Government of Maharashtra

SEAC- 2013/CR-281/TC-2
Environment department
Room No. 217, 2nd floor,
Mantralaya Annexe,
Mumbai- 400 032.
Dated: 29th September, 2014

To,
M/s Balkrishna Paper Mills Limited.
A-7, Kamla City, Trade World,
Lower Parel, Mumbai.

Subject: Environment clearance for proposed 4.5 MW Co-generation Power Plant project at Ambivali, Tal Kalyan, Dist Thane by M/s. Balkrihna Paper Mills.

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification, 2006, by the State Level Expert Appraisal Committee-I, Maharashtra in its 81st meeting and decided to recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 74th meeting.

2. It is noted that the proposal is for grant of Environmental Clearance for proposed 4.5 MW Co-generation Power Plant project at Ambivali, Tal Kalyan, Dist Thane. SEAC-I considered the project under screening category 1(d), B2 of EIA Notification 2006.

Brief Information of the project submitted by Project Proponent is as:

Name of the Project.	4.5 MW Coal based captive co-generation Power Plant.
Project proponent.	M/s. Balkrishna Paper Mills Limited. A-7, Kamla City, Trade World,Lower Parel, Mumbai.
Consultant.	M/S. Ultratech Environment Consultancy & Laboratory
New Project/Expansion in existing Project/Modernization/Diversification in existing Project.	Modernization in existing project
If Expansion/Diversification, whether environmental clearance has been obtained for existing project (*If yes, enclose a copy with compliance table)*	No Company is in existence since 1971 and involved in manufacture of Duplex & Triplex paper using 100 % waste paper so EC not required for this project.
Activity Schedule in the EIA Notification.	1(d) B2 Category.
Area Details	Total Plot Area- 91440 Sq. Mtr. Built up Area: 19551.62 Sq. Mtr.
Name of Notified Industrial	Unit is in area which is in Industrial Area as per KDMC Drg.

<table>
<tr><td>Area</td><td>NA permissions granted by Collector Office for Industrial Purpose.</td></tr>
<tr><td>Estimated Capital Cost of the Project (Including cost for land, building, plant & machinery)</td><td>No land is purchased for present project. Land for factory was purchased in Year 1964.
Cost of Building- 4.0 Crores.
Cost of Machinery- 23.0 Crores.
Total Cost : 27 Crores.</td></tr>
<tr><td>Location Details of the project.</td><td>Latitude – 19 Deg. 16 `, 27" N<br>Longitude – 73 Deg. 10`, 36" E
Location - Village Ambivali (Kalyan)
Elevation above Mean Sea Level- 6.59 Mtr</td></tr>
<tr><td>Raw Materials (Including Process chemicals, catalysts & additives)</td><td>
<table>
<tr><td>List of Raw Materials to be used</td><td>Physical & Chemical nature of raw material.</td><td>Quantity(MT/Yr) full production capacity</td><td>Source of Materials.</td><td>Means of Transportation (Source to storage site) with justification.</td></tr>
<tr><td>Imported Coal</td><td>Solid. Contains carbon.</td><td>125 MT/Day. Approximate consumption per year is 41250 MT (considering 330 Day of operation per year.)</td><td>From Indonesia.</td><td>By ship up to Mumbai port & by Truck from Port to Factory.</td></tr>
</table>
</td></tr>
<tr><td>Production Details</td><td>
<table>
<tr><td>Names of Products, By-products & Intermediate Products.</td><td>Existing (MT/Year)</td><td>Proposed Activity (New/modernization /expansion)</td><td>Total (MT/Year)</td></tr>
<tr><td>Product: Electrical Energy</td><td>NIL</td><td>New Activity. 4.5 MW power generation/day i.e 1642.5 MW/year</td><td>1642.5 MW/year</td></tr>
<tr><td>By Product- Steam</td><td>8MT/hr</td><td>32 MT/Hr.</td><td>280320 MT/year</td></tr>
<tr><td>Waste Product: Boiler Ash</td><td>2920 MT/Yr.</td><td>4562.5 MT/year</td><td>4562.5 MT/year</td></tr>
</table>
</td></tr>
<tr><td>Rain water Harvesting (RWH)</td><td>Level of Ground water table:80 ft below ground level
Size & No. of RWH tanks & Qty.
3 RWH tank of capacity 250m^3 each
Location of RWH tanks: on ground level</td></tr>
</table>

