 8.7 | |
| 5 | 5-Feb-25 | 4.4 | 4.1 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 6 | 6-Feb-25 | 4.1 | 4.0 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | |
| 7 | 7-Feb-25 | 4.0 | 4.5 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 8 | 8-Feb-25 | 4.5 | 4.6 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 9 | 9-Feb-25 | 4.6 | 4.5 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 10 | 10-Feb-25 | 4.5 | 4.4 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 11 | 11-Feb-25 | 4.4 | 4.4 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 12 | 12-Feb-25 | 4.4 | 4.3 | 8.7 | 0.0174 | 0.7221 | 0.609 | 0.3915 | 1.392 | 0.696 | 1.74 | 3.132 | 8.7 | |
| 13 | 13-Feb-25 | 4.3 | 4.1 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 14 | 14-Feb-25 | 4.1 | 4.7 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 15 | 15-Feb-25 | 4.7 | 4.8 | 9.5 | 0.019 | 0.7885 | 0.665 | 0.4275 | 1.52 | 0.76 | 1.9 | 3.42 | 9.5 | |
| 16 | 16-Feb-25 | 4.2 | 4.8 | 9 | 0.018 | 0.747 | 0.63 | 0.405 | 1.44 | 0.72 | 1.8 | 3.24 | 9 | |
| 17 | 17-Feb-25 | 4.9 | 4.8 | 9.7 | 0.0194 | 0.8051 | 0.679 | 0.4365 | 1.552 | 0.776 | 1.94 | 3.492 | 9.7 | |
| 18 | 18-Feb-25 | 4.8 | 4.8 | 9.6 | 0.0192 | 0.7968 | 0.672 | 0.432 | 1.536 | 0.768 | 1.92 | 3.456 | 9.6 | |
| 19 | 19-Feb-25 | 4.8 | 4.9 | 9.7 | 0.0194 | 0.8051 | 0.679 | 0.4365 | 1.552 | 0.776 | 1.94 | 3.492 | 9.7 | |
| 20 | 20-Feb-25 | 4.7 | 3.5 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 21 | 21-Feb-25 | 4.9 | 4.4 | 9.3 | 0.0186 | 0.7719 | 0.651 | 0.4185 | 1.488 | 0.744 | 1.86 | 3.348 | 9.3 | |
| 22 | 22-Feb-25 | 4.7 | 4.3 | 9 | 0.018 | 0.747 | 0.63 | 0.405 | 1.44 | 0.72 | 1.8 | 3.24 | 9 | |
| 23 | 23-Feb-25 | 4.8 | 4.1 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 24 | 24-Feb-25 | 4.7 | 3.9 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 25 | 25-Feb-25 | 4.6 | 3.8 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 26 | 26-Feb-25 | 4.5 | 4.3 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 27 | 27-Feb-25 | 4.5 | 3.9 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 28 | 28-Feb-25 | 4.4 | 3.8 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| | | 125.6 | 121 | 246.6 | 0.4932 | 20.4678 | 17.262 | 11.097 | 39.456 | 19.728 | 49.32 | 88.776 | 246.6 | |

For Bijendra Energy & Research

Proprietor

MRF ACHHARAUNDA - NAGAR NIGAM MEERUT

Processing Plant of Dry Waste

Supervisor Name- BIJENDRA ENERGY AND RESEARCH - MEERUT

Month- JAN-2025

| Sr. No. | Date | DRY WASTE - SHIFT -A (CAPACITY SMT EACH SHIFT) | DRY WASTE - SHIFT -B (CAPACITY SMT EACH SHIFT) | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | | | Quantity Utilised /Sold | Sign... of Investigator | | |
|---------|-----------|---|---|--|-----------------|-------------------------------|--------------------|------------|------------|-------------|----------------------------|----------------------------|----------------|--------------|
| | | | | | Metal (TPD) | Packaging Material TPD) | Cardboard(TPD) | Glass(TPD) | Cloth(TPD) | Rubber(TPD) | | | Paper (TPD) | Plastic(TPD) |
| 1 | 1-Jan-25 | 4.9 | 4.5 | 9.4 | 0.0188 | 0.7802 | 0.658 | 0.423 | 1.504 | 0.752 | 1.88 | 3.384 | 9.4 | |
| 2 | 2-Jan-25 | 3.5 | 4.3 | 7.8 | 0.0156 | 0.6474 | 0.546 | 0.351 | 1.248 | 0.624 | 1.56 | 2.808 | 7.8 | |
| 3 | 3-Jan-25 | 4.4 | 4.4 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 4 | 4-Jan-25 | 4.3 | 4.1 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 5 | 5-Jan-25 | 4.9 | 4.0 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 6 | 6-Jan-25 | 4.5 | 4.5 | 9 | 0.018 | 0.747 | 0.63 | 0.405 | 1.44 | 0.72 | 1.8 | 3.24 | 9 | |
| 7 | 7-Jan-25 | 4.1 | 4.6 | 8.7 | 0.0174 | 0.7221 | 0.609 | 0.3915 | 1.392 | 0.696 | 1.74 | 3.132 | 8.7 | |
| 8 | 8-Jan-25 | 4.3 | 4.5 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 9 | 9-Jan-25 | 3.9 | 4.4 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 10 | 10-Jan-25 | 3.8 | 4.4 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 11 | 11-Jan-25 | 4.8 | 4.3 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 12 | 12-Jan-25 | 4.1 | 4.1 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 13 | 13-Jan-25 | 4 | 4.1 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | |
| 14 | 14-Jan-25 | 4.1 | 4.8 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 15 | 15-Jan-25 | 4.2 | 4.8 | 9 | 0.018 | 0.747 | 0.63 | 0.405 | 1.44 | 0.72 | 1.8 | 3.24 | 9 | |
| 16 | 16-Jan-25 | 4.8 | 4.1 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 17 | 17-Jan-25 | 4.9 | 4.5 | 9.4 | 0.0188 | 0.7802 | 0.658 | 0.423 | 1.504 | 0.752 | 1.88 | 3.384 | 9.4 | |
| 18 | 18-Jan-25 | 3.5 | 4.3 | 7.8 | 0.0156 | 0.6474 | 0.546 | 0.351 | 1.248 | 0.624 | 1.56 | 2.808 | 7.8 | |
| 19 | 19-Jan-25 | 4.4 | 4.4 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 20 | 20-Jan-25 | 4.3 | 4.1 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 21 | 21-Jan-25 | 4.1 | 4.0 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | |
| 22 | 22-Jan-25 | 3.9 | 4.5 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 23 | 23-Jan-25 | 3.8 | 4.0 | 7.8 | 0.0156 | 0.6474 | 0.546 | 0.351 | 1.248 | 0.624 | 1.56 | 2.808 | 7.8 | |
| 24 | 24-Jan-25 | 4.3 | 4.5 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 25 | 25-Jan-25 | 3.9 | 4.4 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 26 | 26-Jan-25 | 3.8 | 4.4 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 27 | 27-Jan-25 | 4.8 | 4.3 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 28 | 28-Jan-25 | 4.1 | 4.1 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.3645 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 29 | 29-Jan-25 | 4 | 4.1 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | |
| 30 | 30-Jan-25 | 4.1 | 4.8 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 31 | 31-Jan-25 | 4.9 | 4.3 | 9.2 | 0.0184 | 0.7636 | 0.644 | 0.414 | 1.472 | 0.736 | 1.84 | 3.312 | 9.2 | |
| | Total | 131.4 | 134.6 | 266 | 0.532 | 22.078 | 18.62 | 11.97 | 42.56 | 21.28 | 53.2 | 95.76 | 266 | |

For Bijendra Energy & Research


Proprietor

Processing Plant of Dry Waste

Supervisor Name- BIJENDRA ENERGY AND RESEARCH - MEERUT

Month- December, 24

| Sr. No. | Date | DRY WASTE - SHIFT -A (CAPACITY 5 MT EACH SHIFT) | DRY WASTE - SHIFT -B (CAPACITY 5 MT EACH SHIFT) | Total Dry Waste Processed at Plant(TPD) | Output of Plant | | | | Month- December, 24 | | | Sign... of Investigator | | |
|---------|-----------|--|--|---|-----------------|-------------------------------|--------------------|------------|---------------------|-----------------|----------------|----------------------------|------------------|-------------------------------|
| | | | | | Metal (TPD) | Packaging Material TPD) | Cardboard(TPD) | Glass(TPD) | Cloth(TPD) | Rubber(TPD) | Paper (TPD) | | Plastic (TPD) | Quantity Utilised /Sold |
| 1 | 1-Dec-24 | 4.9 | 4.2 | 9.1 | 0.0182 | 0.7533 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 2 | 2-Dec-24 | 3.5 | 4.1 | 7.6 | 0.0152 | 0.6308 | 0.532 | 0.342 | 1.216 | 0.608 | 1.52 | 2.736 | 7.6 | |
| 3 | 3-Dec-24 | 4.4 | 4.5 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 4 | 4-Dec-24 | 4.3 | 4.5 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 5 | 5-Dec-24 | 4.9 | 4.4 | 9.3 | 0.0186 | 0.7719 | 0.651 | 0.4185 | 1.488 | 0.744 | 1.86 | 3.348 | 9.3 | |
| 6 | 6-Dec-24 | 4.5 | 4.1 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 7 | 7-Dec-24 | 4.1 | 4.0 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | |
| 8 | 8-Dec-24 | 4.3 | 4.5 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 9 | 9-Dec-24 | 3.9 | 4.6 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 10 | 10-Dec-24 | 3.8 | 4.5 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 11 | 11-Dec-24 | 4.8 | 4.4 | 9.2 | 0.0184 | 0.7636 | 0.644 | 0.414 | 1.472 | 0.736 | 1.84 | 3.312 | 9.2 | |
| 12 | 12-Dec-24 | 4.1 | 4.4 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 13 | 13-Dec-24 | 4 | 4.3 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 14 | 14-Dec-24 | 4.1 | 4.1 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 15 | 15-Dec-24 | 4.2 | 4.7 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 16 | 16-Dec-24 | 4.1 | 4.8 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 17 | 17-Dec-24 | 4.5 | 4.8 | 9.3 | 0.0186 | 0.7719 | 0.651 | 0.4185 | 1.488 | 0.744 | 1.86 | 3.348 | 9.3 | |
| 18 | 18-Dec-24 | 4.3 | 4.9 | 9.2 | 0.0184 | 0.7636 | 0.644 | 0.414 | 1.472 | 0.736 | 1.84 | 3.312 | 9.2 | |
| 19 | 19-Dec-24 | 4.4 | 3.5 | 7.9 | 0.0158 | 0.6557 | 0.553 | 0.3555 | 1.264 | 0.632 | 1.58 | 2.844 | 7.9 | |
| 20 | 20-Dec-24 | 4.1 | 4.4 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 21 | 21-Dec-24 | 4.0 | 4.3 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 22 | 22-Dec-24 | 4.5 | 4.1 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 23 | 23-Dec-24 | 4.6 | 3.9 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 24 | 24-Dec-24 | 4.5 | 3.8 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 25 | 25-Dec-24 | 4.4 | 4.3 | 8.7 | 0.0174 | 0.7221 | 0.609 | 0.3915 | 1.392 | 0.696 | 1.74 | 3.132 | 8.7 | |
| 26 | 26-Dec-24 | 4.4 | 3.9 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 27 | 27-Dec-24 | 4.3 | 3.8 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | |
| 28 | 28-Dec-24 | 4.1 | 4.8 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 29 | 29-Dec-24 | 4.7 | 4.1 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 30 | 30-Dec-24 | 4.8 | 4 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 31 | 31-Dec-24 | 4.8 | 4.1 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| | total | 134.3 | 132.6 | 266.9 | 0.5338 | 22.1527 | 18.683 | 12.0105 | 42.704 | 21.352 | 53.38 | 96.084 | 266.9 | |

For Bijendra Energy & Research
Proprietor

MALYANA MRF - NAGAR NIGAM MEERUT

Processing Plant of Dry Waste

Month-FEB-2025

Supervisor Name- BIJENDRA ENERGY AND RESEARCH - MEERUT

| Sr. No. | Date | DRY WASTE - SIEVE - A (CAPACITY'S MT EACH SIEVE) | DRY WASTE - SIEVE - B (CAPACITY'S MT EACH SIEVE) | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | | | | Quantity Utilised /Sold | Sign... of Investigator | |
|---------|---------|--|--|---|-----------------|--------------------|------------------|------------|------------|--------------|------------|-------------------------|-------------------------|--------------|
| | | | | | Metal (TPD) | Packaging Material | Cardboard d(TPD) | Glass(TPD) | Cloth(TPD) | Rubber (TPD) | Paper(TPD) | | | Plastic(TPD) |
| 1 | 1-2-25 | 3.9 | 4.1 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3755 | 1.328 | 0.664 | 1.66 | 2.968 | 8.3 | |
| 2 | 2-2-25 | 4.1 | 4.5 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 3 | 3-2-25 | 4.5 | 4.1 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 4 | 4-2-25 | 4.3 | 4.4 | 8.7 | 0.0174 | 0.7221 | 0.609 | 0.3915 | 1.392 | 0.696 | 1.74 | 3.132 | 8.7 | |
| 5 | 5-2-25 | 4.1 | 4.1 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 6 | 6-2-25 | 4.1 | 4.0 | 8.1 | 0.0162 | 0.6725 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | |
| 7 | 7-2-25 | 4.0 | 4.5 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 8 | 8-2-25 | 4.5 | 4.6 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 9 | 9-2-25 | 4.6 | 4.5 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 10 | 10-2-25 | 4.5 | 4.4 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 11 | 11-2-25 | 4.4 | 4.4 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 12 | 12-2-25 | 4.9 | 4.3 | 9.2 | 0.0184 | 0.7636 | 0.644 | 0.414 | 1.472 | 0.756 | 1.84 | 3.312 | 9.2 | |
| 13 | 13-2-25 | 4.5 | 4.1 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 14 | 14-2-25 | 4.1 | 4.1 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 15 | 15-2-25 | 3.8 | 4.1 | 7.9 | 0.0158 | 0.6557 | 0.553 | 0.3555 | 1.264 | 0.632 | 1.58 | 2.844 | 7.9 | |
| 16 | 16-2-25 | 4.2 | 4.1 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 17 | 17-2-25 | 4.9 | 4.8 | 9.7 | 0.0194 | 0.8051 | 0.679 | 0.4365 | 1.552 | 0.776 | 1.94 | 3.492 | 9.7 | |
| 18 | 18-2-25 | 4.8 | 4.8 | 9.6 | 0.0192 | 0.7968 | 0.672 | 0.432 | 1.536 | 0.768 | 1.92 | 3.456 | 9.6 | |
| 19 | 19-2-25 | 4.8 | 4.1 | 8.9 | 0.0178 | 0.7587 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 20 | 20-2-25 | 4.7 | 3.5 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 21 | 21-2-25 | 3.8 | 4.4 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 22 | 22-2-25 | 4.7 | 4.3 | 9 | 0.018 | 0.747 | 0.63 | 0.405 | 1.44 | 0.72 | 1.8 | 3.24 | 9 | |
| 23 | 23-2-25 | 4.8 | 4.1 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 24 | 24-2-25 | 4.7 | 3.9 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 25 | 25-2-25 | 4.6 | 3.8 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 26 | 26-2-25 | 4.5 | 4.3 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 27 | 27-2-25 | 4.5 | 3.9 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 28 | 28-2-25 | 4.4 | 3.9 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3755 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| | | 123.5 | 118.4 | 241.9 | 0.4838 | 20.0777 | 16.933 | 10.8855 | 38.704 | 19.352 | 48.38 | 87.084 | 241.9 | |

For Bijendra Energy & Research

Proprietor



| Sr. No. | Date | DRY WASTE - SMT (CAPACITY SMT EACH SHIFT) | | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | Quantity Utilised /Sold | Signature of Investigator | | | | | |
|--------------|-----------|---|----------------------|---|-----------------|--------------------|----------------|----------------|-------------------------|---------------------------|---------------|--------------|---------------|--------------|--|
| | | DRY WASTE - SHIFT -A | DRY WASTE - SHIFT -B | | Metal (TPD) | Packaging Material | Cardboard(TPD) | Glass(TPD) | | | Cloth(TPD) | Rubber(TPD) | Paper (TPD) | Plastic(TPD) | |
| 1 | 1-Jan-25 | 4.9 | 4.5 | 9.4 | 0.0188 | 0.7802 | 0.658 | 0.423 | 1.504 | 0.752 | 1.88 | 3.384 | 9.4 | | |
| 2 | 2-Jan-25 | 3.5 | 4.3 | 7.8 | 0.0156 | 0.6474 | 0.546 | 0.351 | 1.248 | 0.624 | 1.56 | 2.808 | 7.8 | | |
| 3 | 3-Jan-25 | 4.4 | 4.4 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | | |
| 4 | 4-Jan-25 | 4.3 | 4.1 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.588 | 1.68 | 3.024 | 8.4 | | |
| 5 | 5-Jan-25 | 4.1 | 4.0 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | | |
| 6 | 6-Jan-25 | 4.5 | 4.5 | 9 | 0.018 | 0.747 | 0.63 | 0.405 | 1.44 | 0.72 | 1.8 | 3.24 | 9 | | |
| 7 | 7-Jan-25 | 4.1 | 4.2 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | | |
| 8 | 8-Jan-25 | 4.3 | 4.5 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | | |
| 9 | 9-Jan-25 | 4.2 | 4.4 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | | |
| 10 | 10-Jan-25 | 3.8 | 4.4 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | | |
| 11 | 11-Jan-25 | 4.1 | 4.3 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | | |
| 12 | 12-Jan-25 | 4.1 | 4.1 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | | |
| 13 | 13-Jan-25 | 3.9 | 4.1 | 8 | 0.016 | 0.664 | 0.56 | 0.36 | 1.28 | 0.64 | 1.6 | 2.88 | 8 | | |
| 14 | 14-Jan-25 | 4.1 | 4.8 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | | |
| 15 | 15-Jan-25 | 4.2 | 4.8 | 9 | 0.018 | 0.747 | 0.63 | 0.405 | 1.44 | 0.72 | 1.8 | 3.24 | 9 | | |
| 16 | 16-Jan-25 | 4.8 | 4.1 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | | |
| 17 | 17-Jan-25 | 4.1 | 4.1 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | | |
| 18 | 18-Jan-25 | 3.1 | 4.3 | 7.4 | 0.0148 | 0.6142 | 0.518 | 0.333 | 1.184 | 0.592 | 1.48 | 2.664 | 7.4 | | |
| 19 | 19-Jan-25 | 4.4 | 4.0 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | | |
| 20 | 20-Jan-25 | 4.3 | 4.1 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | | |
| 21 | 21-Jan-25 | 4.1 | 4.0 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | | |
| 22 | 22-Jan-25 | 3.9 | 4.5 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | | |
| 23 | 23-Jan-25 | 3.8 | 4.0 | 7.8 | 0.0156 | 0.6474 | 0.546 | 0.351 | 1.248 | 0.624 | 1.56 | 2.808 | 7.8 | | |
| 24 | 24-Jan-25 | 4.3 | 4.9 | 9.2 | 0.0184 | 0.7636 | 0.644 | 0.414 | 1.472 | 0.736 | 1.84 | 3.312 | 9.2 | | |
| 25 | 25-Jan-25 | 3.9 | 4.4 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | | |
| 26 | 26-Jan-25 | 3.8 | 3.4 | 7.2 | 0.0144 | 0.5976 | 0.504 | 0.324 | 1.152 | 0.576 | 1.44 | 2.592 | 7.2 | | |
| 27 | 27-Jan-25 | 4.8 | 4.3 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | | |
| 28 | 28-Jan-25 | 4.1 | 4.1 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | | |
| 29 | 29-Jan-25 | 4 | 4.1 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | | |
| 30 | 30-Jan-25 | 4.1 | 4.8 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | | |
| 31 | 31-Jan-25 | 4.9 | 4.3 | 9.2 | 0.0184 | 0.7636 | 0.644 | 0.414 | 1.472 | 0.736 | 1.84 | 3.312 | 9.2 | | |
| Total | | | | 128.9 | 132.8 | 261.7 | 0.5234 | 21.7211 | 18.319 | 11.7765 | 41.872 | 52.34 | 94.212 | 261.7 | |

For Bijendra Energy & Research

(Signature)
Bijendra

Processing Plant of Dry Waste

| Sr. No. | Date | Supervisor Name: BIJENDRA ENERGY AND RESEARCH - MEERUT | | | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | | | Month- December, 24 | | | Sign... of Investigator |
|---------|-----------|--|---|---|---|-----------------|--------------------------|-----------------|------------|------------|--------------|---------------------|---------------|-------------------------|-------------------------|
| | | DRY WASTE- SHFT-A (CAPACITY 5 MT EACH SHFT) | DRY WASTE- SHFT-B (CAPACITY 5 MT EACH SHFT) | DRY WASTE- SHFT-C (CAPACITY 5 MT EACH SHFT) | | Metal (TPD) | Packaging Material (TPD) | Cardboard (TPD) | Glass(TPD) | Cloth(TPD) | Rubber (TPD) | Paper (TPD) | Plastic (TPD) | Quantity Utilised /Sold | |
| 1 | 1-Dec-24 | 4.1 | 4.2 | 4.3 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 2 | 2-Dec-24 | 4.8 | 4.1 | 4.5 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 3 | 3-Dec-24 | 4.2 | 4.3 | 4.5 | 8.7 | 0.0174 | 0.7221 | 0.609 | 0.3915 | 1.392 | 0.696 | 1.74 | 3.132 | 8.7 | |
| 4 | 4-Dec-24 | 4.8 | 4.5 | 4.3 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 5 | 5-Dec-24 | 4.8 | 4.4 | 4.4 | 9.2 | 0.0184 | 0.7636 | 0.644 | 0.414 | 1.472 | 0.736 | 1.84 | 3.312 | 9.2 | |
| 6 | 6-Dec-24 | 4.9 | 4.1 | 4.1 | 9 | 0.018 | 0.747 | 0.63 | 0.405 | 1.44 | 0.72 | 1.8 | 3.24 | 9 | |
| 7 | 7-Dec-24 | 3.5 | 4.0 | 4.0 | 7.5 | 0.015 | 0.6225 | 0.525 | 0.3375 | 1.2 | 0.6 | 1.5 | 2.7 | 7.5 | |
| 8 | 8-Dec-24 | 4.4 | 4.5 | 4.5 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 9 | 9-Dec-24 | 4.3 | 4.6 | 4.5 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 10 | 10-Dec-24 | 4.1 | 4.5 | 4.4 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 11 | 11-Dec-24 | 3.9 | 4.4 | 4.4 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 12 | 12-Dec-24 | 3.8 | 4.4 | 4.4 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 13 | 13-Dec-24 | 4.1 | 4.3 | 4.3 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 14 | 14-Dec-24 | 3.9 | 4.1 | 4.1 | 8 | 0.016 | 0.664 | 0.56 | 0.36 | 1.28 | 0.64 | 1.6 | 2.88 | 8 | |
| 15 | 15-Dec-24 | 3.8 | 4.7 | 4.7 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 16 | 16-Dec-24 | 4.2 | 4.8 | 4.8 | 9 | 0.018 | 0.747 | 0.63 | 0.405 | 1.44 | 0.72 | 1.8 | 3.24 | 9 | |
| 17 | 17-Dec-24 | 4.1 | 4.8 | 4.8 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 18 | 18-Dec-24 | 4.5 | 4.2 | 4.2 | 8.7 | 0.0174 | 0.7221 | 0.609 | 0.3915 | 1.392 | 0.696 | 1.74 | 3.132 | 8.7 | |
| 19 | 19-Dec-24 | 4.3 | 3.1 | 3.1 | 7.4 | 0.0148 | 0.6142 | 0.518 | 0.333 | 1.184 | 0.592 | 1.48 | 2.664 | 7.4 | |
| 20 | 20-Dec-24 | 4.1 | 4.4 | 4.4 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 21 | 21-Dec-24 | 4.1 | 4.3 | 4.3 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 22 | 22-Dec-24 | 4.0 | 4.1 | 4.1 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | |
| 23 | 23-Dec-24 | 4.5 | 3.9 | 3.9 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 24 | 24-Dec-24 | 4.9 | 3.8 | 3.8 | 8.7 | 0.0174 | 0.7221 | 0.609 | 0.3915 | 1.392 | 0.696 | 1.74 | 3.132 | 8.7 | |
| 25 | 25-Dec-24 | 4.5 | 4.3 | 4.3 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 26 | 26-Dec-24 | 4.4 | 3.5 | 3.5 | 7.9 | 0.0158 | 0.6557 | 0.553 | 0.3555 | 1.264 | 0.632 | 1.58 | 2.844 | 7.9 | |
| 27 | 27-Dec-24 | 4.4 | 3.9 | 3.9 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 28 | 28-Dec-24 | 4.3 | 4.8 | 4.8 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 29 | 29-Dec-24 | 4.7 | 4.1 | 4.1 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 30 | 30-Dec-24 | 4.8 | 4 | 4 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 31 | 31-Dec-24 | 4.8 | 4.1 | 4.1 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| | total | 134 | 131.2 | 131.2 | 265.2 | 0.5304 | 22.0116 | 18.564 | 11.934 | 42.432 | 21.216 | 53.04 | 95.472 | 265.2 | |

For Bijendra Energy & Research

 Dr. Pradyumn



NOOR NAGAR MRF - NAGAR NIGAM MEERUT

Processing Plant of Dry Waste

Supervisor Name- BIJENDRA ENERGY AND RESEARCH - MEERUT

Month-FEB-2025

| Sr. No. | Date | DRY WASTE - SHIFT -A (CAPACITY S MIT EACH SHIFT) | DRY WASTE - SHIFT -B (CAPACITY SMT EACH SHIFT) | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | | | | Quantity Utilised/Sold | Sign... of Investigator | |
|---------|-----------|--|---|--|-----------------|-----------------------|--------------------|------------|------------|-----------------|------------|---------------------------|----------------------------|--------------|
| | | | | | Metal (TPD) | Packaging Material | Cardboar d(TPD) | Glass(TPD) | Cloth(TPD) | Rubber (TPD) | Paper(TPD) | | | Plastic(TPD) |
| 1 | 1-Feb-25 | 3.9 | 4.4 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 2 | 2-Feb-25 | 4.1 | 4.5 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 3 | 3-Feb-25 | 4.5 | 4.1 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 4 | 4-Feb-25 | 4.3 | 4.4 | 8.7 | 0.0174 | 0.7221 | 0.609 | 0.3915 | 1.392 | 0.696 | 1.74 | 3.132 | 8.7 | |
| 5 | 5-Feb-25 | 4.1 | 4.1 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 6 | 6-Feb-25 | 4.1 | 4.0 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | |
| 7 | 7-Feb-25 | 4.0 | 4.5 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 8 | 8-Feb-25 | 4.5 | 4.6 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 9 | 9-Feb-25 | 4.6 | 4.5 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 10 | 10-Feb-25 | 4.5 | 4.4 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 11 | 11-Feb-25 | 4.4 | 4.4 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 12 | 12-Feb-25 | 4.9 | 4.3 | 9.2 | 0.0184 | 0.7636 | 0.644 | 0.414 | 1.472 | 0.736 | 1.84 | 3.312 | 9.2 | |
| 13 | 13-Feb-25 | 4.3 | 4.3 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.074 | 8.4 | |
| 14 | 14-Feb-25 | 4.1 | 4.1 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 15 | 15-Feb-25 | 3.8 | 4.1 | 7.9 | 0.0158 | 0.6557 | 0.553 | 0.3555 | 1.264 | 0.632 | 1.58 | 2.844 | 7.9 | |
| 16 | 16-Feb-25 | 4.2 | 4.1 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 17 | 17-Feb-25 | 4.9 | 4.8 | 9.7 | 0.0194 | 0.8051 | 0.679 | 0.4365 | 1.552 | 0.776 | 1.94 | 3.492 | 9.7 | |
| 18 | 18-Feb-25 | 4.8 | 4.8 | 9.6 | 0.0192 | 0.7968 | 0.672 | 0.432 | 1.536 | 0.768 | 1.92 | 3.456 | 9.6 | |
| 19 | 19-Feb-25 | 4.8 | 4.1 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 20 | 20-Feb-25 | 4.7 | 3.5 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 21 | 21-Feb-25 | 3.8 | 4.4 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 22 | 22-Feb-25 | 4.7 | 4.3 | 9 | 0.018 | 0.747 | 0.63 | 0.405 | 1.44 | 0.72 | 1.8 | 3.24 | 9 | |
| 23 | 23-Feb-25 | 4.8 | 4.1 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 24 | 24-Feb-25 | 4.7 | 3.9 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 25 | 25-Feb-25 | 4.6 | 3.8 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 26 | 26-Feb-25 | 4.5 | 4.3 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 27 | 27-Feb-25 | 4.5 | 3.9 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 28 | 28-Feb-25 | 4.4 | 3.9 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| | | 123.5 | 118.4 | 241.9 | 0.4838 | 20.0777 | 16.933 | 10.8855 | 38.704 | 19.352 | 48.38 | 87.084 | 241.9 | |



NOOR NAGAR MRF - NAGAR NIGAM MEERUT

Processing Plant of Dry Waste

Month- JAN-2025

Supervisor Name- BIJENDRA ENERGY AND RESEARCH - MEERUT

| Sr. No. | Date | DRY WASTE - SHIFT-A (CAPACITY SMT EACH SHIFT) | DRY WASTE - SHIFT-B (CAPACITY SMT EACH SHIFT) | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | | | Quantity Utilised /Sold | Sign... of Investigator | | |
|---------|--------------|---|---|---|-----------------|--------------------|-----------------|----------------|---------------|---------------|-------------------------|-------------------------|--------------|--------------|
| | | | | | Metal (TPD) | Packaging Material | Cardboard(TPD) | Glass(TPD) | Cloth(TPD) | Rubber(TPD) | | | Paper (TPD) | Plastic(TPD) |
| 1 | 1-Jan-25 | 4.2 | 4.2 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 2 | 2-Jan-25 | 4.1 | 4.8 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 3 | 3-Jan-25 | 4.4 | 4.1 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 4 | 4-Jan-25 | 4.3 | 3.1 | 7.4 | 0.0148 | 0.6142 | 0.518 | 0.333 | 1.184 | 0.592 | 1.48 | 2.664 | 7.4 | |
| 5 | 5-Jan-25 | 4.1 | 4.4 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 6 | 6-Jan-25 | 3.9 | 4.3 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 7 | 7-Jan-25 | 3.8 | 4.1 | 7.9 | 0.0158 | 0.6557 | 0.553 | 0.3555 | 1.264 | 0.632 | 1.58 | 2.844 | 7.9 | |
| 8 | 8-Jan-25 | 4.3 | 3.9 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 9 | 9-Jan-25 | 3.5 | 3.8 | 7.3 | 0.0146 | 0.6059 | 0.511 | 0.3285 | 1.168 | 0.584 | 1.46 | 2.628 | 7.3 | |
| 10 | 10-Jan-25 | 3.9 | 4.3 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 11 | 11-Jan-25 | 4.8 | 3.9 | 8.7 | 0.0174 | 0.7221 | 0.609 | 0.3915 | 1.392 | 0.696 | 1.74 | 3.132 | 8.7 | |
| 12 | 12-Jan-25 | 4.1 | 3.8 | 7.9 | 0.0158 | 0.6557 | 0.553 | 0.3555 | 1.264 | 0.632 | 1.58 | 2.844 | 7.9 | |
| 13 | 13-Jan-25 | 4 | 4.8 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 14 | 14-Jan-25 | 4.1 | 4.1 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 15 | 15-Jan-25 | 4.2 | 4 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 16 | 16-Jan-25 | 4.8 | 4.1 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 17 | 17-Jan-25 | 4.1 | 4.9 | 9 | 0.018 | 0.747 | 0.63 | 0.405 | 1.44 | 0.72 | 1.8 | 3.24 | 9 | |
| 18 | 18-Jan-25 | 3.1 | 4.3 | 7.4 | 0.0148 | 0.6142 | 0.518 | 0.333 | 1.184 | 0.592 | 1.48 | 2.664 | 7.4 | |
| 19 | 19-Jan-25 | 4.4 | 4.0 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 20 | 20-Jan-25 | 4.3 | 4.1 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 21 | 21-Jan-25 | 4.1 | 4.0 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | |
| 22 | 22-Jan-25 | 3.9 | 4.5 | 8.4 | 0.0168 | 0.6972 | 0.588 | 0.378 | 1.344 | 0.672 | 1.68 | 3.024 | 8.4 | |
| 23 | 23-Jan-25 | 3.8 | 4.0 | 7.8 | 0.0156 | 0.6474 | 0.546 | 0.351 | 1.248 | 0.624 | 1.56 | 2.808 | 7.8 | |
| 24 | 24-Jan-25 | 4.3 | 4.9 | 9.2 | 0.0184 | 0.7636 | 0.644 | 0.414 | 1.472 | 0.736 | 1.84 | 3.312 | 9.2 | |
| 25 | 25-Jan-25 | 3.9 | 4.4 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 26 | 26-Jan-25 | 3.8 | 3.4 | 7.2 | 0.0144 | 0.5976 | 0.504 | 0.324 | 1.152 | 0.576 | 1.44 | 2.592 | 7.2 | |
| 27 | 27-Jan-25 | 4.8 | 4.3 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 28 | 28-Jan-25 | 4.1 | 4.1 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 29 | 29-Jan-25 | 4 | 4.1 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | |
| 30 | 30-Jan-25 | 4.1 | 4.8 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 31 | 31-Jan-25 | 4.9 | 4.3 | 9.2 | 0.0184 | 0.7636 | 0.644 | 0.414 | 1.472 | 0.736 | 1.84 | 3.312 | 9.2 | |
| | Total | 128.1 | 129.8 | 257.9 | 0.5158 | 21.4057 | 18.053 | 11.6055 | 41.264 | 20.632 | 51.58 | 92.844 | 257.9 | |

For Bijendra Energy & Research

 Director



NOOR NAGAR MRF - NAGAR NIGAM MEERUT

Processing Plant of Dry Waste

Supervisor Name- BIJENDRA ENERGY AND RESEARCH - MFERUT

Month- December, 24

| Sr. No. | Date | DRY WASTE - SHIFT -A (CAPACITY 5 MT EACH SHIFT) | DRY WASTE - SHIFT -B (CAPACITY 5 MT EACH SHIFT) | Total Dry Waste Processed at Plant(TPD) | Output Of Plant | | | | | | Month- December, 24 | | | Sign... of Investigator |
|---------|-----------|--|--|---|-----------------|-----------------------|--------------------|------------|------------|-----------------|---------------------|------------------|-------------------------------|----------------------------|
| | | | | | Metal (TPD) | Packaging Material | Cardboard(TPD) | Glass(TPD) | Cloth(TPD) | Rubber(TPD) | Paper (TPD) | Plastic (TPD) | Quantity Utilised /Sold | |
| 1 | 1-Dec-24 | 4.1 | 4.4 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 2 | 2-Dec-24 | 4.8 | 4.5 | 9.3 | 0.0186 | 0.7719 | 0.651 | 0.4185 | 1.488 | 0.744 | 1.86 | 3.348 | 9.3 | |
| 3 | 3-Dec-24 | 4.8 | 4.1 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 4 | 4-Dec-24 | 4.1 | 4.4 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 5 | 5-Dec-24 | 3.5 | 4.1 | 7.6 | 0.0152 | 0.6308 | 0.532 | 0.342 | 1.216 | 0.608 | 1.52 | 2.736 | 7.6 | |
| 6 | 6-Dec-24 | 4.1 | 4.0 | 8.1 | 0.0162 | 0.6723 | 0.567 | 0.3645 | 1.296 | 0.648 | 1.62 | 2.916 | 8.1 | |
| 7 | 7-Dec-24 | 4.3 | 4.5 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 8 | 8-Dec-24 | 4.1 | 4.6 | 8.7 | 0.0174 | 0.7221 | 0.609 | 0.3915 | 1.392 | 0.696 | 1.74 | 3.132 | 8.7 | |
| 9 | 9-Dec-24 | 4.1 | 4.5 | 8.6 | 0.0172 | 0.7138 | 0.602 | 0.387 | 1.376 | 0.688 | 1.72 | 3.096 | 8.6 | |
| 10 | 10-Dec-24 | 3.8 | 4.4 | 8.2 | 0.0164 | 0.6806 | 0.574 | 0.369 | 1.312 | 0.656 | 1.64 | 2.952 | 8.2 | |
| 11 | 11-Dec-24 | 4.3 | 4.4 | 8.7 | 0.0174 | 0.7221 | 0.609 | 0.3915 | 1.392 | 0.696 | 1.74 | 3.132 | 8.7 | |
| 12 | 12-Dec-24 | 4.2 | 4.3 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 13 | 13-Dec-24 | 3.9 | 4.1 | 8 | 0.016 | 0.664 | 0.56 | 0.36 | 1.28 | 0.64 | 1.6 | 2.88 | 8 | |
| 14 | 14-Dec-24 | 4.2 | 4.1 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 15 | 15-Dec-24 | 4.9 | 4.1 | 9 | 0.018 | 0.747 | 0.63 | 0.405 | 1.44 | 0.72 | 1.8 | 3.24 | 9 | |
| 16 | 16-Dec-24 | 4.8 | 4.8 | 9.6 | 0.0192 | 0.7968 | 0.672 | 0.432 | 1.536 | 0.768 | 1.92 | 3.456 | 9.6 | |
| 17 | 17-Dec-24 | 4.8 | 4.8 | 9.6 | 0.0192 | 0.7968 | 0.672 | 0.432 | 1.536 | 0.768 | 1.92 | 3.456 | 9.6 | |
| 18 | 18-Dec-24 | 4.7 | 4.2 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| 19 | 19-Dec-24 | 3.8 | 4.1 | 7.9 | 0.0158 | 0.6557 | 0.553 | 0.3555 | 1.264 | 0.632 | 1.58 | 2.844 | 7.9 | |
| 20 | 20-Dec-24 | 4.7 | 4.4 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 21 | 21-Dec-24 | 4.8 | 4.3 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 22 | 22-Dec-24 | 4.7 | 4.1 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 23 | 23-Dec-24 | 4.6 | 3.9 | 8.5 | 0.017 | 0.7055 | 0.595 | 0.3825 | 1.36 | 0.68 | 1.7 | 3.06 | 8.5 | |
| 24 | 24-Dec-24 | 4.5 | 3.8 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 25 | 25-Dec-24 | 4.5 | 4.3 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 26 | 26-Dec-24 | 4.4 | 3.5 | 7.9 | 0.0158 | 0.6557 | 0.553 | 0.3555 | 1.264 | 0.632 | 1.58 | 2.844 | 7.9 | |
| 27 | 27-Dec-24 | 4.4 | 3.9 | 8.3 | 0.0166 | 0.6889 | 0.581 | 0.3735 | 1.328 | 0.664 | 1.66 | 2.988 | 8.3 | |
| 28 | 28-Dec-24 | 4.3 | 4.8 | 9.1 | 0.0182 | 0.7553 | 0.637 | 0.4095 | 1.456 | 0.728 | 1.82 | 3.276 | 9.1 | |
| 29 | 29-Dec-24 | 4.7 | 4.1 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 30 | 30-Dec-24 | 4.8 | 4 | 8.8 | 0.0176 | 0.7304 | 0.616 | 0.396 | 1.408 | 0.704 | 1.76 | 3.168 | 8.8 | |
| 31 | 31-Dec-24 | 4.8 | 4.1 | 8.9 | 0.0178 | 0.7387 | 0.623 | 0.4005 | 1.424 | 0.712 | 1.78 | 3.204 | 8.9 | |
| | total | 136.5 | 131.6 | 268.1 | 0.5362 | 22.2523 | 18.767 | 12.0645 | 42.896 | 21.448 | 53.62 | 96.516 | 268.1 | |

For Bijendra Energy & Research

OmniStar



सत्यमेव जयते

INDIA NON JUDICIAL

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Government of Uttar Pradesh



IN-UP16821351244029W

Signature
ACC Name: ARBINO KUMAR, ACC Code-UP14003504

ACC Add: Sub Registrar Noida, Mob.-9899010606

License No.-91/03, Tehsil & Distt, G.B. Nagar, UP

e-Stamp

ANNEXURE R-2

Certificate No. : IN-UP16821351244029W
 Certificate Issued Date : 19-Jul-2024 02:55 PM
 Account Reference : NEWIMPACC (SV)/ up14003504/ NOIDA/ UP-GBN
 Unique Doc. Reference : SUBIN-UPUP1400350430178347752572W
 Purchased by : NTPC VIDYUT VYAPAR NIGAM LTD
 Description of Document : Article 5 Agreement or Memorandum of an agreement
 Property Description : Not Applicable
 Consideration Price (Rs.) :
 First Party : NTPC VIDYUT VYAPAR NIGAM LTD
 Second Party : Not Applicable
 Stamp Duty Paid By : NTPC VIDYUT VYAPAR NIGAM LTD
 Stamp Duty Amount(Rs.) : 100
 (One Hundred only)



IN-UP16821351244029W

Please write or type below this line

MSW SUPPLY AGREEMENT

FOR

DEVELOPMENT OF MSW TO TORREFIED PLANT FACILITY

AT

GANWARI, MEERUT

BETWEEN

NAGAR NIGAM MEERUT

AND

NTPC VIDYUT VYAPAR NIGAM LIMITED (NVTN)

नगर आयुक्त
नगर निगम, मेरठ



1. The authenticity of this Stamp certificate should be verified at www.ehfilestamp.com or using e-Stamp Mobile App of Stock Holding Corporation in the details on this Certificate and its availability on the website / Mobile App renders it invalid.
 2. The cover of enclosing the document is on the terms of this certificate.
 3. In case of any discrepancy please inform the Competent Authority.

MSW SUPPLY AGREEMENT

THIS AGREEMENT is made on this ^{03rd} day of ^{October} 2024 at Meerut
BETWEEN

1. **NAGAR NIGAM MEERUT**, a civic body established under Uttar Pradesh Municipal Corporation Act-1959 that performs the functions of the Municipal Corporation provided under the Act of 1959 within the Municipal limit of district Meerut in Uttar Pradesh, India and having its office at Near Ghanta Ghar, Kaiser Ganj Road, Meerut (U.P.) 250002 (hereinafter referred to as "NNM"), which expression shall, unless the context otherwise specifies, means and include its successors and permitted assigns on the FIRST PART

AND

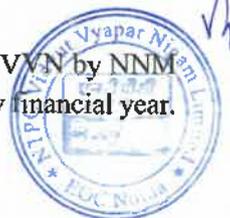
2. **NTPC VIDYUT VYAPAR NIGAM LTD**, a company incorporated under the Companies Act, 1956 and having its registered office at NTPC Bhawan, SCOPE Complex, 7 Institutional Area, Lodhi Road, New Delhi- 110003 (hereinafter referred to as "NVVN", which expression shall, unless the context otherwise specifies, means and include its successors, and permitted assigns) on the SECOND PART.

NNM and NVVN are hereinafter referred to individually as the "**Party**" and collectively as the "**Parties**".

WHEREAS

1. NNM is a civic body performs the functions of the Municipal Corporation provided under the Act of 1959 within the Municipal limit of district and is responsible for, inter-alia amongst others, making adequate provisions for the collection/removal and disposal of Municipal Solid Waste. Government of India has formulated Municipal Solid Waste (Management and Handling) Rules, 2016, which impose an obligation on NNM to adopt a suitable process for processing and disposal of Municipal Solid Waste (MSW). In furtherance of its actions and pursuant to the Solid Waste Management Rules 2016, NNM desires to establish facilities to process, manage, and dispose of Municipal Solid Waste (MSW).
2. NNM is desirous of augmenting its waste management capability and expanding its waste processing, management, and disposal capabilities. NVVN has received clearance from NNM to develop, operate, and maintain a 900 TPD (700 TPD + 200 TPD) MSW to Torrefied Plant Facility at the Ganvari, on a demarcated 15-acre land in Meerut, Uttar Pradesh (hereinafter referred to as "Site")
3. The plant capacity may be extended to 900 TPD in the future as per the availability of MSW. NVVN shall install the plant on a modular basis to accommodate the additional line in the plant.
4. The designated quantity of MSW is intended exclusively for use by NVVN. NNM will not be permitted to establish a designated quantity agreement with any other agency. Furthermore, the previous agreements on MSW quantity shall not conflict with the supply of designated MSW to NVVN.
5. It has also been decided that the said land will be made available under lease to NVVN by NNM at a lease rent of Rs 1/sqm/year. NVVN shall pay lease rent in the first week of every financial year.

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नगर निगम, मेरठ



The Lease rent shall start from the date of Agreement.

6. NVVN shall establish the Project for processing of non-hazardous municipal solid waste using the technologies of processing municipal solid waste.
7. NNM is thus desirous of entering into an agreement with NVVN, vesting it with the rights and obligations required to enable it to duly undertake the development, financing, construction, operation, and maintenance of a waste processing project at Ganvari, Meerut, Uttar Pradesh on a build, occupy and operate basis.
8. NVVN will not charge any processing fees from NNM for the processing of received MSW.
9. To ensure the quality of waste, NNM will be responsible for installing MSW pre-processing units. NVVN will extent technical support for reviewing the technical specifications of the equipment and the tender documents as and when they are issued by NNM for the aforementioned units.
10. NNM will be responsible for assisting in obtaining capital subsidies from the Central or State Government, or any other directives issued by the Government of India or the Government of Uttar Pradesh.
11. For all purposes, notices, intimations, coordination, correspondence, replies, complaints, demands, invoices, payments, or any other work NNM shall be the Coordinating Authority under this Agreement.
12. This MSW Supply agreement shall be a co-terminus with the Land Lease Agreement to be executed between the Parties.
13. The terms and conditions of this agreement shall be exclusive and unique between the Parties. Hence, must not be shared with any other external agencies/other municipalities / prospective partners of NVVN.

NOW THEREFORE THIS AGREEMENT WITNESSETH AND IT IS HEREBY AGREED BETWEEN

THE PARTIES as follows:

1. DEFINITIONS & INTERPRETATION

1.1. Definitions

In this Agreement, unless repugnant to the context or inconsistent therewith, the following words, phrases, and expressions shall bear the meaning hereinafter respectively assigned to them:

- 1.1.1. **"Additional Cost"** shall mean the additional capital expenditure and/or the additional operating costs or both as the case may be, which NVVN would be required to incur as a result of a Change in Law.
- 1.1.2. **"Applicable Approvals"** means all the authorizations, licenses, clearances, permits, no-objections, sanctions and consents as required by Applicable Laws, to be procured by NVVN in connection with the implementation of the Project. NNM may facilitate the process.
- 1.1.3. **"Applicable Laws"** means all the laws, acts, ordinances, rules, regulations, notifications, guidelines or bye-laws which have the force of law, in force and effect, as of the date hereof and which may be promulgated or brought into force and effect hereinafter in India, including judgments, decrees, injunctions, writs or orders of any court of record, as may be in force and effect during the subsistence of this Agreement and applicable to the Project.
- 1.1.4. **"Bio-degradable waste"** shall have the meaning given to SWM Rules, 2016 as amended thereto.

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- 1.1.5. **"Combustible waste"** shall have the meaning given to SWM Rules, 2016 as amended thereto.
- 1.1.6. **"Commissioning Period"** in relation to the Plant means the period of up to three (3) months from the date when the Mechanical Completion of all of the Project Facilities has been achieved.
- 1.1.7. **"Concession"** means collectively all the rights granted by NNM to NVVN under this Agreement with respect to developing, implementing, constructing, operating and maintaining & disposal of the Plant for the management, processing and disposal of the Municipal Solid Waste generated from within the MSW Supply Area, subject to all the terms, conditions, covenants and obligations of this Agreement.
- 1.1.8. **"Daily Weight Sheet"** shall have the meaning given to the term in Clause 7.3.
- 1.1.9. **"Date of Commissioning" or "COD"** means the date notified by NVVN as the date on which the Plant is ready to commence commercial operations after successfully completing the testing and receiving necessary statutory clearance from the competent authority, which shall be a date no later than three months of the date of Mechanical Completion of the Plant.
- 1.1.10. **"Date of Mechanical Completion"** means, in relation to the Plant, the date, not being later than twenty-four (24) months from the Effective Date (including 3 months of commissioning period), on which, the construction of the Plant is to be completed with all equipment and be ready for testing and commissioning. Total time including commissioning and mechanical completion should not exceed 24 months.
- 1.1.11. **"Dead Remains"** means the dead bodies, carcasses, bones or skeletal remains of animals, rodents and other living beings (other than plants).
- 1.1.12. **"Delivery Schedule"** shall have the meaning given to the term in Clause 6.1.
- 1.1.13. **"Delivery point"** means the location(s) identified by NVVN.
- 1.1.14. **"Declared grade"** shall mean the characteristic & composition of MSW supplied by NNM. **NNM shall supply MSW, of minimum GCV value of 2500 Kcal/kg, comprising of obligated fraction of MSW (as per Clause 5.2) and Inert with recyclables less than 5%.**
- 1.1.15. **"Designated Quantity"** means a total of 700 Tons per day of MSW at Site, as per terms of this Agreement. In the case of a 900 TPD plant, the total MSW Designated quantity shall be 900 TPD.
- 1.1.16. **"Disposal"** shall have the meaning given to as in SWM Rules, 2016
- 1.1.17. **"Domestic hazardous waste"** means discarded paint drums, pesticide cans, CFL bulbs, expired medicines, broken mercury thermometers, used batteries, used needles and syringes and contaminated gauge, etc., generated at the household level;
- 1.1.18. **"Development Costs"** shall mean the aggregate of the amounts spent by NVVN in undertaking activities in relation to the implementation of the Project till the Date of Commissioning which amounts will include but not be limited to:
- expenditure incurred for and in relation to the Project which have been charged/assigned to NVVN including cost of Capital,
 - expenditure incurred in relation to preparation of all reports, studies and other papers relating to the Project and the Project Facilities,
 - expenditure incurred in respect of filing applications for and obtaining and maintaining Applicable Approvals,
 - fees of all consultants, experts, accountants, lawyers, lenders and other independent persons hired in relation to the Project,
 - costs of maintaining offices of NVVN that are attributable to the Project,
 - any payments made to NNM or on behalf of NNM in relation to the Concession of the Project and
 - costs of any contractors appointed by NVVN in relation to the implementation of the Project
- 1.1.19. **"Encumbrances"** means any encumbrance such as mortgage, charge, pledge, lien, hypothecation, security interest or other obligations and shall also include physical encumbrances, including utilities both under and above the ground and encroachments on the Site.

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- 1.1.20. **"Effective Date"** means the date on which the obligations of NVVN become binding and effective, all the conditions precedent specified in Clause 3.1 are either satisfied or waived by NVVN in accordance with Clause 3.3.
- 1.1.21. **"Financing Documents" or "Financing Agreements"** means collectively the agreements entered into for providing the debt financing for the implementation of the Project and shall include the security documents creating the relevant security (such as mortgages or charges or liens) on the Plant or any part thereof, for securing the debt provided.
- 1.1.22. **"Good Industry Practice"** means the exercise of that degree of skill, diligence, prudence and foresight in compliance with the undertakings and obligations under this Agreement which would reasonably and ordinarily be expected of a skilled and an experienced person engaged in the implementation, operation and maintenance or supervision or monitoring thereof or any of them of facilities similar to the Facilities to be constructed, operated and maintained pursuant to the Project.
- 1.1.23. **"Hazardous Waste"** shall have the meaning as defined under the Hazardous Wastes (Management and Handling) Rules, 2016 as amended thereto.
- 1.1.24. **"Inerts"** means wastes which are not bio-degradable, recyclable or combustible street sweeping or dust and silt removed from the surface drains;
- 1.1.25. **"Incineration"** means an engineered process involving burning or combustion of solid waste to thermally degraded waste materials at high temperature;
- 1.1.26. **"Leachate"** means the liquid that seeps through the solid waste or other medium and has extracts of dissolved or suspended material from it;
- 1.1.27. **"Landfill Site"** means the existing landfill site for disposal of solid waste, which shall be suitably indicated by the NNM, and any alternate or additional landfill site notified by NNM pursuant to Clause 8 as being available for disposal of MSW pursuant to this Agreement, if the existing landfill site is not available or suitable for disposal of MSW. Landfill site location for disposal of rejected MSW shall be identified by NNM and shared with NVVN. Responsibility for disposal of rejected MSW shall be of NNM.
- 1.1.28. **"Landfilling"** means the disposal of the Residual Inert Matter and Rejected Wastes at the Landfill Site in accordance with the terms of this Agreement.
- 1.1.29. **"Lease Agreement"** means the lease agreement pursuant to which NNM or any of its nominated Agency shall lease the Site to NVVN for 30 years (includes tendering process, erection Commissioning period and operational years) or may be extended with mutual consent of Parties.
- 1.1.30. **"Lenders"** means the Persons that provide the financing for the Projects pursuant to Financing Agreements.
- 1.1.31. **"Material Adverse Effect"** means a material adverse effect on (a) the ability of either Party to exercise any of the rights to perform / discharge any of its duties / obligations under and in accordance with the provisions of this Agreement and/or (b) the legality, validity, binding nature or enforceability of this Agreement.
- 1.1.32. **"Material Breach"** shall mean a breach by either Party of any of its obligations under this Agreement which has or is likely to have a Material Adverse Effect on the Project and which such Party shall have failed to cure.
- 1.1.33. **"Maximum MSW Quantity"** means a total of 700 Tons per day of MSW at Site, as per terms of this Agreement. In case of 900 TPD plant the maximum MSW quantity shall be 900 TPD.
- 1.1.34. **"MSW Supply Agreement"** means this agreement for MSW supply between NNM and NVVN, including its schedules and annexures and includes any amendments made hereto in accordance with the provisions hereof.
- 1.1.35. **"MSW Supply Area"** means, the areas under the jurisdiction of NNM.
- 1.1.36. **"MSW Quantity"** means Seven Hundred metric tons (700 TPD) with a permitted variation level of 560 TPD to 700 TPD at Site, which is the quantity of MSW that NVVN will receive from NNM or any Person located within the jurisdiction of NNM, for processing at the Plant. In case of 900

TPD plant, NNM shall deliver the MSW with a permitted variation level of 720 TPD to 900 TPD at site.

