

No.23-1/2006-IA-III
Government of India
Ministry of Environment and forest
(IA-III Division)

Paryavaran Bhavan,
CGO Complex, Lodhi Road,
New Delhi - 110003.

Dated the 9th May, 2007


AMENDMENT

Sub: Environmental clearance for Integrated Municipal Waste Processing Complex at Okhla and Timarpur, Delhi by M/s Timarpur-Okhla Waste Management Company Private Limited -regarding.

This has reference to our earlier letter of even number dated 21.3.2007 regarding the subject mentioned above.

In para 2 "to produce 15 MW power" shall be substituted with "to produce 16 MW power".

All other conditions shall remain unchanged.


(Dr. A. Senthil Vel)
Additional Director

To
✓ Shri D. K. Mittal,
Managing Director, IL&FS,
Infrastructure Development Corporation Limited,
Core 4B, 4th Floor, India Habitat Centre,
Lodhi Road, New Delhi-110003

Copy for information to:-

1. Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (NEZ), Bays No.24-25, Sector 31-A, Dakshim Marg, Chandigarh - 160022.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110032.
3. Member Secretary, Delhi Pollution Control Committee, 4th Floor, I.S.B.T. Building, Kashmere Gate, Delhi-110006
4. DIG (SU), Regional Office Cell, Ministry of Environment & Forests, New Delhi.
5. Guard File.
6. Monitoring Cell
7. Director (EI), Ministry of Environment & Forests, New Delhi.


(Dr. A. Senthil Vel)
Additional Director

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Paryavaran Bhavan,
CGO Complex, Lodhi Road,
New Delhi - 110003.

Dated the 21st March, 2007

Sub: Environmental clearance for Integrated Municipal Waste Processing Complex at Okhla and Timarpur, Delhi by M/s Timarpur-Okhla Waste Management Company Private Limited - regarding.

Reference is invited to letter No.Nil, dated 5.10.2006, dated 13.10.2006, dated 4.12.2006, dated 18.12.2006, dated 13.2.2007, dated 23.2.2007 by M/s Infrastructure Development Corporation Limited on the above-mentioned subject have been considered. Public hearing has been conducted for the project on 20.1.2007.

The project pertains to setting up of an integrated municipal waste processing complex at Okhla. The project at Okhla site will be designed to process 1300 TPD (650 X 2) of mixed garbage and 100 TPD of green waste, and the plant at Timarpur will be designed to process 650 TPD (650 X 1) of garbage. The plant will have two identical process streams, each handling, 650 MT of MSW/day to produce 225 MT of RDF from each of the streams. The fluff produced from both the plants will be used at Okhla project to feed power plant. The power plant would be able to produce 15 MW Power (Gross) at generator terminals. Power plant will have single boiler/single turbine configuration. Power plant will have RDF fluffs as the main fuel. There will be a provision in the plant for firing Methane gas produced from bio-methanation plant. Methane gas generated from green waste (100 TPD) in the biomethanation plant will be about 6000 cum/day with the gross calorific value of 4500 kcal/N.cum. RDF fluff requirement to produce 15 MW power would be about 25 to 30 TPH (600 to 720 TPD). RDF Fluff production at Okhla is estimated to be around 450 TPD and at Timarpur around 225 TPD. MSW to RDF plant will accordingly have a capacity of processing 1300 TPD of MSW at Okhla and 650 TPD of MSW at Timarpur. The size of the RDF fluff should be minus 100 mm, edge to edge and its density should be around 80-100 kg/m³. RDF plant will have dust collection and disposal facility and will have provision for suitable ventilation system to reduce smell inside the plant. There will be a 4.0 TPH capacity pelletising facility to produce RDF pellets from RDF, biomass and horticultural waste. The pellets will be 20 mm to 25 mm dia and 20 mm to 40 mm long with a bulk density of 650 kg/cum. Ash coming out of HAG and power plant boiler (both bottom ash and fly-ash) will be disposed to landfill site located at Jaitpur/Bhatti mines (20 km distance from project site). Depending on many factors, the CV of the fuel should be about 2600kca/kg \pm 100 kcal/kg. During screening of MSW through (-) 15mm size the smaller fraction will be separated out and sold as soil enricher, especially to nearby coal based power plant as an organic cover for fly ash damper.