<table>
<tr><td></td><td>Size & no's of recharge pits & Qty.: No recharging will be done
Budgetary allocation (Capital & O &M):Capital cost 3.47 Lac
O & M cost 0.27 Lac/annum</td></tr>
<tr><td>Total water requirement</td><td>Total water requirement:2155 KLD</td></tr>
<tr><td>Storm Water Drainage</td><td>Natural water drainage pattern. The storm water will be collected in the storm water drains of adequate capacity.
Quantity of Storm water:
Size of SWD: 600 mm wide with slope 1:200</td></tr>
<tr><td>Sewage Generation & Treatment</td><td>Amount of sewage generation : 20 CMD
Proposed Treatment: Treated in existing ETP of capacity 2525CMD.
Capacity of STP: NA</td></tr>
<tr><td>Effluent Characteristics</td><td>
<table>
<tr><th>S.N.</th><th>Parameters</th><th>Inlet-Effluent Characteristics.</th><th>Outlet-Effluent Characteristics.</th><th>Effluent Discharge Standards (MPCB)</th></tr>
<tr><td>1</td><td>PH</td><td>6.5 to 7.5</td><td>6.8 to 7.7</td><td>5.5 to 9.0</td></tr>
<tr><td>2</td><td>BOD</td><td>350</td><td>Less than 100</td><td>100 mg/Lt</td></tr>
<tr><td>3</td><td>COD</td><td>750</td><td>Less than 250</td><td>250 mg/Lt</td></tr>
<tr><td>4</td><td>Suspended Solids.</td><td>150</td><td>Less than 100</td><td>100 mg/Lt</td></tr>
<tr><td>5</td><td>Oil & Grease</td><td>2.5</td><td>BDL.</td><td>10 mg/Lt</td></tr>
</table>
</td></tr>
<tr><td>ETP Details</td><td>Amount of Effluent generation (CMD): 1975 CMD
Capacity of ETP (CMD): 2525 CMD
Amount of treated effluent recycled (CMD): 1780 CMD
Amount of water sent to CETP: NA
Membership of CETP (if required):No</td></tr>
<tr><td>Note on ETP Technology to be used</td><td>Primary treatment based on Crofta units followed by biological treatment.</td></tr>
<tr><td>Disposal of the ETP Sludge(If applicable)</td><td>N.A. ETP sludge will be utilized in the process.</td></tr>
</table>

Solid waste Management

S.N.	Source	Quantity (TPM)	Form (Sludge, Dry, slurry etc.)	Management
1	Raw Water treatment plant.	--	--	--
2	ETP Primary sludge: Secondary(biological sludge)		Sludge Sludge	Paper pulp: Recycled back in the process Organic waste: Used as manure
3	Process:	50 MT/Month	Wet sludge.	Paper with impurities Used by other parties to produce low quality paper board.
		100 MT/Month	Plastic waste	Sell to authorized vendor
		150 MT/Month	Boiler ash. From Boiler.	Sold to brick manufacturers

Atmospheric Emissions *(Flue gas, characteristics SPM, SO2, NOx, CO etc)*

S. No.	Pollutant	Source of Emission	Emission rate (Kg/Hr.)	Conc in flue gas (gm/M^3)
1	SPM	Boiler chimney	0.66	0.062
2	SO2	Boiler chimney	7.53	0.274
3	NOx	Boiler chimney	--	--
4	CO	Boiler chimney	--	--
5	Others			

Stack Emission Details

Plant section & Unit	Stack No.	Height from Ground level(Mts)	Internal Diameter, Top (Mtr)	Emission rate M^3/Hr.	Temp. o Exhaust Gases
Boiler	1.	52	1.3	21385	160

Emission Standards.

Pollutants (SPM,SO2 etc.)	Emission standard limit (mg/Nm^3)	Proposed limit (mg/Nm^3)	MPCB Consent (mg/Nm^3)
SPM	150	150	150
SO_2		1250 kg/day	1250 kg/day

Ambient Air Quality Data.

S.N.	Pollutant	Permissible Standards	Proposed Concentration (In Micrgm/M^3)	Remarks
1	PM – 2.5	60	47	All the values are within the permissible limits
2	RPM - 10	100	64	
3	SO_2	80	19	
4	NOx	80	29	
5	CO	4 mg/m^3 for 1 hr	2.01	

Details of Fuel to be used

Sr. No.	Fuel	Daily consumption (TPD/KLD)		Calorific Value (Kcals/Kg)	% Ash	% Sulfur
		Existing	Proposed			
1.	Imported Coal	70 TPD	125 TPD	5100 K. Cal/Kg	< 10 %	< 0.5%

Energy

Power Supply:
Existing Power Requirement:3.5 MW
Proposed Power Requirement:4.3 MW will be generated from power plant

DG Sets:
Number & capacity of DG sets
Existing:1 of capacity 250 KVA
Proposed: Existing will be utilised

Details of Non-Conventional renewable energy proposed to be used: NA

Green Belt Development

Green Belt Area- 11600 Sq. Mtr. At present.
No. of trees and species to be planted: 15 nos of following speciaes
Pithocolbian saman.
Alstonia scholaris
Cassia siamea.
Peltoforam ferrugineum
Inga Dulcis.

