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19/10/2016

BEFORE THE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

Original Application No. 199 of 2014

IN THE MATTER OF:

Almitra H. Patel & Anr.

Versus.

Applicant

Union of India & Ors.

Respondent (s)

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Filed through

(MS. PUJA KALRA)

Advocate on behalf of SDMC
430-431, 4th Floor, Lawyers Chambers
Delhi High Court, New Delhi

Dated _____ Oct. 2016

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SUGGESTIONS ON THE VARIOUS SUGGESTIONS SUBMITTED BY THE APPLICANT, ALMITRA H. PATEL ON 30.7.2016 AND 7.9.2016 ON BEHALF OF SOUTH DELHI MUNICIPAL CORPORATION (SDMC) IN RESPONSE TO THE HON'BLE COURT ORDERS DATED 8.9.2016 AND 22.9.2016.

I, Dev Kumar, and presently working as Executive Engineer, Sanitary Land Fill site (SLF) Okhla Phase-I, South Delhi Municipal Corporation, (SDMC) having its office at Room No. 6, Gate No. 4 at office complex of Dr. Ambedker Stadium, Delhi Gate, New Delhi -110002, do hereby solemnly affirm and declare as under:-

1. That the deponent is presently working as Executive Engineer, Sanitary Land Fill site (SLF) Okhla Phase-I, South Delhi Municipal Corporation having its office at Room No. 6, Gate No. 4 at office complex of Dr. Ambedker Stadium, Delhi Gate, New Delhi -110002, and is well conversant with the facts of the present matter and also of the orders dated 8.9.2016 and 22.9.2016 passed by the Hon'ble Court and as such am competent to swear the present comments on behalf of South Delhi Municipal Corporation on the basis of records maintained and made available by plants operators in this regard.

2. That the comments on the prayers made by the applicant on 30.7.2016 are as under:-

S. No.	Prayers made by applicant	Comments of SDMC
1	WTE project be approved on the following conditions:	
	a. Energy balance, Mass balance and waster balance shall be submitted the initial proposal for consideration and form part of the agreement.	It should be followed by proponent and SDMC.
	b. No commitment in the agreement shall be made for mixed waste or waste of any specific calorific value	SDMC have to adhere to the Solid Waste (Management & Handling) Rules, 2016 and have to ensure complete segregation of waste and the recyclables have to be recycled, wet waste has to be processed by composting. Otherwise also, SDMC do not commit for waste with any specific calorific value
	c. No unprocessed wet waste or recyclables shall form part of the feedstock.	By recycling and composting, no unprocessed and un-recycled waste shall be available and form part of the feedstock.
	d. No commitment for guaranteed supply of waste in excess of 85% of	The recyclables shall be recycled to the extent possible but the

	<p>their current total waste generation as minimizing residual waste is a key objective of SWM.</p>	<p>waste availability to the WTE cannot be restricted to 85% of the waste generation.</p>
	<p>e. Incinerator ash shall be sent to hazwaste landfill at the operators cost.</p>	<p>As per Schedule-II, Part-C, Note-(d), of Solid Waste Rules 2016, "if the concentration of toxic metals in incineration ash exceeds the limits specified in the Hazardous Waste (Management, Handling and Trans boundary Movement) Rules, 2008, as amended from time to time, the ash shall be sent to the hazardous waste treatment, storage and disposal facility." Therefore, the disposal of the ash will depend on the concentration of toxic metals. However, the fly ash can be used for manufacturing of brick & paver blocks. Ash can also be utilized in road sub base.</p>
2	<p>All SPGBs/PCC Shall not only permit but encourage supply of combustibles including mixed plastics as RDF to nearby industries power plants and cement plants.</p>	<p>It should be followed by Delhi Pollution Control Committee (DPCC) and Central Pollution Control Board (CPCB).</p>

3	Union of India Respondent No.1 herein shall phase out with clear timelines the use of PVC in all Packing, hoarding, banners, use and throw and short life items.	This para does not pertain to SDMC.
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3. That comments on comparisons table of Waste processing option, 2016, submitted by applicant on 7.9.2016 is annexed hereto and marked as Annexure-A (Colly).



DEPONENT

VERIFICATION:

Verified at Delhi on this _____ day of October, 2016 that the contents of the above said written submission are true and correct as per the official record maintained and made available in this regard. No part of it is false and nothing material has been concealed there from.