- 1.1.37. **"Minimum MSW Quantity"** means a total of 560 Tons per day of MSW received at Site minus **Total Rejected Quantity**, as per terms of this Agreement. In case of 900 TPD plant the minimum MSW quantity shall be 720 TPD.
- 1.1.38. **"MSW" or "Municipal Solid Waste"** shall have meant as defined under the Municipal Solid Waste (Management & Handling) Rules 2016, which is reproduced as below: **"Municipal Solid Waste"** or **"MSW"** includes commercial and residential wastes generated in a municipal or notified areas in either solid or semi-solid form excluding industrial hazardous wastes but including treated bio-medical wastes.
- 1.1.39. **"NNM"** means Nagar Nigam, Meerut- a civic body established under Uttar Pradesh Municipal Corporation Act, 1959 to perform functions of Municipal corporation as provided under the Act of 1959 and having its office at Near Ghanta Ghar, Kaiser Ganj Road, Meerut (U.P.) 250002.
- 1.1.40. **"Operating Conditions"** means, in relation to a Project Facility, the minimum conditions that are required in order to ensure the due performance of the relevant Project Facility to process MSW and contribute to the Plant being able to process of the MSW Quantity by the Plant.
- 1.1.41. **"Operational Period"** means, the period from COD to the end of project life i.e., 25 years
- 1.1.42. **"Organic Waste"** means such type of Waste that can be degraded by micro-organisms.
- 1.1.43. **"Person"** means any individual, corporation, partnership, joint venture, trust, unincorporated organization, government or governmental authority or agency or any other legal entity.
- 1.1.44. **"Plant"** means the Waste Management & comprising the Segregation Plant and/or the Torrefaction Plant, and/or the Inert Management Facility to be designed, constructed, operated and maintained by NNVN in accordance with the terms and provisions of this Agreement, and Land Lease Agreement, and in the event NNVN decides to design, construct, operate and maintain such facility shall also be part of the Plant.
- 1.1.45. **"Preliminary Notice"** means the notice of intended Termination by the Party entitled to terminate this Agreement to the other Party setting out, inter alia, the underlying Event of Default.
- 1.1.46. **"Project"** means the project for enabling the processing of Municipal Solid Waste equivalent to the MSW Quantity and for that purpose to design, development, financing, construction, operation and maintenance of the Plant under and in accordance with the terms and provisions of this Agreement.
- 1.1.47. **"Project Facilities"** means, as the context may require either all or one or more of the following: (i) the Site and (ii) the individual facilities comprising the Plant, namely the Torrefaction Plant, and/or the Waste Processing Plant, and/or Inert Management Facilities,
- 1.1.48. **"Quarterly quantity"** or **"QQ"** shall have the meaning ascribed to it in Clause 10.6
- 1.1.49. **"Receipt Point"** means the place within the Site, specified in writing by NNVN and marked on a layout plan by NNVN on or before the Date of Mechanical Completion, at which NNM shall be required to deliver the MSW in accordance with the terms of this Agreement.
- 1.1.50. **"Residual solid waste"** means and includes the waste and rejects from the solid waste processing facilities which are not suitable for recycling or further processing.
- 1.1.51. **"Residual Inert Matter"** means the waste matter obtained after processing of the MSW by each of the relevant Project Facilities.
- 1.1.52. **"Rejected Waste"** means such components of a consignment of Municipal Solid Waste delivered by NNM that are refused to be accepted by NNVN as per provisions of Clause 7.5 (a)
- 1.1.53. **"Site"** means the land admeasuring 15 Acres located adjacent to Ganvari, Meerut, Uttar Pradesh.
- 1.1.54. **"Solid Waste"** means and includes solid or semi-solid domestic waste, sanitary waste, commercial waste, institutional waste, catering and market waste and other nonresidential wastes, street sweepings, silt removed or collected from the surface drains, horticulture waste,

agriculture & dairy waste, treated bio-medical waste excluding industrial waste, bio-medical waste and e-waste, battery waste, radio-active waste generated in the area under the local authorities and other entities mentioned in rule 2 in Solid Waste Management Rules, 2016 as amended thereto

- 1.1.55. "Solid Waste Management Rules 2016"** means the Municipal Solid Wastes (Management and Handling) Rules, 2016 framed by the Government of India under the Environment (Protection) Act, 1986 (Act 29 of 1986) and includes any statutory amendments / modifications thereto or reenactments thereof, for the time being in force.
- 1.1.56. "Supplementary MSW"** shall have the meaning given to the term in Clause 2.4 and as per provisions of Clause 2.4.
- 1.1.57. "Transportation"** means conveyance of solid waste, either treated, partly treated or untreated from a location to another location in an environmentally sound manner through specially designed and covered transport system so as to prevent the foul odor, littering and unsightly conditions.
- 1.1.58. "Technology"** means the relevant technology for the waste Torrefaction processes, that NVVN may, at its discretion, deem fit to use in the Project Facilities from time to time.
- 1.1.59. "Term"** means the time period of Thirty (30) years commencing from the date of execution of this agreement and will also include such successive time period/s by which the Concession granted in this Agreement may be renewed/ extended as provided herein.
- 1.1.60. "Termination"** means the early termination of this Agreement pursuant to Termination Notice given by either Party to the other Party or otherwise in accordance with the provisions of this Agreement but shall not, unless otherwise requires, include expiry of this Agreement due to the expiry of its Term
- 1.1.61. "Termination Notice"** means the termination notice given pursuant to Clause 15.
- 1.1.62. "Termination Date"** means the date specified in the Termination Notice as the date on which Termination occurs.
- 1.1.63. "Termination Payment"** means the payments payable pursuant to Clause 15.2(g) of this Agreement.
- 1.1.64. "Third Party"** means the agency appointed for collection, preparation and analysis of MSW samples at unloading points and/or the locations allocated to them within plant limit.
- 1.1.65. "Torrefaction"** means the combustible waste fraction of solid waste like plastic, wood, pulp or organic waste derived from MSW, other than chlorinated materials, in the form of pellets produced by drying, shredding, dehydrating and compacting of solid waste, then charred in absence of Oxygen to form Charcoal like compound also called Torrefied Charcoal.
- 1.1.66. "Total Rejected Quantity"** the quantity of MSW that is rejected or not accepted by NVVN in accordance with the provisions of this Agreement shall not be included for the purposes of processing.
- 1.1.67. "Weekly MSW Deficiency Amount"** shall have the meaning given to the phrase in Clause 7.6.
- 1.1.68. "Weighbridge"** means the electronic weighbridge capable of performing the operations specified in Clause 7.3.
- 1.1.69. "Weights and Measures Standards"** mean the standards, as prescribed under the standards of Weights and Measures Act, 1976 and amendments thereof.
- 1.1.70. "Gross Calorific Value" or "GCV"** means the heat value determined on equilibrated basis through a Bomb Calorimeter in accordance with to the procedure laid down in IS:1350 (Part-II)-1970.
- 1.1.71. "Unused material"** shall mean waste material remaining after processing of raw municipal solid waste from pre-processing facilities, and Torrefaction plant shall be given back to NNM for disposal of the same.
- 1.1.72. "Unloading points"** means the place/point(s) at the plant end at which MSW from NNM is received/unloaded.

1.1.73. "Year" means the financial year, commencing from 1st April and ending on the following March 31st and "quarter" means the respective three-monthly periods, namely April to June, July-September, and so on.

1.2 Interpretation

- (a) The words, phrases and expressions defined hereinabove in Clause 1.1 or defined elsewhere by description in this Agreement, together with their respective grammatical variations and cognate expressions shall carry the respective meanings assigned to them in the said Clause 1.1 or in this Agreement and shall be interpreted accordingly. Expressions which have not been defined in this Agreement shall carry the respective meanings assigned to them in their ordinary applicability read in context with the manner of their usage in this Agreement or in their respective technical sense, as the case may be;
- (b) all words in singular shall be deemed to connote their respective plurals and vice-versa, unless the context suggests otherwise;
- (c) the words "include" and "including" are to be construed without limitation;
- (d) the headings of the Clauses in this Agreement are merely for purposes of convenience and shall have no bearing on the interpretation of this Agreement;
- (e) the Schedules and Annexures to this Agreement form an integral part of this Agreement and shall be interpreted accordingly.
- (f) a reference to Rs., INR or Rupees is to the lawful currency of the Republic of India unless specified otherwise;
- (g) a reference to an agreement, deed, instrument or other document includes the same as amended, novated, supplemented, varied or replaced from time to time; and
- (h) a reference to any legislation or legislative provision includes any statutory modification or re-enactment of, or legislative provision substituted for, and any subordinated legislation issued under, that legislation or legislative provision;

2. THE PROJECT

2.1 Grant of Concession

Subject to and in accordance with the terms and conditions set out in this Agreement, NNM hereby irrevocably grants to NVVN the exclusive right and authority, during the Term, to process MSW and produce Torrefied Charcoal from the same, and for that purpose NVVN hereby accepts to develop, establish, finance, design, construct, operate and maintain the Plant at the Site in addition to the other rights granted under this Agreement:

- (a) to receive at the Receipt Point, during each day of the Operational Period, MSW from NNM (which shall be delivered by NNM at its own cost and expense) for the Project, to be transported and supplied by NNM, at the Receipt Points mainly and primarily from the MSW Supply Area
- (b) to inspect the MSW delivered by NNM and identify Rejected Waste as per provisions of Clause 7.5, in such manner as it deems fit, and refuse to accept the Rejected Waste


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- (c) to receive all the fiscal incentives and benefits accruing in respect of or on account of the Project

2.2 Rights Associated with the Grant of Concession

Without prejudice to the generality of foregoing, the Concession hereby granted to NVVN shall include without being limited to, and shall entitle NVVN, without requiring any further authorization or authority from NNM, to enjoy, the following rights, privileges and benefits in accordance with the provisions of this Agreement and Applicable Laws:

- (a) to design, engineer, finance, procure, construct, install, commission, operate and maintain each of the Project Facilities either by itself or through such entities as may be selected by it;
- (b) upon commissioning of a Project Facility, to manage, operate and maintain the same either by itself or through such other entities as may be selected by it;
- (c) to borrow or raise money or funding required for the due implementation of the Project and mortgage, charge or create lien or encumbrance on the whole or part of the Project Facilities; but NVVN will not mortgage, charge or create lien or encumbrance on the land provided by NNM for the implementation of the Project;
- (d) to use, appropriate, process MSW delivered by NNM to NVVN and dispose the Residual Inert Matter as per provisions of this Agreement-
- (e) to store, use, appropriate, market and sell or dispose all the products obtained after the processing and treatment of the MSW (including but not limited to electricity, methane, Torrefied Charcoal, Volatile Gas and Residual Inert Waste) and to further retain and appropriate any revenues generated from the sale of such products. As the complete investment is being done by NVVN, thus it may be noted that revenue proceeds from carbon credits or any other credits, if any, generated shall be owned by NVVN.
- (f) to obtain the utilities required for enabling the construction of the Project Facilities, without any additional cost or charges, other than the applicable user charges for the utilities
- (g) exclusively hold, possess, and control the Site, in accordance with the terms of the Land Lease Agreement, for the purposes of the due implementation of this Project, in accordance with the terms of this Agreement

2.3 Use of Suitable Technology

Without prejudice to the generality of the foregoing, NVVN shall have the right to develop the Project Facilities using such Technology that it considers suitable and commercially viable for the purposes of implementing the Project, in accordance with terms of this Agreement. It is acknowledged that it is the intention of NVVN to use the Technology associated with the concept of a waste processing plant and that NVVN shall have the right to modify, adapt, upgrade or change the Technology, from time to time, based on actual operations of the Plant and the requirements of the Project. It should be noted that technology is for processing of MSW and converting it into Torrefied charcoal, however, byproducts generated, if any, may be utilized by NVVN.

2.4 Use of Supplementary Fuel for Waste Torrefaction Plant

The Parties hereby agree that NVVN shall have the right to use, at such times as it may deem fit, any waste (such as Agro waste) as a supplement to the MSW (as per Ministry of New &

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renewable Energy - MNRE Guidelines from time to time) to enrich the Torrefied coal/output and/or to directly support the operation of Waste Torrefaction Plant (such waste shall be referred to as "Supplementary Waste").

2.5 Sale and Marketing of Products from Processing MSW

NNM hereby confirms that NVVN shall be free to sell any products derived or produced from the Plant as a consequence of undertaking the processing of the MSW including Torrefied Coal or fluff or gas or any other products or by-products, other material recovered or produced from MSW at the Plant, without any interference or requirement of any additional reporting, clearance or approval in this regard from NNM. NVVN shall have the right to sell or otherwise dispose of such products, at such price and to such persons and using such marketing and selling arrangements as it may deem appropriate.

2.6 Term of Concession

The Concession is granted to NVVN for the Twenty Five (25) years Term and shall terminate upon the expiry of the Term or upon earlier Termination of this Agreement. After the completion of the operational life of the Torrefaction plant, the scrap of the plant will be taken care of by NVVN.

2.7 Renewal of Concession

NNM may agree to renew or extend the Concession after the expiry of the initial Term, for another such period as may be mutually agreed to and, on such terms, and conditions as mutually agreed upon. However, any such extension shall be co-terminus with Land Lease Agreement.

3. CONDITIONS PRECEDENT

3.1 Conditions Precedent

This Agreement and the Concession granted herein by NNM to NVVN are valid and binding from the date of execution of this Agreement *provided however*, the obligations of NVVN under this Agreement would become effective and binding, only upon the satisfaction of the following conditions precedent:

- (a) NNM by itself or through any of its agencies at its own cost and expense, provides NVVN the complete and lawful right, title, and Vacant Possession of the Site, in accordance with the provisions of the Land Lease Agreement. NNM will retain the right, title, and interest over the lands. NVVN will be permitted to use the land only for the purposes of setting up an MSW to the Torrefied charcoal plant facility and its ancillary facilities including the rooftop solar plant to meet the power requirement restricted to plant operations only, the land will remain in the name of NNM in land records and NVVN will not be allowed to mortgage the lands for raising loans nor create any charge.


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- (b) NNM shall facilitate NVVN to obtain all the required approvals and statutory clearance (if any) required to enable the commencement and completion of the construction of the Project Facilities, pursuant to the Solid Waste Management Rules 2016 and any other applicable Laws, for the Site.
- (c) Approval of Feasibility Report and Investment approval for MSW to Torrefied Charcoal Plant, Meerut by Competent Authority. Communication regarding the same shall be provided to the Municipal Commissioner Office, NNM.
- (d) To ensure the quality of waste, NNM will be responsible for installing MSW pre-processing units. NVVN will extent technical support for reviewing the technical specifications of the equipment and the tender documents as and when they are issued by NNM for the aforementioned units.

3.2 Non-Compliance with Conditions Precedent

It is agreed that, if any of the above preconditions mentioned under Clause 3.1 above, that are to be provided or facilitated by NNM, are not met within Twelve (12) months from the date of execution of this Agreement, then NVVN shall have the option of either: (i) extending the time period for the satisfaction of the conditions precedent by Six (6) months or (ii) terminate this Agreement, in which event if NNM is at default, NNM shall be liable to pay Termination Payments equal to Development Costs incurred by NVVN with applicable taxes if any up to that stage which shall be finalized by the joint committee nominated by NNM and NVVN.

3.3 Option with NVVN on Non-Satisfaction of Conditions Precedent

Without prejudice to the provisions of Clause 3.2, in the event the conditions precedent specified under Clause 3.1 above are not satisfied within an extended period of six (6) months then NVVN shall, at its discretion, also have the right to waive the requirement of satisfaction of any of the unsatisfied Conditions Precedent and undertake to satisfy such conditions precedent itself.

4. THE SITE

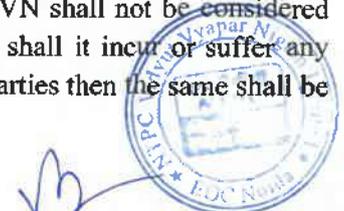
4.1 Vesting of Site with NVVN

NNM itself or through any of its nominated Agency shall allow to use of the land to NVVN for 30 years (including the tendering process, commissioning period, and operational years) as per terms of the Land Lease Agreement. This may be extended further on similar terms and conditions with mutual consent of both Parties.

4.2 MSW SUPPLY AGREEMENT to be Co-Terminus with Vesting of Site

NNM hereby agrees and ensures that this Agreement shall be Co-Terminus with the Land Lease Agreement. In case, the Land Lease Agreement is Terminated, NVVN shall not be considered to be in breach of any of its obligations under this Agreement nor shall it incur or suffer any liability under this Agreement. In case a dispute arises between the Parties then the same shall be


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decided as per the remedy provided under Clause 18 of the Agreement.

5. COLLECTION OF MSW

5.1 Separate Storage and Collection of Various Types of MSW

NNM shall supply an obligated fraction of MSW (as per Clause 5.2) Quantity free of cost to NVVN at the Receipt Point either by itself or through its nominated agencies

5.2 Collection from Bulk Generators

- (a) It may also be noted that the C&D waste/Inert provided by NNM shall be a part of MSW Quantity, however, such quantity shall be as per the below table of MSW Quantity on any given day.

| Particulars | % |
|------------------|--------|
| Moisture | ≤25% |
| Size | ≤50 mm |
| C&D Waste/ Inert | ≤5% |

The NNM shall strive and comply with the Solid Waste Management Rules 2016 issued in Gazette Notification by MoEFCC, to the extent possible, and supply the MSW with the following characteristics as quoted from SWM rules 2016:

- i. ensuring the supply of largely "Dry Waste" under this agreement, and that it does not have excessive moisture. Also, some amount of Biodegradable waste and moisture shall be allowed, considering the present condition of source segregation. However, NNM shall strive to improve the process and strictly segregate the waste at source within 2 years from the date of award to NVVN.
- ii. ensuring that the waste is largely free from inerts; such as sweeping waste, silt, glass, C&D waste components, and metals, etc. the segregation at source as envisaged in Solid Waste (Management & Handling) Rules 2016 & its amendment from time to time.

5.3 Collection at Cost of NNM

NNM shall be responsible for providing MSW at any location inside the plant premises, as directed, at no cost to NVVN

6. TRANSPORTATION OF MSW

6.1 Delivery Schedule

NNM shall schedule the delivery of MSW at the Receipt Point in such a manner as to ensure that the daily rate of delivery of MSW at the Receipt Points shall be between 560 TPD to 700 TPD ("Delivery Schedule"). In the case of 900 TPD plant the daily rate of delivery of MSW at Receipt Points shall be between 720 TPD to 900 TPD. Any deviations in the said Delivery Schedule shall be only with the prior consultation of NVVN. This provision shall not prejudice NNM's primary obligation to supply MSW under this Agreement.

7. DELIVERY OF MSW


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7.1 Delivery of MSW Prior to COD

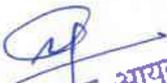
At any time during the period from the Effective Date and until the Date of Commissioning of the Plant, NNM shall supply and make available to NVVN at Receipt Point, free of any cost, between 560 TPD to 700 TPD of MSW at Receipt Point, as requisitioned by NVVN by seven days advance notice in writing. In the case of 900 TPD plant the delivery of MSW at Receipt Points shall be between 720 TPD to 900 TPD.

7.2 Delivery of MSW after COD

From the Date of Commissioning till the end of the Operational Period, NNM shall supply and make available to NVVN during each day (during the Operational Period), MSW of a quantity equal to the MSW Quantity, in accordance with the Delivery Schedule and the provisions of this Agreement. MSW supplied to NVVN shall be primarily from the MSW Supply Area. However, if NNM is not able to supply MSW Quantity from the MSW Supply Area, NNM can at their wish supply MSW from any other area beyond its jurisdiction.

7.3 Measurement of MSW Delivered

- (a) NVVN shall make a Weighbridge to be constructed at the Receipt Point which should have video surveillance, a server room, an electronic display unit, and suitable technology, duly calibrated as per BIS norms and duly certified by the Department of Legal Metrology (Weight & Measures Department) of Government of India/Uttar-Pradesh, weighbridge having the maximum possible accuracy, to carry out the following operations:
 - (i) weigh the MSW delivery trucks, take the weight of empty delivery trucks, and determine the weight of the consignment as the difference between the Gross weight of the loaded truck & bare weight of the Empty truck. The density of the consignment shall be calculated with the volume dimension of the truck & weight of the consignment as arrived at.
 - (ii) generate and maintain an electronic database for each delivery and provide a printout of the specifications and details for each consignment, as stated in sub-clause (i) above (such printout is hereinafter referred to as "**Daily Weight Sheet**").
 - (iii) additionally, NVVN should provide a weight receipt in Duplicate to the driver of the truck
 - (iv) The Weighbridge(s) shall be operated and maintained by NVVN.
 - (v) NNM shall extend its help in coordinating with the Department of Legal Metrology (Weight & Measures Department) for the calibration of Weighbridge.
- (b) Each consignment shall be first weighed at the Weighbridge. NNM or its Transporters shall provide the weight and volume of each empty delivery truck, in order to enable the due operation of the Weighbridge.
- (c) The Weighbridge shall be monitored and inspected regularly to ensure its due calibration and accuracy and any errors shall be rectified immediately.
- (d) The Daily Weight Sheet shall be final and binding on the Parties. NVVN shall also be liable to provide Daily & Monthly Weight Sheets (consolidated Daily Weight Sheets) to NNM at the end


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of every calendar month.

- (e) In the event the Weighbridge is not operational, the weight of the MSW delivered at the Receipt Point during such time shall be measured by an appropriate alternate arrangement established by NVVN and agreed to by NNM, to weigh the MSW being delivered.
- (f) Weighment of **Unused material (residual solid waste, residual inert matter)** remaining after processing of raw municipal solid waste from pre-processing facilities, Waste Torrefaction including ash/residue generated during the process of Waste Torrefaction shall be done before lifting of the same by NNM for disposal of the same.
- (g) NVVN shall identify the storage locations for unused materials from where NNM shall lift the same for disposal. The disposal shall be done by NNM at their own cost, twice a week or as required by NVVN.

7.4 Maintenance of Records

The Daily Weight Sheet will be maintained on a day-to-day basis by NVVN and NNM jointly, to record the quantity of MSW delivered and the quantity of MSW entered therein, as having been received and measured, subject to the right of NVVN to inspect and reject the Rejected Waste that may be part of any consignment, be deemed to have been received by NVVN for the purposes of this Agreement. A copy of the Daily Weight Sheet shall be sent to NNM by NVVN. NVVN shall maintain the records of the Daily Weight Sheets (in electronic form) for a period of the last three years. NVVN shall also provide a soft copy of the data at the end of every Calendar year to NNM. NVVN would also integrate the digital database of the weighments into the NNM's existing digital monitoring platform.

7.5 Determination of Rejected Waste

- (a) If the Weighbridge determines that a consignment, other than a consignment of Organic Waste (to which the provisions of this Clause 7.5 (a) shall not be applicable), has a density greater than,
 - (i) in the case of an open truck, five hundred fifty kilograms per cubic meter (550 Kg/m³) and
 - (ii) in the case of a compactor truck, eight hundred fifty kilograms per cubic meter (850 Kg/m³)

then, the relevant consignment shall be rejected, and the truck shall not be allowed to unload the consignment. NNM hereby agrees that in order to enable the screening to be carried out effectively, it shall adhere to the Delivery Schedule.

- (b) The quantity of Rejected Waste at the tipping point of the plant identified during a period, shall be deducted from the MSW being supplied by NNM while determining whether NNM has delivered the MSW Quantity for such relevant period.

7.6 Failure to deliver MSW Quantity

NNM hereby agrees that the delivery by NNM every day of the MSW Quantity is critical for ensuring the due implementation of the Project. NNM hereby agrees that in consideration of NVVN implementing the Project and processing the MSW generated within the areas under

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the jurisdiction of NNM, it hereby assures and undertakes that it shall deliver, on every day after the COD, MSW of a quantity that is equal to at least the Minimum MSW Quantity at the Receipt Point, in accordance with the Delivery Schedule, and in the event it is not able to deliver the MSW Quantity for a period of six consecutive days, then NVVN, NNM shall jointly scrutinize the data through appointment of joint committee which may include experts nominated by NNM and NVVN for determining the compensation due to capacity utilization losses payable to NVVN.

8. LANDFILL SITE (if required)

8.1 The Landfill Site

NNM shall be responsible for the due operation and maintenance of the Landfill Site and for ensuring its availability and suitability for accepting the Residual Inert Matter and Rejected Wastes. The NNM shall cause the Landfill Site to be operated and maintained at its own cost and expense (including payment of all levies, charges and taxes whatever) and as per the requirements and conditions as prescribed under Applicable Law. NNM hereby indemnifies NVVN and agrees to hold it harmless against any liability, expense, cost, loss, claim, action, or damage that NVVN suffers on account of the non-availability of the Landfill Site to accept the Residual Inert Matter and Rejected Waste. The landfill site location at the nearby area (not adjacent) for disposal of rejected MSW shall be identified by NNM and shared with NVVN. Responsibility for disposal of rejected MSW shall be of NNM.

8.2 Disposal of Rejected Waste and Residual Inert Matter

NNM shall maintain and make available, without any tax, charge, or fee, the Landfill Site in Meerut to NVVN to dispose of the Rejected Waste and Residual Inert Matter, if any rejected by NVVN, and in respect of which any cess, taxes, and charges of any nature whatsoever are to be borne and paid only by NNM. NNM and NVVN agree that NVVN shall assist in loading of the Residual Inert Matter/ Residual Solid Waste into the Truck(s) at the Site while Rejected Waste shall be transported by NNM by itself to the Landfill site, at no cost to NVVN.

NNM shall bear the cost of transportation and off-loading of the Residual Inert Matter from the Site to the Landfill Site in Meerut.

NVVN shall share inert waste collection reports with NNM twice a week or as required.

8.3 Closure of Landfill Site and Alternate Site

- (a) NNM shall be responsible for the operational and maintenance activities of the Landfill Site. NNM hereby indemnifies NVVN and agrees to hold it harmless against any liability, expense, cost, loss, claim, action, or damage that NVVN suffers on account of operation, maintenance, or any other requirements related to the Landfill Site.
- (b) NNM further agrees that in case the closure of the Landfill Site occurs prior to the expiry of the Term, for any reason whatsoever, it shall provide and maintain free of cost to NVVN an alternate Landfill Site located at any other place within its jurisdiction, where NNM can undertake the Landfilling activities. In the event that NNM fails to provide the said alternative Landfill Site, NNM shall pay to NVVN all transport and handling costs incurred by NVVN in carrying and disposing the Inert Matter and the Rejected Wastes.


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9. EXPANSION OF PROJECT

If at a later date, it is possible to expand the facilities to consume more garbage or produce more Torrefied Charcoal, the same may be done as per mutually acceptable terms. The Parties however also acknowledge that it may not be possible for the capacity of the Plant to be expanded in order to process MSW in quantities greater than the MSW Quantity. However, NVVN expects (without being obligated to do so) that up to ten percent (10%) extra MSW can be processed by the Torrefaction Plant and the extra quantities of Torrefied Material that are so produced by it can be either stored or sold by NVVN in any form.

10. ADDITIONAL OBLIGATIONS OF NVVN

In addition to and without prejudice to the other obligations of NVVN specified in other provisions of this Agreement, NVVN shall also discharge the following additional obligations

10.1 Financing and Implementation of the Project

- (a) The Parties hereby agree that NVVN shall have the complete discretion to implement and finance the Project in the manner it deems fit. Without prejudice to the generality of the foregoing, NVVN shall have the right to implement the Project through one or more special purpose companies and induct or appoint any number of Persons as contractors, operators, partners or investors or Lenders, without any restriction or condition or requirement of prior approval of NNM. NNM hereby further agrees that NVVN may carry out any work relating to the Project either by itself or through any suitable entities it may appoint, without the need to obtain any approval of NNM *provided however*, NVVN shall remain completely responsible to ensure that the Project Facilities comply with this Agreement.
- (b) NNM confirms that NVVN has the full right and authority, without requiring any further consent, authorization or "no-objection" from NNM, to borrow moneys or raise finances and to mortgage or charge the Project Facilities and any assets of the NVVN for the purpose of obtaining finance for the implementation of the Project except the land under lease for the project or any asset owned by NNM.

10.2 Undertakings

NVVN undertakes:

- (a) that, subject to the provisions of this Agreement and NNM performing its obligations, it shall undertake to construct, erect, assemble, install and achieve mechanical completion of the Project Facilities in a manner so as to enable the mechanical completion of the entire Project to be achieved within scheduled period from the Effective Date.
- (b) that it shall always ensure it has the due authorization and proper legal right to use the Technology it uses for the due operation of the Plant, and
- (c) that the Project Facilities shall be operated and maintained in accordance with this Agreement and that the Plant shall, upon completion and commissioning, subject to NNM complying with its obligations under this Agreement and the Operating Conditions for each Project Facility being satisfied, have the capacity of processing MSW up to the MSW Quantity. NNM hereby agrees

that NVVN may carry out the operation and maintenance of the Plant (or any part thereof) by itself or through any suitable entities it may appoint *however*, NVVN shall remain completely responsible to ensure that the Project Facilities comply with this Agreement.

NNM undertakes:

- (a) that supply of non-hazardous MSW to the project shall be as per declared grade and SWM Rules 2016 as amended thereto.
- (b) that NNM shall bear all the cost of transportation of MSW and off-loading of the Unused material to landfill site and transportation of the hazardous substance if supplied with MSW.
- (c) that supply of non-hazardous MSW to the project shall be as per annual contract quantity.

10.3 Period of Agreement:

10.3.1. This Agreement shall come into force with effect from the date of signing of this MSW Supply Agreement (the Effective Date) subject to meeting the Condition Precedent.

10.3.2. This Agreement shall, unless terminated in accordance with the terms of Clause 16 of this Agreement, remain in force for a period of **Thirty (30) years** from the Effective Date.

10.4 Quantity

10.4.1. Annual Contracted Quantity (ACQ)

The Annual Contracted Quantity of MSW agreed to be supplied by the NNM shall be 2.31 lakh tons per year from the NNM control area. In the case of 900 TPD plant the Annual Contracted Quantity of MSW agreed to be supplied by the NNM shall be 2.97 lakh tons per year from the NNM control area.

For part of the Year, the ACQ shall be pro-rated accordingly.

10.4.2. In the event of a long outage arising out of the Renovation and Modernization and Life Extension Program (R&M&LE), at NVVN, the NVVN shall give an advance notice of three months to the NNM. NVVN shall also specify the period of such outage and the resultant reduction in the supply of MSW sought by the NVVN on account of R&M&LE. Thereupon both the Parties shall reduce the ACQ in writing accordingly. The ACQ shall stand restored to its original level in the subsequent year.

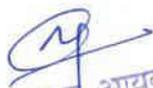
10.5 End use of MSW:

The total quantity of MSW supplied pursuant to this Agreement is meant for use at the MSW processing facility, **Waste Torrefaction Plant of NVVN.**

10.6 Quarterly Quantity

The annual contracted quantities for the year shall be divided into quarterly quantities (QQ), expressed in tones as follows:

- (i) **April-June: 25 % of ACQ**
- (ii) **Jul-Sep: 22% of ACQ**


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(iii) Oct-Dec: 28 % of ACQ

(iv) Jan-March: 25 % of ACQ

10.7 Scheduled quantity (SQ):

10.7.1. The monthly Scheduled Quantity (SQ) shall be one-third (1/3rd) of the QQ.

10.7.2. The increase/ decrease resulting from such revision shall not be in excess of 10 % of the monthly SQ.

10.7.3. NNM shall have the right to make good the short supplies in a particular month in the succeeding month (s) of the same Quarter to the extent of 10% of the monthly SQ.

10.7.4. Any changes in supply which shall deviate from monthly SQ, shall be notified by either NVVN or NNM in writing, at least thirty (30) days prior to the commencement of a month.

10.7.5. Normally variation shall not be permitted in respect of QQ either by NVVN or NNM pursuant to 10.7.2, 10.7.3, and 10.7.4 except with mutual consent of NVVN, NNM. However, variation in QQ with corresponding variation in the SQs of the quarter concerned over and above permitted under sub clause 10.7.2, 10.7.3, and 10.7.4 can be made with mutual consent of NVVN or NNM expressed in writing.

10.8 Compensation for short delivery

10.8.1. If for a Year, the Level of Delivery by the NNM, falls below ACQ with respect to that Year, the defaulting Party shall be liable to pay compensation with applicable taxes if any to the other Party for such shortfall in Level of Delivery, as the case may be ("Failed Quantity") in terms of the following:

| Sl. No. | Level of Delivery of MSW in a year | Rate of compensation for the failed quantity |
|---------|---|---|
| 1 | Less than 100 % but up to 80 % of ACQ | NIL |
| 2 | Less than 80 % of ACQ (Not applicable for initial stabilization period of one year after commissioning, during which penalty shall not be applicable) | NVVN, NNM shall jointly scrutinize the data through appointment of joint committee which may include experts nominated by NNM and NVVN to determine the compensation which is to be made. |

10.9 Quality:

10.9.1. The quality of MSW delivered/ to be delivered shall conform to the specifications as per declared grade.

10.9.2. NNM shall strive to supply the MSW of not less than 2500 Kcal/Kg by the following means:

- ensuring that the waste supplied under this agreement does not have excessive moisture,
- ensuring that the waste is largely free from inerts; such as sweeping waste, silt, glass, C&D waste components, and metals, etc. the segregation at source as envisaged in Solid Waste

(Management & Handling) Rules 2016 & its amendment from time to time.

- iii. In case the GCV of MSW falls below 3000 Kcal/Kg but is not less than 2500 Kcal/Kg then NVVN will highlight the matter to the NNM, or a Nodal Officer appointed by NNM to rectify the issue. In case the GCV of MSW is less than 2500 Kcal/Kg, then NVVN shall have the right to reject the consignments or claim losses due to the lower calorific value of the MSW at a rate to compensate the losses.

NVVN and NNM shall jointly finalize the rates (through the appointment of a joint committee nominated by experts from NNM and NVVN) at which the compensations are to be made.

- 10.9.3. The NNM shall not deliver hazardous, Radioactive, and other prohibited items as per Solid Waste (Management & Handling) Rules 2016 & its amendment from time to time.

- 10.9.4. In case of the supply of hazardous & Radio-active substances, if any, to the NVVN pre-processing facility, the same consignment shall be transported by NNM to the storage location(s) as identified at NNM's risk and cost adhering to the Hazardous and other waste (Management & Trans boundary Movement) Rules 2016 & its amendment from time to time.

10.10 Modalities for assessment of hazardous substance/waste:

- 10.10.1. NVVN shall inform the NNM of all incidents of receipt/presence of Hazardous waste, in terms of specifications, in any specific consignment(s), immediately on its detection at the Unloading Point and/or MSW processing point, and the NNM shall take all reasonable steps to prevent such ingress at their end.

- 10.10.2. In case of receipt of items against the Hazardous WM Rules 2016, NNM shall take it back at their own cost.

- 10.10.3. Quantity of hazardous substance/bio-hazardous waste attributable to the NNM shall be worked out by pro rata apportionment on the basis of proportionate receipt of MSW by road transport from NNM out of the total MSW received during a month.

10.11 Assessment of Quality of MSW

Samples of MSW shall be collected by a Third Party by manual method during each of the shifts and at the Delivery Point for determining the quality of MSW provided.

Detailed modalities for collection, handling, storage, and preparation of samples by a Third Party shall be done and the Expenses shall be borne by NVVN. However, the approval of the sampling agency will be granted by a joint permanent committee appointed by NNM and NVVN.

10.12 Price of MSW

The "As Delivered Price of MSW" for the MSW supplies pursuant to this Agreement shall be NIL.

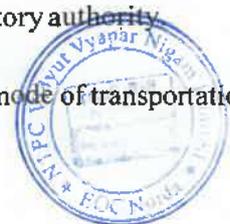
Transportation charges shall be borne by NNM for the transportation of MSW.

Statutory Charges:

The statutory charges shall comprise royalties, cesses, duties, taxes, levies etc., if any, payable under relevant statute shall be payable by NNM. These levies/charges shall become effective from the date as notified by the Government/statutory authority.

In all cases, the entire freight and statutory charges, irrespective of the mode of transportation

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of the MSW supplied, shall be borne by NNM.

10.13 Adequate Organization

NVVN shall, through the Term have requisite organization and designate and appoint suitable officers/ representatives as it may deem appropriate for implementing the Project properly and for carrying out the purposes of this Agreement in accordance with the terms hereof.

10.14 Disposal of Residual Inert Matter

NNM shall collect and transport the Residual Inert Matter from the identified points of the Plant to the Landfill Site for disposal. All charges for transportation of the Residual Inert Matter up to the Landfill Site will be borne by NNM subject to provisions of Clause 8.2. NNM shall also ensure that the Residual Inert Matter shall meet the norms as prescribed.

10.15 Applicable Approvals

NVVN shall apply and procure all Applicable Approvals in respect of the construction, commissioning, and operation of the Project Facilities *provided however*, any Applicable Approval that is to be provided by the NNM (lies within the sole jurisdiction of NNM) shall be granted by NNM upon the application for the same being made in accordance with applicable law by NVVN *provided further that* in the event NNM fails to perform its obligation of providing the support to NVVN for obtaining the Applicable Approvals, then the failure to obtain the relevant Applicable Approval by NVVN shall not be an NVVN event of default under this Agreement. Any such support by NNM shall be limited to the endorsement or forwarding of applications for such Approvals as required under Law

10.16 Compliance with Applicable Laws and Environment Laws

NVVN shall construct, operate, and maintain the Plant (and each of the Project Facilities) in accordance with Applicable Laws, including but not limited to all the applicable laws relating to the protection and safeguarding of the environment and the laws for preventing and monitoring the pollution of the environment, and obtain and maintain the Applicable Approvals required for the same.

10.17 Repair and Maintenance Work of the Plant

NVVN shall have the right to suspend receiving and processing of MSW, if required, for undertaking maintenance or repair of any of the Project Facilities. NVVN shall provide NNM with 15 days advance notice of any planned repair or maintenance work of any of the Project Facilities that will result in the suspension of the operations of the Plant or a reduction in the capacity of the Plant to process the MSW being supplied by NNM provided however, no such notice would be required in the event of any unplanned repair or maintenance caused by an emergency or accident or any such unforeseeable event. A tentative maintenance schedule shall be provided to NNM every year in January month of each year. However, the NNM shall maintain a temporary storage facility during the said maintenance period for the dumping of the MSW as per SWM rules 2016 which will be again processed by NVVN when the plant is in order. The transportation of waste from this temporary storage facility to the Waste Processing plant, NVVN, shall be carried out by NNM at its own cost.

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The maximum period for repair and maintenance during any Calendar Year shall be restricted to 60 days in a year. However, breakdown maintenance may exceed this limit.

10.18 No Breach of Obligations in Certain Circumstances

NVVN shall not be considered to be in breach of its obligations under this Agreement nor shall it incur or suffer any liability if and to the extent performance of any of its obligations under this Agreement, if affected by or on account of any of the following:

- (i) Force Majeure Event, subject to the provision of Clause 19, or
- (ii) NNM Event of Default, or
- (iii) Termination of Land Lease Agreement not at the default of NVVN
- (iv) Compliance with the instructions of NNM or the directions of any government agency/ competent authority, or Closure of the Project Facilities or part thereof as permitted under this Agreement or otherwise with the approval of the NNM, or
- (v) Non-availability of the Landfill Site or any interference with the right of NVVN to dispose the Residual Inert Matter at the Landfill Site, or
- (vi) Any repair or maintenance work being undertaken on one or more of the Project Facilities that requires suspension of the operations of the Plant subject to Clause 10.16

10.19 Project Engineer of NVVN

- (a) NVVN shall within six (6) months from the effective date hereof, appoint a suitable person to act as the Project Engineer for supervision and monitoring of the construction and operation of the Plant. The Project Engineer shall also be responsible for maintaining proper coordination and exchange of information with the NNM representative.
- (b) NVVN shall be fully entitled to remove and replace the Project Engineer if so, deemed expedient by NVVN.
- (c) NVVN alone shall be responsible for payment of the salary and/or fees and other benefits, and expenses payable to the Project Engineer.

10.20 Processing of MSW

- (a) NVVN hereby assures NNM that, from the Date of Commissioning and subject to the provisions of this Agreement and delivery of the required MSW by NNM, the Plant shall be able to accept for processing a minimum of 80% of average annual waste tons of MSW per year after completion of First-year operation ("**Minimum Guaranteed Quantity**"). Following the completion of each week from the date of commissioning, NVVN will be required to submit a report to NNM. This report, provided in soft copy formats, will include a detailed calculation of the amount of MSW delivered by NNM during the preceding week. Additionally, the report will outline the quantity of MSW that has been accepted and rejected by the plant during the specific week.

10.21 Compliance with Environmental Laws

NVVN undertakes to comply with applicable Environmental Laws and establish a fully equipped laboratory to monitor the quality of water, air, and soil and the impact of the project on the same and would appoint the required staff.

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11. ADDITIONAL OBLIGATIONS OF NNM

Without prejudice and in addition to the other obligations of NNM specified in this Agreement, NNM shall have the following additional obligations to enable the due implementation of the Project by NVVN.

11.1 Disposal of Waste during Plant Shutdown

It is hereby agreed that such quantity of MSW that cannot be accepted by NVVN for processing in the Plant for any other reason such as suspension of operation of the Plant or maintenance of any of the Project Facilities or initial stabilization period of first year (the period for the aforesaid activities shall be maximum up to the period of total 60 days in a calendar year, however, breakdown maintenance may exceed this limit), subject to Clause 10.16, shall be disposed by NNM, at its own cost, directly at the Landfill Site or at such other location or in such other manner as may be deemed appropriate by NNM. However, the MSW dumped during this period will be processed by NVVN on best efforts basis, when plant is in order.

11.2 Applicable Approvals

NNM, shall, at the request of NVVN facilitate NVVN in obtaining all Applicable Approvals and to provide/ facilitate all co-ordination with various State and other concerned authorities and agencies and all other assistance and (including the supply of utilities like water i.e 10 KLD water supply through bore well or water supply connection for drinking water usage during plant construction and operation period, & shall provide 50 KLD of treated STP water for construction activities and 200 KLD of treated STP water for process application within the plant battery limit & Electricity i.e. power connection of 2.5-3 MVA capacity at 11/33 KV voltage at the plant battery limit) as envisaged herein, (except as otherwise expressly provided herein), as required and needed for the implementation of the Project and for the purposes of this Agreement. NNM shall, without prejudice to the generality of the foregoing, extend all required assistance to NVVN in getting permission from all agencies/ authorities to establish and maintain water and electricity installations and lines. The NNM will provide the all the Electrical Infrastructure including Electric Transformer and all the Water Infrastructure including Water Supply Line/Raw Water and pump house till the project site for the Project Facilities. The running expenses of such facilities during construction and operation period have to borne by the NNM.

- (a) Without prejudice to the generality of Clause 11.2(a) above, NNM shall:
- (i) recommend and forward to the relevant authority/ministry/department, any application of NVVN to obtain any Applicable Approval,
 - (ii) co-ordinate the grant of the Applicable Approval with the relevant authority/ministry/department and facilitate NVVN in getting necessary clearances from the relevant authorities / ministry/departments.
 - (iii) facilitate the approval of building plans for the Project Facilities at Site by the concerned authorities under the Act / building by-laws / other relevant by-laws or regulations.
- (b) Further, any expenses / fees incurred in obtaining the aforesaid approvals have to be borne by the NVVN only.

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11.3 Benefits to Project to Accrue Directly to NVVN

NNM hereby agrees that if there is any financial or tax benefits or otherwise in respect or on account of the Project (including but not limited to Viability Gap Funding, Grants, Tax Benefits, etc.), they shall accrue directly and exclusively to NVVN alone and not to NNM and NNM hereby undertakes that it shall not claim or file and application claiming such benefits to the prejudice of NVVN. NNM agrees to facilitate the grant or receipt of all such benefits by NVVN, whether on its own behalf or on behalf of NNM and for the purpose to give all needed recommendations, no-objections, authorizations etc. However, NNM shall not be liable to bear any cost on account of any and all benefits.

11.4 NNM Assistance in Enabling Financing

NNM hereby undertakes to provide undertakings as may be reasonably required by the Lenders in order to enable the financing of the Project. NNM acknowledges that under the Financing Documents the Lenders may, in certain events, take over the Plant for management or for sale or provide for transfer of the Plant to another Entity. In no case land provided by NNM can be mortgaged or used as collateral for financing and also cannot be used for any other purpose except for the establishment of proposed project. NNM agrees, for the purposes of the Financing Documents, to be duty bound to intimate to the Lenders by such notice as required under the Financing Documents:

- (a) of the happening or likely happening of an Event of Default on the part of NNM or NVVN;
- (b) of the termination of this Agreement by NNM or by NVVN;
- (c) of the occurrence, continuance and cessation of any force majeure cause;
- (d) of any other breach or default on the part of NVVN under this Agreement,

11.5 NNM Liaison Officer

NNM shall, within fifteen (15) days from the date mutually agreed, appoint one of its officers to act as (and herein also referred to) as NNM Liaison Officer to provide liaison and coordination with the Project Engineer in the implementation of the Project. The NNM officer who shall act as the NNM Liaison Officer can be changed by NNM from time to time and shall be notified in writing by NNM one week in advance to NVVN.

12. NO PROPERTY TAXES ON PROJECT FACILITIES

Having regard to the nature and importance of the Project aimed at reducing environmental pollution and being implemented in the said discharge of the statutory liabilities and social responsibility of NNM being a kind of utility service established by NVVN for NNM, it is agreed that NVVN shall be exempted from the levy, assessment, and payment of property tax in respect of the Project Facilities from the Effective Date until expiry of the Term. NNM undertakes to give full effect to this provision by issuing such necessary exemption as required under the Act / relevant rules thereunder and by taking all such steps as necessary for the purpose.

13. COVENANT OF NON-INTERFERENCE


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13.1 Non-Interference by NNM

- (a) NNM covenants with NVVN that NNM or any of its officers, employees or workmen shall not, at any time, during the Term of this Agreement interfere with or obstruct in the functioning, running and the overall management of the Project and in any matter in relation to or connected therewith.
- (b) NNM shall have no right, title or interest to the technology that would be used by NVVN in the development, operation and maintenance of the Project Facilities. NNM agrees that any technology that may be employed by NVVN in the development, operation and maintenance of the Project Facilities would be proprietary technology obtained under specific license and NNM hereby undertakes that it shall not violate or cause a breach of the license arrangements of NVVN for such technology. The technology utilized by NVVN should be for processing of MSW and transforming it into Torrefied Charcoal.
- (c) However, in exceptional cases the Commissioner or any authorized person on his behalf has the right to enter and inspect the plant. Further, if any dispute arises then the same has to be decided as per the Dispute Resolution procedure provided under Clause 18 of the Agreement.

13.2 Site Visits by NNM

NNM shall have the right to send its duly authorized representatives to visit the Site, during normal working hours after providing at least one-hour notice, *provided however*, the representatives of NNM shall not interfere with or prevent NVVN officials from discharging their functions and further the NNM representatives shall not cause the suspension of the operations of the Plant and will abide by the safety and other regulations (including but not limited to regulations limiting movement of personnel) put in place by NVVN at the Site.

14. INSURANCE**14.1 NVVN Obligation**

NVVN shall at its cost and expense, obtain and maintain, during the Term, all such insurances (in addition to those mandated by Applicable Laws or required by the Lenders) as may be required by the Lenders.

14.2 Insurance Proceeds

Subject to the provisions of the Financing Documents and unless otherwise provided herein, the proceeds of all insurance policies received shall be promptly applied by NVVN towards repair, renovation, restoration or re-instatement of the Project Facilities or any part thereof which may have been damaged or destroyed. NVVN may designate the Lenders as the loss payees under the insurance policies or assign the insurance policies in their favor as security for the financial assistance provided by them to the Project.

14.3 No Breach of insurance Obligation

If during the Term, any risk which has been previously insured becomes un-insurable due to the fact that the insurers have ceased to insure such a risk and therefore insurance cannot be maintained / re-instated in respect of such risk, NVVN shall not be deemed to be in breach of its obligations regarding insurance under this Agreement.


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15. EVENTS OF DEFAULT AND TERMINATION

15.1 Events of Default

Events of Default shall mean either NVVN Event of Default or NNM Event of Default both as the context may admit or require

(a) NVVN Event of Default

Any of the following events shall constitute an Event of Default by NVVN ("NVVN Event of Default") unless such event has occurred as a result of one or more reasons set out in Clause 19:

- (i) NVVN has failed to achieve project completion beyond 180 days of the expiry of Commissioning Period.
- (ii) NVVN is in Material Breach of any of its obligations under this Agreement and the same has not been remedied for more than 60 days in a calendar year or more than 15 days per instance:
- (iii) A resolution for voluntary winding up has been passed by the shareholders of NVVN
- (iv) Any petition for winding up of NVVN has been admitted and liquidator or provisional liquidator has been appointed or NVVN has been ordered to be wound up by Court of competent jurisdiction, except for the purpose of amalgamation or reconstruction, provided that, as part of such amalgamation or reconstruction and the amalgamated or reconstructed entity has unconditionally assumed all surviving obligations of NVVN under this Agreement.
- (v) NVVN using the land provided by the NNM for any other purpose other than the purpose for which it is provided except with the consent of NNM.

(b) NNM Event of Default

Any of the following events shall constitute an event of default by NNM ("NNM Event of Default") when not caused by a NVVN Event of Default or Force Majeure Event:

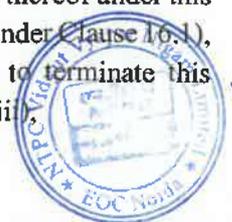
- (i) NNM has failed to pay compensation or any other Payments with applicable taxes if any due to NVVN under this Agreement within 12 months of such Payments getting due.
- (ii) NNM is in Material Breach of any of its obligations under this Agreement and has failed to cure such breach within Sixty (60) days of receipt of notice thereof issued by NVVN
- (iii) NNM has unlawfully repudiated this Agreement or otherwise has refused to be bound by this Agreement:

15.2 Termination due to Event of Default

(a) Termination for NVVN Event of Default

- (i) Without prejudice to any other right or remedy which NNM may have in respect thereof under this Agreement and subject to the existing rights of the Lenders (including the rights under Clause 16.1), upon the occurrence of a NVVN Event of Default, NNM shall be entitled to terminate this Agreement in the manner as set out under Clause 15.2(a)(ii) and Clause 15.2(a)(iii).

