

Ref. No.: JUWM(B)L/EC/2025-26/09

Date: 20-06-2025

To,
The Chairman,
Delhi Pollution Control Committee,
6th Floor, C wing, Delhi Secretariat, I P Estate,
Delhi - 110002.

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01/07/2025
26/6/25
NMC-II

Sub

Subject: Information regarding grant of Environmental Clearance (EC) for the "Proposed Waste to Energy Thermal Power Project of capacity 30 MW" located at DSIIDC Industrial Area, Sector 5, village Bawana, Sub-district Narela, District North Delhi, Delhi by M/s Jindal Urban Waste Management (Bawana) Limited.

Respected Sir,

We are pleased to inform you that Environment Clearance for the "Proposed Waste to Energy Thermal Power Project of capacity 30 MW" located at DSIIDC Industrial Area, Sector 5, village Bawana, Sub-district Narela, District North Delhi, Delhi by M/s Jindal Urban Waste Management (Bawana) Limited has been accorded by the Ministry of Environment, Forest & Climate Change vide file no. J-13012/04/2023-IA.I (T) on 18-06-2025.

As per the clause 29(ii) of environment clearance letter, it is stated that,

"...The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn must display the same for 30 days from the date of receipt."

Therefore, we are herewith enclosing a copy of Environment Clearance for your kind information and necessary action. Kindly ensure it is displayed at your esteemed office for a period of 30 days in compliance with the specified condition.

Thanking You,

Yours Faithfully

For M/s Jindal Urban Waste Management (Bawana) Limited

Sandip Dutt
(Authorized Signatory)



Recd on 30/06/2025



Encl. as above

Copy to: MSIDPCC

Please place this on the website of DPCC for information to public with caption/subject as above and also place on Board of DPCC for 30 days. 188v 30/06/2025



File No: J-13012/04/2023-IA.I (T)
Government of India
Ministry of Environment, Forest and Climate
Change
IA Division



Date 18/06/2025



To,

Sh. Sandip Dutt
M/s. Jindal Urban Waste Management (Bawana) Limited
U-1, UPSIDC Industrial Area, Nandgaon, Koshi Kalan, Chhata, Mathura, Uttar Pradesh, 281403
E-mail: Info.Juwmb1@jindalecopolis.com

Subject: Proposed Waste to Energy Thermal Power Project of capacity 30 MW by M/s Jindal Urban Waste Management (Bawana) Limited located at DSIIDC Industrial Area, Sector 5, village Bawana, Sub-district Narela, District North Delhi, Delhi - Environmental Clearance -Regarding

Sir/Madam,

This is with reference to your proposal number IA/DL/THE/536932/2025 dated 12/05/2025 along with a written submission dated 03.06.2025 seeking for grant of Environmental Clearance (EC) under the provisions of the EIA Notification 2006 and as amended thereof for the project mentioned above.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC25A0603DL5984671N
(ii) File No.	J-13012/04/2023-IA.I (T)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	1(d) Thermal Power Plants
(vi) Sector	Thermal Projects Proposed Waste to Energy Project 50 MW, DSIIDC Industrial Area, sector-5, Bawana, Delhi- 110039 by M/s Jindal Urban Waste Management (Bawana) Limited.
(vii) Name of Project	M/s. Jindal Urban Waste Management (Bawana) Limited
(viii) Name of Company/Organization	North West, Delhi
(ix) Location of Project (District, State)	MoEF&CC
(x) Issuing Authority	Yes
(xi) Applicability of General Conditions as per EIA Notification, 2006	

3. M/s Jindal Urban Waste Management (Bawana) Limited has made an online application vide proposal number IA/DL/THE/536932/2025 dated 12/05/2025 along with copy of EIA/EMP report, CAF (Part A, B & C) and sought for Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above.

4. The proposed project/activity is listed at item no. 1(d) Thermal Power Plants of the schedule of the EIA Notification, 2006 and falls under Category 'A'. Further, the proposed project/activity also attracts the general condition of the EIA Notification, 2006 as the project site is located at a distance of 4.48 KM from Delhi-Haryana State boundary in NNW direction.

5. The instant Proposal was considered by the EAC (Thermal) in its 25th meeting held on 27th May, 2025. The PP has submitted the written information on 03.06.2025. The MoM for the same may be seen using the following web link: <https://parivesh.nic.in>

Details submitted by the project proponent

6. The instant proposal of M/s Jindal Urban Waste Management (Bawana) Limited is for setting up of Waste to Energy (WTE) Thermal Power Project with a capacity 30 MW at Delhi State Industrial and Infrastructure Development Corporation Limited (DSIIDC) Industrial Area, Sector 5, village Bawana, Sub-district Narela, District North Delhi, Delhi.