DEPONENT

ANNEXURE 'A'

COMPARISON TABLE OF WASTE PROCESSING OPTIONS, 2016

S. No	Various suggestions for waste processing 2016 submitted by Almitra H. Patel through affidavit dated 7.9.2016.				Various suggestions for waste processing 2016 provided by Plants Operators and SDMC.					
	Bio-stabilising 1	Composting 2	Biomethanation 3	Waste to Energy 4	Bio-stabilising 1	Composting 2	Biomethanation 3	Waste to Energy 4		
1	Time for startup	Immediate	9 months	6 months	2-4 years	Time for startup	Not feasible	9-15 months to availability of land to be made by DDA/GNCTD	9-12 months	2-2.5 years Subject to availability of land to be made by DDA/GNCTD
2	Mfn. waste tpd reqd.	Any quantity	1-500 tpd	0.1-300 tpd	400 tpd	-	-	300 tpd	0.1-300 tpd	500 tpd
3	Type of waste input	Any	Any	Raw wet waste + non-veg waste	RDF. No raw wet waste + No recyclables	-	-	MSW (Any Type)	Raw wet waste + non-veg waste	Mixed Solid Waste, segregated waste, non segregated waste

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4	Area reqd	Like open dump	1.5 ha/100tpd	0.6 ha/100 tpd	5 ha/400 tpd	-	-	1.4 ha/100tpd	0.8 ha/100 tpd	1.5 Acre/MW
5	Capital Cost	0.5 crores/100 tpd	10 crores/100 tpd	Zero for BOO	1000-2000 crores	-	-	10-12 /100tpd crores	0.6 crores/100 tpd	10-15 crores/MW (4MW from each 100 TPD)
6	Operating cost Per ton intake	Same or less than open dumping	Rs. 160/ t waste	Zero-Rs 100/t	Rs 1000 +/t	-	-	Rs. 2000-2200/ T waste	Rs. 100-150/t	Rs 1,40,000/ ton
7	Energy reqmt	Very low	Low	Almost Nil	Very High	-	-	Low	Low	10-15% of Gross generation
8	Payback time	1 month	5 yrs	6 yrs for BOO	10 yrs+	-	-	12-15 years	6 years	10 years
9	Products produced	Stabilished org + RDF if screened	Compost + Course organics + RDF	Piped gas or bottled gas + liquid fertilizer	Costly electricity	-	-	Compost + RDF+ (Aggregate& Dust)	Piped gas or bottled gas + liquid fertilizer (Aggregate& Dust)	Main product: Renewable electricity, By product: Fly ash bricks, paver block and other building material

10	Product use	Compost +RDF screened	if Agricultural /horticulture / forestry + erosion control	Heating, using 100% energy	Power, using 25% energy	-	-	Agricultural/Farming/ Horticulture forestry	Heating, using 100% energy	Renewable energy can be supplied to grid, Other building materials like paver blocks, bricks can be used for construction purpose.
11	Rejects qty	60% of intake	20-45% of intake	Nil, or RDF if mixed waste	Hazardous ash	-	-	60-70% of intake	RDF & DUST	Non hazardous ash in the range of 10-15% of MSW intake
12	Rejects use	Agricultural/ horticulture	RDF/fuel	RDF for fuel	None	-	-	RDF/fuel & Road filling	RDF for fuel	Rejects can be used for filling of low lying area even ash can also be utilized in Road sub base. Fly ash can be used for manufacturing of brick & paver blocks.

3	Pollution load	Nil, Leachate if mismanaged	or Odour+ if leachate if mismanaged	Low odour from intake	Dioxins, hazardous ash, soot, particulates	-	Odour + leachate if mismanaged otherwise no pollution load	Low odour from intake	Nationally standard Norms
14	Operating problems	Very low	Low Seasonal sale, late paymt	Moderate, need monitoring	Very high, energy intensive	-	Low Seasonal sale, late payment, low price sale, less order from chemicals companies & lack of awareness between people.	Moderate & need strict monitoring	No such operating problem, even plant can be operated beyond 90% 95& PLF. However, chlorinated hard PVC type plastics are technically not possible to be segregated from MSW.
15	Constraints	Do anywhere	Keep far from habitation	Keep near gas consumer	Keep far from residential, need hazardous waste landfill nearby	-	Keep far from residential area near about 1-15 km	Keep near gas consumer	MSW supplied is non hazardous and the rejects including ash are also non hazardous. Thus there is no need of hazardous waste land fill anywhere.

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16	Advantages	V low-tech	Low tech	Decentralised saves transport	Uses RDF for non-recyclables	-	-	Low tech	Decentralised saves transport	Lowers land fill burden. Generate much needed electricity. Generated carbon footprints reducing green house gas
17	Success rate	V high, V easy	50+ plants	Recent success Emerging technology	Mostly failures; Mostly scams	-	-	60-70 plants	Not notice	Okhla and Jabalpur project is the success story. Okhla project has so far processed 30 Lac Ton of waste and generated more than 500 Mus of electricity. Industry is in its initial development stages.

Ex. Engineer (SLF) SDMC

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6	Advantages	V low-tech	Low tech	Decentralised saves transport	Uses RDF for non- recyclables	-	-	Low tech	Decentralised saves transport	Lowers land fill burden. Generate much needed electricity. Generated carbon footprints reducing green house gas
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