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- (ii) If NNM decides to terminate this Agreement pursuant to preceding Sub-Clause (i), it shall in the first instance issue Preliminary Notice to NVVN. Within thirty (30) days of receipt of the Preliminary Notice, NVVN shall submit to NNM in sufficient detail, the manner in which it proposes to cure the underlying Event of Default ("**NVVN's Proposal to Rectify**"). In case of non-submission of NVVN's Proposal to Rectify within the said period of 30 days, NNM shall be entitled to terminate this Agreement by issuing Termination Notice.
- (iii) If the NVVN's Proposal to Rectify is submitted within the period stipulated, NVVN shall have further period of 30 days to remedy / cure the underlying Event of Default. If, however NVVN fails to remedy/cure the underlying Event of Default within such further period allowed NNM shall be entitled to terminate this Agreement by issue of Termination Notice.

(b) Termination for NNM Event of Default

- (i) Without prejudice to any other right or remedy which NVVN may have in respect thereof under this Agreement, upon the occurrence of NNM Event of Default, NVVN shall be entitled to terminate this Agreement by issuing Termination Notice.
- (ii) If NVVN decides to terminate this Agreement pursuant to preceding Sub-Clause (i) it shall in the first instance issue Preliminary Notice to NNM. Within 30 days of receipt of Preliminary Notice, NNM shall forward to NVVN its proposal to remedy / cure the underlying Event of Default (the "**NNM Proposal to Rectify**"). In case of non-submission of NNM Proposal to Rectify within the period stipulated thereof, NVVN shall be entitled to terminate this Agreement by issuing Termination Notice.
- (iii) if NNM Proposal to Rectify is forwarded to the NVVN within the period stipulated thereof, NNM shall have further period of 30 days to remedy / cure the underlying Event of Default within such further period allowed, the NVVN shall be entitled to terminate this Agreement by issuing Termination Notice.

(c) Termination Notice

If a Party, having become entitled to do so decides to terminate this Agreement pursuant to the preceding Sub-Clause (a) or (b), it shall issue Termination Notice setting out:

- (i) in sufficient detail the underlying Event of Default;
- (ii) the Termination Date which shall be a date occurring not earlier than 60 days from the date of Termination Notice;
- (iii) the estimated termination payment including the details of computation thereof; and
- (iv) any other relevant information.

(d) Obligation of Parties

Following issue of Termination Notice by either Party, the Parties shall, subject to the provision of the Financing Documents and the rights of the Lenders provided therein, promptly take all such steps as may be necessary or required to ensure that:

- (i) until Termination the Parties shall, to the fullest extent possible, discharge their respective obligations so as to maintain the continued operation of the Project Facilities


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- (ii) the Termination Payment, if any, payable by NNM in accordance with the following sub clause (f) is paid to NVVN on the Termination Date (Vice-versa) and
- (iii) the Project Facilities are handed back to respective Parties as under this Agreement, and Land Lease Agreement, by NVVN on the Termination Date free from any Encumbrance along with any payment that may be due by NVVN to NNM

(e) Withdrawal of Termination Notice

Notwithstanding anything inconsistent contained in this Agreement, if the Party who has been served with the Termination Notice cures the underlying Event of Default to the satisfaction of the other Party at any time before the Termination occurs, the Termination Notice shall be withdrawn by the Party which had issued the same.

Provided that the Party in breach shall compensate to the other Party for any direct costs / consequences with applicable taxes if any occasioned by the Event of Default which caused the issue of Termination Notice.

(f) Termination Payments

1. Upon Termination of this Agreement on account of NNM Event of Default, NVVN shall be entitled to the termination payment as suggested by the joint committee which shall include experts nominated by NNM and NVVN and the compensation which is to be made.
2. Upon Termination of this Agreement on account of NVVN Event of Default, NNM shall be entitled to the termination payment as suggested by the joint committee which may include experts nominated by NNM and NVVN and the compensation which is to be made.

15.3 Rights of NNM on Termination

Subject to the provision of Clause 16, upon Termination of this Agreement and after NVVN has received all the payments due from NNM under this Agreement, NNM shall have the power and authority to:

- (i) enter upon suitable agreements / arrangements with the Land Lessee/Licensee with respect to possession and control of the Project Facilities.
- (ii) prohibit NVVN and any person claiming through or under NVVN from entering upon dealing with the Project Facilities.

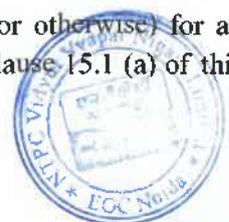
15.4 Accrued Rights of Parties

Notwithstanding anything to the contrary contained in this Agreement, any termination of this Agreement shall be without prejudice to accrued rights of either Party including its right to claim and recover money damages and other rights and remedies which it may have in law or contract. The rights and obligations of either Party under this Agreement, including without limitation those relating to the Termination Payment, shall survive the Termination but only to the extent such survival is necessary for giving effect to such rights and obligations

16. LIMITATION OF LIABILITY OF NVVN

NNM hereby agrees that NVVN shall not have any liability (monetary or otherwise) for an NVVN Event of Default other than the obligation as stipulated under Clause 15.1 (a) of this


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Agreement.

17. DISPUTE RESOLUTIONS

Any dispute or difference arising out of or in connection with the Agreement shall be to the extent possibly settled amicably between the Parties. In case, it is not resolved amicably, the Parties shall resolve such dispute or difference through Administrative Mechanism for Resolution of CPSEs, Disputes (AMRCD) constituted by the Department of Public Enterprises in terms of Office Memorandum No. 05/0003/2019-FTS-10937 dated 14.12.2022 issued by Government of India, Department of Public Enterprises and its guidelines/amendments on the subject issued from time to time. ("AMRCD").

18. FORCE MAJEURE

18.1 Force Majeure Event

Any event lying beyond the reasonable control of a Party and not brought about at the instance of the Party claiming to be affected by such event ("Affected Party") which the Affected Party could not prevent or overcome despite having exercised due care and diligence and which results in a Material Adverse Effect shall constitute a Force Majeure Event. Such events provided they fulfill the requirements stated in the preceding sentence, shall include, but not be limited to the following:

- (a) earthquake, flood, inundation and landslide
- (b) Pandemic Situation
- (c) storm, tempest, hurricane, cyclone, lightning, thunder or other extreme atmosphere disturbances
- (d) fire caused by reasons not attributable to the Affected contractors or agents appointed by the Affected Party
- (e) acts of terrorism
- (f) action of a Government Agency having Material Adverse Effect including but not limited to
- (i) acts of expropriation, compulsory acquisition or takeover by any Government Agency of the Project / Project Facilities or any part thereof or of NVVN's rights in relation to the Project.
- (ii) any judgment or order of a court of competent jurisdiction or statutory authority in India made against NVVN or any contractor appointed by NVVN for the purposes of the Project, in any proceedings which is non-collusive and duly prosecuted by NVVN.
- (iii) any unlawful, unauthorized or without jurisdiction refusal to issue or to renew or the revocation of any Applicable Approvals, in each case, for reasons other than NVVN's or any of its contractor's breach or failure in complying with the Applicable Laws, Applicable Approvals, any judgment or order of a Governmental Agency or of any contract by which NVVN or its contractor as the case may be is bound
- (g) War, hostilities (whether declared or not) invasion act of foreign enemy, rebellion, riots, weapon conflict or military actions, civil war, ionizing radiation, contamination by radioactivity from nuclear MSW, any nuclear waste, radioactive toxic explosion, volcanic eruptions.

Provided that NNM's inability to supply MSW wholly or in part from the aforementioned MSW Supply Area shall not constitute a Force Majeure Event under this agreement.

18.2 Notice of Force Majeure Event

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- (a) As soon as practicable and in any case within 7 days of the date of occurrence of a Force Majeure Event or the date of knowledge thereof, the Affected Party shall notify the other Party and also the Project Engineer and the NNM representative of the same setting out, inter alia, the following in reasonable detail:
- (i) the nature and extent of the Force Majeure Event;
 - (ii) the estimated duration of the Force Majeure Event;
 - (iii) the nature of and the extent to which, performance or any of its obligations under this Agreement is affected by the Force Majeure Event;
 - (iv) the measures which the Affected Party has taken or proposes to take to alleviate/ mitigate the impact of the Force Majeure Event and to resume performances of such of its obligations affected thereby; and
 - (v) any other relevant information concerning the Force Majeure Event, and / or the rights and obligations of the Parties under this Agreement.
- (b) As soon as practicable and in any case within 5 days of notification by the Affected Party in accordance with the preceding Sub-Clause (a), the Parties shall along with the Project Engineer and the NNM representative meet, hold discussions in good faith and where necessary conduct physical inspection / survey of the Project Facilities in order to:
- (i) assess the impact of the underlying Force Majeure Event.
 - (ii) to determine the likely duration of Force Majeure Period and
 - (iii) to formulate damage mitigation measures and steps to be undertaken by the Parties for resumption of obligations the performance of which shall have been affected by the underlying Force Majeure Event.
- (c) The Affected Party shall during the Force Majeure Period provide to the other Party and the Project Engineer/ NNM representative regular (not less than weekly) reports concerning the matters set out in the preceding Sub-Clause (b) as also any information, details or document, which the other Party may reasonably require.

18.3 Performance of Obligations

If the Affected Party is rendered wholly or partially unable to perform any of its obligations under this Agreement because of a Force Majeure Event, it shall be excused from performance of such obligation to the extent it is unable to perform the same on account of such Force Majeure Event provided that:

- (a) due notice of the Force Majeure Event has been given as required by the preceding Clause 19.2;
- (b) the excuse from performance shall be of no greater scope and of no longer duration than is necessitated by the Force Majeure Event;
- (c) the Affected Party has taken all reasonable efforts to avoid, prevent, mitigate and limit damage, if any, cause or is likely to be caused to the Project Facilities as a result of the Force Majeure Event and to restore the Project Facilities as a result of the Force Majeure Event and to restore the Project Facilities, in accordance with the Good Industry Practice and its relative obligations under this Agreement;
- (d) when the Affected Party is able to resume performance of its obligations under this Agreement, it shall give to the other Party and the Project Engineer and NNM representative written notice to that effect and shall promptly resume performance of its obligations hereunder the non-issue of

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- such notice being no excuse for any delay for resuming such performance;
- (e) the Affected Party shall continue to perform such of its obligations which are not affected by the Force Majeure Event and which are capable of being performed in accordance with the Agreement;
 - (f) any insurance proceeds received shall be, subject to the provisions of Financing Documents, entirely applied to repair, replace or restore the assets damaged on account of the Force Majeure Event or in accordance with Good Industry Practice.

18.4 Termination due to Force Majeure Event

(a) Termination

If a Force Majeure Event, excluding events described under Clauses 18.1 (g), continues or is in the reasonable judgment of the Parties likely to continue beyond a period of 120 days, the Parties may mutually decide to terminate this Agreement or continue this Agreement on mutually agreed revised terms. If the Parties are unable to reach an agreement in this regard, the Affected Party shall after the expiry of the said period of 120 days, be entitled to terminate this Agreement.

(b) Termination Notice

If either Party having entitled to do so, decides to terminate this Agreement pursuant to the preceding sub-clause 18.4(a), it shall issue Termination Notice setting out:

- (i) in sufficient detail the underlying Force Majeure Event;
- (ii) the Termination Date which shall be a date occurring not earlier than 60 days from the date of Termination Notice;
- (iii) any other relevant information.

(c) Obligation of Parties

Following issue of Termination Notice by either Party, the Parties shall promptly take all such steps as may be necessary or required to ensure that:

- (i) NVVN receives the Insurance proceeds in accordance with the following Clause 18.4(d) on or before the Termination Date and
- (ii) the vacant possession of sites is handed over by NVVN on the Termination Date free from all Encumbrance, to the extent applicable.

(d) Termination Payment

Upon Termination of this Agreement due to a Force Majeure Event, NNM or NVVN shall not be liable to pay any Termination Payments. All Termination Payments shall be as made good by Insurance only under the provisions of Insurance obligations of NVVN.

18.5 Liability for other losses, damages etc.

Save and except as expressly provided in this Clause 19, neither Party hereto shall be liable in any manner whatsoever to the other Party in respect of any loss, damage cost, expense, claims, demands and proceedings relating to or arising out of occurrence or existence of any Force Majeure Event.

19. CHANGE IN LAW

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- (a) Change in Law shall mean the occurrence or coming into force of any of the following, after the date of execution of this Agreement:
- (i) The enactment of any new Indian law;
 - (ii) The repeal, modification or re-enactment of any existing Indian law
 - (iii) A change in the interpretation or application of any Indian law by a court of record
 - (iv) Any order, decision or direction of a court of record. Provided that Change in Law shall not include:
 1. Coming into effect, after the Appointed Date, of any provision or statute, which is already in place as of the date of execution of this Agreement,
 2. Any new law or any change in the existing law under the active consideration of or in the contemplation of any government as of the Appointed Date, which is a matter of public knowledge,
 3. Any change in the rates of the Govt. taxes.
- (b) Subject to Change in Law, NNM and NVVN shall comply the Change in Law by mutual agreement such that it does not affect the Project execution.
- (c) As per the essence of this agreement supply of Municipal solid waste is being provided to NVVN free of cost and land for the project is being available to NVVN on the basis of lease rent, if due to changes in law(s) and/or taxes/duties, there arises any cost for supply of waste and/or allocation of land in future, the same shall be borne by NNM.

20. JURISDICTION

Subject to Clause 17, only the courts in Delhi shall have jurisdiction to try all disputes and matters arising out of an under this Agreement.

21. NO WAIVER OF RIGHTS AND CLAIMS

Any forbearance, toleration or delay in invoking any of the rights or claims accruing in favor of any Party under the terms of this Agreement shown or made by such a Party in whose favor such rights or claims might have vested by virtue of this Agreement shall neither constitute nor be construed to be a waiver of such rights or claims accruing in respect of such a Party.

22. SUPERCESSION OF EARLIER AGREEMENTS

This Agreement represents the entire Agreement between NNM and NVVN and all agreements, correspondence, notes or any other document submitted, or understandings made or reached by and between the Parties inter se in respect of the subject matter of these presents prior to the date hereof shall be deemed to have been superseded and revoked on the execution of this Agreement.

NOTICES

Unless otherwise stated, notices to be given under this Agreement including but not limited to a

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notice of waiver of Term, breach of any term of this Agreement and termination of this Agreement, shall be in writing and shall be given by hand delivery/ recognized national/ international courier, mail, telex or facsimile and delivered or transmitted to the Parties at their respective addresses set forth below:

If to NNM:

Nagar Nigam Meerut (NNM),
(Attn: The Office of Municipal Commissioner),
Near Ghanta Ghar, Kaiser Ganj Road,
Meerut (U.P.) – 250002
Uttar Pradesh, India
Email Id: *nnmee@nic.in*

If to NVVN:

NTPC Vidyut Vyapar Nigam Ltd, (NVVN)
(Attn: CEO)
5th Floor, EOC Complex, A8-A,
Sector 24, Noida, Uttar-Pradesh 201301
Email Id: *wteprojects@ntpc.co.in*

All notices under this Agreement shall be in English.

23. LEGAL CHARGES

The prescribed legal charges for execution of this Agreement shall be borne by NNM & NVVN equally.

24. JOINT COMMITTEE CHARGES

The payment, if any, to the experts of NNM and NVVN of the Joint Committee shall be borne by NNM & NVVN equally.

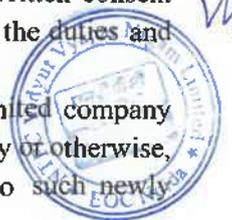
25. COUNTERPARTS

This Agreement may be executed in duplicate counterparts, each of which when executed and delivered shall constitute an original of this Agreement but shall together constitute one and only one Agreement.

26. ASSIGNMENT

- (a) Subject to Sub-Clause (b) and (c) below, no assignment of this Agreement or any rights or duties hereunder shall be made in whole or in part by any Party without the written consent of the other Party and in the event of any assignment the assignee shall assume the duties and liabilities of the assignor.
- (b) It is hereby specifically agreed that NVVN shall, in the event of forming a limited company either as subsidiary company/joint venture or jointly along with any other company or otherwise, be at liberty to assign or the rights and benefits hereof or duties hereunder to such newly

[Signature]
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formed limited company or in favor of such subsidiary company/ joint venture of NVVN/NTPC. NVVN, shall, however, in such event obtain formal consent from NNM, which consent shall not be unreasonably withheld by NNM. Any assignment by NVVN shall be subject to the condition that the assignee shall assume the duties and liabilities of NVVN.

- (c) NNM hereby agrees that NVVN shall not require any prior approval of NNM for creating any Encumbrance, right, title, or interest over the Project Facilities and the other assets of the Project except the land, in favor of the Lenders.
- (d) NNM confirms that (i) the Financing Documents may include suitable rights in favor of the lenders for taking over the Project Facilities for management or for sale, in enforcement of their security upon the happening of an event of default thereunder on the part of NVVN.

27. NO PARTNERSHIP

Nothing herein contained shall be construed to constitute a partnership between NNM and NVVN, or to constitute either Party as the agent of the other and neither Party shall hold itself out as such.

28. SEVERABILITY

If any provision of this Agreement shall be declared illegal, void or unenforceable, the same shall not affect the other provisions herein which shall be considered severable from such provision and shall remain in full force and effect.

29. REPRESENTATION AND WARRANTIES

29.1 Representation and Warranties of NNM

NNM hereby represents, assures, confirms and undertakes to NVVN as follows:

- (a) That it is an urban local body under the laws of India and has authority to conduct its business and to enter into this Agreement
- (b) That it has full power and authority to execute, deliver and perform this Agreement and has taken all necessary sanctions and approvals and followed all the procedure required to authorize the execution, delivery and performance of this Agreement
- (c) Nothing in this Agreement conflicts with its constitutional authority, mandate, or any law or any other agreement, understanding or arrangement or any judgment, decree or order or any statute, rule or regulation applicable to it
- (d) All approvals and permissions as are necessary for the execution of this Agreement have been obtained and all the required procedure for the due execution of this Agreement have been adhered to and further that this Agreement will be valid, legal and binding against it under the Indian Law;

29.2 Representation and Warranties of NVVN

NVVN hereby represents, assures, confirms and undertakes to NNM as follows:

- (a) That it is duly incorporated under the laws of India and has authority to conduct its business and to enter into this Agreement;
- (b) That it has full power and authority to execute, deliver and perform this Agreement and has

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taken all necessary sanctions and approvals (corporate, statutory or otherwise) to authorize the execution, delivery and performance of this Agreement

- (c) Nothing in this Agreement conflicts with its Memorandum and Articles of Association or any other agreement, understanding or arrangement or any judgment, decree or order or any statute, rule or regulation applicable to it
- (d) this Agreement will be valid, legal and binding against it under the Indian Law.

30. COMMERCIAL AGREEMENT

NNM hereby recognizes that this is a commercial act being undertaken by NVVN and that it hereby unconditionally and irrevocably: (i) waives any right of immunity, sovereign or otherwise and(ii) agrees that should any proceedings be brought against it or its assets in relation to this Agreement or any transaction contemplated by this Agreement no immunity, sovereign or otherwise, from such proceedings, execution, attachment or other legal process shall be claimed by or in behalf of itself or with respect to any of its assets


नगर आयुक्त
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IN WITNESS WHEREOF the Parties hereto have placed their respective hands and seals hereto on the day and year first herein above mentioned

SIGNED, SEALED AND DELIVERED BY:

| | |
|---|--|
| For and on behalf of:- Nagar Nigam Meerut | For and on behalf of:- NVVN Limited, New Delhi |
| <i>Saurabh</i> Authorized Signatory नगर आयुक्त नगर निगम, मेरठ | <i>Amit</i> Authorized Signatory अमित कुमार कुलश्रेष्ठ/AMIT KUMAR KULSHRESHTHA महाप्रबन्धक (एनआई-डब्ल्यू) General Manager (NI-WTE) एन टी वी सी विद्युत व्यापार निगम लिमिटेड NTPC Vidyut Vyapar Nigam Limited |
| Name: SAURABH KANWAR | Name: AMIT KUMAR KULSHRESHTHA |
| Designation: Municipal Commissioner | Designation: General Manager (NI-WTE) |
| Contact Address: Nagar Nigam Meerut, Near Gahanta Ahar, KaiserGanj Road, Meerut - 250002 | Contact Address: 5th Floor, EOC Complex, A8-A, Sector 24, Noida, Uttar-Pradesh 201301 |

| Witnesses | |
|---|---|
| 1. <i>B. Anand Kumar</i> Addl Commissioner | 1. <i>Himanshu Phuloria</i> (Himanshu Phuloria) Engineer (NI-WTE) |
| 2. <i>Prakash</i> CFO | 2. |

Date: 03.10.24

Place: Meerut

Annexure-I

List of Banned Items in the Waste:-

- C&D Waste
- Anatomical Hospital Waste
- Asbestos containing Waste
- Biohazardous Waste
- Electronic Scrap
- Entire Battery
- Explosives
- High concentration Cyanide Waste
- Mineral Acids
- Radioactive Waste


नगर आयुक्त
नगर निगम, मेरठ



पत्रांक: 335 / आ0लि0-न0आ0 / 2025

दिनांक: 01 अप्रैल, 2025

प्रेषक,

नगर आयुक्त
नगर निगम, मेरठ।

सेवा मे,

संयुक्त सचिव,
नगर विकास अनुभाग-7,
उ0प्र0 शासन, लखनऊ।

विषय:- मेरठ महानगर में कूड़े का निस्तारण किये जाने के संबंध में।

महोदय,

कृपया उपर्युक्त विषयक आपके कार्यालय के पत्र संख्या-1456/नौ-7-2025-COM.NO-1895825 नगर विकास अनुभाग-7 दिनांक 28.03.2025 का सन्दर्भ ग्रहण करने का कष्ट करें, जिसके अन्तर्गत श्री अरूण चन्द्रप्रकाश गोविल, मा0 सांसद मेरठ के मा0 मुख्यमंत्री जी को सम्बोधित पत्र दिनांक 08.03.2025 के क्रम में कृत कार्यवाही से अवगत कराये जाने के निर्देश दिये गये हैं।

उपरोक्त के संबंध में आपके संज्ञान में लाना है कि नगर निगम, मेरठ की सीमा के अन्तर्गत हापुड़ रोड पर लोहिया नगर में लीगेसी वेस्ट उपलब्ध है जहाँ लगभग 6,86,300 टन लीगेसी वेस्ट उपलब्ध है। जिसके निस्तारण हेतु डी0पी0आर0 तैयार करा दी गयी है जो कुल अंकन 28.69 करोड़ की है तथा लीगेसी वेस्ट को निस्तारित करने की समय सीमा 24 माह निर्धारित की गयी है। नगर निगम, मेरठ पर पर्याप्त संसाधन एवं धन उपलब्ध न होने के कारण उपरोक्त लीगेसी वेस्ट का निस्तारण नहीं हो पा रहा है।

अतः आपके उपरोक्त निर्देशों के क्रम में डी0पी0आर0 संलग्न करते हुए आपकी सेवा में आवश्यक कार्यवाही हेतु सादर प्रेषित है।

संलग्नक:-यथोक्त।

भवदीय

Sambhu
01/04/2025
(सौरभ गगवार)

नगर आयुक्त,
नगर निगम, मेरठ।

प्रतिलिपि:- संख्या एवं दिनांक तदैव।

1. श्री अरूण चन्द्रप्रकाश गोविल, मा0 सांसद, मेरठ-हापुड़ लोकसभा को आपके कार्यालय के पत्र संख्या-लो0स0मे0 / 5362025 दिनांक 08.03.2025 के क्रम में सादर सूचनार्थ प्रेषित।
2. प्रमुख सचिव महोदय, नगर विकास विभाग, उ0प्र0 शासन लखनऊ को सादर आवश्यक कार्यवाही हेतु प्रेषित।

नगर आयुक्त,
नगर निगम, मेरठ।

515
कार्यालय नगर निगम, मेरठ।

पत्रांक: 335 / आ0लि0-न0आ0 / 2025

दिनांक: 01 अप्रैल, 2025

प्रेषक,

नगर आयुक्त
नगर निगम, मेरठ।

सेवा में,

संयुक्त सचिव,
नगर विकास अनुभाग-7,
उ0प्र0 शासन, लखनऊ।

विषय:- मेरठ महानगर में कूड़े का निस्तारण किये जाने के संबंध में।

महोदय,

कृपया उपर्युक्त विषयक आपके कार्यालय के पत्र संख्या-1456/नौ-7-2025-COM.NO-1895825 नगर विकास अनुभाग-7 दिनांक 28.03.2025 का सन्दर्भ ग्रहण करने का कष्ट करें, जिसके अन्तर्गत श्री अरुण चन्द्रप्रकाश गोविल, मा0 सांसद मेरठ के मा0 मुख्यमंत्री जी को सम्बोधित पत्र दिनांक 08.03.2025 के क्रम में कृत कार्यवाही से अवगत कराये जाने के निर्देश दिये गये हैं।

उपरोक्त के संबंध में आपके संज्ञान में लाना है कि नगर निगम, मेरठ की सीमा के अन्तर्गत हापुड़ रोड पर लोहिया नगर में लीगेसी वेस्ट उपलब्ध है जहाँ लगभग 6,86,300 टन लीगेसी वेस्ट उपलब्ध है। जिसके निस्तारण हेतु डी0पी0आर0 तैयार करा दी गयी है जो कुल अंकन 28.69 करोड़ की है तथा लीगेसी वेस्ट को निस्तारित करने की समय सीमा 24 माह निर्धारित की गयी है। नगर निगम, मेरठ पर पर्याप्त संसाधन एवं धन उपलब्ध न होने के कारण उपरोक्त लीगेसी वेस्ट का निस्तारण नहीं हो पा रहा है।

अतः आपके उपरोक्त निर्देशों के क्रम में डी0पी0आर0 संलग्न करते हुए आपकी सेवा में आवश्यक कार्यवाही हेतु सादर प्रेषित है।

संलग्नक:-यथोक्त।

भवदीय

(सौरभ गंगवार)

नगर आयुक्त,
नगर निगम, मेरठ।

प्रतिलिपि:- संख्या एवं दिनांक तदैव।

1. श्री अरुण चन्द्रप्रकाश गोविल, मा0 सांसद, मेरठ-हापुड़ लोकसभा को आपके कार्यालय के पत्र संख्या-लो0स0मे0 / 5362025 दिनांक 08.03.2025 के क्रम में सादर सूचनार्थ प्रेषित।
2. प्रमुख सचिव महोदय, नगर विकास विभाग, उ0प्र0 शासन लखनऊ को सादर आवश्यक कार्यवाही हेतु प्रेषित।

Saurabh
01/04/2025
नगर आयुक्त,
नगर निगम, मेरठ।



**DETAILED PROJECT REPORT
FOR LEGACY WASTE MANAGEMENT
OF
MEERUT MUNICIPAL CORPORATION**

EXECUTIVE SUMMARY

| Detailed Project Report | Biomining of legacy waste at Lohiya Nagar for Meerut Municipal Corporation |
|---|--|
| Project Site | Lohiya Nagar |
| Total Waste Quantified in Lohiya Nagar Dumpsite | 6,86,300 Tonnes |
| Proposed Technology Identified | Biomining |
| Cost of Technology | |
| Total Project Cost | Rs. 28.69 Crores including RDF transportation charges |
| Estimated biomining cost | Rs. 418.11 per Metric Tonne |
| Time period of project | 24 Months considering 2 months for mobilization and 4 months of monsoon |
| Project Structuring | Complete outsourcing by private operator |

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1. INTRODUCTION

1.1 Background

Urban India accounts for one third of India's population and generates 54.75 Million Tonnes of municipal solid waste annually. The most prevalent method of disposal of this waste has been open dumping, for most of India's history. The accelerated growth of urban population and increasing economic activities rule out the viability of this method any longer. Swachh Bharat Mission since 2014 has introduced several scientific methods in MSWM. Environmental adjudication has also mandated the scientific remediation of dumpsites. The fact that many old dumpsites and landfills in the country pose threat to public health and the environment necessitates action to remediate dumpsites and reclaim the land being degraded.

Approximately 1,32,000 Metric Tonnes of MSW is generated from all urban areas of the country, which translates to about 300-550 grams per person per day. The waste generation is higher in larger cities and lower in smaller cities. The general trend of per capita waste generation is as follows:

| Sl. No. | ULB Population Class | Typical Per Capita Waste Generation |
|---------|----------------------|-------------------------------------|
| 1 | >10 Lakh | 550 |
| 2 | 1 to 10 Lakh | 450 |
| 3 | <1 Lakh | 300 |

After decades of use, these open dumps have grown larger and higher, becoming huge point sources of pollution. Waste rotting in these dumps produces leachate, a foul dark liquid concentrate that kills vegetation in its path and irreversibly pollutes groundwater. The heaps of garbage also produce methane, a greenhouse gas that causes 21 times more global warming than carbon dioxide. Methane often auto-ignites, causing fires in the dumpsites, generating smoke and emissions thereby severe air pollution.

It is estimated that more than 10,000 hectares of urban land is locked in these dumpsites in India. In the absence of exposure to air, these dumpsites in the absence of oxygen generate methane (a greenhouse gas) and other landfill gases, which contribute to global warming. They also produce leachate (liquid generated by dumped waste) which pollutes groundwater. Frequent outbreaks of fire at the dumpsites lead to air pollution. The presence of these dumps encourages further dumping at these sites, even though they are filled beyond capacity to take any more waste.

The need for remediation of these dumpsites is directed by NGT Order in OA 519/2019 dated 17/7/2019 on Remediation, the observation being the following:

1. "where bio-mining and bioremediation is possible, both ex-situ and in-situ, such options can be exercised, which is not only environmentally safe but cost effective. There may be hardly any situation when bioremediation is not possible.



2. The option of capping of legacy wastes, which has huge environmental and health consequences, is no option at all, except for inert waste, which again is to be disposed in a scientific secured landfill”

The order further traces the magnitude of the problem as follows:

As per Annual Report of the CPCB (2016-2017), there are 2120 Legacy waste dumpsites in India across 23 States: (as per MoHUA MIS data 1,764 dumpsites are recorded. The figure 2120 may include the under construction and existing SLF also, which do not require remediation)

The NGT orders for actions by States & ULBs may be mentioned as 1. Bioremediation and Biomining of dumpsites should be the preferred option. 2. Cities with more than 10 lakh population need special localized solutions.

The Solid Waste Management Rules of 2016 directed Urban Local Bodies to clear legacy waste dumps as well as existing operational dumpsite down to pre-existing ground level through a process called bioremediation or biomining, which refers to an environment-friendly technique to separate soil and recyclables from legacy waste.

1.2 Provision of SWM Rules, 2016

The Government of India has notified the Solid Waste Management Rules (SWM) Rules, 2016 for proper and effective management of municipal solid waste (MSW). Under the SWM Rules, 2016, following provisions have been made to manage old dumps of MSW Rule 15 - Duties and responsibilities of local authorities and village Panchayats of census towns and urban agglomerations.

The local authorities and Panchayats shall,

- investigate and analyse all old open dumpsites and existing operational dumpsites for their potential for bio-mining and bioremediation and wherever feasible, take necessary actions to bio-mine or bioremediate the sites.
- in absence of potential of bio-mining and bioremediation of dumpsites, they shall be scientifically capped as per landfill capping norms to prevent further damage to the environment.

Further, provisions under Schedule I (j) are given below:

Schedule-I (j) - Closure and Rehabilitation of Old Dumps- Solid waste dumps which have reached their full capacity or those which will not receive additional waste after setting up of new and properly designed landfills should be closed and rehabilitated by examining the following options:

- i. Reduction of waste by bio-mining and waste processing followed by placement of residues in new landfills or capping as in (ii) below
- ii. Capping with solid waste cover or solid waste cover enhanced with geomembrane to enable collection and flaring / utilization of greenhouse gases

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As such, Meerut Municipal Corporation is looking for solutions for legacy waste management for this dumpsite.

2. OBJECTIVES

Preparing a Detailed Project Report (DPR) for Legacy Waste Processing for the Meerut Municipal Corporation would involve outlining a clear strategy for managing and processing the existing waste that has accumulated over the years in the city. The objectives of preparing such a DPR can include:

a) Assessment of Current Waste Scenario

- **Quantification of legacy waste:** Assess the amount of waste that has been accumulated in the city.
- **Identification of the current waste management systems:** Evaluate the existing waste management infrastructure, including landfills, collection systems, and waste processing facilities.
- **Identification of potential environmental and health risks:** Evaluate the environmental and public health impacts caused by the improper handling of legacy waste.

b) Technological Solutions for Waste Processing

- **Evaluation of waste processing technologies:** Assess different technologies for managing and processing legacy waste, such as composting, waste-to-energy (WTE), bio-remediation, mechanical biological treatment (MBT), or landfilling with improved techniques.
- **Selection of an appropriate method for legacy waste management:** Choose the most suitable method(s) based on the waste composition, local conditions, cost-effectiveness, and environmental impact.
- **Integration with current waste management practices:** Propose how the legacy waste processing can be integrated into the existing waste management infrastructure.

c) Environmental Impact Mitigation

- **Reduction of environmental hazards:** Propose methods to reduce leachate, greenhouse gas emissions, and air pollution from legacy waste.
- **Compliance with environmental regulations:** Ensure that the legacy waste processing methods comply with relevant national and state-level environmental regulations (e.g., CPCB guidelines, SWM Rules).
- **Restoration and rehabilitation of old landfills:** Suggest strategies for the closure, capping, and rehabilitation of legacy landfill sites.

d) Financial Planning and Budgeting





- **Cost estimation and budgeting:** Provide an accurate estimate of the costs involved in the processing and disposal of legacy waste, including operational and maintenance costs.
 - **Funding sources:** Identify potential sources of funding, including government grants, municipal budgets, or public-private partnerships (PPP).
 - **Financial feasibility analysis:** Ensure that the proposed solution is financially viable and provides value for money in the long term.
- e) **Social and Stakeholder Engagement**
- **Stakeholder consultation:** Involve local communities, waste pickers, NGOs, and other stakeholders in the planning process to ensure that the project meets their needs and concerns.
 - **Awareness campaigns:** Develop plans for creating public awareness regarding the legacy waste processing project and the benefits of waste segregation and recycling.
- f) **Implementation Strategy**
- **Project timeline:** Provide a detailed timeline for the implementation of the legacy waste processing solution, including milestones, deadlines, and phases.
 - **Capacity building and training:** Outline plans for training municipal staff, operators, and stakeholders in the operation of the legacy waste management system.
 - **Monitoring and reporting framework:** Set up mechanisms to monitor the progress of the project, measure its success, and report to relevant authorities and stakeholders.
- g) **Sustainability and Long-Term Benefits**
- **Reduction of landfill dependency:** Focus on reducing the city's reliance on landfills for waste disposal, thus extending the lifespan of existing landfills and reducing the need for new ones.
 - **Resource recovery:** Maximize the recovery of recyclable materials, compost, or energy from legacy waste, contributing to a circular economy.
 - **Community health and environmental benefits:** Highlight the long-term benefits for public health, such as cleaner air, water, and soil, and a reduction in the incidence of disease associated with improper waste disposal.

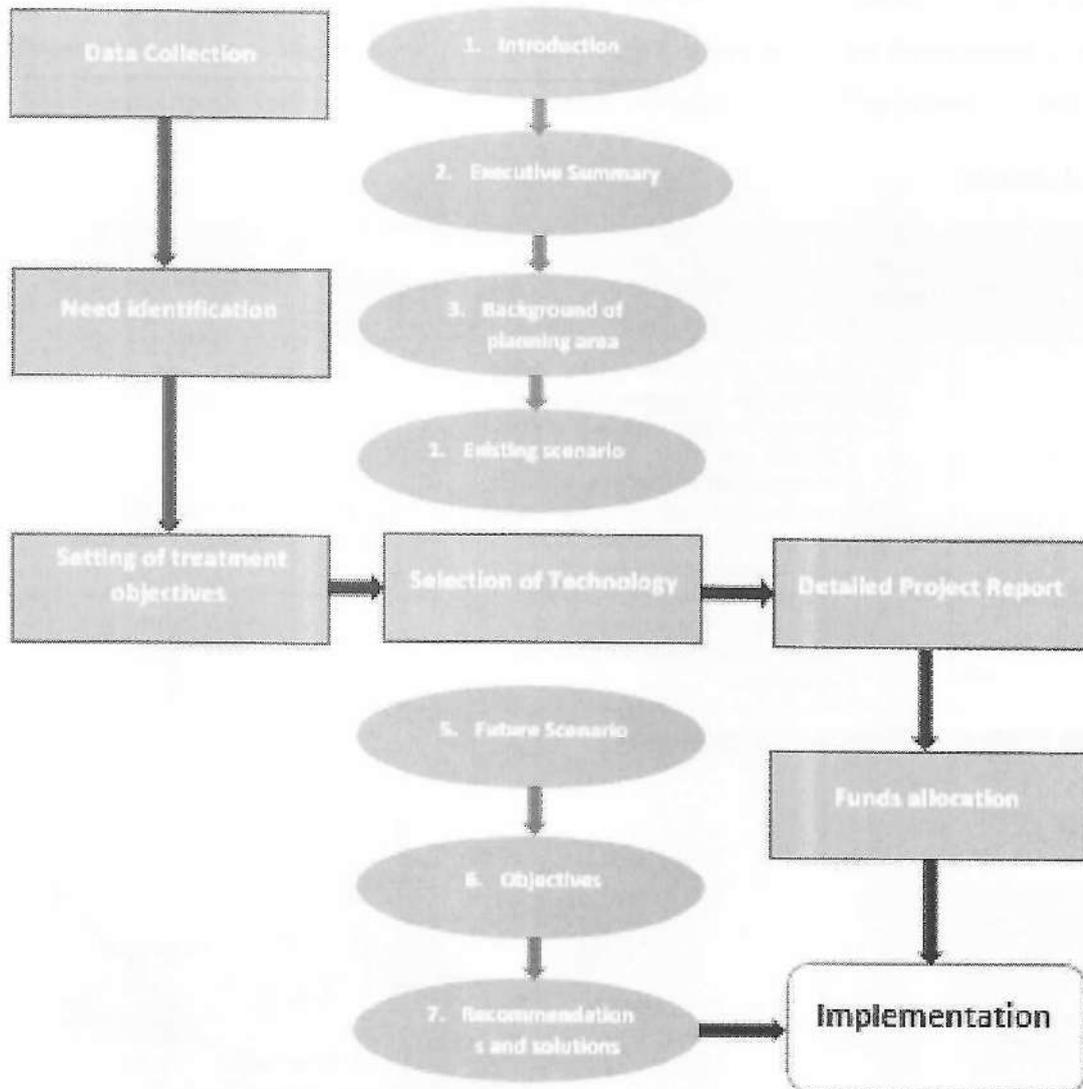
Scope & Limitation of the study:

- a) The study is limited to Meerut Municipal Corporation area only
- b) The study is limited to legacy waste management only

3. METHODOLOGY







4. CITY PROFILE

4.1 Introduction and salient feature of City Profile

Meerut is one of the most important town in the Northern part of India. The town, situated in Western Uttar Pradesh has got a long history behind it. The city was the part of Hastinapur Empire of Kaurvas that ruled the Vedic India and was the protagonists of Hindu Epic of Mahabharata.

Meerut is the fastest developing city of Uttar Pradesh after Noida and Ghaziabad. Meerut ranks 4th in terms of population in Uttar Pradesh. It is an ancient city located 56 km (35 mi) north-east of New Delhi.

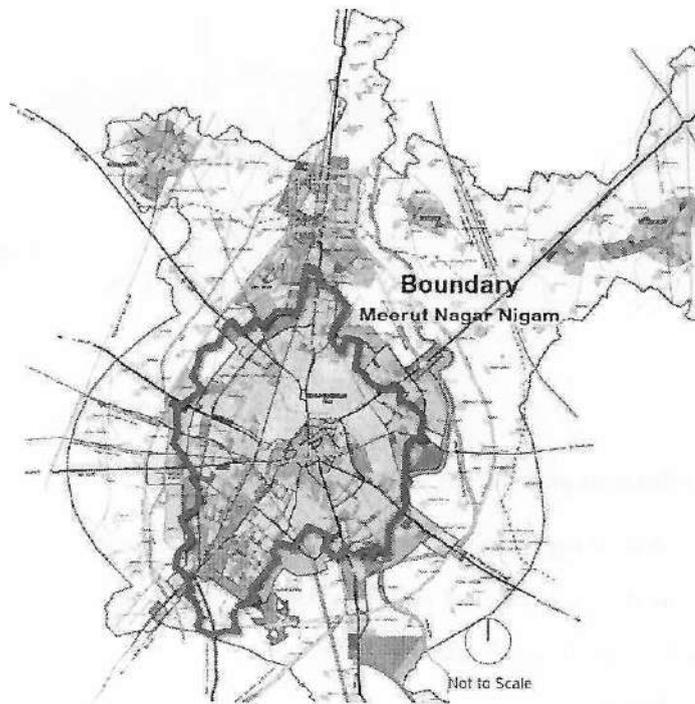
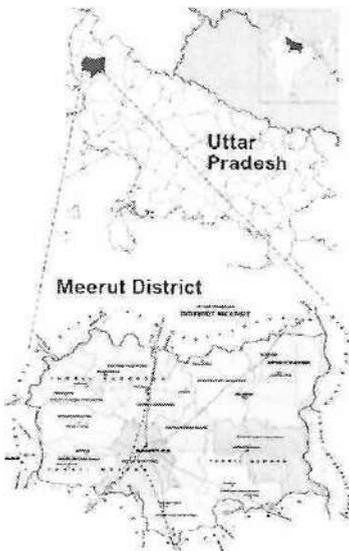
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Meerut also has one of the biggest army garrisons / cantonments in this part of the country. It is famous for its scissors, sports goods and Gazak, Meerut is also the sports capital of India and with the availability of 3500 hectares of industrial land and proximity of Delhi it is developing as the industrial hub.

4.2 Physical aspects

| Urban Local Body | Area | No of Wards | Topography | Temperature | Humidity | Rainfall |
|------------------------------|---------------------|-------------|--|--------------------------|---------------|-----------------|
| Meerut Municipal Corporation | 142 km ² | 90 Wards | Meerut is situated on the vast plains that are bounded by River Ganges on the east and River Hindon on the West. The average rainfall here is about 586 mm and monsoons begin by the end of June and lasts till the end of September. The alluvial soil grains deposited from both the rivers is what makes this whole region most suitable for agriculture. | 41°C (Max) and 8°C (Min) | 22%-73% (Max) | 850 mm annually |

4.3 Location of Meerut Municipal Corporation



4.4 Demographic Profile

| Year | Population | Growth Rate |
|------|------------|-------------|
| 1951 | 167315 | |
| 1961 | 211326 | 35.50 |
| 1971 | 286345 | 54.50 |
| 1981 | 442405 | 70.38 |
| 1991 | 753778 | 41.79 |
| 2001 | 1068772 | 41.79 |
| 2011 | 1305429 | 22.14 |

5. SOLID WASTE MANAGEMENT SCENARIO

5.1. Solid Waste Generation

The city generates about 700 Metric Tons of waste daily with an average per capita generation of 500 grams. The MMC is responsible for the collection, transportation and disposal of all solid waste generated in the city.

According to the data provided by MMC, there is a range of vehicles for the transportation of solid waste. Sweepers employed by the MMC regularly sweep the streets in the early morning and then waste is collected by the door to door collection (DTDC) method, private sweepers also collect waste. Vehicles of MMC are plying in the three depots, namely, Surajkund Depot, Delhi Road Depot and Kankarkhera vehicle depot. MMC has the following list of vehicles for the collection of wastes:

| Sl. No. | Type of Vehicle | Surajkund Depot | Delhi Road Vehicle Depot | Kunkarkhera Vehicle | Total |
|---------|-----------------------|-----------------|--------------------------|---------------------|-------|
| 1 | JCB | 04 | 04 | 04 | 12 |
| 2 | Truck | 07 | 04 | 05 | 16 |
| 3 | Tractor, Trolley | 20 | 15 | 08 | 43 |
| 4 | Tata Aee | 06 | 08 | 09 | 23 |
| 5 | Large Poklane | 02 | 04 | 02 | 08 |
| 6 | Small Poklane | 02 | 00 | 01 | 03 |
| 7 | Mini Poklane | 05 | 06 | 05 | 16 |
| 8 | Door to Door Vehicles | 60 | 52 | 34 | 146 |

Source: Meerut Municipal Corporation 2021

Currently MMC is utilising excavators for cleaning of drains. Under the area of MMC, total 315 drains are there. In order to clean the drains, poklane/fassi machines are used for the big drains while small drains are cleaned by JCB. Presently, 12 JCB are working for cleaning the drains. There are 24 big drains, having the 45.9 kilometres length which are generally cleaned by JCB, Big poklane and fassi machines

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while 195 drains with 142 kilometres distance are cleaned by the small poklane and remaining are 53 of about 51 kilometres long which are cleaned by sanitary workers of Nagar Nigam.

Door to door collection system municipal vehicles include carriage, hand-cart, cycle-rickshaw and every wheeled conveyance which is used or is capable of being used on a street provided by ULB for point to point collection of Municipal Solid Waste. These vehicles carry the collected solid waste to the Lohia Nagar plant where the waste is segregated into three parts:

- A. Non-recyclable component of solid waste like plastic, paper, cardboard is used as RDF (Refuse Derived Fuel). Such waste is sold by MMC at the rate of Rs.250 per tonnes to the industries, where it is shred, dried, baled and then burned to produce electricity. RDF is a renewable energy source that ensures waste not to be thrown out, rather to be put for good use.
- B. Biodegradable waste is used for making manure and compost which is sold to the farmers of the nearby villages at a subsidised rate. They use this organic manure to improve the fertility of the soil.
- C. Inert solid waste (e.g. concrete, dust and sand) is solid waste or remnant of processing whose physical, chemical and biological properties make it suitable for sanitary landfilling; it is used for denting of the roads by MMC.

5.2. Meerut Municipal Corporation's (MMC) initiative for SWM

MMC gets funds for solid waste management from central government, state government and finance commission grants under SBM. Also, MMC uses its own funds, collected from tax and non-tax sources, for paying remunerations to safayi mitras (both permanent and contractual Below is given the data of fast five years related to MMC expenditure under SBM for solid waste management

MMC Expenditure for SWM under Different Heads (in Lakh Rs.)

| Heads of Expenditure | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21(Ap 20 to 31 Oct. 2020) |
|--|---------|---------|----------|----------|--------------------------------|
| Mechanization for SWM financed by FFC* | | | 5240.93 | 5013.86 | 370.83 |
| Exp under SBM | 52.96 | 369.05 | 385.83 | 112.88 | 15.51 |
| Payment to Sutaikarmi | | | | | |
| (a)Permanent | 32.96 | 4126.04 | 4266.26 | 5412.64 | 2418.10 |
| (b)Contract | 2459.48 | 2182.25 | 3107.25 | 3459.70 | 2083.72 |
| Total Exp of SWM | 5808.44 | 6677.34 | 13000.27 | 13999.08 | 4888.16 |

Source: Budgets documents of MMC *Fourteen Finance Commission

Role of Rag pickers in SWM: Rag pickers play a vital role in SWM They move from one community bin to open dump/land-filing sites in search of recyclable items (paper, plastic, tin etc.) that can be sold to scrap merchants to enable these urban poor to generate income. These rag pickers save almost 14% of the municipal budget annually, but their role is mostly unrecognized and they are generally deprived of

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the right to work. These rag-pickers may reduce up to 20% load on transportation and on landfill. There work needs to be brought to the mainstream and should be recognized.

5.3. Dumpsite

The dumpsite is located at Lohiya Nagar with an area of 30.58 acres.

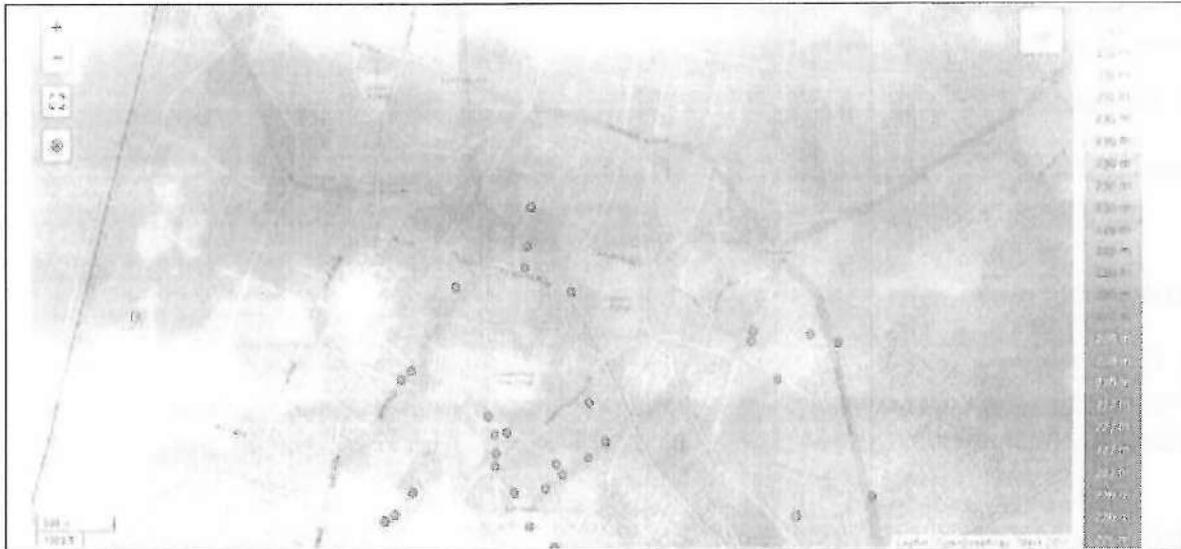
6. THE PLANNING AREA

6.1 Description of the Proposed Site

Meerut Nagar Nigam is planning to carry out legacy dumpsite remediation in one of its existing dumpsites namely Lohiya nagar dumpsite. This chapter describes the details about the project site that include basic information of the proposed area including topography, land use, changes in water bodies etc.

6.2 Details of Lohiya Nagar Dumpsite

| Sl.No. | Particulars | Details |
|--------|------------------------|--|
| 1 | Name of the dumpsite | Lohiya Nagar Dumpsite |
| 2 | City | Meerut |
| 3 | District | Meerut |
| 4 | State | Uttar Pradesh |
| 5 | Latitude and Longitude | 28.9268105, 77.732108 |
| 6 | Size of the dumpsite | 30.58 acres |
| 7 | Location Details | |
| 8 | Topographic map |  |



| | | |
|----|--------------------------------|-----------|
| 9 | Nearest Town/City | Meerut |
| 10 | Nearest Railway Station | Meerut |
| 11 | Nearest Airport | IGI Delhi |
| 12 | Seismic Zone | II |

6.3 Waste Quantification

6.3.1. Volume Estimation

The quantification of waste is to be done by the topographical survey method. The objective of the topographical survey is to quantify the waste, determine its volume and extent over the disposal site.

The physical characteristics includes moisture content, density, percentage of different components such as, paper, plastics, glass metal, organic waste, sand soil bricks, stones etc., were analyzed.

At Lohiya Nagar, the solid waste is dumped above the ground. Contour survey of the ground profile of dumpsite, before the start of dumping, is not available. Topographic survey has been done to establish the contours of the present solid waste dump and the area of spread of dump as well as the actual availability of land at site.