7. The details of the Terms of Reference (ToR) obtained for the above project for preparation of EIA/EMP report is furnished as below:

Proposal No with Date	Consideration	Details	Date of accord	ToR Validity
IA/DL/THE/435160/2023 dated 11/08/2023	2 nd meeting of EAC-Thermal held on 31/10/2023	Terms of Reference	10/01/2024	4 years

8. Environmental site settings:

S. No.	Particulars	Details			Remarks
1.	Total Land	15.0 Acres (or) 6.07 Ha – Government Land			Land Use: Industrial Purpose Located at DSIIDC Industrial Area, Sector-5, Bawana, Delhi
2.	Land Use breakup	Details			Land Use: Industrial Purpose. At DSIIDC Industrial Area, Sector-5, Bawana, Delhi-110039.
		Area Break up (Acres)			
		Percentage (%)			
		TPP Site			
		7.84			
		52.27			
		Admin Office & Canteen			
0.3					
2.0					
Greenbelt Area					
6.0					
40.0					
Others					
0.86					
5.73					
Total					
15 acres (or) 6.07 Ha					
100%					
3.	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 20/02/2025	The land requirement for the project is 6.07 Ha (or) 15 acres which is a Government land.			The land has been provided by Municipal Corporation of Delhi (MCD) to M/s. Jindal Urban Waste Management (Bawana) Limited vide concession agreement dated 27/02/2025.
4.	Existence of habitation & involvement of R&R, if any.	Study Area:			The proposed project is within the DSIIDC Industrial Area, Bawana The land for the project is allocated by the MCD. It does not involve R&R issue.
		Habitation		Distance	
		JJ Colony		Within 1 Km	
		Iradat Nagar alias Naya		Within 05 Km	

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		<table><tr><td>Bans</td><td rowspan="6"></td></tr><tr><td>Holambi Khurd</td></tr><tr><td>Holambi Kalan</td></tr><tr><td>Sanoth</td></tr><tr><td>Ghoga</td></tr><tr><td>Khera Khurd</td></tr></table>	Bans		Holambi Khurd	Holambi Kalan	Sanoth	Ghoga	Khera Khurd																					
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5.	Latitude and Longitude of all corners of the project site.	<table><tr><th colspan="3">Plant Site:</th></tr><tr><th>Point</th><th>Lat.</th><th>Long.</th></tr><tr><td></td><td>28°47'41.49"N</td><td>77°3'42.51"E</td></tr><tr><td></td><td>28°47'46.08"N</td><td>77°3'36.54"E</td></tr><tr><td></td><td>28°47'53.53"N</td><td>77°3'43.80"E</td></tr><tr><td></td><td>28°47'49.56"N</td><td>77°3'48.06"E</td></tr><tr><td></td><td>28°47'47.84"N</td><td>77°3'47.27"E</td></tr><tr><td></td><td>28°47'47.12"N</td><td>77°3'47.43"E</td></tr><tr><td></td><td>28°47'46.70"N,</td><td>77°3'47.84"E</td></tr></table>	Plant Site:			Point	Lat.	Long.		28°47'41.49"N	77°3'42.51"E		28°47'46.08"N	77°3'36.54"E		28°47'53.53"N	77°3'43.80"E		28°47'49.56"N	77°3'48.06"E		28°47'47.84"N	77°3'47.27"E		28°47'47.12"N	77°3'47.43"E		28°47'46.70"N,	77°3'47.84"E	
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6.	Elevation of the project site	The project site elevation varies from 248 m to 236 m above mean sea level (msl)																												
7.	Involvement of Forest land if any	No																												
8.	Water body (Rivers, Lakes, Pond, Nalla, Natural Drainage, Canal etc.) exists within the project site as well as study area	A natural nallah is passing through the project site. Western Yamuna Canal is located at approx. 32 meters from the project site in South-West direction. Protection measures: - MSW will be stored in a closed pit to prevent cross-contamination - Fly ash and bottom ash securely stored in closed silos - Fuel oil tanks equipped with dykes and spill collection pits - Nallah passing through the site will not be diverted - Development of a green belt along the surrounding nallah/stream - Stormwater from open storage areas will be routed through pits for effective silt collection	No perennial river passing, only regulated canal passing by near to the project site.																											
9.	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	There is no National Park, Wildlife Sanctuary etc. within study area.																												
10.	Archaeological sites, monuments/ historical temples, etc.	None																												
11.	Involvement of Critically Polluted Area/ Severely Polluted area as per 2018 CEPI score	No																												

9. Salient features of the proposed WTE project: The technology proposed to be employed for this WTE project is RDF combustion based reciprocating forward feed grate technology. The power plant constitutes Material Recovery Facility

(Pre-sorting), RDF fuel Pit, Incinerators, Boilers, and Steam Turbine Generators with power generation total capacity of 30 MW±6MW. Air cooled condensers (ACC) are to be used in lieu of water-cooled condenser (WCC). The rejects/generated bottom ash will be processed in the bottom ash processing plant. After the processing materials which are not recyclable for further processing will be sent to Sanitary Landfill. Fly ash will be sent to the secured landfills site designated by MCD. The air pollution control system will consist of Flue Gas Treatment System which includes Adsorption of acidic components and other pollutants by lime and Activated carbon in turbo reactors and filtration of dust particles through bag filters. Wastewater & leachate generated from the WTE plant will be treated in the Leachate Treatment Plant. The treated wastewater will be recycled to DM plant and rejected water for quenching of bottom ash. The green belt area will be developed in an area of 6 acres all along the periphery of the project site. .