NDMC and MCD will supply MSW as per agreement to TOWMCL sites in tipper trucks in two or three shifts as per regulations. After weighing and inspection, trucks will be brought to MSW storage area and the material shall be unloaded into the pits. After unloading the pits immediately the MSW shall be sprayed with herbal pesticide to retard its decomposition. EOT cranes will pick up this material from the pits through Grab buckets and deposit it on to a main conveyor through vibrator regulatory feeders. The main conveyor shall discharge the MSW to a manual inspection conveyor at elevated level of about 7 elevation. The plant water is required for the complex for bio-methanation plant, RDF plant, power plant and for general purposes for drinking, buildings, wash water etc. For the bio-methanation plant, the requirement is 150 cu m/day of sewage water. The treated sewage effluent from the plant is also 150 cum/day. The RDF plants requires a maximum of about 100 cm/day for washing and other industrial purposes. The treated sewage water could be used for this purpose. The power plant requires water for cooling tower make up and for boiler cycle make up. The power plant cooling capacity is 5400 cum/hr. The cooling tower make up water required is 135 cu m/hr, which works to 3240 cu m/day. The boiler make up water is expected to be 3 cu /hr totalling to 72 cu m/day.

The proposal has been examined and environmental clearance to this project is hereby accorded under Environment Impact Assessment Notification, 2006 subject to effective implementation of the following environmental safeguards and conditions:-

A. SPECIFIC CONDITIONS:

- (i) To minimize odour and aesthetics, it should be ensured that the waste will be directly unloaded into specifically designed pits. The air contained in the complex should be suitably treated with wet scrubbing method before letting out in the atmosphere.
- (ii) For reducing moisture in the municipal solid waste provision for drying using hot air generator should be provided.
- (iii) Ballistic separator in place of conventional air density separator should be provided.
- (iv) For odour management during transportation, provisions of MSW Rules, 2000 should be adhered to. Herbal insecticide should be spread on the MSW to control odour during transportation. During processing of the MSW slight negative pressure should be applied so that no bad odour eminent out of the processing plant.
- (v) The effluent generated from the plant should be treated at the facilities provided by Delhi Jal Board and discharged as per the norms laid down by for further treatment.
- (vi) To prevent spillage during transportation it should be ensured that the trucks are covered.
- (vii) Final disposal of the inert waste should be transported to the landfill site of the MCD.
- (viii) No groundwater should be tapped for the project within the project premises.
- (ix) The MSW should not be spread on the vacant land. Necessary lining on the floor should be provided so that the leachates from the solid waste do not percolate to the groundwater during rainy season.
- (x) No Objection Certificate from the Delhi Pollution Control Committee should be obtained before initiating the project.

B. GENERAL CONDITIONS:

- (i) Construction of the proposed structures should be undertaken meticulously confirming to the existing Central/local rules and regulations. All the construction designs/drawings relating to the proposed construction activities must have approvals of the concerned State Government Department/Agencies.
- (ii) To meet any emergency situation, appropriate fire-fighting system should be installed. Appropriate arrangements for uninterrupted power supply to the environment protection equipment and continuous water supply for the fire fighting system should be made.
- (iii) A separate Environment Management Cell with suitably qualified staff to carry out various environment related functions should be set up under the charge of a Senior Executive who will report directly to the Chief Executive of the Company.
- (iv) The funds earmarked for environment protection measures should be maintained in a separate account and there should be no diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards should be reported to this Ministry's Regional Office at Chandigarh.
- (v) Full support should be extended to the officers of this Ministry's Regional Office at Chandigarh and the officers of the Central and Pollution Control Committee by the project proponents during their

inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.

- (vi) In case of deviation or alteration in the project including the implementing agency, a fresh reference should be made to this Ministry for modification in the clearance conditions or imposition of new one for ensuring environmental protection. The project proponents should be responsible for implementing the suggested safeguard measures.
- (vii) This Ministry reserves the right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.
- (viii) This Ministry or any other competent authority may stipulate any other additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.
- (ix) A copy of the clearance letter shall be marked to the concerned Panchayat/local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.
- (x) Pollution Control Committee/Committee should display a copy of the clearance letter at the District Industries Center and Collector's Office/ Tehsildar's Office for 30 days.
- (xi) The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letters are available with the Delhi Pollution Control Committee and may also be seen at website of the Ministry of Environment & Forests at <http://www.envfor.nic.in/>.
- (xii) The project proponents should inform Regional Office Chandigarh as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of work.
- (xiii) The project proponent will obtain the Forest clearance for the land passing through the Reserved Forest area before commencement of the project activities in forest area.
- (xiv) Budgetary break up for Environmental Management Plan for the project to be mentioned.

The above mentioned stipulations will be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (protection) Act, 1986, the Hazardous Chemicals (Manufacture, Storage and Import) Rules, 1989, and its subsequent amendments and the Public Liability Insurance Act, 1991 and the Rules made thereunder from time to time.


(Dr. A. Senthil Vel)
Additional Director

To

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