The area of the contour level is calculated, and the contour difference is taken as height and volume is calculated. The approach of the volume estimation is based on the cutting volume method and the methodology is provided as under:

- Step 1. Establishment of DGPS ground control points at various locations on site
- Step 2. Drone mission planning and data collection from drone
- Step 3. Report generation

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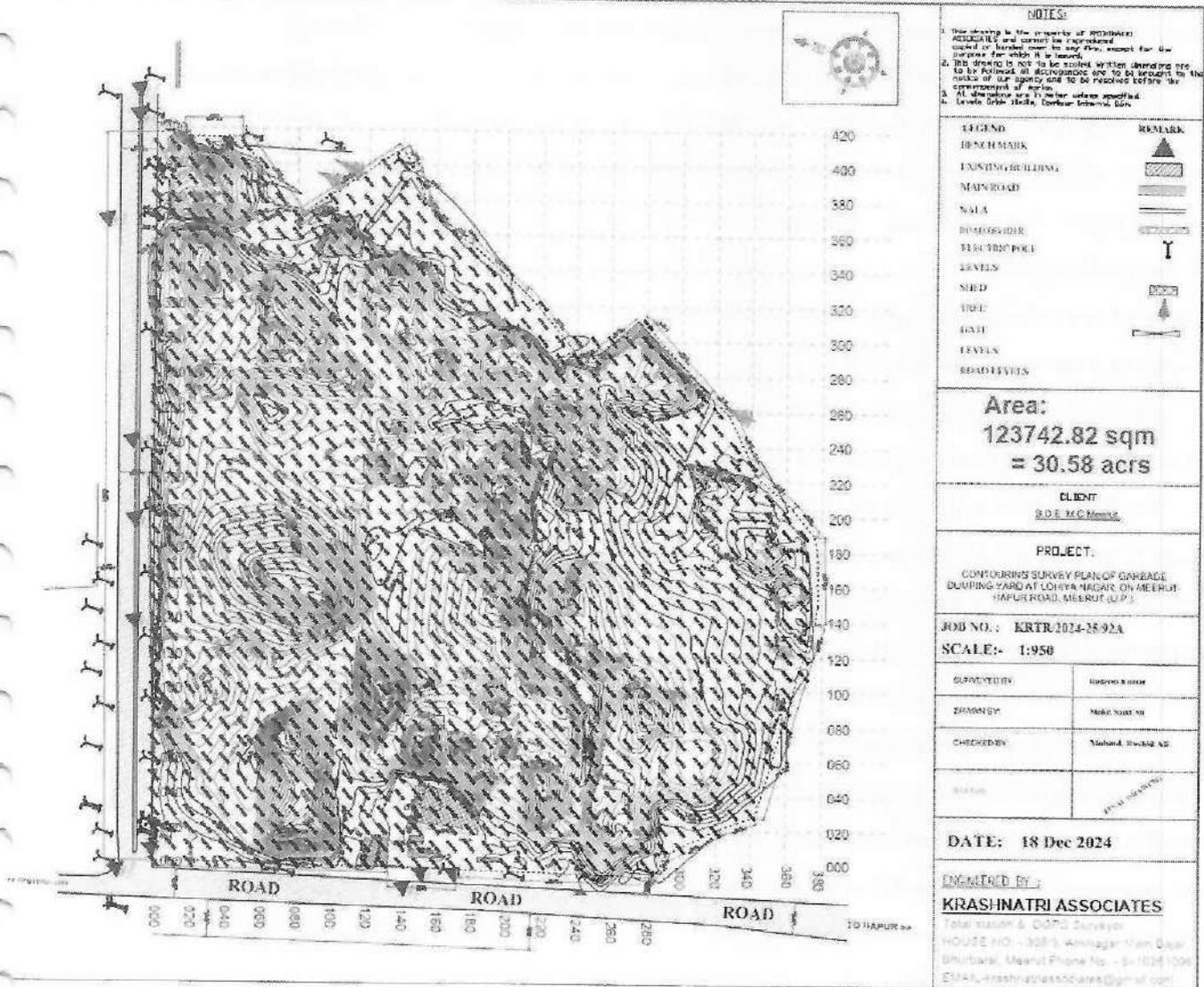
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The total volume calculated for Lohiya Nagar is estimated 549046.89 cubic meters.

Total quantity of Legacy Waste: 6,86,300 MT (considering density as 1.25 MT/cum)

Survey report has been provided in Annexure 1



7. SELECTION OF TECHNOLOGY

7.1. Clearing vs. Capping of Legacy Waste

The SWM Rules 2016 clearly mandate clearing of sites as a first option, by bio-mining and bioremediation. Still, capping is often proposed or considered an option in India merely because it is

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done in the West. But clearing a dumpsite almost to ground level rather than capping it is a far better option for permanent pollution prevention, as well as for the following additional reasons:

Clearing by bio-mining recovers the entire base area of a dump at almost ground level. Capping gives only one-third of the base area as usable area at an inconvenient height for future use.

Cleared sites require no after-care. Capping requires at least 15 years of continuous leachate pump-out and treatment in a dedicated effluent treatment plant nearby. Gas extraction is very difficult and inefficient when attempts are made to insert suction pipes into dumped waste instead of before dumping begins. Poor success at Gorai capping led to the forced refund by Mumbai city of Rs 15 crore advance carbon credits.

Capping of open dumps (wrongly called SLFs or Sanitary Landfills) requires intake of fresh waste to be stopped and permanently diverted to a fresh site before capping begins. With increasing protests against fresh waste disposal sites, getting started elsewhere can often delay capping plans indefinitely. Bioremediation and Bio-mining to clear a site can start immediately at one part of an actively used dump while fresh waste continues to be received and stabilized at another part. Clearing can be done in phases to match available funds.

In the USA, only grass is permitted to be grown on the soil cover of a capped site. It must be regularly mowed for 15 years to prevent the growth of herbs or shrubs or trees whose roots may penetrate the plastic layer below the soil cover. If trees are planted over soil capping, they die in a few years as soon as their roots enter the hot airless waste below. Capped sites are closed to the public for 15 years. But if a dump is cleared to near ground level, it can be easily converted to a public tree park or garden if desired, unless below-ground waste remains untreated on the site

Thus, capping of dumpsites is not advisable and bioremediation and biomining of the legacy waste has been selected as the preferred option for legacy waste management of these two sites.

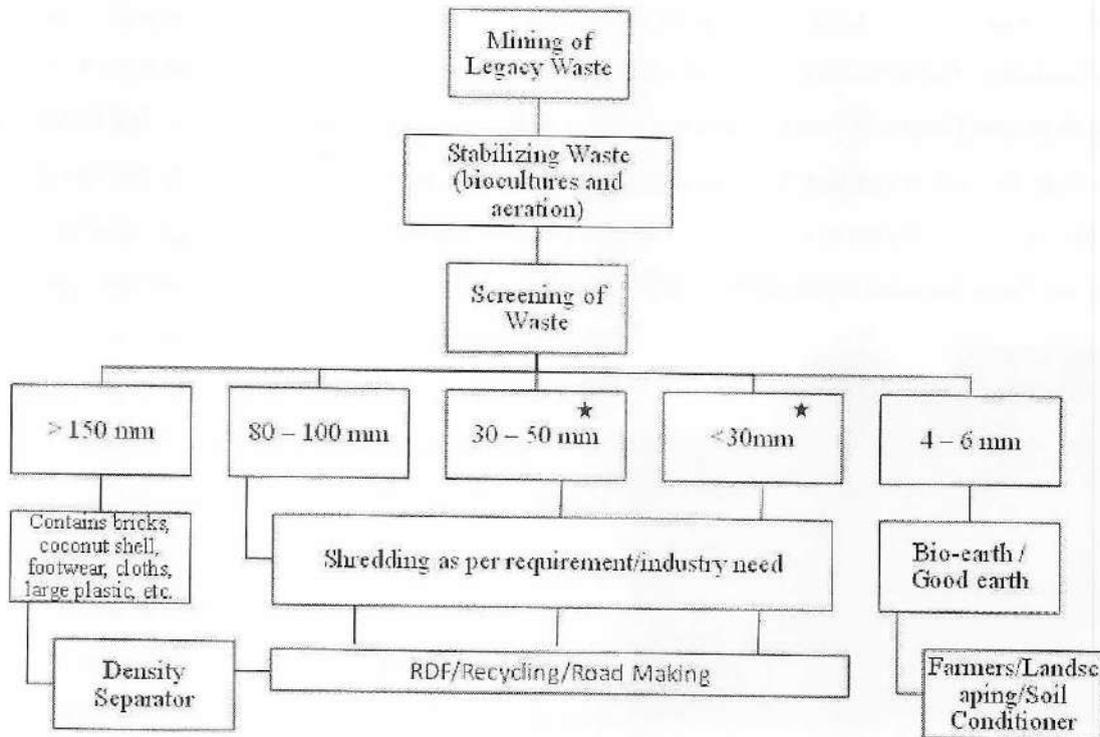
7.2. Bioremediation and Biomining of Old Municipal Dumpsites

It refers to the excavation of old dumped waste and make windrow of legacy waste thereafter stabilization of the waste through bio-remediation i.e. exposure of all the waste to air along with use of composting bio-cultures, i.e. screening of the stabilized waste to recover all valuable resources (like organic fines, bricks, stones, plastics, metals, clothes, rags etc.) followed by its sustainable management through recycling, co-processing, road making etc.

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★ In Case of RDF (With Size Up to 50mm) shredding is not required

Fig. 1: Overview of Bio-remediation and Bio-mining of Legacy Waste

The first step is to excavate legacy waste, loosen it and make windrows so as the leachate can be dried of through solar exposure and all the entrapped methane is removed from the heap. All biodegradable waste, like discarded food, fruit, flower and garden waste, needs air to decompose it in an odourless way without producing leachate. So the first step in stabilizing and bringing down airless legacy waste is to expose as much of it as possible to air (Fig. 1).

Addition of composting bio-cultures speeds up decomposition and rapidly creates biological heat within the waste that helps to dry it out and reduce its volume by 35-40%. This happens through loss of moisture and by decomposition of some of the aerated waste to carbon dioxide and water vapour. This is called bioremediation and makes the waste dry enough for screening. Waste is called stabilized when there is no more generation of heat or landfill gas or leachate, and seeds are able to germinate in it.

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It means the screening of such stabilized waste into different size fractions that can be usefully used off-site or disposed of without affecting the environment. Screen sizes commonly used are one or more of the following: 150 mm, 80 to 100 mm, 24 to 50mm, 12- 16 mm and 4-6. The finest fraction is called bio-earth or good earth. It contains a mixture of humus-rich organics which improve soil fertility along with a high proportion of soil or sand, which is why it cannot meet FCO standards for compost. The coarsest fraction contains bricks, stones, coconut shells, footwear, cloth and larger plastics. Density separation helps recover combustibles which can be used (usually up to 5-10%) as fuel replacement



after supplying it to customer requirements. The lighter mid-fractions are mostly plastics and can be shredded as per industry requirement for use in bitumen hot mix plants to make so called Plastic Roads or as refuse derived fuel for co-processing in cement kilns. Fractions up to 50mm do not require shredding for use as RDF. The heavier mid-fractions are mostly stony inert which can be used in the lowest layers of roadmaking or plinth-

filling or in low-lying areas but should not contain more than 3-5% plastics by weight. Less than 10% of the original waste remains as totally unusable residual rejects and may remain onsite, either in a small heap or spread to raise the ground level by a couple of meters. The land which was hosting waste dumps is now fully recovered for alternate uses. Biomining and Bio-remediation processes should be adopted as early as possible to ensure holistic solid waste management.

7.3. Process of Bioremediation and Biomining

Exposing the legacy waste to air to stabilize it has been done since 1998 in many ways. Almost all of them involve forming the waste into long low heaps of about 2-meter height called windrows, to get maximum surface area to volume. Repeated turning is necessary to ensure that the innermost waste in

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windrows also gets exposed to air. Usually 3-4 turnings of legacy waste are necessary to stabilize it.



1. Use a tractor-tiller to repeatedly loosen the topmost 150 mm layer of legacy waste. Mist-spray the waste lightly with bio-cultures to control odour and get the decomposing microbes dispersed into the waste. Hand-pick out large objects like rocks or coconut-shells or long pieces of cloth. Form the waste into windrows using a Bobcat or JCB or similar earth-moving equipment. Turn these windrows every 5 days. After 2-3 weeks when the heaps are free flowing enough for screening, move the material to multi-deck vibrating screens or to trommels (rotating cylinders with different size perforations) to get fractions of different size and weight.

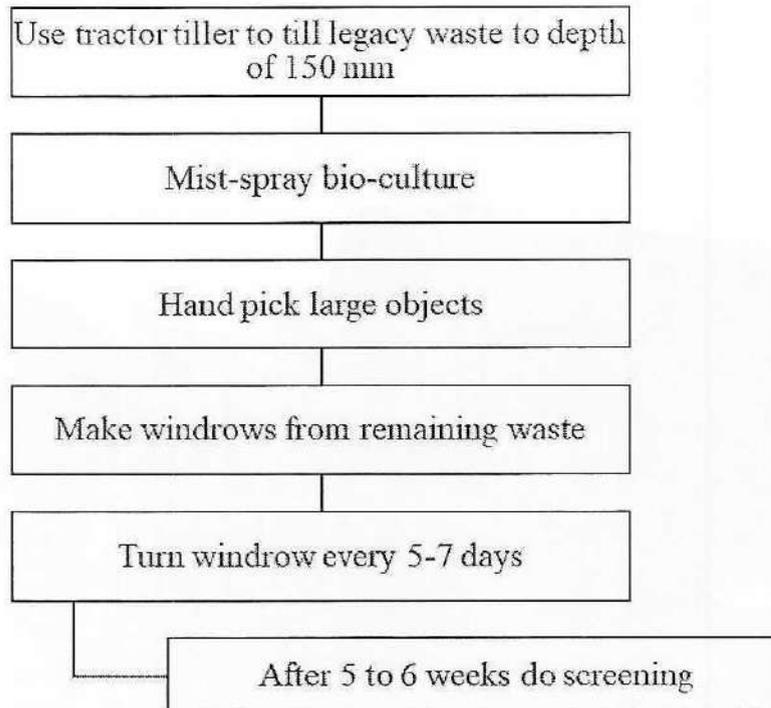


Fig. 2: Schematic representation of Bio-mining through Tractor Tiller by Windrows

2. Use a JCB to dig 2-2.5 meters deep trenches downwards from the top of a legacy waste heap at 1.5 to 2 meters intervals. This is a rapid and cost-effective way to slice the uppermost layer into in-situ windrows. Mist-spray the sides of the trenches to get microbes to reach exposed waste surfaces. Bring down these slices to form terraces and turn one aerated windrow onto another weekly before repeating the process until almost ground level is reached. Start screening when waste moisture is low enough.

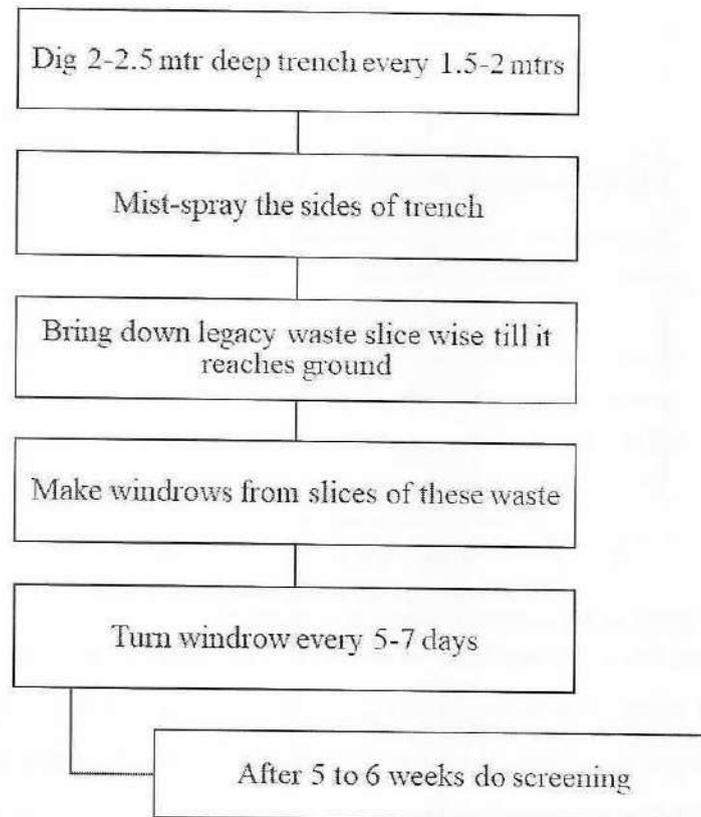


Fig. 3: Schematic representation of Bio-mining through Trench Method

- Use a JCB to lift legacy waste off the top of a heap and drop it from a height to aerate and loosen the waste and form 2-3 meters high cones. Mist-spray bio culture on the cones. Every day or 2-3 days use the JCB to lift waste from the cones and drop it back to the same or a nearby location, to aerate the waste. This is rather fuel intensive.

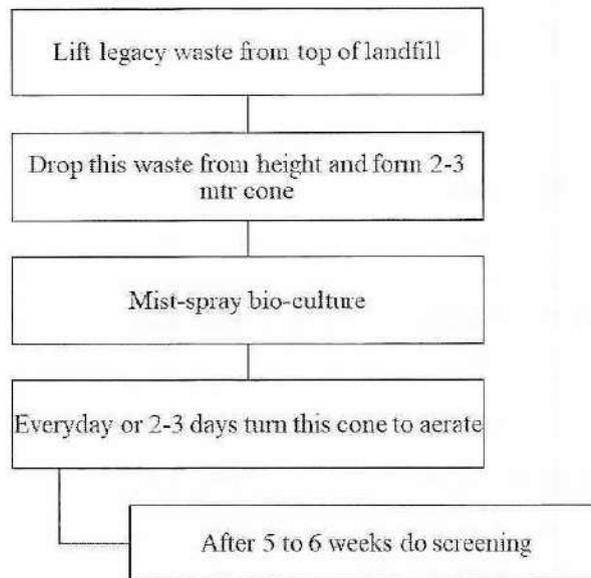


Fig. 4: Schematic representation of Bio-mining through Cone Method

4. Where space permits, move the waste to form several long parallel windrows. Turn these weekly with a JCB. Often at the second or third turning, one heap can be combined with a second one as their volumes decrease. Windrows can be aerated either by moving all the waste to form a new parallel windrow, with the innermost waste on the outside for aeration, or by moving all the waste forward in small steps while dropping it from a height for aeration.

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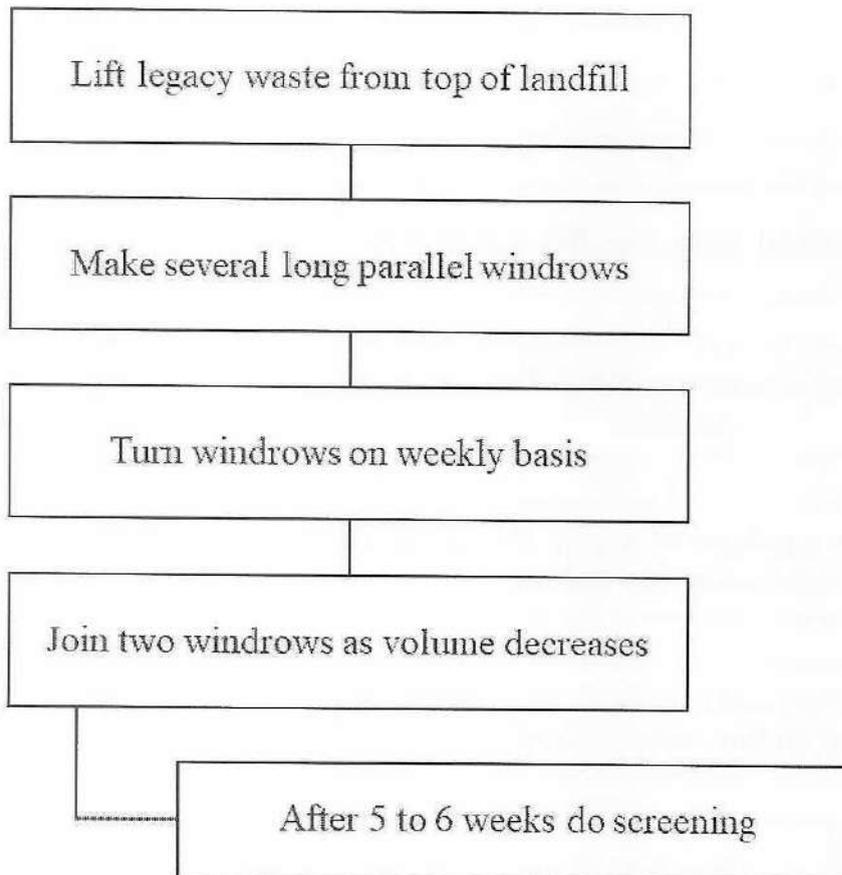


Fig. 5. Schematic representation of Bio-mining through Windrow Method for Spacious Landfill Sites

5. If waste needs to be moved from one location to another part of the same site, usually the perimeter, place it in thin 150 mm layers and mist-spray bio cultures. Allow 5 days to aerate one layer before adding the next one and mist-spraying bio cultures on that also. Turning may not be necessary when waste is spread thin like this, to decompose like leaves on a forest floor.

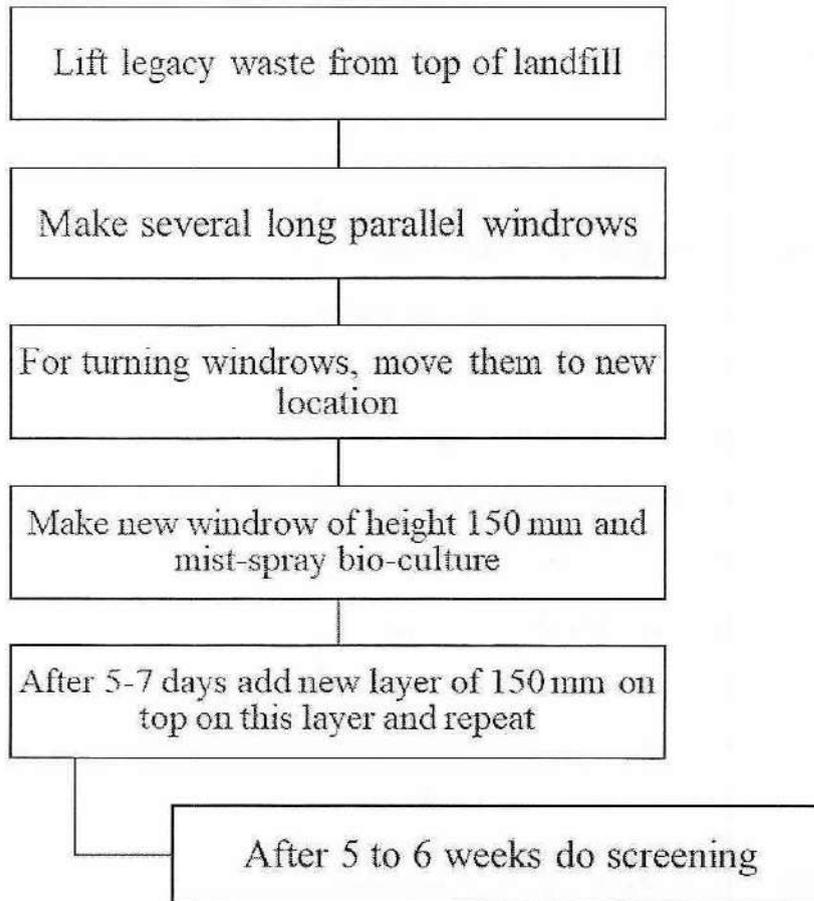


Fig. 6. Schematic representation of Bio-mining through Thin Layer Spreading Method

6. This is a constantly evolving field. Hence other cost effective and space effective methods can also be applied.

7.4. Processing Equipment's for Processing of Legacy Waste

The major equipment that would come in use would fall under the following heads of processes like excavation, shredding, screening, air classification and ferrous separation. As per suitability and requirement the appropriate choices should be made.

1. Screening
 - Trommel
 - Vibrating Screen
 - Disc/ Star
2. Handling Equipment
 - Loader (Front Load)
 - Conveyers
 - Fork-Lifts
3. Handling Equipment

- Loader (Front Load)
- Conveyers
- Fork-Lifts

7.5. Treatment Process

Processing of accumulated waste shall be done in following manner as given below:

1. Local Body (LB) shall make a time bound plan to execute the bio-mining process to clear the old waste.
2. Volume of waste to be determined through contour survey (Total Station Survey) and site measurements. Drone mapping of heap volumes at different stages is most cost-effective and fast. Weighment of heaps is difficult and problematic as payment would be collected for heavy fractions, leaving behind the more pollution-prone lighter fractions.
3. Initial Contour level survey of the site shall be done on start of work and Final Contour level survey shall be done on final completion of the work.
4. Do an initial baseline survey of surface and subsurface soils and waters and also leachate present, to check for heavy metals and toxics if any. Samples should be drawn by an NABL or MOEF certified lab, also at the final stage. During operations, the operator should collect and keep daily samples of the finest fractions, to be pooled and analyzed monthly or at random by an NABL lab. This is to ensure that unsterilized rotted waste is not simply moved from one location to another by mining without bioremediation.
5. Sprinkle the newly exposed surfaces with a composting bio culture solution or a dilute solution of 5% fresh cow dung in water. This will control smell and speed up decomposition. With the help of Back Hoe loader, the waste in the demarcated area should be loosened up.
6. Usually the top layer has several materials in the active biological state. This layer shall be stabilized through composting bio-cultures, as well as herbal/biological sanitizers if found necessary for odour control.
7. Raking of garbage layers by a long spike harrow operating in cross directions may be done as needed to pull out large rags, plastic, rubber, textiles etc.
8. Waste pickers or labour should manually pick out bulky waste like coconut shells, banana stems, tyres and rocks prior to screening for bio-mining. Store in separate heaps for sale or use.

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9. Turn these windrow heaps once a week until no more volume reduction is observed in the heaps and no more heat is generated. If the garbage is stabilized, there will be no smell or leachate formation and the material will be dry enough for sieving.
10. LB or its agency may deploy Trommels and/or Horizontal Screens or other types of screens for the purpose of screening. Screen the stabilized waste in a rotary screen or gravity screens of different size openings, preferably 35mm and 8mm. A fan can blow out the plastic fraction for use by recyclers.
11. Appropriate numbers of excavators, backhoe loaders and workers will be required to execute the work.
12. The recyclables recovered from the bio-mining process should be sent for recycling as per the quality of the material, which should also be randomly sampled by an NABL lab and tested for heavy metals, salinity/electrical conductivity and leachability to ensure no environmental harm during use. FCO standards for pH and contaminants could be provisionally used as a benchmark. Non-Recyclable plastic material shall be sent for road making or to RDF units or cement plants. Initial cleaning of recyclable waste shall be done before it is transported for sale or disposal.
13. The recovered earthy fines shall preferably be used for landscaping or gardening or road medians within the Local Body or the site. The recovered soil can also be used as "Soil enricher" to develop green areas or by farmers.
14. The recyclables like plastic, glass, metals, rags and cloth recovered from the waste during screening shall be sorted out and preferably cleaned before sending to recycling industries or as RDF.
15. The heavy fractions may be sand and gravel usable for road shoulders or for plinth filling. Stones and concrete if any can be used for road sub-grade, or for crushing. recycling and reuse in the construction industry. The recovered construction and demolition waste recovered from the bio-mining process may be sent to a C&D processing facility if suitable for production of building materials.
16. In very old garbage layers with high debris content, most of the organic matter may have already been decomposed. Do a seed germination test to ensure it is stabilized. Add bio-cultures to fully stabilize it if heat is still generated in windrow heaps or volume reduction is observed. After 7-10 days of stabilization the waste can be taken up for screening.
17. Usually the finest fraction will be organic matter plus fine soil, called 'bio-earth', which can be used as soil improver, especially for restoring alkaline or saline soils to fertility, or to grow some vegetation

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for erosion control. It is also useful as a lawn subgrade cum drainage layer, or it can be used as organic manure in tree pits. The next coarser fraction will be gravel and coarse organics, which can be used for road and railway embankments the coarsest fraction may have a lot of combustibles (cloth etc.) which can be baled and supplied as Alternate Fuel Resources in cement kilns or boilers.

18. There may be some (maximum 5-10% of total) left over waste including lumps of heterogeneous nature. The waste may be soaked with leachate or hard and difficult to disintegrate. This waste can be sent to scientific landfill for disposal (near zero residues).
19. The recovered land from the bio-mining process shall be utilized for any purpose deemed appropriate. Ideally reclaimed space should be reused for waste processing, otherwise for alternate non-habitation uses.



8. PROPOSED DESIGN PARAMETERS FOR BIOMINING PROCESS

| Sl. No. | Machineries | Specification | Required nos. |
|--|---|--|---------------|
| 1 | Total No of Units Required | | 1 |
| 2 | Processing capacity per unit | 60 MT/hr | 1 |
| 3 | Belt Conveyors (Roller Belts) along with digital weightment system with supporting structure along with cable tray and electrical panels. | Roller Belts with pitch roller frame of about 500 mm, Heavy duty rubber belt M24 grade | 1 |
| 4 | Trommel Screen and Anticlogging Device | Trommel (35 mm) | 2 |
| 5 | Ballistic Separator | | 1 |
| 6 | Container Office | | 1 |
| 7 | Portable Toilets | | 1 |
| 8 | Weigh Bridge | | 1 |
| Specialized machineries for operational purpose | | | |
| 9 | High Power Excavator | | 5 |
| 10 | Front End Loader | | 2 |
| 11 | Tipper | | 4 |
| 12 | Tractor Trailer | | 2 |

9. COST ASSESSMENT

9.1 Cost Estimation for Biomining

| Sl. No | Parameters | Value | Unit |
|--------|---|----------|--------|
| 1 | Processing Capacity per unit | 30 | MT/hr |
| 2 | Number of Processing Lines | 2 | Nos |
| 3 | Number of hours of operation proposed per day | 21 | Hours |
| 4 | Number of days of operations proposed per year (Inclusive of stoppage due to monsoons, preventive and non-preventive maintenance) | 275 | Days |
| 5 | Total Quantity to be Processed Per Month (MT) | 38,128 | MT |
| 6 | Total Quantity to be Processed in a Year (MT) | 3,43,150 | MT |
| 7 | Existing quantity of Legacy Waste | 6,86,300 | MT |
| 8 | Time required for clearance of approx. 7 Lakh MT (including 2 months for mobilization and 4 months of monsoon) | 24 | Months |
| 9 | Average Processing capacity of dumpsite | 1248 | MT/day |

9.2 Capital Cost Estimation for Biomining

| Sl. No. | Parameters | Nos required | Total Costs in Lakhs | Justifications and Standards |
|---------|---|--------------|----------------------|---|
| 1 | Site Development | 1 | 5.00 | Details are not provided as such considering the size of the facility, we can roughly estimate Rs.1.0Lac/ acre of processing site land. As it is believed that no major civil infrastructure is erected at the land. Only the base of the land is worked on. |
| 2 | Machineries | | 131.31 | Annexure 2 |
| 2.1 | Trommel Screen (35mm) with Belt Conveyors and all other accessories | 2 | 76.39 | |

| | | | | |
|-----|---|---|---------------|---------|
| 2.3 | Ballistic Separator with all conveyor and structure | 1 | 54.92 | |
| 3 | Container Offices | 1 | 5.00 | |
| 4 | Weigh bridge and accessories | 1 | 6.85 | |
| 5 | CCTV monitoring system | 1 | 3.15 | |
| 6 | Portable Toilets | 1 | 1.20 | |
| 7 | Civil Work, Compound Fence, Foundation | 1 | 15.00 | Lumpsum |
| | Total | | 167.51 | |

9.3 Operational Cost Assessment for Biomining Component 1: Power

| Component 1. Power (A) | | | | |
|------------------------|--|--------------|-----------------------|--|
| Sl. No | Parameters | Value | Units | Standard Calculations |
| 1 | Connected Load proposed | 500 | KW | |
| 2 | Operating Load | 200 | KWH | 0.4 times the Connected Load |
| 3 | Contract Demand | 235.29 | KVA | Operating Load/0.85 |
| 4 | Number of units consumed Per Metric Tonne | 3.33 | Unit | 60 Metric Tonnes Per Hour processing capacity per unit (Operating Load/60) |
| 5 | Fixed KVA Charges/Demand Cost per Metric Tonne | 2.25 | INR | ((Contract Demand X 365)/Monthly processing capacity) (in INR) |
| 6 | Power Cost Per Unit | 12 | INR/Unit | Considered |
| 7 | Total Power Charges per Ton ((Number of Units consumed per ton x Cost per Unit) + (Fixed KVA Charges/Demand Cost per Metric Tonne)) (in INR) | 5.59 | INR/Tonne | Calculated |
| 8 | Total Power Cost Per Month | 2.13 | Lakhs INR/Month | Calculated |
| A | Total Power Cost in a Year | 25.56 | Lakhs INR/Year | |

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Component 2: Machinery and Equipment (Rental)

| Component 2. Machinery and Equipment (B) | | | | | |
|--|---|---|--------------|--|---|
| Sl. No | DESCRIPTION | Cost per day with three shifts (in INR) | Nos Required | Amount (in INR considering 275 days of operations) | Justification |
| 1 | High-power Excavator (Hitachi- 200): Proposed for Pre-stabilization (primary excavation the garbage and forming windrows of the same before sprinkling of bio culture and Deodorizer) & loading and transferring the waste to the plant area from dumpsite. | 18,375 | 2 | 1,01,06,250 | DSR rates: Code 0020: Basic Rates Earth Work Annexure 3 |
| 2 | High-power Excavator (Hitachi- 200): Proposed for feeding the waste into processing lines. | 18,375 | 2 | 1,51,59,375 | |
| 3 | Front End Loader (JCB): Proposed for aggregate shifting and soil disposal area levelling | 15,750 | 3 | 1,29,93,750 | DSR rates: Code 0014: Basic Rates Hire Charges of Plant and Machinery |
| 4 | Tipper: Proposed for transportation of waste from dumping area to Plant site | 9,844 | 4 | 1,08,28,400 | DSR rates: Code 0017: Basic Rates Hire Charges of Plant and Machinery |
| 5 | TRACTOR TRAILER: Proposed for internal movement of aggregates and dust management. | 3,150 | 2 | 17,32,500 | DSR rates: Code 0039: Basic Rates Hire Charges of Plant and Machinery |
| B | TOTAL Rental charges in Lakhs per Year | | | 508.20 | |

Note: As per DSR the hire charges of plant machinery on per day basis is for single shift of eight working hours. Annexure 3

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Component 3: Labour Costs

| Component 3. Labor (C) | | | | | |
|------------------------|--|--------------|--------|-----------------------|----------------------------------|
| Sl. No | Designation | Nos Required | Salary | Total Costs Per Month | Justification for No |
| 1 | Unskilled- Labours | 21 | 10,712 | 2,24,952 | 7 Labour per Shift |
| 2 | Skilled Mechanical Maintenance Operators | 3 | 20,000 | 60,000 | 1 Operators per shift per line |
| 3 | Skilled- Electrical Maintenance Operators | 3 | 20,000 | 60,000 | 1 Operators per shift per line |
| 4 | Skilled-Supervisor Maintenance Operators | 6 | 27,000 | 1,62,000 | 2 Supervisors per shift per line |
| 5 | Semi-skilled- Weigh Bridge Operators | 2 | 20,000 | 40,000 | |
| 6 | Head Operations/Plant Head | 1 | 80,000 | 80,000 | |
| 7 | Accountants | 1 | 27,000 | 27,000 | |
| 8 | Environmental Engineer | 1 | 35,000 | 35,000 | |
| 9 | Security Guards | 3 | 9,450 | 28,350 | For three shifts |
| 10 | Skilled- Control Room, CCTV, PLC Operator | 3 | 20,000 | 60,000 | For three shifts |
| 11 | MISCELLANEOUS which includes internet charges, mobile charges, transportation of staffs, drinking water, refreshments, uniforms etc. | 1 | 30,000 | 30,000 | |
| | Total in Lakhs | | | 8.07 | |
| C | Total for a Year in Lakhs | | | 96.88 | |
| | Total No. of Operational facility Staff | 45 | | | |

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Component 4: RDF Transportation Costs

| Component 4. RDF Transportation (D) | | | | |
|-------------------------------------|---|---------------|-----------------|---|
| Sl. No | Parameters | Value | Unit | Justification |
| 1 | Total Waste Processed | 3,43,150 | Ton/Year | Calculated |
| 2 | RDF Generation | 30 | % | Assumption |
| 3 | Total RDF generated Per Year | 1,02,945 | Ton/Year | Calculated |
| 4 | Tipper Capacity | 10 | Ton | Assumption |
| 5 | Total Annual Trips Required | 10,295 | Trips/Year | Calculated |
| 6 | Total Daily Trips Required | 37 | Trips/Day | Calculated |
| 7 | No. of Tippers required | 10 | Nos. | Assumption |
| 8 | Cost of 1 Trip to Cement Plant - 1 within 152 km. (two way) | 2,736 | INR/Trip | Assuming the mileage of a truck as 5 km per litre and the cost of fuel as Rs. 90 per litre. |
| 9 | Cost of 1 Trip to Cement Plant - 2 within 252 km. (two way) | 4,536 | INR/Trip | |
| 10 | Hiring of tipper for three shifts | 9,844 | INR/Day | DSR rates: Code 0017: Basic Rates Hire Charges of Plant and Machinery |
| D | Total Cost in Lakh for Transportation of RDF | 626.49 | INR/Year | Considering 60% of RDF to be disposed at nearest cement plant i.e., Cement Plant - 1 and 40% of RDF to be disposed at nearest cement plant i.e., Cement Plant - 2 |

Component 5: Calculation of Total Operational Costs

| Calculation of Total Operation Cost (E) | |
|--|----------------|
| Total Operational Cost (in INR Lakhs) =(A+B+C+D) | 1257.13 |



9.4 Financial Analysis and Per Tonne Cost Estimation for Biomining

| Sl.No | Parameter | Value | Unit | Reference | Justification |
|-------|---|----------|-----------|---------------|--|
| 1 | Total Capex | 167.51 | INR Lakhs | A | Calculated from Capex Cost Sheet |
| 2 | Total Opex (Annual) | 1257.13 | INR Lakhs | B | Calculated from Capex Cost Sheet |
| 3 | Total Cost Per Year | 1424.64 | INR Lakhs | C=A+B | |
| 4 | Opex (2 nd Year) | 1257.13 | INR Lakhs | D | |
| 5 | Project Cost for Biomining of Lohiya Nagar Dumpsite with RDF Disposal Cost Included | 2681.77 | INR Lakhs | E= C + D | |
| 5.1 | Environmental Charges @ 1% of Project Cost | 26.82 | INR Lakhs | F | |
| 5.2 | Water Charges @ 1% of Project Cost | 26.82 | INR Lakhs | G | |
| 5.3 | Labour Cess @ 1% of Project Cost | 26.82 | INR Lakhs | H | |
| 5.4 | Project Monitoring Cost @ 2% of Project Cost | 53.64 | INR Lakhs | I | |
| 5.5 | Contingency @ 2% of Project Cost | 53.64 | INR Lakhs | J | |
| 6 | Total Project Cost to remediate ~7 Lac MT of legacy waste | 2869.49 | INR Lakhs | K=E+F+G+H+I+J | |
| 7 | Total waste to be remediated | 6,86,300 | Tonnes | L | Calculated from Total Processing Sheet |
| 8 | Remediation Cost Per Tonne | 418.11 | INR/MT | M=K/L | Calculation based |

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10. MODELS FOR IMPLEMENTING DUMPSITE REMEDIATION

10.1 Execution Methods

| Sl. No. | Execution Methods | Preference for Biomining of Lohiya Nagar |
|---------|--|--|
| 1 | 100% Reclamation: Design Finance Own and Operate and Transfer with near-zero residues. All work must be carried out in compliance with SWM Rules 2016 and CPCB Guidelines for the disposal of legacy waste 2019 | Preferred |
| 2 | 100% Capping (Minimum operating/ processing cost) | - |
| 3 | 60-70% Reclamation, rest with inert capping - Part Capping, (Nashik Model, EPC)-Processing & Operating cost lying between the first two models | - |

10.2 Working Models

| Sl. No | Working Models | Preference for Biomining of Lohiya Nagar Dumpsite |
|--------|--|--|
| 1 | 100% work to outsourced to selected private contractor | Preferred |
| 2 | 100% by ULB with rented equipment and manpower | Not Preferred ULB lacks technical know how |
| 3 | Part by private operator (processing only) and rest by ULB (utilization, transportation, and disposal) | Preferred |

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11. STANDARD PROCEDURES FOR OPERATIONS

11.1 Stabilization of Fresh Waste

Clearing of old dumps is meaningless unless the creation of fresh open dumpsites is stopped. This is best done by proper segregation of biodegradable waste and its processing through aerobic composting or Biomethanation as mentioned in SWM 2016 Rule 15 (v) (a). For this the practice of unloading waste and then levelling it into airless heaps must stop. Instead, incoming waste must be unloaded in windrows.

This is easily done by moving the garbage vehicle slowly forward during unloading. This leaves the waste unloaded as a long low heap which can be bio-treated with composting bio-cultures and then shaped by a Bobcat or JCB into neat parallel windrows of maximum 2 – 2.5 meter height and of whatever length the site space permits. More than one row per day can be formed, depending on daily waste volumes. If prevailing winds in the area are West to East, let the windrows stretch from West to East (not North to South) so that the wind can blow freely between the rows for maximum aeration and moisture removal.

These windrows must be punctually and regularly turned every 5-7 days, using small earthmoving equipment or even tractors with lifting arrangement for smaller quantities. The heaps can be turned to form a parallel windrow, with the innermost airless portion getting exposed to air on the outside of the new heap at each turning. Or the waste from one end of the windrow can be lifted up and dropped a little forward, so the entire heap is aerated and moved a little forward in the process. At the next turning the whole heap can be moved backward again similarly, if space is a constraint. Leave enough space between windrows for movement of turning equipment.

When the heaps are so hot inside that a lot of white water vapour like steam is seen coming out during turning, that is a good sign that stabilizing is going well. After 4-5 turnings, water vapour will no longer be visible and the waste will have reduced in volume by 40% and become free flowing. A germination test is the best way to ensure that the waste is stabilized and good to use. Sprinkle exactly 50 or 100 ragi seeds in one tray of stabilized waste and in a similar tray of good red soil. Water both in the same way for a week and count the sprouted seedlings. If waste is well stabilized, the numbers in it should be similar to those in the red earth.


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Smaller towns with farms nearby can keep a mesh screen available onsite for use by farmers who may wish to do some coarse screening before taking away the stabilized waste to their fields, preferably free or on nominal payment. It is never really free to farmers, who have to spend a day plus labour, and vehicle hire to take it away to their fields. But it is a huge help to cities to have their disposal sites emptied this way.

If windrow unloading and stabilizing is done for unmixed wet waste, all of the resulting material is usable. But this should invariably be done even for mixed waste. The non-biodegradable waste left over after screening may contain recyclables. These should reach the dry waste sorting centres for recycling or sustainable end of life disposal. Such Sorting Centres (SC) or Dry Waste Collection Centres (DWC) should preferably be present in every ward. Material Recovery Facilities (MRF) for processing the waste at city level should also be established based on the quantum of the waste generation. Establishment of such MRFs and DWC shall be at the discretion of Local Bodies.

Informal sector workers should be employed at such SC/DWC or MRFs to help include waste pickers into city's solid waste management together with their up-liftment. To ensure sustainable and maximum waste recovery and recycling from such centres, the prime responsibility can be contracted to competent executing agencies where disposal of dry waste can operate through the principle of Extended Producers Responsibility. The non-recyclables can be used to prepare refuse derived fuel for co-processing in cement plants or used in road making as per the city's requirement or pyrolysis etc.

11.2 Use of Screened Fractions

When planning for bio-remediation and bio-mining, it is important at the same time to identify where the screened fractions will go, in order to bring down the heap of mixed waste to fractions that would each have been usable if unmixed. None of these fractions will bring in income. In fact, their transport offsite is a cost to be budgeted for. Look for the nearest industries using solid fuel. Look for the nearest bitumen hot-mix plants and also specify Plastic Roads in road tenders to ensure offtake of the thin-film plastic fractions. Start a dialogue with all kabadiwalas within the local body to see who will be willing to pick up or accept which items. Plan for offsite aggregation space for different fractions and types of waste that will result from screening. Identify aggregation and storage sheds





for use by waste-picker groups or kabadiwalas. Identify transporters who can transport different fractions out on their return trips.

For the bio-earth or good earth finest fraction, test periodically for heavy metals, then look for farmers willing to accept it. It is excellent for reclaiming salt-affected soils and for restoration of mining overburden areas if any are nearby. There is a cess for restoration of mined areas, which is normally unspent as forest departments are supposed to revegetate them. But this is unviable in barren rocky soil by planting and watering saplings. Revegetation is instead possible and effective by mixing grass seed with the good earth fraction and spreading it on the overburden to start a natural succession of grasses, herbs, and shrubs.

11.3 Process Management:

There are several factors that must be kept in mind during implementation of the project.

11.4 Space Management:

For all waste-stabilizing methods, management of space is the biggest challenge, as aeration, stabilizing and screening mostly needs to be done within the boundaries of an already overloaded dumpsite. This is achieved mainly by experience and creative common-sense. Onsite earth-mover operators often come up with the best solutions, so seek their opinions. Every dumpsite poses a case-by-case challenge, but there is no above-ground dump that cannot be successfully bio-remediated and bio-mined.



Keep safety in mind. Always try to work downward from the top surface. Do not think of slicing waste from the top down along one side of the heap unless you can ensure leaving a stable wall of waste with a safe slope of 25 - 30 degrees while you work. Leaving a vertical wall of waste during operations can cause a dangerous landslide of disturbed waste.

11.5 Leachate Management:

Most high heaps of legacy waste are water-logged with leachate even near the topmost layers and all

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the way to the bottom, like a dhokla. This is not just from rainwater entering the heap but is produced by airless rotting within the entire waste heap. So, when legacy waste heaps are opened up, some leachate almost always trickles out. This is not produced by the formation of windrows or cones, which in fact help to dry out the waste by aerated decomposition.

Channels must be created to lead the oozing leachate rivulets to a lined depression or pond for treatment or for leachate recirculation onto windrows as a type of bio-culture. (test to see if heaps generate enough heat with its use). Leachate can also be treated in collection ponds by underwater composting. Bio-cultures that have been proved successful at other locations can be sprinkled onto the leachate pools. But intermittent aeration is a must, using small compressor pumps or aerators or airlift aeration or even simple manual or mechanical agitation. Aeration is necessary for the added microbes to do their work of digesting the polluting solids suspended in the dark and turbid leachate. Success is noticed by a progressive change in color from dark to light, by reduction or absence of odour and by fine bubbles rising to the surface from digested solids.

11.6 Fire Control and Safety:

Most large dumpsites are smoldering from hidden fires. Methane itself is flammable with a blue flame and supports the yellow flame burning of combustible plastics, cloth, and oily rags. Sometimes flammable industrial waste finds its way onto dumpsites, aggravating the problem.

It is difficult to begin bio-remediation work on a smoking dump. Sometimes digging into the dump awakens hidden fires. So, fire control is important. Adding water increases the generation of both methane and leachate and is counter-productive, not a long-term solution, adding soil cover to smother the flames adds more material to a heap that one is trying to bring down.

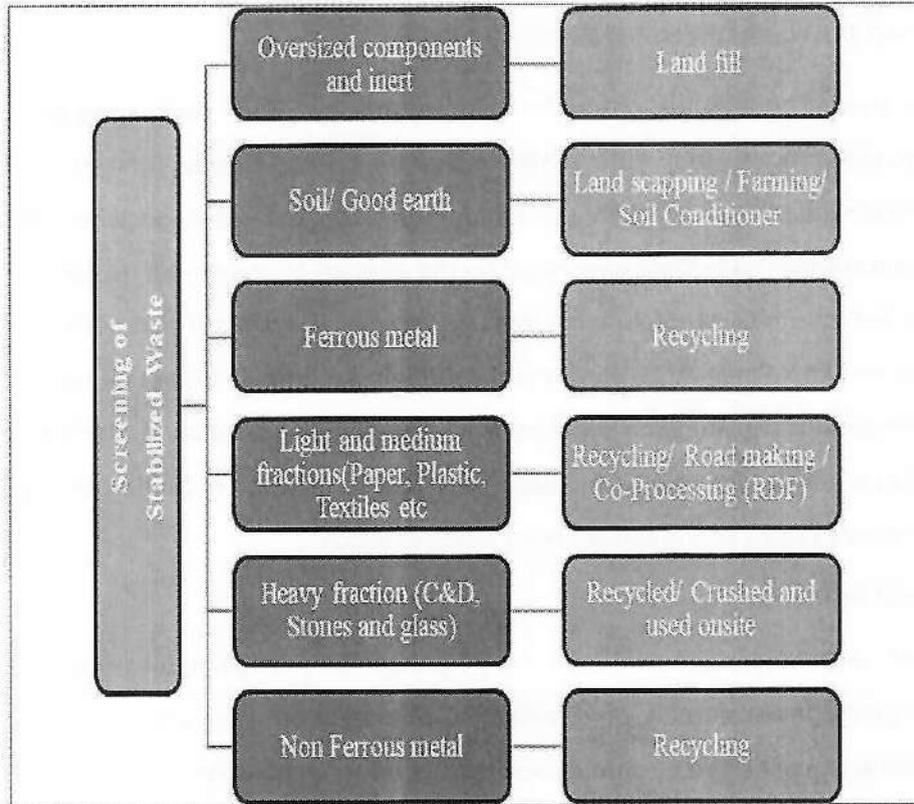
There is a better way, again requiring creative common-sense and experience and training of earth-mover drivers. Most fires within heaps have a point source – a bag of textile discards or plastic waste or a ball of oily rags. Earthmover drivers must learn to dig in and pluck out these burning balls of fire. These should be laid nearby on the surface of the dump and then rubbed out with the back of the excavator shovel to extinguish the flames and smoke. Wet soil should be kept handy to immediately plug the excavated hole. Adding composting bio-cultures can be tried, to counter the anaerobic conditions around the burning spots. Smoking points must be tackled patiently and systematically, one by one, till the dump is smoke-free to begin stabilizing operations by bioremediation.

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It is important to do the risk assessment and an onsite emergency plan should be kept handy prior to commencement of dumpsite bioremediation & bio-mining.



11.7 Use of Recovered Space:

The benefit of bio-mining lies in abatement of ongoing and future pollution and ill health and in the recovery and re-use of valuable space. This is ideally for continued long-term waste management since public consent for new waste sites is increasingly difficult because of earlier visible mismanagement of a virgin site. Ensure advance demarcation and declaration of a buffer zone of no new habitation for up to 500 meters around the cleared site to prevent real-estate activity from encroaching the buffer as soon as the dump is removed.

If a dump is engulfed within a growing city and its continued use for waste management is unsuitable, identify in advance the planned future use of that site and put up a signboard indicating that use, to ensure public acceptance of the biomining operations which will be temporarily noisy and dusty. This will also protect the site from land-grabbers.

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Cleared dumps are not permitted for habitation for at least 15 years (SWM Rules Schedule I, H (2)). This is because of unhealthy leachate below the site and formation of flammable and offensive landfill gases from waste pockets that may remain unexcavated.

Permissible options are reuse for SWM, open stadia, sports grounds, parks and gardens, parking lots, container yards, warehouses of non-flammables and similar facilities where people are not living or working all day and night.

11.8 Bio-mining Below-Ground Waste

Many cities and towns chose abandoned quarry-pits to dump untreated waste, without realizing the permanently harmful effects of this. Leachate oozing out at the bottom of the pit cannot be seen or captured or treated and enters both shallow and deep groundwater through fissures in the rock. The hydrostatic pressure in deep quarries, as divers experience at increasing depths, forces the leachate even more forcefully into the cracks. Dark and smelly water pollution begins to show up in nearby wells and bore wells after a year or further away even after 3-4 years, after which the damage is irreversible.

But leachate in an airless rotting mass continues to form for up to 30 years, so further damage can be prevented by bio-mining the quarry-pits. This has also been ordered by the NGT (in OA 179 of 2017). The waste needs to be excavated in descending layers like any open-cast mining and unloaded on the surface in windrows or conical heaps which can be turned weekly for 5- 6 weeks before screening. Use of bio cultures is most important here, to control odour and the leachate which will run out while placing excavated material. Adding bio-cultures into the pit without excavation will not give the waste and the digesting microbes the air needed for stabilizing the waste.

Immediate stoppage of further quarry-dumping of untreated waste is the most important action. The excavated quarry-pit, or any other quarry-pits that are planned for waste disposal, must first be filled to ground level with only debris and construction and demolition waste up to slightly above surrounding ground level. The newly created space can then be used for waste stabilizing by unloading fresh waste in windrows here and turning them regularly. Any small quantity of leachate produced will be visible as it runs out from the edges of the heaps. Bio- mining /screening may have to be interrupted during monsoons, both above grounds and below ground.



12. ENVIRONMENTAL RISKS AND ENVIRONMENTAL MANAGEMENT PLAN

There are several potential environmental risks associated with bio-mining projects and therefore a plan addressing these potential risks should be kept ready. Most of the conditions present at the landfill and its surroundings will be unique to the specific landfill, and specific to the age of the waste being excavated.

Majorly the risks would be associated with proper management of hazardous waste that may be uncovered during the operations of reclamation, managing the releases of gases, odours, its associated risks to human health and controlling any fire, subsidence or collapse.