- Total MSW feed : 3000 TPD
- Power Plant capacity : 30 MW ± 6 MW
- RDF Processing Capacity : 700 TPD per unit (2x700 TPD for two units)
- Auxiliary power consumption : 10 to 15% of total power generation
- Saleable Power to Grid : 85 to 90%
- Calorific Value of Fuel : 1600 kcal/kg and above based on RDF quality
- Export grid voltage : 66 kV
- Grid Interconnection : DTL Bawana Substation (220/66 kV)
- Furnace and boiler type
- Upward grate system
- 99.9% Combustion rate (less than 10 ppm of CO)
- Low NOX generation design – secondary air control
- Flue gas Cooling system
- Hydrated lime dosing system for SO₂ control
- Stack of 60 meter height

The description of process involved in the generation of electricity from municipal waste is given below:

- MSW receiving
- Pre Segregation and preparation of RDF
- Heat Recovery & Steam Generation in the boiler
- Power Generation & exporting to grid
- Flue Gas Cleaning System
- Leachate Treatment

Overall mass balance

Description	Quantity (Tons Per Day)	% fraction
Total Waste for processing	3000 ton	100 %
Green Waste by bio-methanation process	600 ton	20 %
Total MSW Processed for RDF	2,400 ton	80 %
Total RDF to storage	1,400 ton	58 %
Inerts removal in processing	295 ton	12%
Leachate recovered	357 ton	15 %
Moisture	343 ton	14 %
Compost	4 ton	0.17 %
Recyclables	2 ton	0.08 %

Note: 20 to 25 percentage variations on the MSW feed quality are envisaged.

10. Fuel requirement: The details of the municipal solid waste requirement for the proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (TPD)	Source	Distance from site (Kms)	Mode of Transportation	Linkage document
1.	3000 Municipal Solid	Municipal	Approx. 12 Kms	Road	Concession Agreement with

	Waste	Corporation of Delhi			MCD
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11. Water requirement: The water requirement for the proposed project during operation phase is estimated as 625 m³/day and approx. 7 m³/day of fresh water will be required for domestic purposes which will be met by the DJB. Requirement of water for industrial usage will be met from the blowdown reject water from the Pragati Power Corporation Limited (PPCL) or treated sewage from STP, DJB. There will be no use of ground water in the process or for domestic use for the proposed project.

Operation Phase:

- Fresh water – 7 m³/day
- Blowdown reject water from the PPCL/Treated sewage from STP, DJB – 625 m³/day
- Treated Leachate water – 357 m³/day

12. Power requirement: The power requirement during construction shall be met from the nearest construction power source i.e., Tata Power Delhi Distribution Limited (TPDDL). During operation phase, power consumption shall be 10–15 % of the generated power. A 750 kVA DG set is envisaged which will be used in case of grid failure.

13. Baseline Environmental Studies with proposed mitigation measures

Period	March, 2023 to May, 2023	Additional Study (if any)
AAQ parameters at 8 Locations (min and max)	PM _{2.5} = 46.0 To 228.0 µg/m ³ PM ₁₀ = 77.0 To 380.0 µg/m ³ SO ₂ = 5.0 to 18.0 µg/m ³ NO _x = 14.0 To 32.0 µg/m ³ CO = 0.52 To 0.84 mg/m ³	-
Incremental GLC level	PM = 1.604 µg/m ³ (Level at 0.96.km in South Direction) SO ₂ = 6.418 µg/m ³ (Level at 0.96.km in South Direction) NO _x = 12.837 µg/m ³ (Level at 0.96.km in South Direction) <u>Proposed mitigation measures</u> • Presence of PVC waste is significant, hence the release of HCl, Dioxins and furans will be less significant (below 0.1 ngTEQ/Nm³) • Hydrated lime and activated carbon injection in the post-combustion stage to control SO₂ and HCl • 130% design capacity of PTFE Bag Filter House, • PM, SO₂, and NO_x emissions will be maintained within the levels of 50 mg/Nm³, 200 mg/Nm³, and 400 mg/Nm³, respectively, as per SWM Rules, 2016 norms • Continuous Emission Monitoring System (CEMS) will be installed on the stack • CAAQMS will be installed at the site • Provision for Selective Non-catalytic Reduction for Nox Control <u>Odour control measures</u> • Negative Pressure Ventilation in the MSW collection pit • Ventilation air from MSW pit will be fired in the boiler • Fogging unit/mist system & herbal solution spray • Odour assessment will be undertaken during the operational phase as per EN 16841-1 standards	-
Ground water quality at 8 locations	pH: 7.11 to 7.58, Temperature- 19 degree C to 22 degree C, Turbidity- 1.0 to 1.6 NTU, TDS-232.0 to 698.0 mg/l, Alkalinity as CaCO ₃ -188 to 232.0 mg/l,	-