Environmental risks can be managed well if considered in advance of the operations and appropriate mitigation measures have been designed by the executing agency.

12.1 Environment Management Plan

In consideration to the prevailing site features and the proposed Solid Waste Management Facilities, it is necessary to ensure that the proposed plant and facilities would be adequately designed with necessary environment protection measures. This Chapter accordingly outlines the environment protection measures for the proposed dumpsite remediation for Lohiya Nagar Plant. During project implementation period special emphasis would be made on measures to minimize leachate/ effluent generation and dust control at source. The sources and types of pollution with broad level mitigation measures is outlined in the following sections.

1. Air Pollution Measures

Air environment including Ambient Air Quality and odour generation due to the proposed project during construction and operational phases would be accounted. The principal sources of air pollution are construction activities, truck movement with construction materials and municipal solid waste, loading and unloading of materials, vehicular exhaust. The impact is generally confined to the project area and is expected to be negligible outside the project site boundaries. The pollutants their sources and mitigation measures to be adopted are presented in below **table XX**.

2. Water Pollution Measures

The water demand for the project which would be in the range of 3 KLD. No surface water would be tapped. The source of water would be the Ground water. The main wastewater generation

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sources during construction phases would be equipment washed water and other surface run-off with suspended solids loading and sewage from temporary sanitary facilities with BOD loading. During construction activity the surface run-off would be diverted to working pit to arrest the suspended solids if any and the settled water would be reused for construction purposes, and for sprinkling on roads to control the dust emission, etc. During operation phase, the wastewater would be from drinking and sanitary use, leachate from bioremediation/windrows area. The domestic wastewater would be treated in septic tank followed by Soak pit. Maximum leachate generation from the windrows and other areas would be treated.

The Leachate generated at various places in the plant would be collected and properly treated in an LTP. The treated leachate would be sprayed on windrow to maintain suitable temperature and moisture. Leachate generated during precipitation period would be stored in evaporation pond. Based on the rainfall intensity of the plant area, separate storm water drainage system would be properly designed. Storm water would be collected in a centralized pit to arrest the silt particulates and clear water would be used locally for landscaping and fountains. Surplus water would be released into public drains or adjacent nala. The pollutants their sources and mitigation measures to be adopted are given below.

3. Solid Waste Disposal

During the construction phase, the solid waste would be different types of raw materials such as coarse aggregate, fines aggregate, bricks, steel etc. being used during construction stage. The solid waste generated during this period would be predominantly inert in nature. During operation phase appropriate management of solid rejects from different processing activity would be undertaken. Sanitary landfilling would be adopted for rejects generated from processing. The pollutants, their sources and mitigation measures to be adopted are presented in Table

| Sl. No. | Pollution Source | Pollution Emitted | Mitigation Measures |
|--|-------------------------|--|--|
| Air Pollution Mitigation Measures | | | |
| 1 | Construction activities | SO ₂ , NO _x , Particulates, | <ul style="list-style-type: none"> • Dust suppression by water sprinkling. • Bitumen covered internal roads. • Wheel Washing Bay at the entry point. • Vehicles carrying of construction |
| 2 | Vehicular Movement | Odour etc., | |

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|--|---------------------------------|--|---|
| 3 | Loading and unloading of trucks | | materials and waste to be covered with tarpaulin / plastic sheet. |
| 4 | Processing of waste | | <ul style="list-style-type: none"> waste handling area rest to be covered Provision of green belt |
| Water Pollution Mitigation Measures | | | |
| 5 | Domestic Waste | Suspended solids, BOD, etc., | <ul style="list-style-type: none"> Septic Tank/Soak Pit. LTP for recycling. Storm water drainage system. |
| 6 | Leachate from windrow area | | |
| Solid Waste Management | | | |
| 7 | Construction | Construction materials e.g. coarse aggregate, fines aggregate, bricks, steel etc., | Recycled or used for filing/ levelling of low-lying areas within the site or transported outside. |

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4. Noise

Noise pollution would be resulted from transportation, construction phase and processing phase. To reduce noise pollution, high-grade machinery would be used. There would not be any major noise-causing activity during operational phase.

5. Ecology of area

Site clearing or operational activities would not impact the ecology of the area adversely, since there are no known rare, endangered, or ecologically significant animal and plant species in the area. The scientific processing would have a beneficial impact on the surrounding terrestrial and aquatic ecology

6. Green Belt Development

In order to arrest wind borne fugitive dusts around the plant boundary with about 3-5 m wide green coverage based on locally available plant species. The green belt developed would help to capture the fugitive emissions, attenuate the noise generation and improve the aesthetics. All open spaces, where tree plantation may not be possible, would be covered with shrubs and grass to prevent erosion of topsoil.

ANNEXURE 1: CONTOUR SURVEY REPORT

| QTY Sheet of Garbage area | | | | | | |
|---------------------------|--------|----------|---------|--------------|----------|----------|
| Chainage | Offset | Dump Lvl | Avg NGL | Actual Diff. | Avg Diff | Distance |
| 0 | 0 | 100.767 | 99 | 1.767 | | |
| 0 | 10 | 100.767 | 99 | 1.767 | 0 | -10 |
| 0 | 20 | 99.838 | 99 | 0.838 | 0.929 | -10 |
| 0 | 30 | 99.785 | 99 | 0.785 | 0.053 | -10 |
| 0 | 40 | 99.789 | 99 | 0.789 | -0.004 | -10 |
| 0 | 50 | 99.687 | 99 | 0.687 | 0.102 | -10 |
| 0 | 60 | 99.827 | 99 | 0.827 | -0.14 | -10 |
| 0 | 70 | 99.946 | 99 | 0.946 | -0.119 | -10 |
| 0 | 80 | 100.066 | 99 | 1.066 | -0.12 | -10 |
| 0 | 90 | 100.1 | 99 | 1.1 | -0.034 | -10 |
| 0 | 100 | 100.652 | 99 | 1.652 | -0.552 | -10 |
| 0 | 110 | 101.96 | 99 | 2.96 | -1.308 | -10 |
| 0 | 120 | 100.644 | 99 | 1.644 | 1.316 | -10 |
| 0 | 130 | 100.647 | 99 | 1.647 | -0.003 | -10 |
| 0 | 140 | 100.323 | 99 | 1.323 | 0.324 | -10 |
| 0 | 150 | 100.126 | 99 | 1.126 | 0.197 | -10 |
| 0 | 160 | 99.929 | 99 | 0.929 | 0.197 | -10 |
| 0 | 170 | 99.977 | 99 | 0.977 | -0.048 | -10 |
| 0 | 180 | 99.942 | 99 | 0.942 | 0.035 | -10 |
| 0 | 190 | 100.077 | 99 | 1.077 | -0.135 | -10 |
| 0 | 200 | 100.796 | 99 | 1.796 | -0.719 | -10 |
| 0 | 210 | 100.747 | 99 | 1.747 | 0.049 | -10 |
| 0 | 220 | 100.986 | 99 | 1.986 | -0.239 | -10 |
| 0 | 230 | 101.042 | 99 | 2.042 | -0.056 | -10 |
| 0 | 240 | 100.462 | 99 | 1.462 | 0.58 | -10 |
| 0 | 250 | 100.345 | 99 | 1.345 | 0.117 | -10 |
| 0 | 260 | 100.379 | 99 | 1.379 | -0.034 | -10 |
| 0 | 270 | 100.572 | 99 | 1.572 | -0.193 | -10 |
| 0 | 280 | 100.524 | 99 | 1.524 | 0.048 | -10 |
| 10 | 0 | 100.85 | 99 | 1.85 | | |
| 10 | 10 | 100.373 | 99 | 1.373 | 0.477 | -10 |
| 10 | 20 | 101.013 | 99 | 2.013 | -0.64 | -10 |
| 10 | 30 | 101.854 | 99 | 2.854 | -0.841 | -10 |
| 10 | 40 | 102.282 | 99 | 3.282 | -0.428 | -10 |
| 10 | 50 | 101.457 | 99 | 2.457 | 0.825 | -10 |
| 10 | 60 | 101.558 | 99 | 2.558 | -0.101 | -10 |
| 10 | 70 | 100.306 | 99 | 1.306 | 1.252 | -10 |
| 10 | 80 | 101.143 | 99 | 2.143 | -0.837 | -10 |
| 10 | 90 | 102.787 | 99 | 3.787 | -1.644 | -10 |
| 10 | 100 | 102.787 | 99 | 3.787 | 0 | -10 |
| 10 | 110 | 102.787 | 99 | 3.787 | 0 | -10 |
| 10 | 120 | 103.788 | 99 | 4.788 | -1.001 | -10 |
| 10 | 130 | 100.802 | 99 | 1.802 | 2.986 | -10 |
| 10 | 140 | 100.802 | 99 | 1.802 | 0 | -10 |

| | | | | | | |
|----|-----|---------|----|-------|--------|-----|
| 10 | 150 | 100.765 | 99 | 1.765 | 0.037 | -10 |
| 10 | 160 | 100.789 | 99 | 1.789 | -0.024 | -10 |
| 10 | 170 | 100.988 | 99 | 1.988 | -0.199 | -10 |
| 10 | 180 | 100.945 | 99 | 1.945 | 0.043 | -10 |
| 10 | 190 | 100.688 | 99 | 1.688 | 0.257 | -10 |
| 10 | 200 | 101.954 | 99 | 2.954 | -1.266 | -10 |
| 10 | 210 | 103.511 | 99 | 4.511 | -1.557 | -10 |
| 10 | 220 | 102.839 | 99 | 3.839 | 0.672 | -10 |
| 10 | 230 | 103.428 | 99 | 4.428 | -0.589 | -10 |
| 10 | 240 | 103.982 | 99 | 4.982 | -0.554 | -10 |
| 10 | 250 | 103.545 | 99 | 4.545 | 0.437 | -10 |
| 10 | 260 | 104.434 | 99 | 5.434 | -0.889 | -10 |
| 10 | 270 | 104.802 | 99 | 5.802 | -0.368 | -10 |
| 10 | 280 | 105.055 | 99 | 6.055 | -0.253 | -10 |
| 10 | 290 | 105.062 | 99 | 6.062 | -0.007 | -10 |
| 10 | 300 | 105.073 | 99 | 6.073 | -0.011 | -10 |
| 20 | 0 | 102.975 | 99 | 3.975 | | |
| 20 | 10 | 103.148 | 99 | 4.148 | -0.173 | -10 |
| 20 | 20 | 103.06 | 99 | 4.06 | 0.088 | -10 |
| 20 | 30 | 104.487 | 99 | 5.487 | -1.427 | -10 |
| 20 | 40 | 103.419 | 99 | 4.419 | 1.068 | -10 |
| 20 | 50 | 103.377 | 99 | 4.377 | 0.042 | -10 |
| 20 | 60 | 103.017 | 99 | 4.017 | 0.36 | -10 |
| 20 | 70 | 102.451 | 99 | 3.451 | 0.566 | -10 |
| 20 | 80 | 102.448 | 99 | 3.448 | 0.003 | -10 |
| 20 | 90 | 103.67 | 99 | 4.67 | -1.222 | -10 |
| 20 | 100 | 103.223 | 99 | 4.223 | 0.447 | -10 |
| 20 | 110 | 103.204 | 99 | 4.204 | 0.019 | -10 |
| 20 | 120 | 102.649 | 99 | 3.649 | 0.555 | -10 |
| 20 | 130 | 103.235 | 99 | 4.235 | -0.586 | -10 |
| 20 | 140 | 103.356 | 99 | 4.356 | -0.121 | -10 |
| 20 | 150 | 103.656 | 99 | 4.656 | -0.3 | -10 |
| 20 | 160 | 104.215 | 99 | 5.215 | -0.559 | -10 |
| 20 | 170 | 104.291 | 99 | 5.291 | -0.076 | -10 |
| 20 | 180 | 102.51 | 99 | 3.51 | 1.781 | -10 |
| 20 | 190 | 102.572 | 99 | 3.572 | -0.062 | -10 |
| 20 | 200 | 104.319 | 99 | 5.319 | -1.747 | -10 |
| 20 | 210 | 103.409 | 99 | 4.409 | 0.91 | -10 |
| 20 | 220 | 102.886 | 99 | 3.886 | 0.523 | -10 |
| 20 | 230 | 103.675 | 99 | 4.675 | -0.789 | -10 |
| 20 | 240 | 100.854 | 99 | 1.854 | 2.821 | -10 |
| 20 | 250 | 100.714 | 99 | 1.714 | 0.14 | -10 |
| 20 | 260 | 100.756 | 99 | 1.756 | -0.042 | -10 |
| 20 | 270 | 101.604 | 99 | 2.604 | -0.848 | -10 |
| 20 | 280 | 102.127 | 99 | 3.127 | -0.523 | -10 |
| 20 | 290 | 102.114 | 99 | 3.114 | 0.013 | -10 |
| 20 | 300 | 102.945 | 99 | 3.945 | -0.831 | -10 |

| | | | | | | |
|----|-----|---------|----|-------|--------|-----|
| 20 | 310 | 104.532 | 99 | 5.532 | -1.587 | -10 |
| 20 | 320 | 105.625 | 99 | 6.625 | -1.093 | -10 |
| 30 | 0 | 104.236 | 99 | 5.236 | | |
| 30 | 10 | 104.649 | 99 | 5.649 | -0.413 | -10 |
| 30 | 20 | 104.762 | 99 | 5.762 | -0.113 | -10 |
| 30 | 30 | 104.291 | 99 | 5.291 | 0.471 | -10 |
| 30 | 40 | 104.869 | 99 | 5.869 | -0.578 | -10 |
| 30 | 50 | 105.647 | 99 | 6.647 | -0.778 | -10 |
| 30 | 60 | 105.693 | 99 | 6.693 | -0.046 | -10 |
| 30 | 70 | 105.945 | 99 | 6.945 | -0.252 | -10 |
| 30 | 80 | 106.297 | 99 | 7.297 | -0.352 | -10 |
| 30 | 90 | 106.241 | 99 | 7.241 | 0.056 | -10 |
| 30 | 100 | 105.497 | 99 | 6.497 | 0.744 | -10 |
| 30 | 110 | 104.753 | 99 | 5.753 | 0.744 | -10 |
| 30 | 120 | 104.972 | 99 | 5.972 | -0.219 | -10 |
| 30 | 130 | 104.37 | 99 | 5.37 | 0.602 | -10 |
| 30 | 140 | 104.323 | 99 | 5.323 | 0.047 | -10 |
| 30 | 150 | 104.291 | 99 | 5.291 | 0.032 | -10 |
| 30 | 160 | 104.259 | 99 | 5.259 | 0.032 | -10 |
| 30 | 170 | 104.368 | 99 | 5.368 | -0.109 | -10 |
| 30 | 180 | 104.744 | 99 | 5.744 | -0.376 | -10 |
| 30 | 190 | 106.336 | 99 | 7.336 | -1.592 | -10 |
| 30 | 200 | 105.102 | 99 | 6.102 | 1.234 | -10 |
| 30 | 210 | 104.056 | 99 | 5.056 | 1.046 | -10 |
| 30 | 220 | 103.201 | 99 | 4.201 | 0.855 | -10 |
| 30 | 230 | 105.236 | 99 | 6.236 | -2.035 | -10 |
| 30 | 240 | 106.054 | 99 | 7.054 | -0.818 | -10 |
| 30 | 250 | 107.548 | 99 | 8.548 | -1.494 | -10 |
| 30 | 260 | 107.59 | 99 | 8.59 | -0.042 | -10 |
| 30 | 270 | 103.288 | 99 | 4.288 | 4.302 | -10 |
| 30 | 280 | 103.18 | 99 | 4.18 | 0.108 | -10 |
| 30 | 290 | 105.933 | 99 | 6.933 | -2.753 | -10 |
| 30 | 300 | 104.216 | 99 | 5.216 | 1.717 | -10 |
| 30 | 310 | 103.581 | 99 | 4.581 | 0.635 | -10 |
| 30 | 320 | 100.452 | 99 | 1.452 | 3.129 | -10 |
| 30 | 330 | 100.034 | 99 | 1.034 | 0.418 | -10 |
| 30 | 340 | 100.542 | 99 | 1.542 | -0.508 | -10 |
| 40 | 0 | 101.189 | 99 | 2.189 | | |
| 40 | 10 | 102.038 | 99 | 3.038 | -0.849 | -10 |
| 40 | 20 | 102.886 | 99 | 3.886 | -0.848 | -10 |
| 40 | 30 | 103.659 | 99 | 4.659 | -0.773 | -10 |
| 40 | 40 | 104.191 | 99 | 5.191 | -0.532 | -10 |
| 40 | 50 | 104.722 | 99 | 5.722 | -0.531 | -10 |
| 40 | 60 | 105.254 | 99 | 6.254 | -0.532 | -10 |
| 40 | 70 | 105.765 | 99 | 6.765 | -0.511 | -10 |
| 40 | 80 | 105.871 | 99 | 6.871 | -0.106 | -10 |
| 40 | 90 | 105.525 | 99 | 6.525 | 0.346 | -10 |

| | | | | | | |
|----|-----|---------|----|--------|--------|-----|
| 40 | 100 | 104.906 | 99 | 5.906 | 0.619 | -10 |
| 40 | 110 | 105.16 | 99 | 6.16 | -0.254 | -10 |
| 40 | 120 | 106.387 | 99 | 7.387 | -1.227 | -10 |
| 40 | 130 | 106.458 | 99 | 7.458 | -0.071 | -10 |
| 40 | 140 | 106.81 | 99 | 7.81 | -0.352 | -10 |
| 40 | 150 | 107.624 | 99 | 8.624 | -0.814 | -10 |
| 40 | 160 | 107.853 | 99 | 8.853 | -0.229 | -10 |
| 40 | 170 | 107.138 | 99 | 8.138 | 0.715 | -10 |
| 40 | 180 | 106.424 | 99 | 7.424 | 0.714 | -10 |
| 40 | 190 | 105.633 | 99 | 6.633 | 0.791 | -10 |
| 40 | 200 | 105.321 | 99 | 6.321 | 0.312 | -10 |
| 40 | 210 | 105.27 | 99 | 6.27 | 0.051 | -10 |
| 40 | 220 | 105.185 | 99 | 6.185 | 0.085 | -10 |
| 40 | 230 | 104.439 | 99 | 5.439 | 0.746 | -10 |
| 40 | 240 | 104.331 | 99 | 5.331 | 0.108 | -10 |
| 40 | 250 | 105.951 | 99 | 6.951 | -1.62 | -10 |
| 40 | 260 | 107.459 | 99 | 8.459 | -1.508 | -10 |
| 40 | 270 | 105.102 | 99 | 6.102 | 2.357 | -10 |
| 40 | 280 | 104.787 | 99 | 5.787 | 0.315 | -10 |
| 40 | 290 | 104.2 | 99 | 5.2 | 0.587 | -10 |
| 40 | 300 | 105.156 | 99 | 6.156 | -0.956 | -10 |
| 40 | 310 | 109.055 | 99 | 10.055 | -3.899 | -10 |
| 40 | 320 | 108.25 | 99 | 9.25 | 0.805 | -10 |
| 40 | 330 | 106.794 | 99 | 7.794 | 1.456 | -10 |
| 40 | 340 | 101.9 | 99 | 2.9 | 4.894 | -10 |
| 50 | 0 | 103.057 | 99 | 4.057 | | |
| 50 | 10 | 106.234 | 99 | 7.234 | -3.177 | -10 |
| 50 | 20 | 107.015 | 99 | 8.015 | -0.781 | -10 |
| 50 | 30 | 106.706 | 99 | 7.706 | 0.309 | -10 |
| 50 | 40 | 99.27 | 99 | 0.27 | 7.436 | -10 |
| 50 | 50 | 100.034 | 99 | 1.034 | -0.764 | -10 |
| 50 | 60 | 100.746 | 99 | 1.746 | -0.712 | -10 |
| 50 | 70 | 102.018 | 99 | 3.018 | -1.272 | -10 |
| 50 | 80 | 103.003 | 99 | 4.003 | -0.985 | -10 |
| 50 | 90 | 103.047 | 99 | 4.047 | -0.044 | -10 |
| 50 | 100 | 102.767 | 99 | 3.767 | 0.28 | -10 |
| 50 | 110 | 103.384 | 99 | 4.384 | -0.617 | -10 |
| 50 | 120 | 103.915 | 99 | 4.915 | -0.531 | -10 |
| 50 | 130 | 104.552 | 99 | 5.552 | -0.637 | -10 |
| 50 | 140 | 105.592 | 99 | 6.592 | -1.04 | -10 |
| 50 | 150 | 106.039 | 99 | 7.039 | -0.447 | -10 |
| 50 | 160 | 105.468 | 99 | 6.468 | 0.571 | -10 |
| 50 | 170 | 104.549 | 99 | 5.549 | 0.919 | -10 |
| 50 | 180 | 105.619 | 99 | 6.619 | -1.07 | -10 |
| 50 | 190 | 106.678 | 99 | 7.678 | -1.059 | -10 |
| 50 | 200 | 107.387 | 99 | 8.387 | -0.709 | -10 |
| 50 | 210 | 108.249 | 99 | 9.249 | -0.862 | -10 |

| | | | | | | |
|----|-----|---------|----|--------|--------|-----|
| 50 | 220 | 109.111 | 99 | 10.111 | -0.862 | -10 |
| 50 | 230 | 109.597 | 99 | 10.597 | -0.486 | -10 |
| 50 | 240 | 108.311 | 99 | 9.311 | 1.286 | -10 |
| 50 | 250 | 107.026 | 99 | 8.026 | 1.285 | -10 |
| 50 | 260 | 105.74 | 99 | 6.74 | 1.286 | -10 |
| 50 | 270 | 106.272 | 99 | 7.272 | -0.532 | -10 |
| 50 | 280 | 105.774 | 99 | 6.774 | 0.498 | -10 |
| 50 | 290 | 104.974 | 99 | 5.974 | 0.8 | -10 |
| 50 | 300 | 104.691 | 99 | 5.691 | 0.283 | -10 |
| 50 | 310 | 104.584 | 99 | 5.584 | 0.107 | -10 |
| 50 | 320 | 105.147 | 99 | 6.147 | -0.563 | -10 |
| 50 | 330 | 105.887 | 99 | 6.887 | -0.74 | -10 |
| 50 | 340 | 105.505 | 99 | 6.505 | 0.382 | -10 |
| 60 | 0 | 105.235 | 99 | 6.235 | | |
| 60 | 10 | 104.965 | 99 | 5.965 | 0.27 | -10 |
| 60 | 20 | 105.255 | 99 | 6.255 | -0.29 | -10 |
| 60 | 30 | 105.688 | 99 | 6.688 | -0.433 | -10 |
| 60 | 40 | 105.137 | 99 | 6.137 | 0.551 | -10 |
| 60 | 50 | 103.405 | 99 | 4.405 | 1.732 | -10 |
| 60 | 60 | 99.896 | 99 | 0.896 | 3.509 | -10 |
| 60 | 70 | 104.463 | 99 | 5.463 | -4.567 | -10 |
| 60 | 80 | 104.928 | 99 | 5.928 | -0.465 | -10 |
| 60 | 90 | 104.138 | 99 | 5.138 | 0.79 | -10 |
| 60 | 100 | 102.453 | 99 | 3.453 | 1.685 | -10 |
| 60 | 110 | 99.074 | 99 | 0.074 | 3.379 | -10 |
| 60 | 120 | 100.152 | 99 | 1.152 | -1.078 | -10 |
| 60 | 130 | 101.934 | 99 | 2.934 | -1.782 | -10 |
| 60 | 140 | 103.032 | 99 | 4.032 | -1.098 | -10 |
| 60 | 150 | 102.749 | 99 | 3.749 | 0.283 | -10 |
| 60 | 160 | 102.465 | 99 | 3.465 | 0.284 | -10 |
| 60 | 170 | 102.182 | 99 | 3.182 | 0.283 | -10 |
| 60 | 180 | 102.069 | 99 | 3.069 | 0.113 | -10 |
| 60 | 190 | 103.108 | 99 | 4.108 | -1.039 | -10 |
| 60 | 200 | 104.002 | 99 | 5.002 | -0.894 | -10 |
| 60 | 210 | 104.357 | 99 | 5.357 | -0.355 | -10 |
| 60 | 220 | 104.712 | 99 | 5.712 | -0.355 | -10 |
| 60 | 230 | 104.212 | 99 | 5.212 | 0.5 | -10 |
| 60 | 240 | 102.991 | 99 | 3.991 | 1.221 | -10 |
| 60 | 250 | 104.315 | 99 | 5.315 | -1.324 | -10 |
| 60 | 260 | 107.096 | 99 | 8.096 | -2.781 | -10 |
| 60 | 270 | 109.039 | 99 | 10.039 | -1.943 | -10 |
| 60 | 280 | 110.086 | 99 | 11.086 | -1.047 | -10 |
| 60 | 290 | 110.982 | 99 | 11.982 | -0.896 | -10 |
| 60 | 300 | 110.024 | 99 | 11.024 | 0.958 | -10 |
| 60 | 310 | 108.419 | 99 | 9.419 | 1.605 | -10 |
| 60 | 320 | 107.133 | 99 | 8.133 | 1.286 | -10 |
| 60 | 330 | 106.068 | 99 | 7.068 | 1.065 | -10 |

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|----|-----|---------|----|--------|--------|-----|
| 60 | 340 | 106.212 | 99 | 7.212 | -0.144 | -10 |
| 60 | 350 | 105.563 | 99 | 6.563 | 0.649 | -10 |
| 70 | 0 | 105.05 | 99 | 6.05 | | |
| 70 | 10 | 104.933 | 99 | 5.933 | 0.117 | -10 |
| 70 | 20 | 104.056 | 99 | 5.056 | 0.877 | -10 |
| 70 | 30 | 102.949 | 99 | 3.949 | 1.107 | -10 |
| 70 | 40 | 105.712 | 99 | 6.712 | -2.763 | -10 |
| 70 | 50 | 105.716 | 99 | 6.716 | -0.004 | -10 |
| 70 | 60 | 105.801 | 99 | 6.801 | -0.085 | -10 |
| 70 | 70 | 105.576 | 99 | 6.576 | 0.225 | -10 |
| 70 | 80 | 104.83 | 99 | 5.83 | 0.746 | -10 |
| 70 | 90 | 104.303 | 99 | 5.303 | 0.527 | -10 |
| 70 | 100 | 102.691 | 99 | 3.691 | 1.612 | -10 |
| 70 | 110 | 101.079 | 99 | 2.079 | 1.612 | -10 |
| 70 | 120 | 99.805 | 99 | 0.805 | 1.274 | -10 |
| 70 | 130 | 101.936 | 99 | 2.936 | -2.131 | -10 |
| 70 | 140 | 102.426 | 99 | 3.426 | -0.49 | -10 |
| 70 | 150 | 102.241 | 99 | 3.241 | 0.185 | -10 |
| 70 | 160 | 100.789 | 99 | 1.789 | 1.452 | -10 |
| 70 | 170 | 99.075 | 99 | 0.075 | 1.714 | -10 |
| 70 | 180 | 100.503 | 99 | 1.503 | -1.428 | -10 |
| 70 | 190 | 104.137 | 99 | 5.137 | -3.634 | -10 |
| 70 | 200 | 103.987 | 99 | 4.987 | 0.15 | -10 |
| 70 | 210 | 103.45 | 99 | 4.45 | 0.537 | -10 |
| 70 | 220 | 102.912 | 99 | 3.912 | 0.538 | -10 |
| 70 | 230 | 102.375 | 99 | 3.375 | 0.537 | -10 |
| 70 | 240 | 102.305 | 99 | 3.305 | 0.07 | -10 |
| 70 | 250 | 104.483 | 99 | 5.483 | -2.178 | -10 |
| 70 | 260 | 103.185 | 99 | 4.185 | 1.298 | -10 |
| 70 | 270 | 103.218 | 99 | 4.218 | -0.033 | -10 |
| 70 | 280 | 103.757 | 99 | 4.757 | -0.539 | -10 |
| 70 | 290 | 104.246 | 99 | 5.246 | -0.489 | -10 |
| 70 | 300 | 103.526 | 99 | 4.526 | 0.72 | -10 |
| 70 | 310 | 106.317 | 99 | 7.317 | -2.791 | -10 |
| 70 | 320 | 107.658 | 99 | 8.658 | -1.341 | -10 |
| 70 | 330 | 109.861 | 99 | 10.861 | -2.203 | -10 |
| 70 | 340 | 111.992 | 99 | 12.992 | -2.131 | -10 |
| 70 | 350 | 112.151 | 99 | 13.151 | -0.159 | -10 |
| 80 | 0 | 110.522 | 99 | 11.522 | | |
| 80 | 10 | 108.893 | 99 | 9.893 | 1.629 | -10 |
| 80 | 20 | 107.264 | 99 | 8.264 | 1.629 | -10 |
| 80 | 30 | 106.4 | 99 | 7.4 | 0.864 | -10 |
| 80 | 40 | 105.843 | 99 | 6.843 | 0.557 | -10 |
| 80 | 50 | 105.05 | 99 | 6.05 | 0.793 | -10 |
| 80 | 60 | 103.91 | 99 | 4.91 | 1.14 | -10 |
| 80 | 70 | 102.927 | 99 | 3.927 | 0.983 | -10 |
| 80 | 80 | 102.051 | 99 | 3.051 | 0.876 | -10 |

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|----|-----|---------|----|--------|--------|-----|
| 80 | 90 | 102.891 | 99 | 3.891 | -0.84 | -10 |
| 80 | 100 | 105.307 | 99 | 6.307 | -2.416 | -10 |
| 80 | 110 | 105.716 | 99 | 6.716 | -0.409 | -10 |
| 80 | 120 | 105.136 | 99 | 6.136 | 0.58 | -10 |
| 80 | 130 | 106.643 | 99 | 7.643 | -1.507 | -10 |
| 80 | 140 | 106.881 | 99 | 7.881 | -0.238 | -10 |
| 80 | 150 | 104.737 | 99 | 5.737 | 2.144 | -10 |
| 80 | 160 | 101.636 | 99 | 2.636 | 3.101 | -10 |
| 80 | 170 | 99.886 | 99 | 0.886 | 1.75 | -10 |
| 80 | 180 | 99.86 | 99 | 0.86 | 0.026 | -10 |
| 80 | 190 | 100.455 | 99 | 1.455 | -0.595 | -10 |
| 80 | 200 | 100.619 | 99 | 1.619 | -0.164 | -10 |
| 80 | 210 | 98.79 | 99 | -0.21 | 1.829 | -10 |
| 80 | 220 | 99.571 | 99 | 0.571 | -0.781 | -10 |
| 80 | 230 | 100.855 | 99 | 1.855 | -1.284 | -10 |
| 80 | 240 | 107.39 | 99 | 8.39 | -6.535 | -10 |
| 80 | 250 | 107.733 | 99 | 8.733 | -0.343 | -10 |
| 80 | 260 | 106.918 | 99 | 7.918 | 0.815 | -10 |
| 80 | 270 | 105.854 | 99 | 6.854 | 1.064 | -10 |
| 80 | 280 | 104.824 | 99 | 5.824 | 1.03 | -10 |
| 80 | 290 | 107.617 | 99 | 8.617 | -2.793 | -10 |
| 80 | 300 | 109.865 | 99 | 10.865 | -2.248 | -10 |
| 80 | 310 | 107.239 | 99 | 8.239 | 2.626 | -10 |
| 80 | 320 | 102.795 | 99 | 3.795 | 4.444 | -10 |
| 80 | 330 | 103.612 | 99 | 4.612 | -0.817 | -10 |
| 80 | 340 | 104.545 | 99 | 5.545 | -0.933 | -10 |
| 80 | 350 | 105.538 | 99 | 6.538 | -0.993 | -10 |
| 80 | 360 | 106.847 | 99 | 7.847 | -1.309 | -10 |
| 90 | 0 | 108.481 | 99 | 9.481 | | |
| 90 | 10 | 110.684 | 99 | 11.684 | -2.203 | -10 |
| 90 | 20 | 113.091 | 99 | 14.091 | -2.407 | -10 |
| 90 | 30 | 112.448 | 99 | 13.448 | 0.643 | -10 |
| 90 | 40 | 110.819 | 99 | 11.819 | 1.629 | -10 |
| 90 | 50 | 109.19 | 99 | 10.19 | 1.629 | -10 |
| 90 | 60 | 107.512 | 99 | 8.512 | 1.678 | -10 |
| 90 | 70 | 105.881 | 99 | 6.881 | 1.631 | -10 |
| 90 | 80 | 104.985 | 99 | 5.985 | 0.896 | -10 |
| 90 | 90 | 104.242 | 99 | 5.242 | 0.743 | -10 |
| 90 | 100 | 103.341 | 99 | 4.341 | 0.901 | -10 |
| 90 | 110 | 102.419 | 99 | 3.419 | 0.922 | -10 |
| 90 | 120 | 101.856 | 99 | 2.856 | 0.563 | -10 |
| 90 | 130 | 103.466 | 99 | 4.466 | -1.61 | -10 |
| 90 | 140 | 105.57 | 99 | 6.57 | -2.104 | -10 |
| 90 | 150 | 107.019 | 99 | 8.019 | -1.449 | -10 |
| 90 | 160 | 105.767 | 99 | 6.767 | 1.252 | -10 |
| 90 | 170 | 106.805 | 99 | 7.805 | -1.038 | -10 |
| 90 | 180 | 106.754 | 99 | 7.754 | 0.051 | -10 |

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|-----|-----|---------|----|--------|--------|-----|
| 90 | 190 | 104.679 | 99 | 5.679 | 2.075 | -10 |
| 90 | 200 | 101.873 | 99 | 2.873 | 2.806 | -10 |
| 90 | 210 | 99.453 | 99 | 0.453 | 2.42 | -10 |
| 90 | 220 | 99.781 | 99 | 0.781 | -0.328 | -10 |
| 90 | 230 | 99.949 | 99 | 0.949 | -0.168 | -10 |
| 90 | 240 | 99.692 | 99 | 0.692 | 0.257 | -10 |
| 90 | 250 | 100.657 | 99 | 1.657 | -0.965 | -10 |
| 90 | 260 | 106.334 | 99 | 7.334 | -5.677 | -10 |
| 90 | 270 | 110.405 | 99 | 11.405 | -4.071 | -10 |
| 90 | 280 | 108.952 | 99 | 9.952 | 1.453 | -10 |
| 90 | 290 | 107.779 | 99 | 8.779 | 1.173 | -10 |
| 90 | 300 | 108.299 | 99 | 9.299 | -0.52 | -10 |
| 90 | 310 | 109.716 | 99 | 10.716 | -1.417 | -10 |
| 90 | 320 | 109.438 | 99 | 10.438 | 0.278 | -10 |
| 90 | 330 | 108.13 | 99 | 9.13 | 1.308 | -10 |
| 90 | 340 | 103.845 | 99 | 4.845 | 4.285 | -10 |
| 90 | 350 | 103.29 | 99 | 4.29 | 0.555 | -10 |
| 90 | 360 | 104.109 | 99 | 5.109 | -0.819 | -10 |
| 100 | 0 | 105.059 | 99 | 6.059 | | |
| 100 | 10 | 107.376 | 99 | 8.376 | -2.317 | -10 |
| 100 | 20 | 109.374 | 99 | 10.374 | -1.998 | -10 |
| 100 | 30 | 112.105 | 99 | 13.106 | -2.732 | -10 |
| 100 | 40 | 113.696 | 99 | 14.696 | -1.59 | -10 |
| 100 | 50 | 112.432 | 99 | 13.432 | 1.264 | -10 |
| 100 | 60 | 110.871 | 99 | 11.871 | 1.561 | -10 |
| 100 | 70 | 108.812 | 99 | 9.812 | 2.059 | -10 |
| 100 | 80 | 106.672 | 99 | 7.672 | 2.14 | -10 |
| 100 | 90 | 105.324 | 99 | 6.324 | 1.348 | -10 |
| 100 | 100 | 104.385 | 99 | 5.385 | 0.939 | -10 |
| 100 | 110 | 104.452 | 99 | 5.452 | -0.067 | -10 |
| 100 | 120 | 104.096 | 99 | 5.096 | 0.356 | -10 |
| 100 | 130 | 103.174 | 99 | 4.174 | 0.922 | -10 |
| 100 | 140 | 102.303 | 99 | 3.303 | 0.871 | -10 |
| 100 | 150 | 104.401 | 99 | 5.401 | -2.098 | -10 |
| 100 | 160 | 106.117 | 99 | 7.117 | -1.716 | -10 |
| 100 | 170 | 106.926 | 99 | 7.926 | -0.809 | -10 |
| 100 | 180 | 107.386 | 99 | 8.386 | -0.46 | -10 |
| 100 | 190 | 106.348 | 99 | 7.348 | 1.038 | -10 |
| 100 | 200 | 104.796 | 99 | 5.796 | 1.552 | -10 |
| 100 | 210 | 103.101 | 99 | 4.101 | 1.695 | -10 |
| 100 | 220 | 100.751 | 99 | 1.751 | 2.35 | -10 |
| 100 | 230 | 99.711 | 99 | 0.711 | 1.04 | -10 |
| 100 | 240 | 99.935 | 99 | 0.935 | -0.224 | -10 |
| 100 | 250 | 99.665 | 99 | 0.665 | 0.27 | -10 |
| 100 | 260 | 100.945 | 99 | 1.945 | -1.28 | -10 |
| 100 | 270 | 106.095 | 99 | 7.095 | -5.15 | -10 |
| 100 | 280 | 110.018 | 99 | 11.018 | -3.923 | -10 |

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|-----|-----|---------|----|--------|--------|-----|
| 100 | 290 | 109.231 | 99 | 10.231 | 0.787 | -10 |
| 100 | 300 | 108.748 | 99 | 9.748 | 0.483 | -10 |
| 100 | 310 | 109.941 | 99 | 10.941 | -1.193 | -10 |
| 100 | 320 | 107.347 | 99 | 8.347 | 2.594 | -10 |
| 100 | 330 | 106.59 | 99 | 7.59 | 0.757 | -10 |
| 100 | 340 | 105.661 | 99 | 6.661 | 0.929 | -10 |
| 100 | 350 | 103.457 | 99 | 4.457 | 2.204 | -10 |
| 100 | 360 | 102.969 | 99 | 3.969 | 0.488 | -10 |
| 110 | 0 | 103.334 | 99 | 4.334 | | |
| 110 | 10 | 104.52 | 99 | 5.52 | -1.186 | -10 |
| 110 | 20 | 106.673 | 99 | 7.673 | -2.153 | -10 |
| 110 | 30 | 111.081 | 99 | 12.081 | -4.408 | -10 |
| 110 | 40 | 113.852 | 99 | 14.852 | -2.771 | -10 |
| 110 | 50 | 113.551 | 99 | 14.551 | 0.301 | -10 |
| 110 | 60 | 111.554 | 99 | 12.554 | 1.997 | -10 |
| 110 | 70 | 109.374 | 99 | 10.374 | 2.18 | -10 |
| 110 | 80 | 107.827 | 99 | 8.827 | 1.547 | -10 |
| 110 | 90 | 105.832 | 99 | 6.832 | 1.995 | -10 |
| 110 | 100 | 104.707 | 99 | 5.707 | 1.125 | -10 |
| 110 | 110 | 103.825 | 99 | 4.825 | 0.882 | -10 |
| 110 | 120 | 104.575 | 99 | 5.575 | -0.75 | -10 |
| 110 | 130 | 104.326 | 99 | 5.326 | 0.249 | -10 |
| 110 | 140 | 103.929 | 99 | 4.929 | 0.397 | -10 |
| 110 | 150 | 103.007 | 99 | 4.007 | 0.922 | -10 |
| 110 | 160 | 104.847 | 99 | 5.847 | -1.84 | -10 |
| 110 | 170 | 106.811 | 99 | 7.811 | -1.964 | -10 |
| 110 | 180 | 105.637 | 99 | 6.637 | 1.174 | -10 |
| 110 | 190 | 106.427 | 99 | 7.427 | -0.79 | -10 |
| 110 | 200 | 104.728 | 99 | 5.728 | 1.699 | -10 |
| 110 | 210 | 102.875 | 99 | 3.875 | 1.853 | -10 |
| 110 | 220 | 101.247 | 99 | 2.247 | 1.628 | -10 |
| 110 | 230 | 100.678 | 99 | 1.678 | 0.569 | -10 |
| 110 | 240 | 100.666 | 99 | 1.666 | 0.012 | -10 |
| 110 | 250 | 99.591 | 99 | 0.591 | 1.075 | -10 |
| 110 | 260 | 100.525 | 99 | 1.525 | -0.934 | -10 |
| 110 | 270 | 101.339 | 99 | 2.339 | -0.814 | -10 |
| 110 | 280 | 104.405 | 99 | 5.405 | -3.066 | -10 |
| 110 | 290 | 106.416 | 99 | 7.416 | -2.011 | -10 |
| 110 | 300 | 104.421 | 99 | 5.421 | 1.995 | -10 |
| 110 | 310 | 103.839 | 99 | 4.839 | 0.582 | -10 |
| 110 | 320 | 103.807 | 99 | 4.807 | 0.032 | -10 |
| 110 | 330 | 103.36 | 99 | 4.36 | 0.447 | -10 |
| 110 | 340 | 102.804 | 99 | 3.804 | 0.556 | -10 |
| 110 | 350 | 102.211 | 99 | 3.211 | 0.593 | -10 |
| 110 | 360 | 102.438 | 99 | 3.438 | -0.227 | -10 |
| 110 | 370 | 102.437 | 99 | 3.437 | 0.001 | -10 |
| 120 | 0 | 103.178 | 99 | 4.178 | | |

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|-----|-----|---------|----|--------|--------|-----|
| 120 | 10 | 103.647 | 99 | 4.647 | -0.469 | -10 |
| 120 | 20 | 105.422 | 99 | 6.422 | -1.775 | -10 |
| 120 | 30 | 109.556 | 99 | 10.556 | -4.134 | -10 |
| 120 | 40 | 113.341 | 99 | 14.341 | -3.785 | -10 |
| 120 | 50 | 111.675 | 99 | 12.675 | 1.666 | -10 |
| 120 | 60 | 109.383 | 99 | 10.383 | 2.292 | -10 |
| 120 | 70 | 106.855 | 99 | 7.855 | 2.528 | -10 |
| 120 | 80 | 106.005 | 99 | 7.005 | 0.85 | -10 |
| 120 | 90 | 104.775 | 99 | 5.775 | 1.23 | -10 |
| 120 | 100 | 104.036 | 99 | 5.036 | 0.739 | -10 |
| 120 | 110 | 103.948 | 99 | 4.948 | 0.088 | -10 |
| 120 | 120 | 104.699 | 99 | 5.699 | -0.751 | -10 |
| 120 | 130 | 104.549 | 99 | 5.549 | 0.15 | -10 |
| 120 | 140 | 104.186 | 99 | 5.186 | 0.363 | -10 |
| 120 | 150 | 103.762 | 99 | 4.762 | 0.424 | -10 |
| 120 | 160 | 105.281 | 99 | 6.281 | -1.519 | -10 |
| 120 | 170 | 106.39 | 99 | 7.39 | -1.109 | -10 |
| 120 | 180 | 103.272 | 99 | 4.272 | 3.118 | -10 |
| 120 | 190 | 104.011 | 99 | 5.011 | -0.739 | -10 |
| 120 | 200 | 103.1 | 99 | 4.1 | 0.911 | -10 |
| 120 | 210 | 102.128 | 99 | 3.128 | 0.972 | -10 |
| 120 | 220 | 101.844 | 99 | 2.844 | 0.284 | -10 |
| 120 | 230 | 101.583 | 99 | 2.583 | 0.261 | -10 |
| 120 | 240 | 103.474 | 99 | 4.474 | -1.891 | -10 |
| 120 | 250 | 103.396 | 99 | 4.396 | 0.078 | -10 |
| 120 | 260 | 99.918 | 99 | 0.918 | 3.478 | -10 |
| 120 | 270 | 99.337 | 99 | 0.337 | 0.581 | -10 |
| 120 | 280 | 100.823 | 99 | 1.823 | -1.486 | -10 |
| 120 | 290 | 100.891 | 99 | 1.891 | -0.068 | -10 |
| 120 | 300 | 101.322 | 99 | 2.322 | -0.431 | -10 |
| 120 | 310 | 101.665 | 99 | 2.665 | -0.343 | -10 |
| 120 | 320 | 101.973 | 99 | 2.973 | -0.308 | -10 |
| 120 | 330 | 102.079 | 99 | 3.079 | -0.106 | -10 |
| 120 | 340 | 102.54 | 99 | 3.54 | -0.461 | -10 |
| 120 | 350 | 103.427 | 99 | 4.427 | -0.887 | -10 |
| 120 | 360 | 105.256 | 99 | 6.256 | -1.829 | -10 |
| 120 | 370 | 104.062 | 99 | 5.062 | 1.194 | -10 |
| 130 | 0 | 103.145 | 99 | 4.145 | | |
| 130 | 10 | 103.246 | 99 | 4.246 | -0.101 | -10 |
| 130 | 20 | 103.716 | 99 | 4.716 | -0.47 | -10 |
| 130 | 30 | 104.185 | 99 | 5.185 | -0.469 | -10 |
| 130 | 40 | 107.786 | 99 | 8.786 | -3.601 | -10 |
| 130 | 50 | 109.281 | 99 | 10.281 | -1.495 | -10 |
| 130 | 60 | 108.005 | 99 | 9.005 | 1.276 | -10 |
| 130 | 70 | 106.896 | 99 | 7.896 | 1.109 | -10 |
| 130 | 80 | 104.276 | 99 | 5.276 | 2.62 | -10 |
| 130 | 90 | 104.564 | 99 | 5.564 | -0.288 | -10 |

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|-----|-----|---------|----|-------|--------|-----|
| 130 | 100 | 103.736 | 99 | 4.736 | 0.828 | -10 |
| 130 | 110 | 103.365 | 99 | 4.365 | 0.371 | -10 |
| 130 | 120 | 104.072 | 99 | 5.072 | -0.707 | -10 |
| 130 | 130 | 104.822 | 99 | 5.822 | -0.75 | -10 |
| 130 | 140 | 104.773 | 99 | 5.773 | 0.049 | -10 |
| 130 | 150 | 104.408 | 99 | 5.408 | 0.365 | -10 |
| 130 | 160 | 103.525 | 99 | 4.525 | 0.883 | -10 |
| 130 | 170 | 105.291 | 99 | 6.291 | -1.766 | -10 |
| 130 | 180 | 106.016 | 99 | 7.016 | -0.725 | -10 |
| 130 | 190 | 103.915 | 99 | 4.915 | 2.101 | -10 |
| 130 | 200 | 102.405 | 99 | 3.405 | 1.51 | -10 |
| 130 | 210 | 102.346 | 99 | 3.346 | 0.059 | -10 |
| 130 | 220 | 102.669 | 99 | 3.669 | -0.323 | -10 |
| 130 | 230 | 103.231 | 99 | 4.231 | -0.562 | -10 |
| 130 | 240 | 102.662 | 99 | 3.662 | 0.569 | -10 |
| 130 | 250 | 102.904 | 99 | 3.904 | -0.242 | -10 |
| 130 | 260 | 102.6 | 99 | 3.6 | 0.304 | -10 |
| 130 | 270 | 99.613 | 99 | 0.613 | 2.987 | -10 |
| 130 | 280 | 99.511 | 99 | 0.511 | 0.102 | -10 |
| 130 | 290 | 101.16 | 99 | 2.16 | -1.649 | -10 |
| 130 | 300 | 101.229 | 99 | 2.229 | -0.069 | -10 |
| 130 | 310 | 101.258 | 99 | 2.258 | -0.029 | -10 |
| 130 | 320 | 101.014 | 99 | 2.014 | 0.244 | -10 |
| 130 | 330 | 101.229 | 99 | 2.229 | -0.215 | -10 |
| 130 | 340 | 102.592 | 99 | 3.592 | -1.363 | -10 |
| 130 | 350 | 103.81 | 99 | 4.81 | -1.218 | -10 |
| 130 | 360 | 104.726 | 99 | 5.726 | -0.916 | -10 |
| 130 | 370 | 107.578 | 99 | 8.578 | -2.852 | -10 |
| 140 | 0 | 107.707 | 99 | 8.707 | | |
| 140 | 10 | 107.894 | 99 | 8.894 | -0.187 | -10 |
| 140 | 20 | 108.764 | 99 | 9.764 | -0.87 | -10 |
| 140 | 30 | 107.99 | 99 | 8.99 | 0.774 | -10 |
| 140 | 40 | 105.115 | 99 | 6.115 | 2.875 | -10 |
| 140 | 50 | 103.828 | 99 | 4.828 | 1.287 | -10 |
| 140 | 60 | 105.22 | 99 | 6.22 | -1.392 | -10 |
| 140 | 70 | 104.09 | 99 | 5.09 | 1.13 | -10 |
| 140 | 80 | 103.058 | 99 | 4.058 | 1.032 | -10 |
| 140 | 90 | 101.843 | 99 | 2.843 | 1.215 | -10 |
| 140 | 100 | 102.235 | 99 | 3.235 | -0.392 | -10 |
| 140 | 110 | 102.927 | 99 | 3.927 | -0.692 | -10 |
| 140 | 120 | 102.625 | 99 | 3.625 | 0.302 | -10 |
| 140 | 130 | 104.673 | 99 | 5.673 | -2.048 | -10 |
| 140 | 140 | 105.977 | 99 | 6.977 | -1.304 | -10 |
| 140 | 150 | 104.353 | 99 | 5.353 | 1.624 | -10 |
| 140 | 160 | 103.905 | 99 | 4.905 | 0.448 | -10 |
| 140 | 170 | 103.808 | 99 | 4.808 | 0.097 | -10 |
| 140 | 180 | 103.601 | 99 | 4.601 | 0.207 | -10 |

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|-----|-----|---------|----|--------|--------|-----|
| 140 | 190 | 103.405 | 99 | 4.405 | 0.196 | -10 |
| 140 | 200 | 102.344 | 99 | 3.344 | 1.061 | -10 |
| 140 | 210 | 102.586 | 99 | 3.586 | -0.242 | -10 |
| 140 | 220 | 103.878 | 99 | 4.878 | -1.292 | -10 |
| 140 | 230 | 104.412 | 99 | 5.412 | -0.534 | -10 |
| 140 | 240 | 104.863 | 99 | 5.863 | -0.451 | -10 |
| 140 | 250 | 103.526 | 99 | 4.526 | 1.337 | -10 |
| 140 | 260 | 101.521 | 99 | 2.521 | 2.005 | -10 |
| 140 | 270 | 99.222 | 99 | 0.222 | 2.299 | -10 |
| 140 | 280 | 99.383 | 99 | 0.383 | -0.161 | -10 |
| 140 | 290 | 99.424 | 99 | 0.424 | -0.041 | -10 |
| 140 | 300 | 99.414 | 99 | 0.414 | 0.01 | -10 |
| 140 | 310 | 100.461 | 99 | 1.461 | -1.047 | -10 |
| 140 | 320 | 100.608 | 99 | 1.608 | -0.147 | -10 |
| 140 | 330 | 100.603 | 99 | 1.603 | 0.005 | -10 |
| 140 | 340 | 100.11 | 99 | 1.11 | 0.493 | -10 |
| 140 | 350 | 101.146 | 99 | 2.146 | -1.036 | -10 |
| 140 | 360 | 102.938 | 99 | 3.938 | -1.792 | -10 |
| 140 | 370 | 104.681 | 99 | 5.681 | -1.743 | -10 |
| 150 | 0 | 104.986 | 99 | 5.986 | | |
| 150 | 10 | 108.312 | 99 | 9.312 | -3.326 | -10 |
| 150 | 20 | 112.582 | 99 | 13.582 | -4.27 | -10 |
| 150 | 30 | 112.313 | 99 | 13.313 | 0.269 | -10 |
| 150 | 40 | 109.662 | 99 | 10.662 | 2.651 | -10 |
| 150 | 50 | 106.116 | 99 | 7.116 | 3.546 | -10 |
| 150 | 60 | 103.189 | 99 | 4.189 | 2.927 | -10 |
| 150 | 70 | 102.415 | 99 | 3.415 | 0.774 | -10 |
| 150 | 80 | 102.266 | 99 | 3.266 | 0.149 | -10 |
| 150 | 90 | 102.174 | 99 | 3.174 | 0.092 | -10 |
| 150 | 100 | 101.95 | 99 | 2.95 | 0.224 | -10 |
| 150 | 110 | 101.726 | 99 | 2.726 | 0.224 | -10 |
| 150 | 120 | 102.078 | 99 | 3.078 | -0.352 | -10 |
| 150 | 130 | 102.37 | 99 | 3.37 | -0.292 | -10 |
| 150 | 140 | 102.29 | 99 | 3.29 | 0.08 | -10 |
| 150 | 150 | 103.815 | 99 | 4.815 | -1.525 | -10 |
| 150 | 160 | 105.891 | 99 | 6.891 | -2.076 | -10 |
| 150 | 170 | 104.067 | 99 | 5.067 | 1.824 | -10 |
| 150 | 180 | 105.423 | 99 | 6.423 | -1.356 | -10 |
| 150 | 190 | 104.151 | 99 | 5.151 | 1.272 | -10 |
| 150 | 200 | 102.599 | 99 | 3.599 | 1.552 | -10 |
| 150 | 210 | 102.264 | 99 | 3.264 | 0.335 | -10 |
| 150 | 220 | 102.388 | 99 | 3.388 | -0.124 | -10 |
| 150 | 230 | 104.017 | 99 | 5.017 | -1.629 | -10 |
| 150 | 240 | 105.587 | 99 | 6.587 | -1.57 | -10 |
| 150 | 250 | 105.295 | 99 | 6.295 | 0.292 | -10 |
| 150 | 260 | 106.512 | 99 | 7.512 | -1.217 | -10 |
| 150 | 270 | 107.246 | 99 | 8.246 | -0.734 | -10 |



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|-----|-----|---------|----|-------|--------|-----|
| 150 | 280 | 100.415 | 99 | 1.415 | 6.831 | -10 |
| 150 | 290 | 99.584 | 99 | 0.584 | 0.831 | -10 |
| 150 | 300 | 99.299 | 99 | 0.299 | 0.285 | -10 |
| 150 | 310 | 99.197 | 99 | 0.197 | 0.102 | -10 |
| 150 | 320 | 99.297 | 99 | 0.297 | -0.1 | -10 |
| 150 | 330 | 99.317 | 99 | 0.317 | -0.02 | -10 |
| 150 | 340 | 100.421 | 99 | 1.421 | -1.104 | -10 |
| 150 | 350 | 100.193 | 99 | 1.193 | 0.228 | -10 |
| 150 | 360 | 100.01 | 99 | 1.01 | 0.183 | -10 |
| 150 | 370 | 99.739 | 99 | 0.739 | 0.271 | -10 |
| 160 | 0 | 99.978 | 99 | 0.978 | | |
| 160 | 10 | 100.325 | 99 | 1.325 | -0.347 | -10 |
| 160 | 20 | 104.304 | 99 | 5.304 | -3.979 | -10 |
| 160 | 30 | 105.452 | 99 | 6.452 | -1.148 | -10 |
| 160 | 40 | 105.512 | 99 | 6.512 | -0.06 | -10 |
| 160 | 50 | 106.937 | 99 | 7.937 | -1.425 | -10 |
| 160 | 60 | 107.814 | 99 | 8.814 | -0.877 | -10 |
| 160 | 70 | 106.413 | 99 | 7.413 | 1.401 | -10 |
| 160 | 80 | 103.569 | 99 | 4.569 | 2.844 | -10 |
| 160 | 90 | 102.228 | 99 | 3.228 | 1.341 | -10 |
| 160 | 100 | 102.213 | 99 | 3.213 | 0.015 | -10 |
| 160 | 110 | 102.124 | 99 | 3.124 | 0.089 | -10 |
| 160 | 120 | 102.035 | 99 | 3.035 | 0.089 | -10 |
| 160 | 130 | 102.148 | 99 | 3.148 | -0.113 | -10 |
| 160 | 140 | 102.28 | 99 | 3.28 | -0.132 | -10 |
| 160 | 150 | 102.03 | 99 | 3.03 | 0.25 | -10 |
| 160 | 160 | 102.589 | 99 | 3.589 | -0.559 | -10 |
| 160 | 170 | 102.624 | 99 | 3.624 | -0.035 | -10 |
| 160 | 180 | 103.28 | 99 | 4.28 | -0.656 | -10 |
| 160 | 190 | 102.754 | 99 | 3.754 | 0.526 | -10 |
| 160 | 200 | 103.431 | 99 | 4.431 | -0.677 | -10 |
| 160 | 210 | 105.861 | 99 | 6.861 | -2.43 | -10 |
| 160 | 220 | 103.43 | 99 | 4.43 | 2.431 | -10 |
| 160 | 230 | 102.415 | 99 | 3.415 | 1.015 | -10 |
| 160 | 240 | 103.019 | 99 | 4.019 | -0.604 | -10 |
| 160 | 250 | 104.17 | 99 | 5.17 | -1.151 | -10 |
| 160 | 260 | 106.248 | 99 | 7.248 | -2.078 | -10 |
| 160 | 270 | 105.818 | 99 | 6.818 | 0.43 | -10 |
| 160 | 280 | 106.219 | 99 | 7.219 | -0.401 | -10 |
| 160 | 290 | 107.262 | 99 | 8.262 | -1.043 | -10 |
| 160 | 300 | 105.428 | 99 | 6.428 | 1.834 | -10 |
| 160 | 310 | 100.174 | 99 | 1.174 | 5.254 | -10 |
| 160 | 320 | 99.927 | 99 | 0.927 | 0.247 | -10 |
| 160 | 330 | 99.681 | 99 | 0.681 | 0.246 | -10 |
| 160 | 340 | 99.405 | 99 | 0.405 | 0.276 | -10 |
| 160 | 350 | 99.12 | 99 | 0.12 | 0.285 | -10 |
| 160 | 360 | 99.17 | 99 | 0.17 | -0.05 | -10 |

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|-----|-----|---------|----|--------|--------|-----|
| 160 | 370 | 100.565 | 99 | 1.566 | -1.396 | -10 |
| 170 | 0 | 100.466 | 99 | 1.466 | | |
| 170 | 10 | 100.395 | 99 | 1.395 | 0.071 | -10 |
| 170 | 20 | 100.269 | 99 | 1.269 | 0.126 | -10 |
| 170 | 30 | 100.246 | 99 | 1.246 | 0.023 | -10 |
| 170 | 40 | 101.32 | 99 | 2.32 | -1.074 | -10 |
| 170 | 50 | 108.803 | 99 | 9.803 | -7.483 | -10 |
| 170 | 60 | 110.852 | 99 | 11.852 | -2.049 | -10 |
| 170 | 70 | 107.654 | 99 | 8.654 | 3.198 | -10 |
| 170 | 80 | 105.497 | 99 | 6.497 | 2.157 | -10 |
| 170 | 90 | 103.774 | 99 | 4.774 | 1.723 | -10 |
| 170 | 100 | 102.188 | 99 | 3.188 | 1.586 | -10 |
| 170 | 110 | 103.026 | 99 | 4.026 | -0.838 | -10 |
| 170 | 120 | 103.452 | 99 | 4.452 | -0.426 | -10 |
| 170 | 130 | 103.453 | 99 | 4.453 | -0.001 | -10 |
| 170 | 140 | 103.323 | 99 | 4.323 | 0.13 | -10 |
| 170 | 150 | 103.234 | 99 | 4.234 | 0.089 | -10 |
| 170 | 160 | 103.145 | 99 | 4.145 | 0.089 | -10 |
| 170 | 170 | 103.056 | 99 | 4.056 | 0.089 | -10 |
| 170 | 180 | 102.157 | 99 | 3.157 | 0.899 | -10 |
| 170 | 190 | 102.178 | 99 | 3.178 | -0.021 | -10 |
| 170 | 200 | 102.625 | 99 | 3.625 | -0.447 | -10 |
| 170 | 210 | 101.865 | 99 | 2.865 | 0.76 | -10 |
| 170 | 220 | 101.992 | 99 | 2.992 | -0.127 | -10 |
| 170 | 230 | 103.195 | 99 | 4.195 | -1.203 | -10 |
| 170 | 240 | 103.441 | 99 | 4.441 | -0.246 | -10 |
| 170 | 250 | 103.289 | 99 | 4.289 | 0.152 | -10 |
| 170 | 260 | 105.094 | 99 | 6.094 | -1.805 | -10 |
| 170 | 270 | 104.841 | 99 | 5.841 | 0.253 | -10 |
| 170 | 280 | 105.656 | 99 | 6.656 | -0.815 | -10 |
| 170 | 290 | 105.468 | 99 | 6.468 | 0.188 | -10 |
| 170 | 300 | 104.416 | 99 | 5.416 | 1.052 | -10 |
| 170 | 310 | 104.384 | 99 | 5.384 | 0.032 | -10 |
| 170 | 320 | 104.773 | 99 | 5.773 | -0.389 | -10 |
| 170 | 330 | 103.201 | 99 | 4.201 | 1.572 | -10 |
| 170 | 340 | 99.621 | 99 | 0.621 | 3.58 | -10 |
| 170 | 350 | 99.488 | 99 | 0.488 | 0.133 | -10 |
| 170 | 360 | 99.354 | 99 | 0.354 | 0.134 | -10 |
| 170 | 370 | 99.221 | 99 | 0.221 | 0.133 | -10 |
| 180 | 0 | 99.095 | 99 | 0.095 | | |
| 180 | 10 | 100.572 | 99 | 1.572 | -1.477 | -10 |
| 180 | 20 | 100.443 | 99 | 1.443 | 0.129 | -10 |
| 180 | 30 | 100.36 | 99 | 1.36 | 0.083 | -10 |
| 180 | 40 | 100.186 | 99 | 1.186 | 0.174 | -10 |
| 180 | 50 | 100.043 | 99 | 1.043 | 0.143 | -10 |
| 180 | 60 | 101.829 | 99 | 2.829 | -1.786 | -10 |
| 180 | 70 | 108.56 | 99 | 9.56 | -6.731 | -10 |

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|-----|-----|---------|----|--------|--------|-----|
| 180 | 80 | 109.025 | 99 | 10.025 | -0.465 | -10 |
| 180 | 90 | 107.635 | 99 | 8.635 | 1.39 | -10 |
| 180 | 100 | 105.653 | 99 | 6.653 | 1.982 | -10 |
| 180 | 110 | 104.409 | 99 | 5.409 | 1.244 | -10 |
| 180 | 120 | 103.59 | 99 | 4.59 | 0.819 | -10 |
| 180 | 130 | 103.745 | 99 | 4.745 | -0.155 | -10 |
| 180 | 140 | 104.629 | 99 | 5.629 | -0.884 | -10 |
| 180 | 150 | 104.715 | 99 | 5.715 | -0.086 | -10 |
| 180 | 160 | 104.522 | 99 | 5.522 | 0.193 | -10 |
| 180 | 170 | 104.433 | 99 | 5.433 | 0.089 | -10 |
| 180 | 180 | 104.344 | 99 | 5.344 | 0.089 | -10 |
| 180 | 190 | 103.846 | 99 | 4.846 | 0.498 | -10 |
| 180 | 200 | 101.307 | 99 | 2.307 | 2.539 | -10 |
| 180 | 210 | 101.829 | 99 | 2.829 | -0.522 | -10 |
| 180 | 220 | 104.444 | 99 | 5.444 | -2.615 | -10 |
| 180 | 230 | 104.595 | 99 | 5.595 | -0.151 | -10 |
| 180 | 240 | 104.213 | 99 | 5.213 | 0.382 | -10 |
| 180 | 250 | 103.428 | 99 | 4.428 | 0.785 | -10 |
| 180 | 260 | 102.22 | 99 | 3.22 | 1.208 | -10 |
| 180 | 270 | 102.412 | 99 | 3.412 | -0.192 | -10 |
| 180 | 280 | 104.015 | 99 | 5.015 | -1.603 | -10 |
| 180 | 290 | 105.148 | 99 | 6.148 | -1.133 | -10 |
| 180 | 300 | 107.029 | 99 | 8.029 | -1.881 | -10 |
| 180 | 310 | 103.987 | 99 | 4.987 | 3.042 | -10 |
| 180 | 320 | 103.723 | 99 | 4.723 | 0.264 | -10 |
| 180 | 330 | 102.112 | 99 | 3.112 | 1.611 | -10 |
| 180 | 340 | 101.555 | 99 | 2.555 | 0.557 | -10 |
| 180 | 350 | 100.531 | 99 | 1.531 | 1.024 | -10 |
| 180 | 360 | 99.602 | 99 | 0.602 | 0.929 | -10 |
| 180 | 370 | 99.325 | 99 | 0.325 | 0.277 | -10 |
| 190 | 0 | 99.191 | 99 | 0.191 | | |
| 190 | 10 | 100.568 | 99 | 1.568 | -1.377 | -10 |
| 190 | 20 | 100.496 | 99 | 1.496 | 0.072 | -10 |
| 190 | 30 | 100.335 | 99 | 1.335 | 0.161 | -10 |
| 190 | 40 | 100.44 | 99 | 1.44 | -0.105 | -10 |
| 190 | 50 | 100.544 | 99 | 1.544 | -0.104 | -10 |
| 190 | 60 | 103.299 | 99 | 4.299 | -2.755 | -10 |
| 190 | 70 | 106.334 | 99 | 7.334 | -3.035 | -10 |
| 190 | 80 | 106.679 | 99 | 7.679 | -0.345 | -10 |
| 190 | 90 | 105.913 | 99 | 6.913 | 0.766 | -10 |
| 190 | 100 | 105.345 | 99 | 6.345 | 0.568 | -10 |
| 190 | 110 | 104.59 | 99 | 5.59 | 0.755 | -10 |
| 190 | 120 | 104.309 | 99 | 5.309 | 0.281 | -10 |
| 190 | 130 | 104.464 | 99 | 5.464 | -0.155 | -10 |
| 190 | 140 | 105.301 | 99 | 6.301 | -0.837 | -10 |
| 190 | 150 | 105.939 | 99 | 6.939 | -0.638 | -10 |
| 190 | 160 | 105.722 | 99 | 6.722 | 0.217 | -10 |

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|-----|-----|---------|----|--------|--------|-----|
| 190 | 170 | 105.633 | 99 | 6.633 | 0.089 | -10 |
| 190 | 180 | 105.534 | 99 | 6.534 | 0.099 | -10 |
| 190 | 190 | 102.935 | 99 | 3.935 | 2.599 | -10 |
| 190 | 200 | 101.35 | 99 | 2.35 | 1.585 | -10 |
| 190 | 210 | 102.96 | 99 | 3.96 | -1.61 | -10 |
| 190 | 220 | 103.867 | 99 | 4.867 | -0.907 | -10 |
| 190 | 230 | 103.351 | 99 | 4.351 | 0.516 | -10 |
| 190 | 240 | 105.179 | 99 | 6.179 | -1.828 | -10 |
| 190 | 250 | 104.664 | 99 | 5.664 | 0.515 | -10 |
| 190 | 260 | 102.783 | 99 | 3.783 | 1.881 | -10 |
| 190 | 270 | 101.742 | 99 | 2.742 | 1.041 | -10 |
| 190 | 280 | 102.534 | 99 | 3.534 | -0.792 | -10 |
| 190 | 290 | 103.825 | 99 | 4.825 | -1.291 | -10 |
| 190 | 300 | 105.091 | 99 | 6.091 | -1.266 | -10 |
| 190 | 310 | 103.439 | 99 | 4.439 | 1.652 | -10 |
| 190 | 320 | 102.842 | 99 | 3.842 | 0.597 | -10 |
| 190 | 330 | 101.106 | 99 | 2.106 | 1.736 | -10 |
| 190 | 340 | 99.819 | 99 | 0.819 | 1.287 | -10 |
| 190 | 350 | 99.611 | 99 | 0.611 | 0.208 | -10 |
| 190 | 360 | 99.608 | 99 | 0.608 | 0.003 | -10 |
| 190 | 370 | 99.162 | 99 | 0.162 | 0.446 | -10 |
| 200 | 0 | 100.566 | 99 | 1.566 | | |
| 200 | 10 | 100.435 | 99 | 1.435 | 0.131 | -10 |
| 200 | 20 | 100.422 | 99 | 1.422 | 0.013 | -10 |
| 200 | 30 | 100.54 | 99 | 1.54 | -0.118 | -10 |
| 200 | 40 | 103.309 | 99 | 4.309 | -2.769 | -10 |
| 200 | 50 | 105.974 | 99 | 6.974 | -2.665 | -10 |
| 200 | 60 | 109.716 | 99 | 10.716 | -3.742 | -10 |
| 200 | 70 | 107.381 | 99 | 8.381 | 2.335 | -10 |
| 200 | 80 | 105.769 | 99 | 6.769 | 1.612 | -10 |
| 200 | 90 | 105.365 | 99 | 6.365 | 0.404 | -10 |
| 200 | 100 | 102.873 | 99 | 3.873 | 2.492 | -10 |
| 200 | 110 | 104.081 | 99 | 5.081 | -1.208 | -10 |
| 200 | 120 | 105.183 | 99 | 6.183 | -1.102 | -10 |
| 200 | 130 | 105.973 | 99 | 6.973 | -0.79 | -10 |
| 200 | 140 | 107.042 | 99 | 8.042 | -1.069 | -10 |
| 200 | 150 | 106.955 | 99 | 7.955 | 0.087 | -10 |
| 200 | 160 | 106.832 | 99 | 7.832 | 0.123 | -10 |
| 200 | 170 | 104.662 | 99 | 5.662 | 2.17 | -10 |
| 200 | 180 | 101.524 | 99 | 2.524 | 3.138 | -10 |
| 200 | 190 | 101.545 | 99 | 2.545 | -0.021 | -10 |
| 200 | 200 | 104.747 | 99 | 5.747 | -3.202 | -10 |
| 200 | 210 | 104.655 | 99 | 5.655 | 0.092 | -10 |
| 200 | 220 | 103.227 | 99 | 4.227 | 1.428 | -10 |
| 200 | 230 | 104.512 | 99 | 5.512 | -1.285 | -10 |
| 200 | 240 | 104.24 | 99 | 5.24 | 0.272 | -10 |
| 200 | 250 | 102.124 | 99 | 3.124 | 2.116 | -10 |

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|-----|-----|---------|----|-------|--------|-----|
| 200 | 260 | 101.428 | 99 | 2.428 | 0.696 | -10 |
| 200 | 270 | 102.489 | 99 | 3.489 | -1.061 | -10 |
| 200 | 280 | 104.435 | 99 | 5.435 | -1.946 | -10 |
| 200 | 290 | 104.727 | 99 | 5.727 | -0.292 | -10 |
| 200 | 300 | 102.934 | 99 | 3.934 | 1.793 | -10 |
| 200 | 310 | 102.527 | 99 | 3.527 | 0.407 | -10 |
| 200 | 320 | 100.189 | 99 | 1.189 | 2.338 | -10 |
| 200 | 330 | 99.727 | 99 | 0.727 | 0.462 | -10 |
| 200 | 340 | 99.378 | 99 | 0.378 | 0.349 | -10 |
| 200 | 350 | 99.157 | 99 | 0.157 | 0.221 | -10 |
| 200 | 360 | 99.158 | 99 | 0.158 | -0.001 | -10 |
| 210 | 0 | 100.558 | 99 | 1.558 | | |
| 210 | 10 | 100.637 | 99 | 1.637 | -0.079 | -10 |
| 210 | 20 | 101.048 | 99 | 2.048 | -0.411 | -10 |
| 210 | 30 | 101.985 | 99 | 2.985 | -0.937 | -10 |
| 210 | 40 | 103.838 | 99 | 4.838 | -1.853 | -10 |
| 210 | 50 | 107.593 | 99 | 8.593 | -3.755 | -10 |
| 210 | 60 | 105.681 | 99 | 6.681 | 1.912 | -10 |
| 210 | 70 | 105.632 | 99 | 6.632 | 0.049 | -10 |
| 210 | 80 | 105.608 | 99 | 6.608 | 0.024 | -10 |
| 210 | 90 | 107.136 | 99 | 8.136 | -1.528 | -10 |
| 210 | 100 | 103.147 | 99 | 4.147 | 3.989 | -10 |
| 210 | 110 | 104.532 | 99 | 5.532 | -1.385 | -10 |
| 210 | 120 | 105.791 | 99 | 6.791 | -1.259 | -10 |
| 210 | 130 | 106.645 | 99 | 7.645 | -0.854 | -10 |
| 210 | 140 | 107.714 | 99 | 8.714 | -1.059 | -10 |
| 210 | 150 | 108.277 | 99 | 9.277 | -0.563 | -10 |
| 210 | 160 | 106.998 | 99 | 7.998 | 1.279 | -10 |
| 210 | 170 | 103.987 | 99 | 4.987 | 3.011 | -10 |
| 210 | 180 | 103.714 | 99 | 4.714 | 0.273 | -10 |
| 210 | 190 | 101.373 | 99 | 2.373 | 2.341 | -10 |
| 210 | 200 | 104.333 | 99 | 5.333 | -2.96 | -10 |
| 210 | 210 | 107.135 | 99 | 8.135 | -2.802 | -10 |
| 210 | 220 | 107.372 | 99 | 8.372 | -0.237 | -10 |
| 210 | 230 | 105.475 | 99 | 6.475 | 1.897 | -10 |
| 210 | 240 | 104.537 | 99 | 5.537 | 0.938 | -10 |
| 210 | 250 | 102.24 | 99 | 3.24 | 2.297 | -10 |
| 210 | 260 | 101.359 | 99 | 2.359 | 0.881 | -10 |
| 210 | 270 | 103.72 | 99 | 4.72 | -2.361 | -10 |
| 210 | 280 | 107.26 | 99 | 8.26 | -3.54 | -10 |
| 210 | 290 | 106.047 | 99 | 7.047 | 1.213 | -10 |
| 210 | 300 | 104.416 | 99 | 5.416 | 1.631 | -10 |
| 210 | 310 | 102.145 | 99 | 3.145 | 2.271 | -10 |
| 210 | 320 | 99.575 | 99 | 0.575 | 2.57 | -10 |
| 210 | 330 | 99.544 | 99 | 0.544 | 0.031 | -10 |
| 210 | 340 | 99.207 | 99 | 0.207 | 0.337 | -10 |
| 210 | 350 | 100.682 | 99 | 1.682 | -1.475 | -10 |

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|-----|-----|---------|----|-------|--------|-----|
| 220 | 0 | 100.803 | 99 | 1.803 | | |
| 220 | 10 | 101.693 | 99 | 2.693 | -0.89 | -10 |
| 220 | 20 | 102.63 | 99 | 3.63 | -0.937 | -10 |
| 220 | 30 | 103.589 | 99 | 4.589 | -0.959 | -10 |
| 220 | 40 | 104.849 | 99 | 5.849 | -1.26 | -10 |
| 220 | 50 | 105.763 | 99 | 6.763 | -0.914 | -10 |
| 220 | 60 | 107.797 | 99 | 8.797 | -2.034 | -10 |
| 220 | 70 | 105.679 | 99 | 6.679 | 2.118 | -10 |
| 220 | 80 | 105.904 | 99 | 6.904 | -0.225 | -10 |
| 220 | 90 | 105.561 | 99 | 6.561 | 0.343 | -10 |
| 220 | 100 | 105.813 | 99 | 6.813 | -0.252 | -10 |
| 220 | 110 | 106.701 | 99 | 7.701 | -0.888 | -10 |
| 220 | 120 | 106.014 | 99 | 7.014 | 0.687 | -10 |
| 220 | 130 | 108.744 | 99 | 9.744 | -2.73 | -10 |
| 220 | 140 | 105.506 | 99 | 6.506 | 3.238 | -10 |
| 220 | 150 | 105.892 | 99 | 6.892 | -0.386 | -10 |
| 220 | 160 | 106.988 | 99 | 7.988 | -1.096 | -10 |
| 220 | 170 | 105.623 | 99 | 6.623 | 1.365 | -10 |
| 220 | 180 | 105.377 | 99 | 6.377 | 0.246 | -10 |
| 220 | 190 | 105.596 | 99 | 6.596 | -0.219 | -10 |
| 220 | 200 | 106.18 | 99 | 7.18 | -0.584 | -10 |
| 220 | 210 | 106.961 | 99 | 7.961 | -0.781 | -10 |
| 220 | 220 | 107.72 | 99 | 8.72 | -0.759 | -10 |
| 220 | 230 | 105.945 | 99 | 6.945 | 1.775 | -10 |
| 220 | 240 | 101.996 | 99 | 2.996 | 3.949 | -10 |
| 220 | 250 | 101.476 | 99 | 2.476 | 0.52 | -10 |
| 220 | 260 | 103.185 | 99 | 4.185 | -1.709 | -10 |
| 220 | 270 | 106.976 | 99 | 7.976 | -3.791 | -10 |
| 220 | 280 | 106.859 | 99 | 7.859 | 0.117 | -10 |
| 220 | 290 | 105.072 | 99 | 6.072 | 1.787 | -10 |
| 220 | 300 | 99.612 | 99 | 0.612 | 5.46 | -10 |
| 220 | 310 | 99.371 | 99 | 0.371 | 0.241 | -10 |
| 220 | 320 | 99.166 | 99 | 0.166 | 0.205 | -10 |
| 220 | 330 | 99.184 | 99 | 0.184 | -0.018 | -10 |
| 220 | 340 | 100.772 | 99 | 1.772 | -1.588 | -10 |
| 230 | 0 | 100.709 | 99 | 1.709 | | |
| 230 | 10 | 103.07 | 99 | 4.07 | -2.361 | -10 |
| 230 | 20 | 103.882 | 99 | 4.882 | -0.812 | -10 |
| 230 | 30 | 104.421 | 99 | 5.421 | -0.539 | -10 |
| 230 | 40 | 106.016 | 99 | 7.016 | -1.595 | -10 |
| 230 | 50 | 105.691 | 99 | 6.691 | 0.325 | -10 |
| 230 | 60 | 104.514 | 99 | 5.514 | 1.177 | -10 |
| 230 | 70 | 105.187 | 99 | 6.187 | -0.673 | -10 |
| 230 | 80 | 105.83 | 99 | 6.83 | -0.643 | -10 |
| 230 | 90 | 106.768 | 99 | 7.768 | -0.938 | -10 |
| 230 | 100 | 105.407 | 99 | 6.407 | 1.361 | -10 |
| 230 | 110 | 104.113 | 99 | 5.113 | 1.294 | -10 |

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|-----|-----|---------|----|-------|--------|-----|
| 230 | 120 | 103.168 | 99 | 4.168 | 0.945 | -10 |
| 230 | 130 | 102.892 | 99 | 3.892 | 0.276 | -10 |
| 230 | 140 | 100.619 | 99 | 1.619 | 2.273 | -10 |
| 230 | 150 | 101.809 | 99 | 2.809 | -1.19 | -10 |
| 230 | 160 | 103.664 | 99 | 4.664 | -1.855 | -10 |
| 230 | 170 | 103.022 | 99 | 4.022 | 0.642 | -10 |
| 230 | 180 | 105.433 | 99 | 6.433 | -2.411 | -10 |
| 230 | 190 | 104.175 | 99 | 5.175 | 1.258 | -10 |
| 230 | 200 | 104.275 | 99 | 5.275 | -0.1 | -10 |
| 230 | 210 | 105.397 | 99 | 6.397 | -1.122 | -10 |
| 230 | 220 | 103.367 | 99 | 4.367 | 2.03 | -10 |
| 230 | 230 | 101.047 | 99 | 2.047 | 2.32 | -10 |
| 230 | 240 | 100.388 | 99 | 1.388 | 0.659 | -10 |
| 230 | 250 | 101.987 | 99 | 2.987 | -1.599 | -10 |
| 230 | 260 | 103.977 | 99 | 4.977 | -1.99 | -10 |
| 230 | 270 | 107.228 | 99 | 8.228 | -3.251 | -10 |
| 230 | 280 | 106.55 | 99 | 7.55 | 0.678 | -10 |
| 230 | 290 | 103.306 | 99 | 4.306 | 3.244 | -10 |
| 230 | 300 | 99.203 | 99 | 0.203 | 4.103 | -10 |
| 230 | 310 | 99.315 | 99 | 0.315 | -0.112 | -10 |
| 230 | 320 | 100.549 | 99 | 1.549 | -1.234 | -10 |
| 230 | 330 | 102.364 | 99 | 3.364 | -1.815 | -10 |
| 230 | 340 | 104.55 | 99 | 5.55 | -2.186 | -10 |
| 240 | 0 | 108.392 | 99 | 9.392 | | |
| 240 | 10 | 108.274 | 99 | 9.274 | 0.118 | -10 |
| 240 | 20 | 108.743 | 99 | 9.743 | -0.469 | -10 |
| 240 | 30 | 105.923 | 99 | 6.923 | 2.82 | -10 |
| 240 | 40 | 104.867 | 99 | 5.867 | 1.056 | -10 |
| 240 | 50 | 105.825 | 99 | 6.825 | -0.958 | -10 |
| 240 | 60 | 106.617 | 99 | 7.617 | -0.792 | -10 |
| 240 | 70 | 105.287 | 99 | 6.287 | 1.33 | -10 |
| 240 | 80 | 102.428 | 99 | 3.428 | 2.859 | -10 |
| 240 | 90 | 99.829 | 99 | 0.829 | 2.599 | -10 |
| 240 | 100 | 100.555 | 99 | 1.555 | -0.726 | -10 |
| 240 | 110 | 100.011 | 99 | 1.011 | 0.544 | -10 |
| 240 | 120 | 102.892 | 99 | 3.892 | -2.881 | -10 |
| 240 | 130 | 102.272 | 99 | 3.272 | 0.62 | -10 |
| 240 | 140 | 101.091 | 99 | 2.091 | 1.181 | -10 |
| 240 | 150 | 101.56 | 99 | 2.56 | -0.469 | -10 |
| 240 | 160 | 99.886 | 99 | 0.886 | 1.674 | -10 |
| 240 | 170 | 100.121 | 99 | 1.121 | -0.235 | -10 |
| 240 | 180 | 100.094 | 99 | 1.094 | 0.027 | -10 |
| 240 | 190 | 100.498 | 99 | 1.498 | -0.404 | -10 |
| 240 | 200 | 100.326 | 99 | 1.326 | 0.172 | -10 |
| 240 | 210 | 101.072 | 99 | 2.072 | -0.746 | -10 |
| 240 | 220 | 102.653 | 99 | 3.653 | -1.581 | -10 |
| 240 | 230 | 107.305 | 99 | 8.305 | -4.652 | -10 |

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|-----|-----|---------|----|-------|--------|-----|
| 240 | 240 | 105.356 | 99 | 6.356 | 1.949 | -10 |
| 240 | 250 | 105.996 | 99 | 6.996 | -0.64 | -10 |
| 240 | 260 | 103.888 | 99 | 4.888 | 2.108 | -10 |
| 240 | 270 | 100.033 | 99 | 1.033 | 3.855 | -10 |
| 240 | 280 | 99.48 | 99 | 0.48 | 0.553 | -10 |
| 240 | 290 | 99.427 | 99 | 0.427 | 0.053 | -10 |
| 240 | 300 | 100.104 | 99 | 1.104 | -0.677 | -10 |
| 240 | 310 | 101.065 | 99 | 2.065 | -0.961 | -10 |
| 240 | 320 | 104.076 | 99 | 5.076 | -3.011 | -10 |
| 240 | 330 | 105.063 | 99 | 6.063 | -0.987 | -10 |
| 250 | 0 | 106.107 | 99 | 7.107 | | |
| 250 | 10 | 105.792 | 99 | 6.792 | 0.315 | -10 |
| 250 | 20 | 105.618 | 99 | 6.618 | 0.174 | -10 |
| 250 | 30 | 105.879 | 99 | 6.879 | -0.261 | -10 |
| 250 | 40 | 106.96 | 99 | 7.96 | -1.081 | -10 |
| 250 | 50 | 105.726 | 99 | 6.726 | 1.234 | -10 |
| 250 | 60 | 104.414 | 99 | 5.414 | 1.312 | -10 |
| 250 | 70 | 100.718 | 99 | 1.718 | 3.696 | -10 |
| 250 | 80 | 100.081 | 99 | 1.081 | 0.637 | -10 |
| 250 | 90 | 102.73 | 99 | 3.73 | -2.649 | -10 |
| 250 | 100 | 104.561 | 99 | 5.561 | -1.831 | -10 |
| 250 | 110 | 105.794 | 99 | 6.794 | -1.233 | -10 |
| 250 | 120 | 105.208 | 99 | 6.208 | 0.586 | -10 |
| 250 | 130 | 103.608 | 99 | 4.608 | 1.6 | -10 |
| 250 | 140 | 101.721 | 99 | 2.721 | 1.887 | -10 |
| 250 | 150 | 100.77 | 99 | 1.77 | 0.951 | -10 |
| 250 | 160 | 100.761 | 99 | 1.761 | 0.009 | -10 |
| 250 | 170 | 102.101 | 99 | 3.101 | -1.34 | -10 |
| 250 | 180 | 101.992 | 99 | 2.992 | 0.109 | -10 |
| 250 | 190 | 104.208 | 99 | 5.208 | -2.216 | -10 |
| 250 | 200 | 102.452 | 99 | 3.452 | 1.756 | -10 |
| 250 | 210 | 104.553 | 99 | 5.553 | -2.101 | -10 |
| 250 | 220 | 108.192 | 99 | 9.192 | -3.639 | -10 |
| 250 | 230 | 105.751 | 99 | 6.751 | 2.441 | -10 |
| 250 | 240 | 102.737 | 99 | 3.737 | 3.014 | -10 |
| 250 | 250 | 99.574 | 99 | 0.574 | 3.163 | -10 |
| 250 | 260 | 99.643 | 99 | 0.643 | -0.069 | -10 |
| 250 | 270 | 100.475 | 99 | 1.475 | -0.832 | -10 |
| 250 | 280 | 101.45 | 99 | 2.45 | -0.975 | -10 |
| 250 | 290 | 103.254 | 99 | 4.254 | -1.804 | -10 |
| 250 | 300 | 102.462 | 99 | 3.462 | 0.792 | -10 |
| 250 | 310 | 102.538 | 99 | 3.538 | -0.076 | -10 |
| 250 | 320 | 102.929 | 99 | 3.929 | -0.391 | -10 |
| 260 | 0 | 103.395 | 99 | 4.395 | | |
| 260 | 10 | 104.847 | 99 | 5.847 | -1.452 | -10 |
| 260 | 20 | 105.005 | 99 | 6.005 | -0.158 | -10 |
| 260 | 30 | 103.843 | 99 | 4.843 | 1.162 | -10 |

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|-----|-----|---------|----|-------|--------|-----|
| 260 | 40 | 100.787 | 99 | 1.787 | 3.056 | -10 |
| 260 | 50 | 100.529 | 99 | 1.529 | 0.258 | -10 |
| 260 | 60 | 103.433 | 99 | 4.433 | -2.904 | -10 |
| 260 | 70 | 105.579 | 99 | 6.579 | -2.146 | -10 |
| 260 | 80 | 106.493 | 99 | 7.493 | -0.914 | -10 |
| 260 | 90 | 107.694 | 99 | 8.694 | -1.201 | -10 |
| 260 | 100 | 106.88 | 99 | 7.88 | 0.814 | -10 |
| 260 | 110 | 103.981 | 99 | 4.981 | 2.899 | -10 |
| 260 | 120 | 101.322 | 99 | 2.322 | 2.659 | -10 |
| 260 | 130 | 101.527 | 99 | 2.527 | -0.205 | -10 |
| 260 | 140 | 101.588 | 99 | 2.588 | -0.061 | -10 |
| 260 | 150 | 106.116 | 99 | 7.116 | -4.528 | -10 |
| 260 | 160 | 103.888 | 99 | 4.888 | 2.228 | -10 |
| 260 | 170 | 107.458 | 99 | 8.458 | -3.57 | -10 |
| 260 | 180 | 106.491 | 99 | 7.491 | 0.967 | -10 |
| 260 | 190 | 106.305 | 99 | 7.305 | 0.186 | -10 |
| 260 | 200 | 107.253 | 99 | 8.253 | -0.948 | -10 |
| 260 | 210 | 104.962 | 99 | 5.962 | 2.291 | -10 |
| 250 | 220 | 103.88 | 99 | 4.88 | 1.082 | -10 |
| 260 | 230 | 100.616 | 99 | 1.616 | 3.264 | -10 |
| 260 | 240 | 99.741 | 99 | 0.741 | 0.875 | -10 |
| 260 | 250 | 102.2 | 99 | 3.2 | -2.459 | -10 |
| 260 | 260 | 103.499 | 99 | 4.499 | -1.299 | -10 |
| 260 | 270 | 105.525 | 99 | 6.525 | -2.026 | -10 |
| 260 | 280 | 106.559 | 99 | 7.559 | -1.034 | -10 |
| 260 | 290 | 105.772 | 99 | 6.772 | 0.787 | -10 |
| 260 | 300 | 103.894 | 99 | 4.894 | 1.878 | -10 |
| 260 | 310 | 102.11 | 99 | 3.11 | 1.784 | -10 |
| 260 | 320 | 101.443 | 99 | 2.443 | 0.667 | -10 |
| 270 | 0 | 102.254 | 99 | 3.254 | | |
| 270 | 10 | 100.503 | 99 | 1.503 | 1.751 | -10 |
| 270 | 20 | 100.667 | 99 | 1.667 | -0.164 | -10 |
| 270 | 30 | 102.549 | 99 | 3.549 | -1.882 | -10 |
| 270 | 40 | 104.888 | 99 | 5.888 | -2.339 | -10 |
| 270 | 50 | 106.692 | 99 | 7.692 | -1.804 | -10 |
| 270 | 60 | 105.927 | 99 | 6.927 | 0.765 | -10 |
| 270 | 70 | 105.836 | 99 | 6.836 | 0.091 | -10 |
| 270 | 80 | 105.233 | 99 | 6.233 | 0.603 | -10 |
| 270 | 90 | 103.842 | 99 | 4.842 | 1.391 | -10 |
| 270 | 100 | 101.973 | 99 | 2.973 | 1.869 | -10 |
| 270 | 110 | 102.677 | 99 | 3.677 | -0.704 | -10 |
| 270 | 120 | 102.382 | 99 | 3.382 | 0.295 | -10 |
| 270 | 130 | 104.136 | 99 | 5.136 | -1.754 | -10 |
| 270 | 140 | 104.4 | 99 | 5.4 | -0.264 | -10 |
| 270 | 150 | 106.502 | 99 | 7.502 | -2.102 | -10 |
| 270 | 160 | 105.517 | 99 | 6.517 | 0.985 | -10 |
| 270 | 170 | 104.002 | 99 | 5.002 | 1.515 | -10 |

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|-----|-----|---------|----|-------|--------|-----|
| 270 | 180 | 103.64 | 99 | 4.64 | 0.362 | -10 |
| 270 | 190 | 102.863 | 99 | 3.863 | 0.777 | -10 |
| 270 | 200 | 102.945 | 99 | 3.945 | -0.082 | -10 |
| 270 | 210 | 100.009 | 99 | 1.009 | 2.936 | -10 |
| 270 | 220 | 99.654 | 99 | 0.654 | 0.355 | -10 |
| 270 | 230 | 102.728 | 99 | 3.728 | -3.074 | -10 |
| 270 | 240 | 104.918 | 99 | 5.918 | -2.19 | -10 |
| 270 | 250 | 106.763 | 99 | 7.763 | -1.845 | -10 |
| 270 | 260 | 106.841 | 99 | 7.841 | -0.078 | -10 |
| 270 | 270 | 106.821 | 99 | 7.821 | 0.02 | -10 |
| 270 | 280 | 106.183 | 99 | 7.183 | 0.638 | -10 |
| 270 | 290 | 105.601 | 99 | 6.601 | 0.582 | -10 |
| 270 | 300 | 105.485 | 99 | 6.485 | 0.116 | -10 |
| 270 | 310 | 104.839 | 99 | 5.839 | 0.646 | -10 |
| 280 | 0 | 104.148 | 99 | 5.148 | | |
| 280 | 10 | 103.38 | 99 | 4.38 | 0.768 | -10 |
| 280 | 20 | 104.213 | 99 | 5.213 | -0.833 | -10 |
| 280 | 30 | 106.203 | 99 | 7.203 | -1.99 | -10 |
| 280 | 40 | 105.006 | 99 | 6.006 | 1.197 | -10 |
| 280 | 50 | 104.553 | 99 | 5.553 | 0.453 | -10 |
| 280 | 60 | 104.237 | 99 | 5.237 | 0.316 | -10 |
| 280 | 70 | 104.051 | 99 | 5.051 | 0.186 | -10 |
| 280 | 80 | 102.847 | 99 | 3.847 | 1.204 | -10 |
| 280 | 90 | 102.138 | 99 | 3.138 | 0.709 | -10 |
| 280 | 100 | 101.791 | 99 | 2.791 | 0.347 | -10 |
| 280 | 110 | 101.444 | 99 | 2.444 | 0.347 | -10 |
| 280 | 120 | 101.422 | 99 | 2.422 | 0.022 | -10 |
| 280 | 130 | 104.312 | 99 | 5.312 | -2.89 | -10 |
| 280 | 140 | 103.754 | 99 | 4.754 | 0.558 | -10 |
| 280 | 150 | 103.771 | 99 | 4.771 | -0.017 | -10 |
| 280 | 160 | 102.587 | 99 | 3.587 | 1.184 | -10 |
| 280 | 170 | 101.218 | 99 | 2.218 | 1.369 | -10 |
| 280 | 180 | 102.024 | 99 | 3.024 | -0.806 | -10 |
| 280 | 190 | 102.71 | 99 | 3.71 | -0.686 | -10 |
| 280 | 200 | 103.097 | 99 | 4.097 | -0.387 | -10 |
| 280 | 210 | 99.967 | 99 | 0.967 | 3.13 | -10 |
| 280 | 220 | 100.604 | 99 | 1.604 | -0.637 | -10 |
| 280 | 230 | 103.898 | 99 | 4.898 | -3.294 | -10 |
| 280 | 240 | 105.469 | 99 | 6.469 | -1.571 | -10 |
| 280 | 250 | 106.024 | 99 | 7.024 | -0.555 | -10 |
| 280 | 260 | 105.73 | 99 | 6.73 | 0.294 | -10 |
| 280 | 270 | 106.086 | 99 | 7.086 | -0.356 | -10 |
| 280 | 280 | 105.293 | 99 | 6.293 | 0.793 | -10 |
| 280 | 290 | 106.276 | 99 | 7.276 | -0.983 | -10 |
| 280 | 300 | 106.105 | 99 | 7.105 | 0.171 | -10 |
| 290 | 0 | 106.525 | 99 | 7.525 | | |
| 290 | 10 | 106.226 | 99 | 7.226 | 0.299 | -10 |

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|-----|-----|---------|----|-------|--------|-----|
| 290 | 20 | 104.877 | 99 | 5.877 | 1.349 | -10 |
| 290 | 30 | 104.545 | 99 | 5.545 | 0.332 | -10 |
| 290 | 40 | 103.821 | 99 | 4.821 | 0.724 | -10 |
| 290 | 50 | 103.368 | 99 | 4.368 | 0.453 | -10 |
| 290 | 60 | 102.915 | 99 | 3.915 | 0.453 | -10 |
| 290 | 70 | 102.546 | 99 | 3.546 | 0.369 | -10 |
| 290 | 80 | 101.935 | 99 | 2.935 | 0.611 | -10 |
| 290 | 90 | 101.542 | 99 | 2.542 | 0.393 | -10 |
| 290 | 100 | 100.745 | 99 | 1.745 | 0.797 | -10 |
| 290 | 110 | 100.809 | 99 | 1.809 | -0.064 | -10 |
| 290 | 120 | 102.43 | 99 | 3.43 | -1.621 | -10 |
| 290 | 130 | 102.996 | 99 | 3.996 | -0.566 | -10 |
| 290 | 140 | 102.668 | 99 | 3.668 | 0.328 | -10 |
| 290 | 150 | 101.573 | 99 | 2.573 | 1.095 | -10 |
| 290 | 160 | 100.855 | 99 | 1.855 | 0.718 | -10 |
| 290 | 170 | 99.021 | 99 | 0.021 | 1.834 | -10 |
| 290 | 180 | 102.501 | 99 | 3.501 | -3.48 | -10 |
| 290 | 190 | 103.339 | 99 | 4.339 | -0.838 | -10 |
| 290 | 200 | 103.235 | 99 | 4.235 | 0.104 | -10 |
| 290 | 210 | 102.714 | 99 | 3.714 | 0.521 | -10 |
| 290 | 220 | 99.958 | 99 | 0.958 | 2.756 | -10 |
| 290 | 230 | 102.011 | 99 | 3.011 | -2.053 | -10 |
| 290 | 240 | 103.808 | 99 | 4.808 | -1.797 | -10 |
| 290 | 250 | 102.791 | 99 | 3.791 | 1.017 | -10 |
| 290 | 260 | 104.05 | 99 | 5.05 | -1.259 | -10 |
| 290 | 270 | 104.809 | 99 | 5.809 | -0.759 | -10 |
| 290 | 280 | 105.084 | 99 | 6.084 | -0.275 | -10 |
| 290 | 290 | 105.987 | 99 | 6.987 | -0.903 | -10 |
| 300 | 0 | 108.036 | 99 | 9.036 | | |
| 300 | 10 | 108.929 | 99 | 9.929 | -0.893 | -10 |
| 300 | 20 | 106.992 | 99 | 7.992 | 1.937 | -10 |
| 300 | 30 | 105.145 | 99 | 6.145 | 1.847 | -10 |
| 300 | 40 | 103.686 | 99 | 4.686 | 1.459 | -10 |
| 300 | 50 | 103.304 | 99 | 4.304 | 0.382 | -10 |
| 300 | 60 | 102.691 | 99 | 3.691 | 0.613 | -10 |
| 300 | 70 | 102.138 | 99 | 3.138 | 0.553 | -10 |
| 300 | 80 | 101.585 | 99 | 2.585 | 0.553 | -10 |
| 300 | 90 | 100.976 | 99 | 1.976 | 0.609 | -10 |
| 300 | 100 | 100.267 | 99 | 1.267 | 0.709 | -10 |
| 300 | 110 | 100.017 | 99 | 1.017 | 0.25 | -10 |
| 300 | 120 | 100.527 | 99 | 1.527 | -0.51 | -10 |
| 300 | 130 | 101.114 | 99 | 2.114 | -0.587 | -10 |
| 300 | 140 | 101.68 | 99 | 2.68 | -0.566 | -10 |
| 300 | 150 | 101.707 | 99 | 2.707 | -0.027 | -10 |
| 300 | 160 | 100.563 | 99 | 1.563 | 1.144 | -10 |
| 300 | 170 | 99.42 | 99 | 0.42 | 1.143 | -10 |
| 300 | 180 | 100.342 | 99 | 1.342 | -0.922 | -10 |

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|-----|-----|---------|----|--------|--------|-----|
| 300 | 190 | 103.018 | 99 | 4.018 | -2.676 | -10 |
| 300 | 200 | 104.669 | 99 | 5.669 | -1.651 | -10 |
| 300 | 210 | 104.184 | 99 | 5.184 | 0.485 | -10 |
| 300 | 220 | 101.932 | 99 | 2.932 | 2.252 | -10 |
| 300 | 230 | 99.548 | 99 | 0.548 | 2.384 | -10 |
| 300 | 240 | 99.705 | 99 | 0.705 | -0.157 | -10 |
| 300 | 250 | 99.581 | 99 | 0.581 | 0.124 | -10 |
| 300 | 260 | 99.884 | 99 | 0.884 | -0.303 | -10 |
| 300 | 270 | 102.37 | 99 | 3.37 | -2.486 | -10 |
| 300 | 280 | 104.035 | 99 | 5.035 | -1.665 | -10 |
| 310 | 0 | 104.117 | 99 | 5.117 | | |
| 310 | 10 | 104.216 | 99 | 5.216 | -0.099 | -10 |
| 310 | 20 | 106.883 | 99 | 7.883 | -2.667 | -10 |
| 310 | 30 | 107.197 | 99 | 8.197 | -0.314 | -10 |
| 310 | 40 | 105.292 | 99 | 6.292 | 1.905 | -10 |
| 310 | 50 | 104.178 | 99 | 5.178 | 1.114 | -10 |
| 310 | 60 | 103.131 | 99 | 4.131 | 1.047 | -10 |
| 310 | 70 | 103.709 | 99 | 4.709 | -0.578 | -10 |
| 310 | 80 | 102.442 | 99 | 3.442 | 1.267 | -10 |
| 310 | 90 | 101.774 | 99 | 2.774 | 0.668 | -10 |
| 310 | 100 | 101.128 | 99 | 2.128 | 0.646 | -10 |
| 310 | 110 | 100.261 | 99 | 1.261 | 0.867 | -10 |
| 310 | 120 | 99.718 | 99 | 0.718 | 0.543 | -10 |
| 310 | 130 | 99.192 | 99 | 0.192 | 0.526 | -10 |
| 310 | 140 | 99.282 | 99 | 0.282 | -0.09 | -10 |
| 310 | 150 | 99.697 | 99 | 0.697 | -0.415 | -10 |
| 310 | 160 | 100.365 | 99 | 1.365 | -0.668 | -10 |
| 310 | 170 | 100.747 | 99 | 1.747 | -0.382 | -10 |
| 310 | 180 | 99.603 | 99 | 0.603 | 1.144 | -10 |
| 310 | 190 | 98.617 | 99 | -0.383 | 0.986 | -10 |
| 310 | 200 | 100.567 | 99 | 1.567 | -1.95 | -10 |
| 310 | 210 | 102.802 | 99 | 3.802 | -2.235 | -10 |
| 310 | 220 | 103.669 | 99 | 4.669 | -0.867 | -10 |
| 310 | 280 | 102.013 | 99 | 3.013 | 1.656 | -60 |
| 320 | 0 | 99.52 | 99 | 0.52 | | |
| 320 | 10 | 99.587 | 99 | 0.587 | -0.067 | -10 |
| 320 | 20 | 100.534 | 99 | 1.534 | -0.947 | -10 |
| 320 | 30 | 102.337 | 99 | 3.337 | -1.803 | -10 |
| 320 | 40 | 104.846 | 99 | 5.846 | -2.509 | -10 |
| 320 | 50 | 104.826 | 99 | 5.826 | 0.02 | -10 |
| 320 | 60 | 104.855 | 99 | 5.855 | -0.029 | -10 |
| 320 | 70 | 105.172 | 99 | 6.172 | -0.317 | -10 |
| 320 | 80 | 104.973 | 99 | 5.973 | 0.199 | -10 |
| 320 | 90 | 103.593 | 99 | 4.593 | 1.38 | -10 |
| 320 | 100 | 103.211 | 99 | 4.211 | 0.382 | -10 |
| 320 | 110 | 102.575 | 99 | 3.575 | 0.636 | -10 |
| 320 | 120 | 102.549 | 99 | 3.549 | 0.026 | -10 |

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|-----|-----|---------|----|--------|--------|-----|
| 320 | 130 | 102.246 | 99 | 3.246 | 0.303 | -10 |
| 320 | 140 | 101.574 | 99 | 2.574 | 0.672 | -10 |
| 320 | 150 | 100.832 | 99 | 1.832 | 0.742 | -10 |
| 320 | 160 | 100.244 | 99 | 1.244 | 0.588 | -10 |
| 320 | 170 | 99.988 | 99 | 0.988 | 0.256 | -10 |
| 320 | 180 | 99.25 | 99 | 0.25 | 0.738 | -10 |
| 320 | 190 | 98.84 | 99 | -0.16 | 0.41 | -10 |
| 320 | 200 | 99.028 | 99 | 0.028 | -0.188 | -10 |
| 320 | 210 | 99.44 | 99 | 0.44 | -0.412 | -10 |
| 320 | 220 | 99.615 | 99 | 0.615 | -0.175 | -10 |
| 330 | 0 | 98.607 | 99 | -0.393 | | |
| 330 | 10 | 99.01 | 99 | 0.01 | -0.403 | -10 |
| 330 | 20 | 98.941 | 99 | -0.059 | 0.069 | -10 |
| 330 | 30 | 102.352 | 99 | 3.352 | -3.411 | -10 |
| 330 | 40 | 102.069 | 99 | 3.069 | 0.283 | -10 |
| 330 | 50 | 99.632 | 99 | 0.632 | 2.437 | -10 |
| 330 | 60 | 101.554 | 99 | 2.554 | -1.922 | -10 |
| 330 | 70 | 103.476 | 99 | 4.476 | -1.922 | -10 |
| 330 | 80 | 105.547 | 99 | 6.547 | -2.071 | -10 |
| 330 | 90 | 104.756 | 99 | 5.756 | 0.791 | -10 |
| 330 | 100 | 104.812 | 99 | 5.812 | -0.056 | -10 |
| 330 | 110 | 103.662 | 99 | 4.662 | 1.15 | -10 |
| 330 | 120 | 102.995 | 99 | 3.995 | 0.667 | -10 |
| 330 | 130 | 102.345 | 99 | 3.345 | 0.65 | -10 |
| 330 | 140 | 102.244 | 99 | 3.244 | 0.101 | -10 |
| 330 | 150 | 102.019 | 99 | 3.019 | 0.225 | -10 |
| 330 | 160 | 101.967 | 99 | 2.967 | 0.052 | -10 |
| 330 | 170 | 102.05 | 99 | 3.05 | -0.083 | -10 |
| 330 | 180 | 101.309 | 99 | 2.309 | 0.741 | -10 |
| 330 | 190 | 100.567 | 99 | 1.567 | 0.742 | -10 |
| 330 | 200 | 100.005 | 99 | 1.005 | 0.562 | -10 |
| 340 | 0 | 100.394 | 99 | 1.394 | | |
| 340 | 10 | 99.945 | 99 | 0.945 | 0.449 | -10 |
| 340 | 20 | 100.43 | 99 | 1.43 | -0.485 | -10 |
| 340 | 30 | 100.822 | 99 | 1.822 | -0.392 | -10 |
| 340 | 40 | 100.158 | 99 | 1.158 | 0.664 | -10 |
| 340 | 50 | 99.646 | 99 | 0.646 | 0.512 | -10 |
| 340 | 60 | 99.564 | 99 | 0.564 | 0.082 | -10 |
| 340 | 70 | 99.115 | 99 | 0.115 | 0.449 | -10 |
| 340 | 80 | 98.588 | 99 | -0.412 | 0.527 | -10 |
| 340 | 90 | 99.516 | 99 | 0.516 | -0.928 | -10 |
| 340 | 100 | 99.467 | 99 | 0.467 | 0.049 | -10 |
| 340 | 110 | 100.787 | 99 | 1.787 | -1.32 | -10 |
| 340 | 120 | 102.632 | 99 | 3.632 | -1.845 | -10 |
| 340 | 130 | 103.506 | 99 | 4.506 | -0.874 | -10 |
| 340 | 140 | 104.234 | 99 | 5.234 | -0.728 | -10 |
| 340 | 150 | 104.501 | 99 | 5.501 | -0.267 | -10 |

| | | | | | | |
|-----|-----|---------|----|-------|--------|-----|
| 340 | 160 | 102.75 | 99 | 3.75 | 1.751 | -10 |
| 340 | 170 | 101.929 | 99 | 2.929 | 0.821 | -10 |
| 340 | 180 | 101.897 | 99 | 2.897 | 0.032 | -10 |
| 340 | 190 | 101.639 | 99 | 2.639 | 0.258 | -10 |
| 340 | 200 | 101.354 | 99 | 2.354 | 0.285 | -10 |
| 350 | 0 | 101.418 | 99 | 2.418 | | |
| 350 | 10 | 101.532 | 99 | 2.532 | -0.114 | -10 |
| 350 | 20 | 101.052 | 99 | 2.052 | 0.48 | -10 |
| 350 | 30 | 100.389 | 99 | 1.389 | 0.663 | -10 |
| 350 | 40 | 99.738 | 99 | 0.738 | 0.651 | -10 |
| 350 | 50 | 100.531 | 99 | 1.531 | -0.793 | -10 |
| 350 | 60 | 100.75 | 99 | 1.75 | -0.219 | -10 |
| 350 | 70 | 101.001 | 99 | 2.001 | -0.251 | -10 |
| 350 | 80 | 100.788 | 99 | 1.788 | 0.213 | -10 |
| 350 | 90 | 100.599 | 99 | 1.599 | 0.189 | -10 |
| 350 | 100 | 99.098 | 99 | 0.098 | 1.501 | -10 |
| 350 | 110 | 99.299 | 99 | 0.299 | -0.201 | -10 |
| 350 | 120 | 99.5 | 99 | 0.5 | -0.201 | -10 |
| 350 | 130 | 99.348 | 99 | 0.348 | 0.152 | -10 |
| 350 | 140 | 99.721 | 99 | 0.721 | -0.373 | -10 |
| 350 | 150 | 101.042 | 99 | 2.042 | -1.321 | -10 |
| 350 | 160 | 102.36 | 99 | 3.36 | -1.318 | -10 |
| 350 | 170 | 102.859 | 99 | 3.859 | -0.499 | -10 |
| 350 | 180 | 103.1 | 99 | 4.1 | -0.241 | -10 |
| 360 | 0 | 102.504 | 99 | 3.504 | | |
| 360 | 10 | 101.351 | 99 | 2.351 | 1.153 | -10 |
| 360 | 20 | 101.484 | 99 | 2.484 | -0.133 | -10 |
| 360 | 30 | 101.268 | 99 | 2.268 | 0.216 | -10 |
| 360 | 40 | 100.821 | 99 | 1.821 | 0.447 | -10 |
| 360 | 50 | 100.887 | 99 | 1.887 | -0.066 | -10 |
| 360 | 60 | 100.99 | 99 | 1.99 | -0.103 | -10 |
| 360 | 70 | 100.636 | 99 | 1.636 | 0.354 | -10 |
| 360 | 80 | 100.545 | 99 | 1.545 | 0.091 | -10 |
| 360 | 90 | 100.079 | 99 | 1.079 | 0.466 | -10 |
| 360 | 100 | 101.244 | 99 | 2.244 | -1.165 | -10 |
| 360 | 110 | 101.587 | 99 | 2.587 | -0.343 | -10 |
| 360 | 120 | 101.078 | 99 | 2.078 | 0.509 | -10 |
| 360 | 130 | 100.847 | 99 | 1.847 | 0.231 | -10 |
| 360 | 140 | 101.553 | 99 | 2.553 | -0.706 | -10 |
| 360 | 150 | 99.136 | 99 | 0.136 | 2.417 | -10 |
| 360 | 160 | 99.313 | 99 | 0.313 | -0.177 | -10 |
| 360 | 170 | 99.516 | 99 | 0.516 | -0.203 | -10 |
| 360 | 180 | 99.897 | 99 | 0.897 | -0.381 | -10 |
| 370 | 0 | 101.065 | 99 | 2.065 | | |
| 370 | 10 | 101.355 | 99 | 2.355 | -0.29 | -10 |
| 370 | 20 | 101.845 | 99 | 2.845 | -0.49 | -10 |
| 370 | 30 | 101.59 | 99 | 2.59 | 0.255 | -10 |

| | | | | | | |
|-----|-----|---------|----|-------|--------|-----|
| 370 | 40 | 100.772 | 99 | 1.772 | 0.818 | -10 |
| 370 | 50 | 101.033 | 99 | 2.033 | -0.261 | -10 |
| 370 | 60 | 100.896 | 99 | 1.896 | 0.137 | -10 |
| 370 | 70 | 100.346 | 99 | 1.346 | 0.55 | -10 |
| 370 | 80 | 100.356 | 99 | 1.356 | -0.01 | -10 |
| 370 | 90 | 100.448 | 99 | 1.448 | -0.092 | -10 |
| 370 | 100 | 100.221 | 99 | 1.221 | 0.227 | -10 |
| 370 | 110 | 99.648 | 99 | 0.648 | 0.573 | -10 |
| 370 | 120 | 100.968 | 99 | 1.968 | -1.32 | -10 |
| 370 | 130 | 102.602 | 99 | 3.602 | -1.634 | -10 |
| 370 | 140 | 102.259 | 99 | 3.259 | 0.343 | -10 |
| 370 | 150 | 101.046 | 99 | 2.046 | 1.213 | -10 |
| 370 | 160 | 100.172 | 99 | 1.172 | 0.874 | -10 |
| 380 | 0 | 99.579 | 99 | 0.579 | | |
| 380 | 10 | 99.422 | 99 | 0.422 | 0.157 | -10 |
| 380 | 20 | 99.73 | 99 | 0.73 | -0.308 | -10 |
| 380 | 30 | 100.069 | 99 | 1.069 | -0.339 | -10 |
| 380 | 40 | 100.323 | 99 | 1.323 | -0.254 | -10 |
| 380 | 50 | 100.512 | 99 | 1.512 | -0.189 | -10 |
| 380 | 60 | 100.583 | 99 | 1.583 | -0.071 | -10 |
| 380 | 70 | 100.255 | 99 | 1.255 | 0.328 | -10 |
| 380 | 100 | 99.872 | 99 | 0.872 | 0.383 | -30 |
| 380 | 110 | 99.919 | 99 | 0.919 | -0.047 | -10 |
| 380 | 120 | 99.906 | 99 | 0.906 | 0.013 | -10 |
| 380 | 130 | 99.806 | 99 | 0.806 | 0.1 | -10 |
| 380 | 140 | 100.053 | 99 | 1.053 | -0.247 | -10 |
| 380 | 150 | 101.795 | 99 | 2.795 | -1.742 | -10 |
| 390 | 0 | 103.153 | 99 | 4.153 | | |
| 390 | 10 | 101.658 | 99 | 2.658 | 1.495 | -10 |
| 390 | 20 | 101.013 | 99 | 2.013 | 0.645 | -10 |
| 390 | 30 | 100.003 | 99 | 1.003 | 1.01 | -10 |
| 390 | 40 | 99.673 | 99 | 0.673 | 0.33 | -10 |
| 390 | 50 | 99.662 | 99 | 0.662 | 0.011 | -10 |
| 390 | 60 | 99.855 | 99 | 0.855 | -0.193 | -10 |
| 390 | 120 | 99.804 | 99 | 0.804 | 0.051 | -60 |
| 390 | 130 | 99.386 | 99 | 0.386 | 0.418 | -10 |
| 390 | 140 | 99.692 | 99 | 0.692 | -0.306 | -10 |
| 390 | 150 | 101.202 | 99 | 2.202 | -1.51 | -10 |
| 400 | 0 | 102.259 | 99 | 3.259 | | |
| 400 | 10 | 102.886 | 99 | 3.886 | -0.627 | -10 |
| 400 | 20 | 100.182 | 99 | 1.182 | 2.704 | -10 |
| 400 | 30 | 101.302 | 99 | 2.302 | -1.12 | -10 |
| 400 | 40 | 100.5 | 99 | 1.5 | 0.802 | -10 |
| 400 | 50 | 99.832 | 99 | 0.832 | 0.668 | -10 |
| 400 | 60 | 100.044 | 99 | 1.044 | -0.212 | -10 |
| 400 | 130 | 99.739 | 99 | 0.739 | 0.305 | -70 |
| 400 | 140 | 100.83 | 99 | 1.83 | -1.091 | -10 |

| | | | | | | |
|-----|--------------|----------------|-----------|--------------|--------|-----|
| 410 | 0 | 101.786 | 99 | 2.786 | | |
| 410 | 10 | 101.183 | 99 | 2.183 | 0.603 | -10 |
| 410 | 20 | 101.227 | 99 | 2.227 | -0.044 | -10 |
| 410 | 30 | 100.759 | 99 | 1.759 | 0.468 | -10 |
| 410 | 40 | 100.319 | 99 | 1.319 | 0.44 | -10 |
| 410 | 50 | 100.044 | 99 | 1.044 | 0.275 | -10 |
| | Avge. | 103.437 | 99 | 4.437 | | |

| |
|--------------------------------|
| AVG DIFF = 4.437 M |
| AREA = 123742.82 SQM |
| Filling = 549046.89 CUM |

ANNEXURE 2: Quotations


Jainum Food & Waste Projects Pvt. Ltd.

Date: 05.12.2024

Ref. No.: JNUM/24-25/M-152rev1

Client: Commissioner, Meerut Municipal Corporation
Contact Person: Commissioner
Contact Phone:
Email:
Subject: Offer for Trommel with Feeder

OFFER

| S. No. | PARTICULARS* | RATE | QUANTITY | AMOUNT** (In INR.) |
|-----------------------------------|---|-----------|----------|-----------------------|
| 1 | MOVING BED FEEDER Type – Flat Type Conveyor L x W x H – 5.0 m x 1.2 m x As per dwg Drive – Electrical 5 H.P. | 2720000/- | 1 No. | 27,20,000=00 |
| 2 | PRIMARY BELT CONVEYOR Type – Trough Type with Receiver Hopper L x W x H – 12.0 m x 1.0 m x As per dwg. Drive – Electrical 5 H.P. | | 1 No. | |
| 3 | TROMMEL (TS-2.0-3) – 35 mm Screening Length – 5.2 m, Total – 7.5 m Diameter – 2.0 m Screen – Punched Screen 35 mm Drive – Electrical 7.5 + 7.5 H.P. with VFD – Dual Drive | | 1 No. | |
| 4 | UNDERSIZE CONVEYOR Type – Trough Type Conveyor L x W x H – 14.0 m x 0.8 m x As per dwg. Drive – Electrical 5 H.P. | | 1 No. | |
| 5 | OVERSIZE CONVEYOR Type – Trough Type Conveyor L x W x H – 6.0 m x 0.8 m x As per dwg. Drive – Electrical 3 H.P. | | 1 No. | |
| 6 | AIR BLOWER | | 1 No. | |
| 7 | CONTROL PANEL All the equipment, including VFD Drive for Trommel and MBF. | 195000/- | 1 SET | 1,95,000=00 |
| SUB TOTAL | | | | 29,15,000=00 |
| GST @18% | | | | 5,24,700=00 |
| ERECTION AND COMMISSIONING | | | | 80,000=00 |
| Transportation | | | | 3,00,000=00 |
| Total | | | | 38,19,700=00 |

Marketing Office: 408, Apollo Square, 7/2 Dr. RSB Marg, Janjirwala Chouraha, Indore-02 (M.P.) India
 Factory: 39-D, A.B. Road, Industrial Area No. 1, Behind TATA Exports, Dewas-455001 (M.P.) India
 Ph. +91-7000837374, 8989124959. Email: jainumprojects@gmail.com



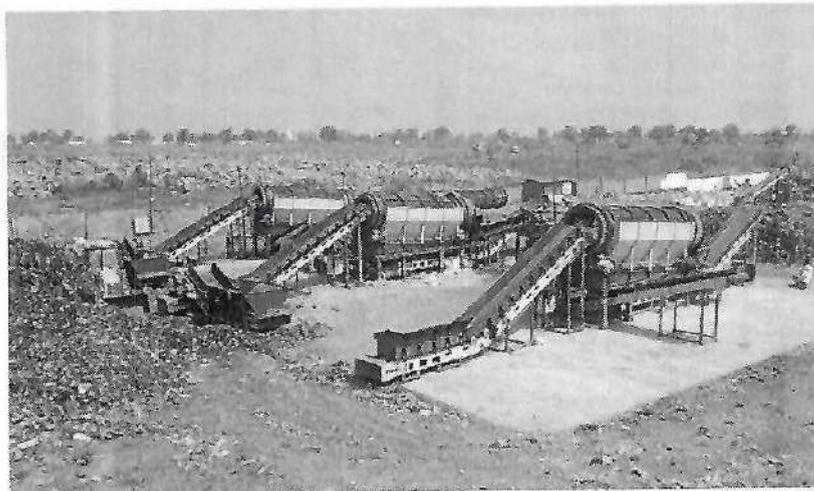
Jainum Food & Waste Projects Pvt. Ltd.

TYPE OR BRANDS OF COMPONENTS

| S.NO. | PARTICULAR | TYPE OR BRAND |
|-------|--------------------------|--|
| 1 | Motor | ABB / Siemens /Crompton |
| 2 | Gearbox | Bonfiglioli / PBL, SF > 1.5 |
| 3 | Bearings | NTN / URB / Matching |
| 4 | Chain (as per use) | K1 Roller Chain, 3" Pitch, ENS, BL=8 Ton |
| 5 | Rubber Belt | M24 Grade, 3 Ply, 7/8 mm thick Chevron Cleated or Plain |
| 6 | Rubber Belt Make | Dunlop / Hilton |
| 7 | Drive Duplex Chain | Diamond |
| 8 | V- Belt | Fenner |
| 9 | Guide and V Block | UHMW |
| 10 | Control Panel Components | I&T, Siemens, RR Kable, etc |
| 11 | VFD | Delta |

KEY FEATURES:

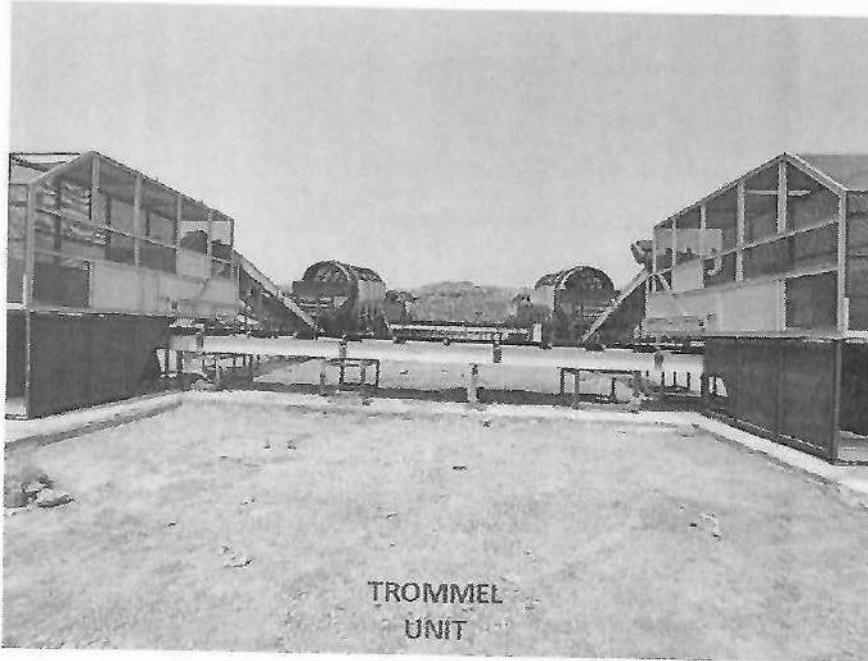
- Trommel comes with Dual Drive synchronised with VFD.
- Better durability and Tyre Life of Trommel, due to Synchronised Dual Drive.
- Feed Conveyor or MBF comes with a VFD for better control over feed rate.
- Heavy Duty Riding Ring, precisely machined, to reduce wear of Rubber Tyre.
- All conveyors are Chassis Type, which allows easier assembly and dis-assembly of the Conveyor. This also allows to increase or decrease in length of the conveyor in event of any future requirement.
- All conveyor chassis are powder coated for better durability.
- All conveyors have spillage protection as integral part of the design.
- Rain Covers for Motor and Drives.
- Dust Proof Control Panel.



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Jainum Food & Waste Projects Pvt. Ltd.



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Jainum Food & Waste Projects Pvt. Ltd.

TERMS AND CONDITIONS:

1. Order:

Should be placed in favour of "Jainum Food & Waste Projects Pvt. Ltd."

2. Price:

All prices quoted are FOR – Dewas basis .

3. SGST/CGST/IGST:

Extra as applicable at the time of delivery Present Rate @ 18%

4. Freight Charges:

Extra as per actual , on to-pay basis Or as per offer submitted, if any.

5. Transit Insurance:

Extra as per actual or as per offer submitted, if any.

6. Payment Terms:

i) **Advance:** 30% along with firm order. ii) **Balance:** 70% + GST, post inspection and before the despatch of goods.

All payments shall be made in favour of "Jainum Food & Waste Projects Pvt. Ltd. "

7. Delivery:

Ex-Stock or within two weeks from the date of confirm order technically and commercially through. Please check the delivery positions before placing the order with us.

8. Warranty:

All products will bear the warranty as indicated in their warranty statement. Standard Warranty of the product is ONE year from the date of commissioning or 13 months from the date of invoicing whichever is earlier.

9. Agreement:

An agreement shall be affected upon after the receipt of order which will enlist the entire scope of work and its provisions, and it will supersede all previous terms and condition.

10. Installation and Commissioning :

If, required, installation & commissioning services can be offered and shall be charged extra as per scope of work. Supervision and training during commissioning of the project is part of the offered value.

11. Client's Scope :

- | | |
|-----------------------------|---|
| i) Unloading & Safe Storage | - Unloading and Safe Storage of the Unit at Site. |
| ii) Erection | - Availability of Hydra as per requirement. |
| iii) Electrical Line | - Electrical line upto Control Panel. |
| iv) Drainage | - Water Drainage line upto the equipment to be used for cleaning and de-watering purpose. |
| v) Water Line | - Water Line upto the equipment for cleaning. |

12. Force Majeure:

- | | |
|----------------------|---|
| i) Natural Phenomena | - Any Natural calamity , weather conditions , floods etc. |
| ii) Government Act | - Any change in laws, licensing, power crisis etc. |
| iii) Transportation | - Non-availability of transport, accident, damage during loading and unloading etc. |
| iv) Delivery | - Any delay on the part of good's supplier in delivery of goods. |

13. Warehousing:

If client fails to take delivery of goods upon intimation of readiness for supply by us, client is required to release the entire due payment to us. In addition to that a warehousing charges of 1% per week will be charged.

cont.....2

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Jainum Food & Waste Projects Pvt. Ltd.

TERMS AND CONDITIONS...(cont.):

14. Cancellation / Alteration:

Order(s) once placed shall not subject to any cancellation / alteration. However, if cancelled the entire advance will be forfeited, provided that such information is received by us before making any progress with regard to drawing or manufacturing work. But, if such intimation is received after the work has already progressed, the client will be required to pay in addition to the advance a sum in proportion to the progress of the work between the date of receipt of order and the date of receipt of intimation regarding cancellation/alteration. JFW claim will be final and binding on the client.

15. Forwarding:

If client fails to take delivery within one month of intimation, supplier can forward the goods to any other client, if available. If despatched to other client, there will be delay in the delivery of the new equipment, as per the delivery period mentioned in point No. 7 above or as per supplier's revised schedule of delivery.

16. Secrecy:

i) Offer

Offer submitted herewith are solely for the use of addressed client and shall not be disclosed to any third party without written permission from us .

ii) Documents

Document, methods and techniques forming part of the supply are solely dedicated for the supplied product it referred to . These documents , methods and techniques shall not be revealed to any third party without written authorisation from us mentioning so .

iii) Jurisdiction

Subjected to Indore Jurisdiction .

17. Validity:

This offer is valid for 30 days.

For Jainum Food & Waste Projects Pvt. Ltd.

Director

Marketing Office: 408, Apollo Square, 7/2 Dr. RSB Marg, Janjirwala Chouraha, Indore-02 (M.P.) India
 Factory: 39-D, A.B. Road, Industrial Area No. 1, Behind TATA Exports, Dewas-455001 (M.P.) India
 Ph. +91-7000837374, 8989124959. Email: jainumprojects@gmail.com

THAPAR ENGINEERING WORKS

Manufacturer of: Stone Crusher Plants & its Spare Parts, Material Handling Equipment,
Construction & Demolition Waste Recycling Plant, Solid Waste
Recycling Plant

Ref No. TEW/08/2024-25/934

29/01/2025

Kind Attn: Meerut Municipal Corporation

Subject : Quotation for Trolley Mounted Ballistic Separator

Dear Sir,

This is in reference to your telephonic conversation with Sh. Khyang Thapar regarding the subject requirement.

On the above subject, we feel pleasure to enclose herewith our detailed offer for the plant required by you.

Hope you shall find our offer most suitable as per your requirement and we shall be pleased with your valued order which we assure you would be executed at your satisfaction.

In case you require any further clarification / information, please feel free to get in touch with us.

Thanking you and assuring you of our best services at all times.

Yours Truly,
For Thapar Engineering Works

Partner
+91 9810332565
+91 9971000040

Encl:

1. Scope Of Supply
2. Price Schedule
3. Terms & Conditions

Add: Plot No. F-1018, RIICO Industrial Area, Khushkhera, Distt. Alwar, Rajasthan.

Contact No. +91 9810332565, +91 9971000040

E-mail : thaparengineeringworks@yahoo.com

Web : www.duromech.in

THAPAR ENGINEERING WORKS

Manufacturer of: Stone Crusher Plants & its Spare Parts, Material Handling Equipment,
Construction & Demolition Waste Recycling Plant, Solid Waste
Recycling Plant

Ref No. TEW/08/2024-25/934

29/01/2025

SCOPE OF SUPPLY

| <u>S No.</u> | <u>Equipment Description</u> | <u>Specification</u> | <u>Qty</u> |
|--------------|---|--------------------------|------------|
| 1 | Tyre Mounted Ballistic Separator DBS-06 With Geared Motor, Axial Fans & Frequency Inverter | 6 Paddles | 1 No. |
| 2 | Feed Conveyor with Feed Hopper | B/W 1.5 Mtrs x 3 Mtrs | 1 No. |
| 3 | Inert Conveyor | B/W 0.8 Mtrs x 9 Mtrs | 1 No. |
| 4 | RDF / Light Fraction Conveyor | B/W 1 Mtrs x 5 Mtrs | 1 No. |
| 5 | Heavy Fraction Conveyor | B/W 0.65 Mtrs x 2.5 Mtrs | 1 No. |
| 6 | Control Panel with Cables | -- | 1 No. |
| | | | |

Note :-

- The Conveyors are trough type and includes impact rollers and carrying rollers as required.
- Ballistic Separator & Blowers will have Variable Frequency Drive.
- Ballistic Separator is Tyre Mounted.

For Thapar Engineering Works

Partner

Add: Plot No. F-1018, RIICO Industrial Area, Khushkhera, Distt. Alwar, Rajasthan.

Contact No. +91 9810332565, +91 9971000040

E-mail : thaparengineeringworks@yahoo.com

Web : www.duomech.in

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Recycling Plant

Ref No. TEW/08/2024-25/934

29/01/2025

BALLISTIC SEPARATOR WITH CONVEYORS

| | |
|-------------------------|--|
| Product | Legacy Waste |
| Type | Single Deck Movable |
| Model | DBS – 06 |
| Total Power Consumption | 37 H.P. |
| Inclination Angle | 8° – 18° |
| Working Length | 14000 mm |
| Working Breadth | 6000 mm |
| Working Height | 3000 mm |
| Base Frame | ISMB 200 |
| Side Body Frame | 6mm Sheet with Pipe and Angle Support |
| Gear Drive | PBL / Premium / SEW Eurodrive |
| Angular Arrangement | Jack Screw Arrangement |
| Paddle Perforation | Square |
| Hole Size | 65 mm |
| Air Blower | 2 No. |
| Screening Area | 9 m ² |
| Machine on Wheels | Yes |
| Bearings | Imported High Quality & Genuine |
| No. of Paddles | 6 Paddles |
| M.O.C of Shaft | EN19 |
| Heat Treatment of Shaft | Volume Hardening |
| Rotation Speed | 160 – 195 |
| Motor Type | Electrical |
| Paint | Epoxy Paint |
| VFD | Provided for Ballistic, Blower & Feed Conveyor |

Add: Plot No. F-1018, RIICO Industrial Area, Khushkhera, Distt. Alwar, Rajasthan.

Contact No. +91 9810332565, +91 9971000040

E-mail : thaparengineeringworks@yahoo.com

Web : www.duomech.in

THAPAR ENGINEERING WORKS

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Recycling Plant

Ref No. TEW/08/2024-25/934

29/01/2025

Makes of Bought – Out Items

| <u>S No.</u> | <u>Description</u> | <u>Make</u> |
|--------------|------------------------|-----------------------------------|
| 1 | Electric Motor | Kirlosker / Crompton / Equivalent |
| 2 | Gear Box | PBL / Premium / SEW Eurodrive |
| 3 | Paint | Berger / Asian |
| 4 | Electrical Switchgears | Siemens / Schneider / L&T |
| 5 | Electrical Wire | KEI / Polycab / RR Cables |

For Thapar Engineering Works

Partner

Add: Plot No. F-1018, RIICO Industrial Area, Khushkhera, Distt. Alwar, Rajasthan.

Contact No. +91 9810332565, +91 9971000040

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Web : www.duramech.in

THAPAR ENGINEERING WORKS

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Recycling Plant

Ref No. TEW/08/2024-25/934

29/01/2025

PRICE SCHEDULE FOR TYRE MOUNTED BALLISTIC SEPARATOR

| S. No. | DESCRIPTION | PRICE | QTY | AMOUNT |
|---|--|----------------|-----|-----------------|
| 1 | Price for Tyre Mounted Ballistic Separator with Conveyors as per Scope of Supply | Rs.44,00,000/- | 1 | Rs.44,00,000.00 |
| Total Price | | | | Rs.44,00,000.00 |
| IGST 18% | | | | Rs.7,92,000.00 |
| TOTAL AMOUNT | | | | Rs.51,92,000.00 |
| Transportation charges extra: Rs. 3,00,000.00 | | | | |

For Thapar Engineering Works

Partner

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Recycling Plant

Ref No. TEW/08/2024-25/934

29/01/2025

General Terms and Conditions:-

1. **Validity:** Strictly 30 days from the date of offer, subjected to that the main producer's price do not fluctuate beyond 5% from the price as on date.
2. **Prices:** The quoted prices are on Ex-Works basis.
3. **Price Escalation:** We reserve the right to revise the price of the booked order if the price of the raw material fluctuates abnormally.
4. **Packing, Handling & Forwarding:** Extra to your account.
5. **Freight:** We shall book the consignment on Freight-to-Pay basis and the freight, at actual, shall be paid by you.
6. **Delivery:** Delivery period will be counted Ex-Works and shall commence from the date of receipt of your confirmed order along with advance and clarifications of all technical points. The delivery period is quoted below is in good faith and is subject to Force Majeure Clause. **Delivery Period: 8 Weeks.**
7. **Tax & Duties:** Goods & Service Tax Extra applicable at the time of delivery will be borne by the purchaser. The rate of Goods & Service Tax on Machinery is 18%.
8. **Payment Terms:** 40% advance along with order and balance 60% along with 100% taxes and duties etc. against performa invoice before dispatch at our works.
9. **Inspection:** When inspection prior to dispatch is required, it can be arranged. An advance notice of 10 days shall be given for the date of inspection.
10. **Force Majeure:** We Shall be under no liability at any circumstances arising out of our offer/order wherever fulfillment of our and/or our sub-contractors and/their control such as war, strikes, fire, accidents, epidemics, failure of supply of electricity, shortage of material or labour or order of the Government or of other duly constituted authority.
11. **Liability:** All liabilities of any shortage/ Breakage will be passed over to the customer's immediately on dispatch Ex-Factory. Shortage / Breakage will not be entertained unless informed in writing within 7 days after arrival of the goods at destination whether dispatched by rail or road transport.

Add: Plot No. F-1018, RIICO Industrial Area, Khushkhera, Distt. Alwar, Rajasthan.

Contact No. +91 9810332565, +91 9971000040

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Ref No. TEW/08/2024-25/934

29/01/2025

12. **Limitation of Liability:** We shall under no circumstances be liable of loss of production, loss of profit and other indirect and consequential losses.

Exclusions:

1. Any Civil work including embedment fittings.
2. Raw Material for trial runs and commissioning.
3. Unskilled labour for testing, trial runs and commissioning.
4. Raw Material for trial run.
5. Mandatory Spares.
6. Workshop and lab equipments.
7. Material handling and feeding material for trial and commissioning.
8. First fill of lubricants such as grease / oil.
9. All other tools and any other items specifically not mentioned in our offer.

For Thapar Engineering Works

Partner

Add: Plot No. F-1018, RIICO Industrial Area, Khushkhera, Distt. Alwar, Rajasthan.

Contact No. +91 9810332565, +91 9971000040

E-mail : thaparengineeringworks@yahoo.com

Web : www.duromech.in

3/22/25, 3:49 PM

Buy LMKC Containerized Housing / Office Unit 6100 mm x C4067E 2440 mm (L x W) online | Government e Marketplace (GeM)

GeM Logo

Containerized Housing

HomeLand and Buildings and Structures and Thoroughfares Prefabricated buildings and structures

Prefabricated emergency relief buildings and structures Containerized Housing / Office Unit (Q3 Category)



LMKC Containerized Housing / Office Unit 6100 mm x C4067E 2440 mm (L x W)

LMKC^R
(Containerized Housing)

₹ 500,000.00 11% OFF

Trends

Product Details

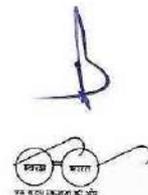
| | |
|--------------------------|---------------------|
| Price For : | 1 pieces |
| MRP/Unit: | ₹ 559,000.00 |
| Offer Price/Unit: | ₹ 500,000.00 |
| Availability: | 10 In Stock |
| Min. Qty. Per Consignee: | 1 |
| Product id: | 5116877-61203397944 |
| Country Of Origin: | India |
| Local Content (MII): | 100% |

*Please Note: Local Content value is as declared by reseller since OEM is not registered on GeM



Ask GeMmy

https://mkt.gep.gov.in/containerized-housing-office-unit/containerized-housing/p-5116877-61203397944-cat.html?variant_id=5116877-6120339 1/10



3/22/25, 3:49 PM

Buy LMKC Containerized Housing / Office Unit 6100 mm x C4067E 2440 mm (L x W) online | Government e Marketplace (GeM)

Seller Details

| | |
|-------------------------------|------------------|
| Sold by: | Resellers |
| Reseller not verified by OEM | |
| Catalogue not verified by OEM | |
| Seller Excellence | 3.5 - 3.99 |
| Seller Details | VIEW ALL SELLERS |

Specifications

| | |
|---|------------------------|
| Number of Ventilators | 2 nos. |
| Number of windows | 3 nos. |
| Inside wall panelling material | Prelaminated MDF board |
| Inside wall panelling thickness (in mm) | 8 mm |
| Inside flooring | Single layer |
| Inside flooring Base Layer | Ply |
| Thickness of Inside flooring base layer (in mm) | 18 mm |
| VIEW MORE | |
| Thickness of Inside flooring top | 2 mm |

 **Ask GeMmy**

https://mkp.gem.gov.in/containerized-housing-office-unit/containerized-housing/p-5116877-61203397944-cat.html#variant_id=5116877-6120339 2/10



3/21/25, 6:39 PM

Buy Unbranded 3 - seater portable toilet 890mm X 840mm X 1980mm (for 1- seater) with No sewage facility online | Governm

GeM Logo

Portable Toilet

HomeLand and Buildings and Structures and ThoroughfaresPortable buildings and structures

Portable Commercial and Industrial buildings and structuresPortable Toilet (Q3 Category)



Unbranded 3 - seater portable toile
890mm X 840mm X 1980mm (for 1-
seater) with No sewage facility

NA
(PUF Panel Male Toilet Block (14x8x8.t

₹ 120,000.00 76% OFF

Trends

Product Details

| | |
|--------------------------|---------------------|
| Price For : | 1 pieces |
| MRP/Unit: | ₹ 495,000.00 |
| Offer Price/Unit: | ₹ 120,000.00 |
| Availability: | 2 In Stock |
| Min. Qty. Per Consignee: | 2 |
| Product id: | 5116877-28314350714 |
| Country Of Origin: | India |
| Local Content (MII): | Not Declared |



Ask GeMmy

Seller Details

Sold by: Resellers
Reseller not verified by OEM

https://mkt.gem.gov.in/portable-toilet/puf-panel-male-toilet-block-14x8x8-6/p-5116877-28314350714-cat.html#variant_id=5116877-28314350714 1/12



3/21/25, 6:39 PM Buy Unbranded 3 - seater portable toilet 890mm X 840mm X 1080mm (for 1- seater) with No sewage facility online | Government

Catalogue not verified by OEM

Seller Excellence **4.0 - 4.49**

Seller Details **VIEW ALL SELLERS**

Specifications

| | |
|--|---|
| Mode of Supply | Knocked Down To Be Assembled At Consignee Site By The Seller |
| Number of Compartments | 3 - seater portable toilet |
| Type of WC | European with ceramic base |
| Number of WC | 1 |
| Number of Urinals (For Gents and Ladies to be mentioned separately) | 0 |
| Number of Bathrooms | 0 |
| Water facility | By mean of overhead tank(Capacity 200Ltrs) |
| Sewage facility | No sewage facility |
| ventilation | One No. |
| Lifting hook | one number heavy lifting hook provided |
| Projection of Roof | 50mm projection on all the four sides |
| Installation and commissioning | To be done by seller |
|  Ask GeMmy ary fitting | To be done by seller |

https://mcp.gem.gov.in/portable-toilet/pul-panel-male-toilet-block-14x8x6-6/p-5116877-28314350714-cat.html#variant_id=5116877-28314350714 2/12



3/21/25, 6:39 PM

Buy Unbranded 3-seater portable toilet 800mm X 840mm X 1980mm (for 1-seater) with No sewage facility online | Government

| | |
|--|---|
| Electrical connection | To be done by seller |
| Waste extraction fittings | To be done by seller |
| Civil foundation | No foundation required |
| Bottom frame material | 35mm X 35mm X 5mm(thick) MS angle for one seater |
| Bottom frame support material | 25mm X 25mm X 3mm(thick) MS angle (for 1-seater, 2-seater & 3-seater) |
| Side panel frame material | 35mm X 35mm X 5mm(thick) MS angle |
| Top(roof) frame material | 35mm X 35mm X 5mm(thick) MS angle |
| Top(roof) support frame structure | 25mm X 25mm X 3mm(thick) MS angle |
| Partition frame material | 35mm X 35mm X 5mm(thick) MS angle |
| Ventilation frame material | 25mm X 25mm X 3mm(thick) flat MS |
| Door frame material | 50mm X 25mm of 14-16gauge rectangular MS hollow pipe |
| Support material for Door panel fixing | Aluminium U-channel of 18gauge |
| Door hinges(two numbers) | 75mm size with 1.2-1.5mm thickness MS |
|  Ask GeMmy material | 25mm X 3mm(thick) MS flat |

https://mkip.gem.gov.in/portable-toilet/puf-panel-male-toilet-block-14x8x8-6/p-5116877-28314350714-cat.html#variant_id=5116877-28314350714

3/12

3/21/25, 7:37 PM

Buy Elweigh Surface Mounted Electronic Weigh Bridge (Without Civil Work) with Double ended Shear Beam Load Cell online

GeM Logo

Electronic Weigh Bridge

Home>Laboratory and Measuring and Observing and Testing Equipment>Measuring and observing and testing instruments

weight measuring instruments>Electronic Weigh Bridge (Without Civil Work) (Q3 Category)

Elweigh Surface Mounted Electronic Weigh Bridge (Without Civil Work) with Double ended Shear Beam Load Cell

Elweigh^R
(EWB_30)

₹ 685,000.00 19% OFF



Trends

Product Details

| | |
|--------------------------|---------------------|
| Price For : | 1 pieces |
| MRP/Unit: | ₹ 850,000.00 |
| Offer Price/Unit: | ₹ 685,000.00 |
| Availability: | 10 In Stock |
| Min. Qty. Per Consignee: | 1 |
| Product id: | 5116877-44218807973 |
| Country Of Origin: | India |
| Local Content (Mill): | Not Declared |



Ask GeMmy
Product compare

Product History 3

Seller Details

https://mkt.geg.gov.in/electronic-weigh-bridge-without-civil-work/electronic-weigh-bridge/p-5116877-44218807973-cat.html#variant_id=5116877 1/13

(Handwritten signatures and initials)



3/21/25, 7:37 PM Buy Eweigh Surface Mounted Electronic Weigh Bridge (Without Civil Work) with Double ended Shear Beam Load Cell online |

Sold by: Resellers

OEM verified Reseller

Catalogue not verified by OEM

Seller Excellence

Seller Details **VIEW SELLER DETAILS**

Specifications

| | |
|--|---|
| Providing Required test load | No(Seller not providing and buyer to arrange same) |
| The test load requirements Provided | NA(in case seller not providing) |
| Type of Weigh Bridge | Surface Mounted |
| Maximum Capacity of weigh Bridge in Tonnes | 30 |
| Graduation of weigh bridge in KG | 1 |
| Warranty Period in Years | 1 |
| The type of Construction of Weigh Bridge Plat form | Modular enabling easy Assembly ,Transportation and adjustment of Size |
| Length of the Platform required for weighing in meters | 7.5 m |
| Width of the Plat form in meters | 3m |
| Ramp length in mm | NA (For surface Mounted and Pit mounted) |

 **Ask GeMmy** **30** in Tonnes **10 ton**

Product History **3**

https://mkt.gegm.gov.in/electronic-weigh-bridge-without-civil-work/electronic-weigh-bridge/p-5116877-44218807973-cat.html?variant_id=5116877... 2/13

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3/21/25, 7:37 PM

Buy Eweigh Surface Mounted Electronic Weigh Bridge (Without Civil Work) with Double ended Shear Beam Load Cell online |

| | |
|--|---|
| No of Load Cell in the weigh bridge system | 4 |
| Type of Load Cell | Double ended Shear Beam Load Cell |
| Load cell technology | Digital |
| Material of Body of Load Cell | Nickel plated Alloy steel |
| Protection class for load cell | IP 65 |
| Certification required for for load cell | OIML |
| Auto rotation lock | NA(For double ended shear beam load cell) |
| LENGTH of cable Provided for load cell in meters | 6 |
| shall be provided with automatic diagnostics | Yes |
| shall be unaffected by off center loads | Yes |
| Rated output Repeatability in terms of FS | 0.05% |
| Overload rating SAFE | 125% |
| Housing Protection for Digital Controller | IP 40 |
| Details of Printer type | laser printer |
| Printer Make | epson |
| USB port provided | Yes |
| No of digits of led display for weight | 6 |
| Minimum character size of LCD Display | 16x2 |
| Provision for remote Display port | Yes |
| Protection class for junction box for connection | IP 65 |

Ask GeMmy Product History 3

https://mnp.gem.gov.in/electronic-weigh-bridge-without-civil-work/electronic-weigh-bridge/p-5116877-44218807973-cat.html#variant_id=5118877... 3/13

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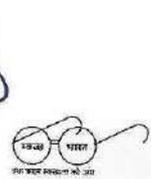


3/21/25, 7:37 PM Buy Elweigh Surface Mounted Electronic Weigh Bridge (Without Civil Work) with Double ended Shoar Beam Load Cell amine [...]

| | |
|---|------------------------|
| Material of construction for junction box | ABS |
| Back up time in hours | NA if UPS not provided |
| Number of additional load cell to be supplied | Not supplied |
| UPS to be provided with the system | No |
| VIEW LESS | |

 Ask GeMmy
Product History 3

https://mkg.gem.gov.in/electronic-weigh-bridge-without-civil-work/electronic-weigh-bridge/p-5116877-44218807973-cat.html#variant_id=5116877... 4/13



3/21/25, 7:37 PM

Buy Elweigh Surface Mounted Electronic Weigh Bridge (Without Civil Work) with Double ended Sheer Beam Load Cell online | ...

Performance Parameters

| | |
|---|--|
| The weigh bridge shall be rugged design with robust load cells and high quality precision Manufacturing | Yes |
| Scope of Supply for the weigh bridge | Weigh Controller, Load Cells, Platform, Large Size LED Display, PC, Printer, UPS, , Model approval , Verification Stamping from legal metrology Dept , Ramp(in case of portable only) |
| Providing Required test load | No(Seller not providing and buyer to arrange same) |
| The test load requirements Provided | NA(in case seller not providing) |
| Scope of Supply do not Involve Civil work such as Foundation work, Cabin Construction and site preparation associated with installation of Weigh Bridge | Yes |
| The required civil work regarding foundation ,cabin etc as applicable shall be got completed by buyer or consignee through their resources and seller shall furnish required drawing and other relevant information for approval immediately within 2 weeks of receipt of order | Yes |
| Type of Weigh Bridge | Surface Mounted |
| Maximum Capacity of weigh Bridge In Tonnes | 30 |
| Graduation of weigh bridge in KG | 1 |
| Before supply of components of bridge the drawig of the entire set up should be got approved from the buyer/consinee | Yes |
| Warranty Period in Years | 1 |

 Ask GeMmy
Product History 3

https://mnp.gem.gov.in/electronic-weigh-bridge-without-civil-work/electronic-weigh-bridge?p=5116877-44218807973-cat.html#variant_id=5116877... 5/13


Auv Enterprises

11A Mohal Nehru Road Belbedai Press Compound Prayagraj
 Contact No.- 6391780460-9984078790
 Email- auventerprises@gmail.com

Quotation

Bill To: :
 Name : Municipal Corporation Meerut
 Address : Nagat Nigam Meerut

Quotation # : AUV-121
 Quotation Date : 22-Mar-2025

| # | Description | Qty | Rate | Amount |
|-------------|--|-----|----------|----------------------|
| 1 | NVR CGST 9% (2205.00) SGST 9% (2205.00) | 1 | 24500.00 | 24500.00 |
| 2 | PTZ CAMERA CGST 9% (17640.00) SGST 9% (17640.00) | 4 | 49000.00 | 196000.00 |
| 3 | CAT_6 CABLE 305 MTR CGST 9% (1215.00) SGST 9% (1215.00) | 1 | 13500.00 | 13500.00 |
| 4 | SURVEILLANCE HDD 4TB CGST 9% (882.00) SGST 9% (882.00) | 1 | 9800.00 | 9800.00 |
| 5 | POE SWITCH 8 PORT CGST 9% (378.00) SGST 9% (378.00) | 1 | 4200.00 | 4200.00 |
| 6 | RJ45 CGST 9% (61.20) SGST 9% (61.20) | 8 | 85.00 | 680.00 |
| 7 | 4U RACK CGST 9% (144.00) SGST 9% (144.00) | 1 | 1600.00 | 1600.00 |
| 8 | 32 INCH LED TV CGST 9% (1485.00) SGST 9% (1485.00) | 1 | 16500.00 | 16500.00 |
| Total | | | | 266780.00 |
| CGST(9%)(+) | | | | 24010.20 |
| SGST(9%)(+) | | | | 24010.20 |
| Net Amount | | | | INR 314800.40 |

Terms & Condition :-

1. Payment made of Cash/DD/Neti in Faour Of AUV Enterprises Allahabad.
2. Warranty Given By Company Terms Condition

ANNEXURE 3: DSR

| Code No. | Description | Unit | Basic rate as on or just before 01.04.2021 ₹ |
|----------|---|----------|--|
| 0054 | Vibratory roller 8 to 10 tonne | hour | 600.00 |
| 0055 | Smooth Wheeled Roller 8 to 10 tonne | hour | 300.00 |
| 0056 | Tandem Road Roller | hour | 1200.00 |
| 0057 | Water Tanker 5 to 6 KL capacity | hour | 200.00 |
| 0058 | Air compressor | hour | 200.00 |
| 0059 | Wet Mix Plant 60 TPH | hour | 950.00 |
| 0060 | Mechanical Broom Hydraulic | hour | 450.00 |
| 0061 | Emulsion Pressure Distributor of capacity 1750 sqm per hour | hour | 700.00 |
| 0062 | Hot mix Plant -120 TPH capacity | hour | 15000.00 |
| 0063 | Hot mix Plant 100 TPH Capacity | hour | 13000.00 |
| 0064 | Paver finisher Hydrostatic with sensor control 100 TPH | hour | 1500.00 |
| 0065 | Paver finisher Mechanical 100 TPH | hour | 800.00 |
| 0066 | Batching and Mixing Plant @ 75 cum per hour | hour | 2400.00 |
| 0067 | Cost for crane upto 80 tonne capacity | day | 15000.00 |
| 0068 | Concrete Paver finisher with 40 HP Motor and sensor | hour | 3000.00 |
| 0069 | Generator 250 KVA | hour | 400.00 |
| 0070 | Generator 100 KVA/125 KVA | hour | 300.00 |
| 0071 | Truck 5.5 cum/10 tonnes | tonne km | 3.30 |
| 0072 | Cost for crane having capacity 50MT | day | 8500.00 |
| 0075 | Road sweeper (Mechanical Broom) @ 1250 sqm per hour | hour | 450.00 |
| 0076 | Drum Type HMP of 60-90 TPH capacity @ 75 tonne per hour actual output | hour | 12000.00 |
| 0080 | Hire and running charges of drill machine up to 400 mm dia (including cost of mobile oil, diesel consumption in ordinary soil and operator) | day | 7500.00 |
| 0081 | Pile Integrity testing equipment | day | 3000.00 |
| 0082 | Excavation of Diaphragm wall by Mechanical Grab | sqm | 1500.00 |
| 0083 | Hire charges of TATA 407 or equivalent for local shifting. | day | 1400.00 |

Note :- 1. Above hire - charges (from item code 0001 to 0063) include cost of services of operating staff, Cost of lubricating oil, diesel / Petrol/ Kerosene oil, other consumables for running the plant and machinery and excluding GST. 2. The hire charges of plant machinery on per day basis are for single shift of eight working hours.

BASIC RATES : 0.1 HIRE CHARGES OF PLANTS & MACHINERY

| Code No. | Description | Unit | Basic rate as on or just before 01.04.2021 ₹ |
|----------|--|----------|---|
| 0025 | Hire and running charges of light crane | day | 3500.00 |
| 0026 | Hire and running charges of bentonite pump | day | 3000.00 |
| 0027 | Hire and running charges of vibrating pile driving hammer complete with power unit and accessories | day | 30000.00 |
| 0028 | Hire and running charges of crane 20 tonne capacity | day | 7000.00 |
| 0029 | Carriage of ready mixed concrete by rotatory transit mixer | km/cum | 37.30 |
| 0030 | Generator 250 KVA | day | 3000.00 |
| 0031 | Steam curing by using boiler /Heater | cum | 500.00 |
| 0032 | Stressing Machine (jack with pump) | day | 11500.00 |
| 0033 | Paint applicator | day | 800.00 |
| 0034 | Cutting saw machine | day | 1350.00 |
| 0035 | Strands Roller machinery for laying strands | day | 3500.00 |
| 0036 | Bed master (Pulling strands) | day | 3000.00 |
| 0037 | Mobile crane | day | 4500.00 |
| 0038 | Tractor with ripper attachment | day | 1200.00 |
| 0039 | Tractor with trolley | day | 1200.00 |
| 0040 | Air compressor 250 cfm with two leads for pneumatic cutters / hammers | day | 1600.00 |
| 0041 | Joint cutting machine with 2-3 blades | day | 800.00 |
| 0042 | C.C .batch mix plant | day | 10000.00 |
| 0043 | Road sweeper | day | 550.00 |
| 0044 | Cost for crane upto 40 tonne capacity | day | 8000.00 |
| 0045 | Slip form paver with sensor | day | 13000.00 |
| 0046 | Water tanker 5000 litre | day | 1200.00 |
| 0047 | Concrete joint cutting machine | day | 600.00 |
| 0048 | Texturing machine | day | 925.00 |
| 0049 | Dozer D-80-A 12 | hour | 1500.00 |
| 0050 | Motor Grader 3.35 metre blade | hour | 2400.00 |
| 0051 | Hydraulic Excavator of 1 cum bucket | hour | 800.00 |
| 0052 | Front end loader 1 cum bucket capacity (incl POL) | hour | 1300.00 |
| 0053 | Tipper-5 Cum/10 tonnes | tonne/km | 3.30 |

BASIC RATES : 0.1 HIRE CHARGES OF PLANTS & MACHINERY

4

BASIC RATES

0.1 HIRE CHARGES OF PLANTS & MACHINERY

Note :- These rates are exclusive of GST, contractor's profit and over heads etc.

| Code No. | Description | Unit | Basic rate as on or just before 01.04.2021 ₹ |
|----------|---|------|---|
| 0001 | Hire charges of Coaltar Boiler 900 to 1400 litres | day | 800.00 |
| 0002 | Hire charges of Concrete Mixer 0.25 to 0.40 cum with Hopper | day | 800.00 |
| 0003 | Hire charges of Diesel Road Roller - 8 to 10 tonne | day | 3000.00 |
| 0004 | Production cost of concrete by batch mix plant | cum | 400.00 |
| 0005 | Hire charges of Diesel Truck - 9 tonne (with POL) | day | 3840.00 |
| 0006 | Hire charges of Spraying machine including electric charges | day | 250.00 |
| 0007 | Hire charges of Coaltar Sprayer | day | 350.00 |
| 0008 | Hire charges of Barber green, drying, mixing and Asphalt Plant, with accessories, capacity 30/45 tonne | day | 7700.00 |
| 0009 | Pumping charges of concrete including Hire charges of pump, piping work & accessories etc. | cum | 210.00 |
| 0010 | Hire charges of Derrick monkey rope | day | 750.00 |
| 0011 | Hire charges of Pump set of capacity 4000 litres/hour | day | 700.00 |
| 0012 | Vibrator (Needle type 40 mm) | day | 350.00 |
| 0013 | Machine for rubbing of floors | day | 300.00 |
| 0014 | Front end loader capacity 1.00 cum | day | 6000.00 |
| 0015 | Hire and running charges of Tripod and Mechanical Winch machine complete with power unit and accessories | day | 3000.00 |
| 0016 | Mastic Cooker | day | 750.00 |
| 0017 | Hire and running charges of tipper | day | 3750.00 |
| 0018 | Hire and running charges of loader | day | 6000.00 |
| 0019 | Hand Grinder for mirror polish | day | 250.00 |
| 0020 | Hydraulic Excavator (3D) with driver and fuel | day | 7000.00 |
| 0021 | Pin vibrator | day | 250.00 |
| 0022 | Surface Vibrator | day | 300.00 |
| 0023 | Hot Bitumen Mixer 0.5 cum i/c hand cart | day | 3500.00 |
| 0024 | Hire and running charges of hydraulic piling rig with power unit etc. including complete accessories and shifting at site | day | 35000.00 |

BASIC RATES : 0.1 HIRE CHARGES OF PLANTS & MACHINERY



सत्यमेव जयते

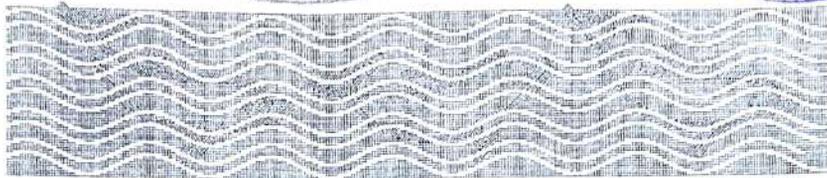
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Account Reference
Unlque Doc. Reference
Purchased by
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Property Description
Consideration Price (Rs.)
First Party
Second Party
Stamp Duty Paid By
Stamp Duty Amount(Rs.)

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NEWIMPACC (SV)/ up14292504/ MEERUT SADAR/ UP-MRT
SUBIN-UPUP1429250404664783128341X
GERON ENGINEERING PVT LTD
Article 5 Agreement or Memorandum of an agreement
Not Applicable
GERON ENGINEERING PVT LTD
MEERUT MUNICIPAL CORPORATION
GERON ENGINEERING PVT LTD
100
(One Hundred only)



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GERON ENGINEERING PVT LTD GERON ENGINEERING PVT LTD GERON ENGINEERING PVT LTD GERON ENGINEERING PVT LTD



IN-UP53737914538407X

Please write or type below this line

CONTRACT AGREEMENT

For
Treatment of Legacy Waste through Bio-Remediation, Resource
Recovery and Scientific Rejects Disposal
at
Mangatpura Dumpsite

Between

[Meerut Municipal Corporation]
and
[Geron Engineering Pvt. Ltd.]

Head Office: 143/1, IInd Floor,
Pandav Nagar, NH-24, Ghaziabad,
Uttar Pradesh – 201002.



अपर नगर अ यका
नगर निगम, प्रःठ

Statutory Alert:

1. The authenticity of this Stamp certificate should be verified at www.shcilestamp.com or using the Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate
3. In case of any discrepancy please inform the Competent Authority.

616

CONTRACT AGREEMENT

For
Treatment of Legacy Waste through Bio-Remediation, Resource Recovery and
Scientific Rejects Disposal
at
Mangatpuram Dumpsite

Between

[Meerut Municipal Corporation]

and

[Geron Engineering Pvt. Ltd.]

Head Office: 143/1, IInd Floor,
Pandav Nagar, NH-24, Ghaziabad,
Uttar Pradesh – 201002.

Dated: 21/03/2025

Form of Contract

This CONTRACT (hereinafter called the "Contract") is made the 21st day of the month of March, 2025, between, on the one hand, Meerut Municipal Corporation (hereinafter called the "Employer") and, on the other hand, Geron Engineering Pvt. Ltd., Ghaziabad, Uttar Pradesh (hereinafter called the "Bidder").

WHEREAS

- (a) the Employer has requested the Bidder to provide certain job as defined in this Contract (hereinafter called the "Services");
- (b) the Bidder, having represented to the Employer that it has the required professional skills, and personnel and technical resources, has agreed to provide the Services on the terms and conditions set forth in this Contract;

NOW THEREFORE the parties hereto hereby agree as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this Contract:

- (a) The General Conditions of Contract;
- (b) The following Appendices:

Appendix A: Request for Proposal (RFP) Document (Tender ID No.: 2024_NNMEE_974577_1 dated 18.11.2024) along with all its corrigendum and addendum.

Appendix B: Complete Technical and Financial Bid submitted by the Bidder



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NSA

अपर-नगर आयुक्त
नगर निगम, मेरठ

2. The mutual rights and obligations of the Employer and the Bidder shall be as set forth in the Contract, in particular:

- (a) the Bidders shall carry out the Services in accordance with the provisions of the Contract; and
- (b) the Employer shall make payments to the Bidders in accordance with the provisions of the Contract and report of 3rd party appointed (if, any) for monitoring and control.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

For and on behalf of Meerut Municipal Corporation

[Authorized Representative]

अपर नगर आयुक्त
नगर निगम, मेरठ

For and on behalf of Geron Engineering Pvt. Ltd., Ghaziabad, Uttar Pradesh.



[Authorized Representative]



NSA

अपर नगर आयुक्त
नगर निगम, मेरठ

General Conditions of Contract

1. GENERAL PROVISIONS

1.1 Definitions Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) "Applicable Law" means the laws and any other instruments having the force of law in India for the time being.
- (b) "Bidder" means any private or public entity that will provide the Services to the "Employer" under the Contract.
- (c) "Contract" means Conditions of Contract, the Employer's Requirements, the Tender, the Bidder's Price Proposal, the Annexure, the Letter of Acceptance, the Contract Agreement (if completed) and such further documents as may be expressly incorporated in the Letter of Acceptance or Contract Agreement (if completed).
- (d) "Day" means calendar day.
- (e) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Clause GC 2.1.
- (f) "GC" means these General Conditions of Contract.
- (g) "Government" means the Government of India
- (h) "Local Currency" means Indian Rupees.
- (i) "Member" means any of the entities that make up the joint venture/consortium/association; and "Members" means all these entities.
- (j) "Activity Schedule" means schedule of activities comprising the different tasks/operations to be performed by the Bidder under the Contract.
- (k) "Works" are what Contract requires the Bidder to carry out and perform.
- (l) "Acceptance Letter" means the document from the Employer on behalf of DLB, UP addressed to Bidder indicating acceptance of the Contract Price and its acceptance of the Bidder as the preferred party to carry out the works, perform services and operations under the Contract.
- (m) "GoUP" means Government of Uttar Pradesh.
- (n) "Authority" means Meerut Nagar Nigam.

1.2 Other Definitions

- i. "Corrupt Practice" means the offering, giving, receiving or soliciting, directly or indirectly of anything of value to influence the action of a public official in the procurement process or in contract execution.

1.3 Relationship between the Parties: Nothing contained herein shall be construed as establishing a relationship of master and servant or of principal and agent as between the "Employer" and the Bidder. The Bidder, subject to this Contract, has complete charge of Personnel and Sub-Bidders, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.

1.4 Law Governing Contract: This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the applicable laws of India.

1.5 Headings: The headings shall not limit, alter or affect the meaning of this



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1.6 Notices:

1.6.1 Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered post to such Party at the address specified in the SC.

1.6.2 A Party may change its address for notice hereunder by giving the other Party notice in writing of such change to the address specified in the SC.

1.7 **Location:** The Services shall be performed at Uttar Pradesh, India.

1.8 **Authorized Representatives:** Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the "Employer" or the Bidder may be taken or executed by the officials specified in the SC.

1.9 **Taxes and Duties:** The Bidder, Sub-Bidders and Personnel shall be liable to pay such direct and indirect taxes, duties, fees and other impositions levied under the applicable laws of India.

1.11 Fraud and Corruption

1.11.1 Definitions: It is the Employer's policy to require that Employers as well as Bidders observe the highest standard of ethics during the execution of the Contract. In pursuance of this policy, the Employer defines, for the purpose of this provision, the terms set forth below as follows:

(i) "Corrupt practice" means the offering, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the selection process or in contract execution;

(ii) "Fraudulent practice" means a misrepresentation or omission of facts in order to influence a selection process or the execution of a contract;

(iii) "Collusive practices" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Employer, designed to establish prices at artificial, non-competitive levels;

(iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract;

1.11.2 Measures to be taken by the Employer

(a) The Employer may terminate the contract if it determines at any time that representatives of the Bidder were engaged in corrupt, fraudulent, collusive or coercive practices during the selection process or the execution of that contract, without the Bidder having taken timely and appropriate action satisfactory to the Employer to remedy the situation;

(b) The Employer may also sanction against the Bidder, including declaring the Bidder ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the Bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, an Employer-financed contract;



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2. COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT

2.1 Effectiveness of Contract: This Contract shall come into force and effect on the date (the "Effective Date") of the "Employer's notice to the Bidder instructing the Bidder to begin carrying out the Services. This notice shall confirm that the conditions precedent and effectiveness conditions, if any, listed in the SC have been met.

2.2 Termination of Contract for Failure to Become Effective: If this Contract has not become effective within such time period after the date of the Contract signed by the Parties as specified in the SC, either Party may, by not less than thirty (30) days written notice to the other Party, declare this Contract to be null and void, and in the event of such a declaration by either Party, neither Party shall have any claim against the other Party with respect hereto.

2.3 Commencement of Services: The Bidder shall begin carrying out the Services not later than 45 days after the Effective Date specified in the SC.

2.4 Expiration of Contract: Unless terminated earlier pursuant to Clause GC 2.9 hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SC.

2.4 Entire Agreement: This Contract contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any other statement, representation, promise or agreement not set forth herein.

2.6 Modifications or Variations: (a) any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. Each Party shall give due consideration to any proposals for modification or variation made by the other Party. (b) In cases of substantial modifications or variations, the prior written consent of the Employer is required.

2.7 Force Majeure

2.7.1 Definition (a) For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable and not brought about by or at the instance of the Party claiming to be affected by such events and which has caused the non-performance or delay in performance, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other extreme adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by Government agencies.

(b) Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or by or of such Party's Sub-Bidders or agents or employees, nor (ii) any event which a diligent Party could reasonably have been expected both to consider at the time of the conclusion of this Contract, and avoid or overcome in the carrying out of its obligations hereunder.



(c) Subject to clause 2.7.2, Force Majeure shall not include insufficiency of funds or inability to make any payment required hereunder.

2.7.2 No Breach of Contract: The failure of a Party to fulfil any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract in so far as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.

2.7.3 Measures to be taken: (a) A Party affected by an event of Force Majeure shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall take all reasonable measures to minimize the consequences of any event of Force Majeure.

(b) A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any case not later than fourteen (14) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give written notice of the restoration of normal conditions as soon as possible.

(c) Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

(d) During the period of their inability to perform the Services as a result of an event of Force Majeure, the Bidder, upon instructions by the "Employer", shall either:

(i) Demobilize, or

(ii) Continue with the Services to the extent possible, in which case the Bidder shall continue to be paid proportionately and on prorata basis, under the terms of this Contract.

(e) In the case of disagreement between the Parties as to the existence or extent of Force Majeure.

2.8 Suspension: The "Employer" may, by written notice of suspension to the Bidder, suspend all payments to the Bidder hereunder if the Bidder fails to perform any of its obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall allow the Bidder to remedy such failure, if capable of being remedied, within a period not exceeding thirty (30) days after receipt by the Bidder of such notice of suspension.

2.9 Termination

2.9.1 by the "Employer": The "Employer" may terminate this Contract in case of the occurrence of any of the events specified in (a) through (i) of this Clause GC 2.9.1

(a) If the Bidder fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension pursuant to Clause GC 2.8 hereinabove, within thirty (30) days of receipt of such notice of suspension or within such further period as the "Employer" may have subsequently approved in writing.

(b) If the Bidder becomes (or, if the Bidder consists of more than one entity, if any of its Members becomes and which has substantial bearing on providing Services under this contract) insolvent or go into liquidation or receivership whether compulsory or voluntary.

(c) If the Bidder fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GC 8 hereof.

(d) If the Bidder, in the judgment of the "Employer", has engaged in corrupt or fraudulent practices in competing for or in executing this Contract.



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(e) If the Bidder submits to the "Employer" a false statement which has a material effect on the rights, obligations or interests of the "Employer".

(f) If the Bidder places itself in position of conflict of interest or fails to disclose promptly any conflict of interest to the Employer.

(g) If the Bidder fails to provide the quality services as envisaged under this Contract. The committee formulated to monitor the progress of the assignment may make judgment regarding the poor quality of services, the reasons for which shall be recorded in writing. The committee may decide to give one chance to the Bidder to improve the quality of the services.

(h) If, as the result of Force Majeure, the Bidder is unable to perform a material portion of the Services for a period of not less than sixty (60) days.

(i) If the "Employer", in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

In such an occurrence the "Employer" shall give a not less than thirty (30) days' written notice of termination to the Bidders, and sixty (60) days' in case of the event referred to in (i).

2.9.2 By the Bidder: The Bidder may terminate this Contract, by not less than thirty (30) days' written notice to the "Employer", in case of the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause GC 2.9.2.

(a) If the "Employer" fails to pay any money due to the Bidder pursuant to this Contract hereof within forty-five (45) days after receiving written notice from the Bidder that such payment is overdue.

(b) If, as the result of Force Majeure, the Bidder is unable to perform a material portion of the Services for a period of not less than sixty (60) days.

(c) If the "Employer" fails to comply with any final decision reached as a result of arbitration.

(d) If the "Employer" is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Bidder may have subsequently approved in writing) following the receipt by the "Employer" of the Bidder's notice specifying such breach.

2.9.3 Cessation of Rights and Obligations: Upon termination of this Contract pursuant to Clauses GC 2.2 or GC 2.9 hereof, or upon expiration of this Contract pursuant to Clause GC 2.4 hereof, all rights and obligations of the Parties hereunder shall cease, except (i) such rights and obligations as may have accrued on the date of termination or expiration, (ii) the obligation of confidentiality set forth in Clause GC 3.3 hereof, and (iv) any right which a Party may have under the Law.

2.9.4 Cessation of Services: Upon termination of this Contract by notice of either Party to the other pursuant to Clauses GC 2.9.1 or GC 2.9.2 hereof, the Bidder shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum.

2.9.5 Payment upon Termination: Upon termination of this Contract pursuant to Clauses GC

2.9.1 or GC 2.9.2 hereof, the "Employer" shall make the following payments to the Bidder:

(a) If the Contract is terminated pursuant to Clause 2.9.1 (g), (h) or 2.9.2, remuneration pursuant to Clause GC 6.3(d) hereof for Services satisfactorily performed prior to the effective date of termination, and reimbursable expenditures pursuant to Clause GC 6.3(d) hereof for expenditures actually and reasonably incurred prior to the effective date of termination; (b) If the agreement is terminated



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pursuant of Clause 2.9.1 (a) to (g), the Bidder shall not be entitled to receive any agreed payments upon termination of the contract. However, the "Employer" may consider to make payment for the part satisfactorily performed on the basis of Quantum Merit as assessed by it, if such part is of economic utility to the Employer. Applicable Under such circumstances, upon termination, the employer may also impose liquidated damages as per the provisions of Clause 9 of this agreement. The Bidder will be required to pay any such liquidated damages to employer within 30 days of termination date.

2.9.6 Disputes about Events of Termination: If either Party disputes whether an event specified in paragraphs (a) through (g) of Clause GC 2.9.1 or in Clause GC 2.9.2 hereof has occurred, such Party may, within thirty (30) days after receipt of notice of termination from the other Party, refer the matter to Clause GC 8 hereof, and this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

3. OBLIGATIONS OF THE BIDDER

3.1 General

3.1.1 Standard of Performance: The Bidder shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Bidder shall always act, in respect of any matter relating to this Contract or to the Services, as faithful adviser to the "Employer", and shall at all times support and safeguard the "Employer's legitimate interests in any dealings with Sub-Bidders or Third Parties.

3.2 Conflict of Interests: The Bidder shall hold the "Employer's interests paramount, without any consideration for future work, and strictly avoid conflict of interest with other assignments or their own corporate interests. If during the period of this contract, a conflict of interest arises for any reasons, the Bidder shall promptly disclose the same to the Employer and seek its instructions.

3.2.1 Bidder not to benefit from Commissions, Discounts, etc.: (a) The payment of the Bidder pursuant to Clause GC 6 hereof shall constitute the Bidder's only payment in connection with this Contract and, subject to Clause GC 3.2.2 hereof, the Bidder shall not accept for its own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or in the discharge of its obligations hereunder, and the Bidder shall use its best efforts to ensure that any Sub-Bidders, as well as the Personnel and agents of either of them, similarly shall not receive any such additional payment.

(b) Furthermore, if the Bidder, as part of the Services, has the responsibility of advising the "Employer" on the procurement of goods, works or services, the Bidder shall comply with the Employer's applicable procurement guidelines, and shall at all times exercise such responsibility in the best interest of the "Employer". Any discounts or commissions obtained by the Bidder in the exercise of such procurement responsibility shall be for the account of the "Employer".

3.2.2 Bidder and Affiliates Not to Engage in Certain Activities: The Bidder agrees that, during the term of this Contract and after its termination, the Bidder and any entity affiliated with the Bidder, as well as any Sub-Bidders and any entity affiliated with such Sub-Bidders, shall be disqualified from providing goods, works or



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services (other than the job concerned) resulting from or directly related to the Bidder's Services for the preparation or implementation of the project.

3.2.3 Prohibition of Conflicting Activities: The Bidder shall not engage, and shall cause their Personnel as well as their Sub-Bidders and their Personnel not to engage, either directly or indirectly, in any business or professional activities that would conflict with the activities assigned to them under this Contract.

3.3 Confidentiality: Except with the prior written consent of the "Employer", the Bidder and the Personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the Services, nor shall the Bidder and its Personnel make public the recommendations formulated in the course of, or as a result of, the Services.

3.4 Accounting, Inspection and Auditing: The Bidder (i) shall keep accurate and systematic accounts and records in respect of the Services hereunder, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify all relevant time changes and costs, and the bases thereof, and (ii) shall periodically permit the "Employer" or its designated representative and/or the Employer, and up to five years from expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the "Employer" or the Employer, if so required by the "Employer" or the Employer as the case may be.

3.5 Reporting Obligations: The Bidder shall submit to the "Employer" the reports and documents in the specified format and within the time period decided by the Authority.

3.6 Documents Prepared by the Bidder to be the Property of the "Employer":

All plans, drawings, specifications, designs, reports, other documents and software prepared by the Bidder for the "Employer" under this Contract shall become and remain the property of the "Employer", and the Bidder shall, not later than upon termination or expiration of this Contract, deliver all such documents to the "Employer", together with a detailed inventory thereof. The Bidder may retain a copy of such documents, but shall not use anywhere, without taking permission, in writing, from the Employer and the Employer reserves right to grant or deny any such request. If license agreements are necessary or appropriate between the Bidder and third parties for purposes of development of any such computer programs, the Bidder shall obtain the "Employer's" prior written approval to such agreements, and the "Employer" shall be entitled at its discretion to require recovering the expenses related to the development of the program(s) concerned.

3.7 Equipment and Materials provided by the Bidders: Equipment or materials brought into the project by the Bidder and the Personnel and used either for the Project or personal use shall remain the property of the Bidder or the Personnel concerned, as applicable.

3.8 Resource Management: All arrangements like water, washing area, facility for parking (Space for parking to be provided by the ULB) and storing equipment, charging stations for charging batteries., fuel for equipment and all such resources, equipment gadgets and tools that may be required time to time to carry on the assigned job efficiently without interruption would be under the scope of the Bidder.

4. BIDDERS' PERSONNEL AND SUB-BIDDERS

4.1 General: The Bidder shall employ and provide such qualified and experienced Personnel and Sub-Bidders as are required to carry out the Services.



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5. OBLIGATIONS OF THE "EMPLOYER"

5.1 Assistance and Exemptions: Unless otherwise specified in the SC, the "Employer" shall use its best efforts to ensure that the Government shall:

(a) Provide the Bidder, Sub-Bidders and Personnel with work permits and such other documents as shall be necessary to enable the Bidder, Sub-Bidders or Personnel to perform the Services. (b) Arrange for the Foreign Personnel to be provided promptly with all necessary entry and exit visas, residence permits, exchange permits and any other documents required for their stay in India.

(c) Issue to officials, agents and representatives of the Government all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services. (d) Provide to the Bidder, Sub-Bidders and Personnel any such other assistance as may be specified in the SC.

5.2 Change in the Applicable Law Related to Taxes and Duties: If, after the date of this Contract, there is any change in the Applicable Laws of India with respect to taxes and duties, which are directly payable by the Bidder for providing the services i.e. service tax or any such applicable tax from time to time, which increases or decreases the cost incurred by the Bidder in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Bidder under this Contract shall be increased or decreased accordingly by agreement between the Parties hereto, and corresponding adjustments shall be made to the ceiling amounts specified in Clause GC 6.1.

5.3 Payment: In consideration of the Services performed by the Bidder under this Contract, the "Employer" shall make to the Bidder such payments and in such manner as is provided by Clause GC 6 of this Contract.

5.4 Counterpart Personnel: (a) If necessary, the "Employer" shall make available to the Bidder free of charge such professional and support counterpart personnel, to be nominated by the "Employer" with the Bidder's advice.

(b) Professional and support counterpart personnel, excluding "Employer's liaison personnel, shall work under the exclusive direction of the Bidder. If any member of the counterpart personnel fails to perform adequately any work assigned to such member by the Bidder that is consistent with the position occupied by such member, the Bidder may request the replacement of such member, and the "Employer" shall not unreasonably refuse to act upon such request.

6. PAYMENTS TO THE BIDDER

6.1 Total Cost of the Services (a) the total cost of the Services payable is set forth in the proposal to the Employer and as negotiated thereafter.

6.2 Currency of Payment: All payments shall be made in Indian Rupees. [In case the payment is to be made in the currency other than Indian Rupees, the same shall be mentioned instead of Indian Rupees]

6.3 Terms of Payment: The payments in respect of the Services shall be made as follows:

(a) The Bidder shall submit the invoice for payment when the payment is due as per the agreed terms. The payment shall be released as per the work-related milestones achieved.



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- (b) If the deliverables submitted by the Bidder are not acceptable to the Employer, reasons for such non-acceptance should be recorded in writing; the Employer shall not release the payment due to the Bidder. In such case, the payment will be released to the Bidder only after it re-submits the deliverable and which is accepted by the Employer.
- (c) All payments under this Contract shall be made to the accounts of the Bidder.
- (d) In case of early termination of the contract, the payment shall be made to the Bidder as mentioned here with: (i) Assessment should be made about work done from the previous milestone, for which the payment is made or to be made till the date of the termination. Based on such details, a reasonable assessment of the reimbursable and miscellaneous expenses shall be made based on details furnished by the Bidder in this regard with supporting documents and based on the assessment of the work done and the respective rates as provided. Wherever such an assessment is difficult, the rates should be arrived at by calculating the amount on pro-rata basis. The total amount payable shall be the amount calculated as per the applicable tax.
- (e) The Contract Fee shall be released by Authority within a period of 21 days (thirty) days from the date of receipt of invoice/bill from the Selected Bidder/Agency .

7. FAIRNESS AND GOOD FAITH

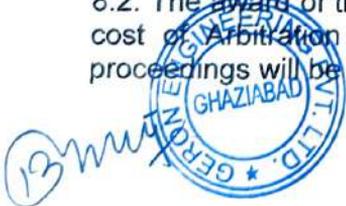
7.1 Good Faith: The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

7.2 Operation of the Contract: The Parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the life of the Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either Party believes that this Contract is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but no failure to agree on any action pursuant to this Clause shall give rise to a dispute subject to arbitration in accordance with Clause GC 8 hereof.

8. SETTLEMENT OF DISPUTES

8.1 Any disputes and or difference relating to this agreement or claims arising out of or relating to this agreement or breach, termination or the invalidity thereof or on any issue whether arising during the progress of the services or after the completion or abandonment thereof or any matter directly or indirectly connected with this agreement will be resolved through joint discussion of the authorized representatives of both the parties (the Authority and Bidder). If the dispute is not resolved by joint discussion, then the matter will be referred for adjudication to a Tribunal of Arbitrator (3 Members (one appointed by each party and third appointed by the said appointed arbitrator on receipt of written notice / demand of appointment of Arbitrator from either party).

8.2. The award of the sole Arbitrator shall be final and binding on all the parties. The cost of Arbitration shall be borne by the respective parties equally. Arbitration proceedings will be held at premises of the Authority, only.



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8.3. Rules governing Arbitration Proceedings: The Arbitration Proceedings shall be governed by Indian Arbitration and Conciliation Act 1996, as amended from time to time including provisions in force at the time the references made.

9. Liquidated Damages

9.1 The parties hereby agree that due to negligence of act of any party, if the other party suffers losses, damages the quantification of which may be difficult, and hence the amount specified hereunder shall be construed as reasonable estimate of the damages and both the parties agree to pay such liquidated damages, as defined hereunder as per the provisions of this Contract.

9.2 The amount of liquidated damages under this Contract shall not exceed 10% of the total value of the contract.

9.3 The liquidated damages shall be applicable under following circumstances:

- If the deliverables are not submitted as per schedule, the Bidder shall be liable to pay 0.1% of the monthly cost of the services for delay of per day or part thereof upto a maximum limit of 10% of the total contract value.
- If the deliverables are not acceptable to the Employer, and defects are not rectified to the satisfaction of the Employer within 30 days of the receipt of the notice, the Bidder shall be liable for Liquidated Damages for an amount equal to 0.5 % of total cost of the services for every week or part thereof for the delay.

10. Miscellaneous provisions:

- "Nothing contained in this Contract shall be construed as establishing or creating between the Parties, a relationship of master and servant or principal and agent.
- Any failure or delay on the part of any Party to exercise right or power under this Contract shall not operate as waiver thereof.
- The Bidder shall notify the Employer of any material change in their status, in particular, where such change would impact on performance of obligations under this Contract.
- Each constituent of the Bidder, shall be jointly and severally liable to and responsible for all obligations towards the Employer for performance of works/services including that of its Associates/Sub Selected bidders under the Contract.
- The Bidder shall at all times indemnify and keep indemnified the Employer against all claims/damages etc. for any infringement of any Intellectual Property Rights (IPR) while providing its services under the Project.
- The Bidder shall at all times indemnify and keep indemnified the Employer against any claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by its (the Bidder's) employees or agents or by any other third Party resulting from or by any action, omission or operation conducted by or on behalf of the Bidder.
- The Bidder shall at all times indemnify and keep indemnified the Employer against any and all claims by Employees, Workman, Bidders, sub-Bidders, suppliers, agent(s), employed engaged or otherwise working for the Bidder, in respect of wages, salaries, remuneration, compensation or the like.
- All claims regarding indemnity shall survive the termination or expiry of the Contract.

ATTESTED
S.W.
DISTRICT JUDGE
Regd. No. 10000

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GEROM ENGINEERING PVT. LTD.
GHAZIABAD

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- (ix) It is acknowledged and agreed by all Parties that there is no representation of any type, implied or otherwise, of any absorption, regularization, continued engagement or concession or preference for employment of persons engaged by the Bidder for any engagement, service or employment in any capacity in any office or establishment of the Government of India/ State or the Employer.
- (x) The performance of the Selected Bidder/Agency based on the service level benchmarks indicated in the guidelines issued by Ministry of Housing and Urban Development, Government of India (as per clause 13 of GCC) or any assessments from time to time and also placed in the draft Concession Agreement.

11. Performance Security

The Performance Security shall be provided @05% of the Annual Contract value from the Nationalized Bank to the Employer valid till the contract period. It needs to be submitted within 15 days from the award of letter of intent and before the signing of the concession agreement.

12. Non-Compliance Penalties

The following penalties shall be imposed by Authority on the Selected Bidder/Agency

| S.No. | Description | Penalty |
|-------|---|--|
| 1. | The Selected Bidder fails to ensure that the employees are in proper dress, and also ensure placement of safety devices and signage at Project Site during the working hours, as per the specification. Every Worker, Supervisor and Manager to be equipped at all times during working hours: Safety. Caps / Helmets, Nose Mask, Rain Coats, Gloves, Radium Jackets, Safety Boots. | ₹500/- per day per default per person. |
| 2. | Failure in conducting preventive maintenance of all the equipment and machinery on daily basis by the Selected Bidder/Agency .Selected Bidder/Agency needs to maintain repair and maintenance logs/dashboard for verification. | ₹1000/- per day |
| 3. | If any of activities of Selected Bidder/Agency is imposing violation of applicable rules and regulation like (Environmental Protection Act, 1986, Motor Vehicles (Amendment) Act 2019, SWM Rules 2016, CPHEEO rules and guidelines, CPCB/PCB Guidelines and Directions and any modifications in future then Selected Bidder/Agency is fully liable to pay a penalty | As Actual imposed/INR 25,000/- Per default. |
| 4. | Non performance of activities as per contract agreement for a day | 1.5 times of calculated per day contracted amount on daily basis |

| S.No. | Description | Penalty |
|-------|--|--|
| 5. | Delay in commencement of the necessary machinery and manpower beyond the scheduled date. One month will be considered if the delay is more than 21 days but less than 31 days | Rs. 5,00,000/- |
| 6. | The concessionaire is responsible for storage/transportation/disposal of residual waste safely as per the provisions made in the SWM Rules, 2016. The residual waste should not be dumped on road side or on other's property. If the residual waste is dumped on road side or any other non-designated site, a penalty per event will be charged to the concessionaire. | Rs. 10,000/- per event. |
| 7. | If the fractions of the waste to clear the land are not disposed or sale/recycled in time bound manner. | Penalty of Rs. 50,000/- will be imposed on weekly basis. |

Note: Additional Penalties pertaining to adherence to Service level Benchmarks are as per defined in section 13 of this document.

13. Clause Deleted

14. Obligations

14.1 Authority/Concerned ULB's Obligation

- (i) Handed over to the Selected Bidder/Agency through respective ULBs the physical possession of the Project Site, for the period co-terminus to the Contract Period free from Encumbrances.
- (ii) Constituted and appointed the Steering Group, within a period of 15 (fifteen) days from the date of this Contract in accordance with the terms hereof; (1 member from the Bidders side may be incorporated in the steering group who is an on-roll employee of the agency);
- (iii) Ensure to make payment to the Selected Bidder/Agency within 30 days of invoice raised
- Authority/Concerned ULBis vested with the rights as overseer and the title of interest, ownership and rights with regard to the Project Site shall vest with Authority except that these will be cleaned by the Selected Bidder/Agency as per the provisions of this Contract;
- (v) Any liability, arising out of providing the Project Site free of encumbrances, unless expressly provided for in this Management Contract, shall be borne solely by Authority. Authority shall indemnify the Selected Bidder/Agency and shall hold it harmless from any claim or consequential cost that may arise as a result of any such terminations;
- (vi) Upon request from the Selected Bidder/Agency, Authority shall provide



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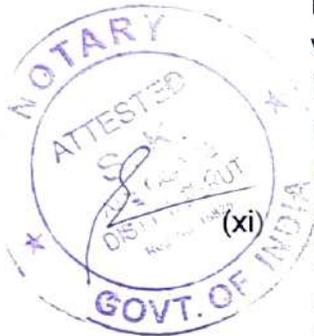
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reasonable assistance and facilitation in procuring clearances/approvals which are necessary for the implementation of the Project and which are in its authority to grant or cause to be granted subject to the Selected Bidder/Agency complying with the eligibility criteria for the grant of such clearances. However, notwithstanding the contents of any other provision of this Contract, the end responsibility for obtaining all such approvals/clearances whether from any Department or any other authorised agency/Government of India or any other statutory body shall be that of the Selected Bidder/Agency ;

- (vii) Authority would ensure that from the Compliance Date and till the completion of the Contract Period, the Selected Bidder/Agency has access to the Project Site for the purpose of carrying out the Selected Bidder/Agency 's obligations under this Management Contract;
- (viii) Authority shall Endeavour to provide electricity connection to the Selected Bidder/Agency at the cost of Selected Bidder/Agency. The Selected Bidder/Agency shall have to apply for an electric connection and commercial charges shall apply on electric consumption.
- (ix) Authority will provide electricity connection upto the site of Project, if the same is not available. The Selected Bidder/Agency shall have to apply for an electric connection and commercial charges shall apply on electric consumption to be borne by the Selected Bidder/Agency .
- (x) Authority/Concerned ULB shall provide water connection to the Selected Bidder/Agency and charges shall be paid by the Selected Bidder/Agency with respect to the use of water for the purposes related to the Project. However, if at any time due to some unavoidable circumstances the release of regular water is not possible, the Selected Bidder/Agency shall be required to make its own arrangement at its own cost;
- (xi) Authority has the right to take over the Project if the Selected Bidder/Agency defaults in fulfilling any of its obligations, rights and responsibilities detailed under this Management Contract including the right to complete the Project directly or indirectly by selecting another Selected Bidder/Agency in the event of default by the Selected Bidder/Agency ;
- (xii) Authority shall recognize and undertake not to, in any manner, violate or cause breach of the terms of this Contract.

14.2 Bidder's Obligation

- (i) Made arrangements for financing the Project and executed the Financing Documents and delivered to the Authority notarized true copies thereof along with soft copies;
- (ii) Submitted to the Authority, a programme supported with Bar chart for all the planned activities envisaged under this project;



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- (iii) Provided an undertaking that all of the Representations and Warranties of the Selected Bidder/Agency are true and correct as on the date of this Contract and as on the Compliance Date and thereafter.
- (iv) Take over the possession of the Project Site from the Authority/Concerned ULB, provided it is being delivered in accordance with the provisions of Article 2.1 and safeguard and use the Project Site solely for the purpose of discharging its obligations under this Management Contract.
- (v) Comply and observe at all times with all Applicable Permits, approvals, Applicable Laws, all central / state government / semi-government / local body's rules and regulations applicable to rendering of such services and in the performance of its obligations under this Management Contract and also, complying with all the inter disciplinary measures as followed by the Authority.
- (vi) Ensure to be fully conversant with all the laws applicable to the work under the Management Contract.
- (vii) Obtain any and all permits, necessary approvals, clearances and sanctions from the Competent Authority (ies), for necessary facilities like power, fire-fighting, telecommunications, etc. as and when required, for the Selected Bidder/Agency and its employees to perform their obligations under this Management Contract, at its own cost.
- (viii) Make own arrangements to obtain the import licenses, if required for the import of machines and equipment at the Project Site, as required for this Project.
- (ix) Ensure to get all the machines/vehicles/equipments registered under the competent Authority who are recognized for such registrations.
- (x) Ensure that the services supplied conform to the standards of the technical specifications and where no applicable standard is mentioned, the standards shall be equivalent or superior to the official standard whose application is appropriate to the country of origin of the goods and suitable to Indian (BIS/MoEF/RTO/ISI) whether conditions and usage.
- (xi) Ensure not to reassign the work under the Contract to any other third party without prior written approval of Authority.
- (xii) At all times, to afford access to the Project Site to the authorized representatives of Authority, senior lenders, other persons duly authorized by any Governmental Agency having jurisdiction over the Project, to inspect

the Project and to investigate any matter within their authority and upon reasonable notice.

- (xiii) Ensure not to pose any problem/nuisance to the general public. The Selected Bidder/Agency shall be solely responsible for the behaviours and honesty of its workforce.
- (xiv) Ensure not to dump or dispose of litter waste, garbage, or recyclables waste on any street, alley or other publicly owned property unless expressly authorized by Authority/Concerned ULB.
- (xv) In the event of any accident/damage to third party by any of the vehicle/equipment of the Selected Bidder/Agency, Authority/Concerned ULB shall be completely free from any liability of any nature occurred on account of the accident. The Selected Bidder/Agency shall be fully and exclusively responsible for the liabilities arising on account of accident and damage to the vehicle, manpower or to the third party. The Selected Bidder/Agency shall be fully and solely responsible for any death or bodily injury to his staff member or any other person in the employment of the Selected Bidder/Agency or to any other person during the performance of the contractual services. This includes any third party claims.
- (xvi) Solely responsible for any consequences under various laws, arising out of any accident caused by vehicles, equipment's or his employees to the property or personnel of Authority/Concerned ULB
- (xvii) Make efforts to maintain harmony and good industrial relation among the personnel employed in connection with the performance of the Selected Bidder/Agency obligations under this Contract and shall be solely responsible for compliance with all labour laws and shall be solely liable for all possible claims from any third party and employment related liabilities of its staff employed in relation with the Project and hereby indemnifies Authority/Concerned ULB against any accident claims, damages, expenses or losses in this regard and that in no case and shall for no purpose shall Authority/Concerned ULB treated as employer in this regard.
- (xviii) Neither place or create nor permit any other person claiming through or under the Selected Bidder/Agency to create or place any Encumbrance over all or any part of the Project Site or on any rights of the Selected Bidder/Agency therein, save and except as expressly set forth in this Contract.
- (xix) Shall be responsible for safety, soundness and durability of the Project structure built on the site.



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the Project and to investigate any matter within their authority and upon reasonable notice.

- (xiii) Ensure not to pose any problem/nuisance to the general public. The Selected Bidder/Agency shall be solely responsible for the behaviours and honesty of its workforce.
- (xiv) Ensure not to dump or dispose of litter waste, garbage, or recyclables waste on any street, alley or other publicly owned property unless expressly authorized by Authority/Concerned ULB.
- (xv) In the event of any accident/damage to third party by any of the vehicle/equipment of the Selected Bidder/Agency, Authority/Concerned ULB shall be completely free from any liability of any nature occurred on account of the accident. The Selected Bidder/Agency shall be fully and exclusively responsible for the liabilities arising on account of accident and damage to the vehicle, manpower or to the third party. The Selected Bidder/Agency shall be fully and solely responsible for any death or bodily injury to his staff member or any other person in the employment of the Selected Bidder/Agency or to any other person during the performance of the contractual services. This includes any third party claims.
- (xvi) Solely responsible for any consequences under various laws, arising out of any accident caused by vehicles, equipment's or his employees to the property or personnel of Authority/Concerned ULB
- (xvii) Make efforts to maintain harmony and good industrial relation among the personnel employed in connection with the performance of the Selected Bidder/Agency obligations under this Contract and shall be solely responsible for compliance with all labour laws and shall be solely liable for all possible claims from any third party and employment related liabilities of its staff employed in relation with the Project and hereby indemnifies Authority/Concerned ULB against any accident claims, damages, expenses or losses in this regard and that in no case and shall for no purpose shall Authority/Concerned ULB treated as employer in this regard.
- (xviii) Neither place or create nor permit any other person claiming through or under the Selected Bidder/Agency to create or place any Encumbrance over all or any part of the Project Site or on any rights of the Selected Bidder/Agency therein, save and except as expressly set forth in this Contract.
- (xix) Shall be responsible for safety, soundness and durability of the Project structure built on the site.



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- (xx) In case of loss due to theft or damage to the Project Facility, due to the negligence of the Selected Bidder/Agency, the Selected Bidder/Agency shall be responsible for making good the same immediately at its own cost and shall continue to keep them available for public use, at all times, within the Contract Period.
- (xxi) To pay at its own cost all applicable existing taxes / charges / fees including service tax, stamp duty, registration charges and any other related legal documentation charges, if any, in respect of the said Project, as leviable on the date of submission of Commercial Proposal. However, if any change is done for any future taxes/charges/levies/ fees/stamp duty, then the Bidder is liable to pay such amount.
- (xxii) Shall ensure that the operation, maintenance and management of the Project Site provided therein are both in conformity with the relevant norms and Maintenance Manual, prepared in accordance to this Management Contract.
- (xxiii) Carry out its duties in regard to the Project in accordance with the provisions of this Contract and the Schedules thereof.
- (xxiv) On expiry of the Contract Period, within a maximum period of 30 (thirty) days, to leave the entire Project Site in a clean and safe condition to the satisfaction of Authority/Concerned ULB.
- (xxv) Shall be solely and primarily responsible to Authority for observance of all the provisions of this Management Contract on behalf of its employees and representatives.
- (xxvi) Shall be liable for and shall indemnify, protect, defend and hold harmless Authority/Concerned ULB, Authority/Concerned ULB's officers, employees, etc. from and against any and all demands, claims, suits and causes of action and any and all liability, costs, expenses, settlements and judgments arising out of the failure of the Selected Bidder/Agency to discharge its obligations under this article / Contract and to comply with the provisions of Applicable laws and Applicable permits.
- (xxvii) The Selected Bidder/Agency shall acknowledge and recognize that time is of the essence of this Contract and that the performance of its obligations shall be construed accordingly.
- (xxviii) Hand back the Project Site to Authority/Concerned ULB, at the end of the Contract Period.



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15. Environmental Compliance

15.1 The Bidder shall, at all times, ensure his operations and services are conforming to the laws pertaining to environment, health and safety aspect including Solid Waste Management Rules, 2016, policies and guidelines related thereto.

16. Insurance

16.1 The Bidder shall insure his workmen, equipment, vehicles etc. No additional burden should fall on the Authority/Concerned ULB due to absence of insurance.

16.2 The Bidder shall take out all necessary insurance against theft, dacoit, fire or other contingencies for infrastructures being developed/ arranged/ deployed/ taken from the authority/Concerned ULB in his possession under this contract. The Authority/Concerned ULB shall not be responsible for any type of liability in this regard.

17. Accidents

17.1 It shall be the Bidder's responsibility to protect to workmen, materials, equipment, vehicles and other immovable property in possession against accidents.

17.2 The Bidder shall be solely responsible for any death or body injury to his staff member or any of the people/person in the employment of the Bidder. This includes any third party claims.

17.3 On the occurrence of an accident, arising out of works, which results in death or which is so serious as to be likely to result in death, the Bidder shall within 24 hours of such accident, report in writing to the Competent Authority, the facts stating clearly and in sufficient details the circumstances of such accident and the subsequent action taken.

17.4 In the event of an accident in respect of which compensation may become payable under The Workmen's Compensation Act, (VIII of 1923) or any other act including all modifications hereof whether such compensation may become payable by the Bidder or by the Authority, the Authority shall retain whole or part of the deposit due and payable to the Bidder such sum or sums or money as may in the opinion of the Authority sufficient to meet out liability, on receipt of award from the Labour Commissioner in regards quantum of compensation the difference in amount will be adjusted.



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Project Information Memorandum (PIM)

1. The Planning Area

1.1. Description of the Proposed Site

Meerut Nagar Nigam is planning to carry out legacy waste dumpsite remediation in one of its existing dumpsites namely Mangatpuram Dumpsite.

1.2. Project Site 1: Details of Dumpsite

| Sl. No | Particulars | Details |
|--------|--------------------------------|--|
| 1 | Name of the dumpsite | Mangatpuram |
| 2 | City | Meerut |
| 3 | District | Meerut |
| 4 | State | Uttar Pradesh |
| 5 | Latitude and Longitude | 25.2731, 78.3226 |
| 6 | Size of the dumpsite | 10 Acres |
| 7 | Location Details |   |
| 8 | Topographic map |  |
| 8 | Recent photographs of the Site | |
| 9 | Nearest Town/City | Meerut |
| 10 | Nearest Railway Station | Meerut |
| 11 | Nearest Airport | IGI Delhi |
| 12 | Seismic Zone | II |

Stamp: GEROM ENGINEERING PVT. LTD. GHAZIABAD

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Notary Seal: NOTARY PUBLIC IN INDIA DIGITAL MEERUT

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Waste Quantification and Characterization at Mangatpuram Dumpsite

1. Volume Estimation through drone mapping of two sites

We had conducted Drone Survey of one waste dump site located at:

1) Mangatpuram, Meerut

Observations and Synopsis

- The site has sizeable quantity of the waste but we were informed no new waste is being added to these sites
- The drone survey was done to cover the entire covering the open area and adjoining areas of the dump sites
- 6 samples of the waste were picked from the both sites and each sample was picked from different points to get an idea of the varying nature of the waste. The samples were packed in zipper bags and sent to the lab to get the density of the waste
- The contour at 1m interval has been prepared and along with digital elevation model
- To assess the change in the waste volume, quarterly drone mapping can be done to assess the volume reduction
- The average density of the waste soil of the both the site is 1.5167 gm/cubic meter
- There is waste erosion happening at site No2 and waste is flowing into the nearby colony road and drains resulting in clogging. This is further damaging the environmental and resulting in degradation. Also there is no fencing at site no.2
- No waste segregation has been done at both the sites



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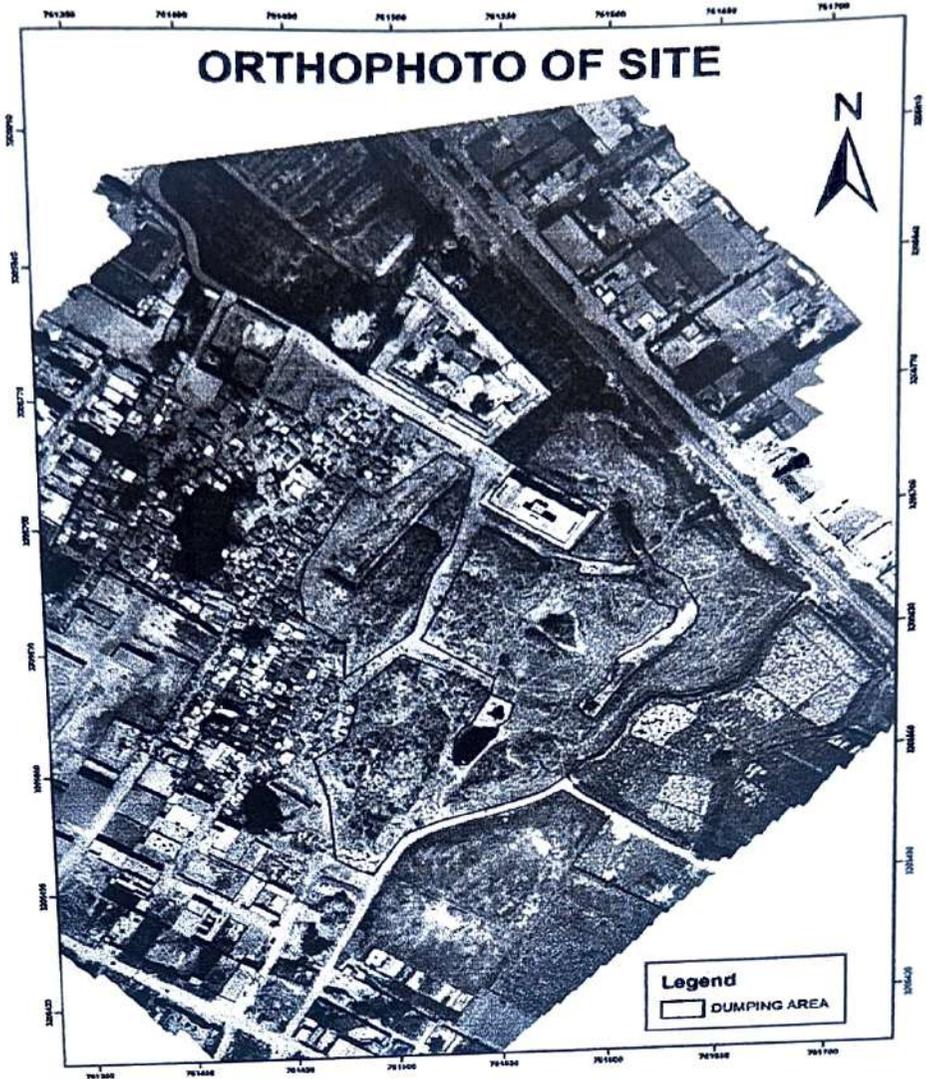


Meerut Site 1:

Extend:

LU: 25° 27' 31.365"N, 78° 32' 26.456"E RU: 25° 27' 31.818"N, 78° 32' 34.417"E

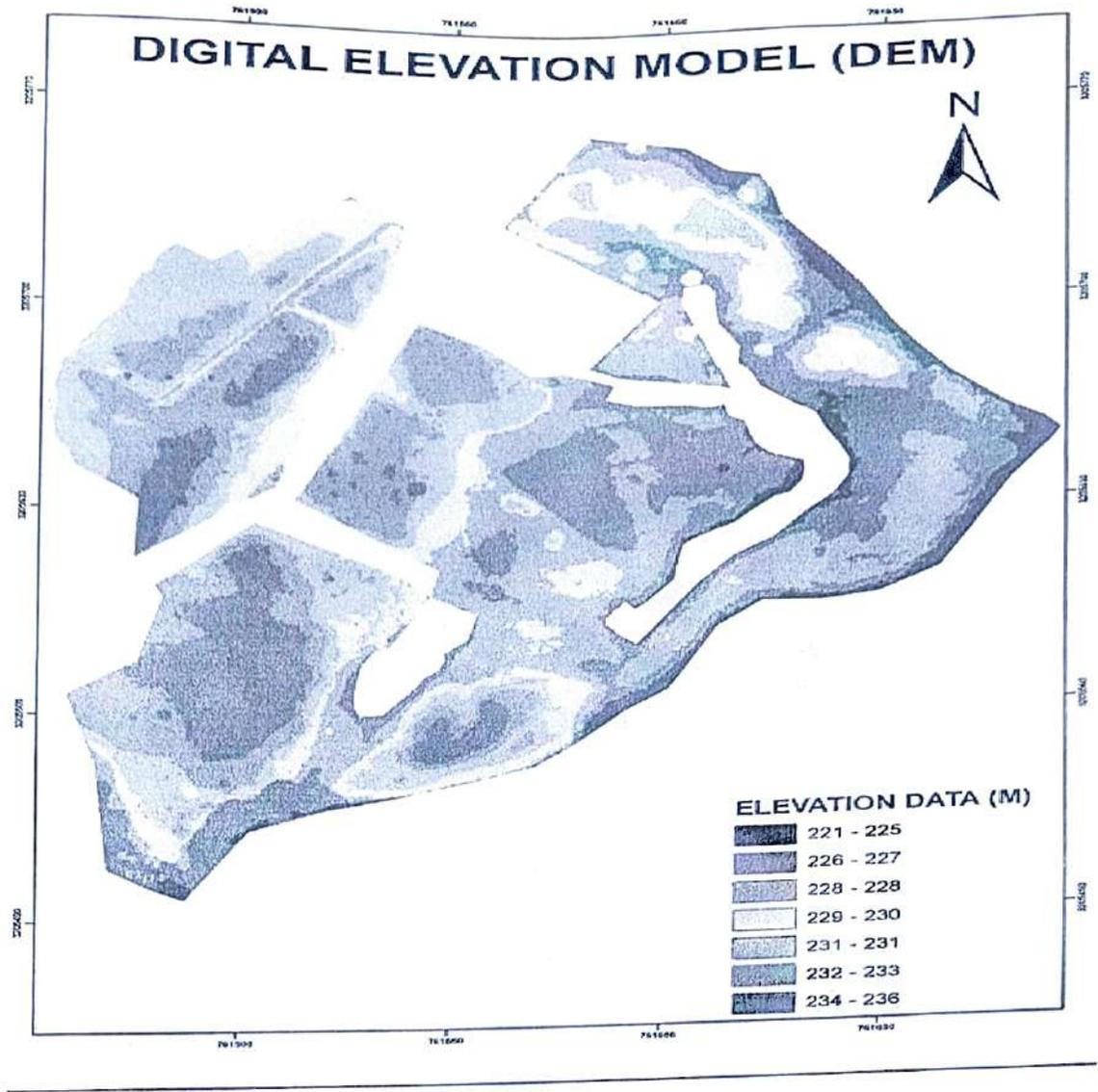
LL: 25° 27' 25.02"N, 78° 32' 26.456"E RL: 25° 27' 25.411"N, 78° 32' 35.169"E



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For and on behalf of
 Geron Engineering Pvt. Ltd. Ghaziabad,
 Uttar Pradesh.



[Authorized Signatory]

For and on behalf of
 Meerut Municipal Corporation

Meerut नगर आयुक्त

[Authorized Signatory]

N&A



ATTESTED

NOTARY

21-03-2025