<table>
<tr><td></td><td>Jambul
Eucalyptus
Golden bamboo.
Soft cotton.
Kadulimb.
Pimpal.
Number, size, age, specias of trees to be cut, trees to be transplanted: NA</td></tr>
<tr><td>Details of Pollution Control System:</td><td>
<table>
<tr><th>S.N.</th><th></th><th>Existing Pollution Control System</th><th>Proposed to be Installed.</th></tr>
<tr><td>1</td><td>Air</td><td>Boiler emission is controlled by installing ESP.</td><td>Existing of adequate capacity will be utilized.</td></tr>
<tr><td>2</td><td>Water</td><td>Effluent Treatment Plant of capacity 2525CMD</td><td>Existing ETP of adequate capacity will be utilized</td></tr>
<tr><td>3</td><td>Noise</td><td>No high Noise operations in plant.</td><td>Not Applicable.</td></tr>
<tr><td>4</td><td>Solid Waste</td><td>Please see Annexure 6 for Details.</td><td>Wet soil is used as garden soil in company premises
Plastic waste is sent to M/S. Ambuja Cement for disposal in their Boiler taking advantage of its calorific value.
Waste paper sludge is sold to parties that use it as their raw material to produce low quality paper boards.
Metal wire is sold to scrap dealers that is recycled back for some other use.
Boiler ash is sold to brick manufacturers to produce Bricks.</td></tr>
</table>
</td></tr>
<tr><td>Environmental Management Plan.
Budgetary Allocation:</td><td>
<table>
<tr><th>S.N.</th><th>Particulars</th><th>Recurring Cost per annum</th><th>Capital Cost</th></tr>
<tr><td></td><td>Air Pollution Control.</td><td>52.19 Lacs Power Maintenance & Spares.</td><td>177.40 Lacs-ESP &Chimney</td></tr>
</table>
</td></tr>
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		Water Pollution Control.	131.57 Lacs	140.35 Lac	
		Noise Pollution Control.	Not Applicable	Not Applicable	
		Environmental Monitoring & Management.	1.63 Lacs	--	
		Occupational Health.	21.41 Lacs		
		Green Belt.	3.10 Lacs		
		Solid waste Management.	40.99 Lacs	10.0 Lacs	
		Total	240.34 Lacs	327.75 Lacs	

3. The proposal has been considered by SEIAA in its 74th meeting decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions :

(i) This EC is issued subject to providing lay by arrangement on the 9m radius in case of emergencies. Air pollution control measures including Coal handling has to be provided.

(ii) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.

(iii) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.

(iv) Regular monitoring of the air quality, including SPM & SO2 levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.

(v) Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.

(vi) Proper Housekeeping programmes shall be implemented.

(vii) In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieve.

(viii) A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set.(If applicable)

(ix) A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.

(x) Arrangement shall be made that effluent and storm water does not get mixed.

(xi) Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.

(xii) Leq of Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.

(xiii) The overall noise levels in and around the plant are shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.

(xiv) Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.

(xv) Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.

(xvi) Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.

(xvii) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.

(xviii) The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.

(xix) The company shall undertake following Waste Minimization Measures :

- Metering of quantities of active ingredients to minimize waste.
- Reuse of by- products from the process as raw materials or as raw material substitutes in other process.
- Maximizing Recoveries.
- Use of automated material transfer system to minimize spillage.

(xx) Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.

(xxi) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.

(xxii) Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.

(xxiii) Separate silos will be provided for collecting and storing bottom ash and fly ash.

(xxiv) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department

(xxv) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in

(xxvi) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.

(xxvii) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

(xxviii)The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM. SO_2, NOx (ambient levels as well as stack emissions) or critical sectorai parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

(xxix) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

(xxx) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.

5. The Environment department reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

6. **Validity of Environment Clearance**: The environmental clearance accorded shall be valid for a period of 5 years to start of production operations.

7. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

8. The above stipulations would 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 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

9. Any appeal against this environmental clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1st Floor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

10. This Environment Clearance is issued for proposed 4.5 MW Co-generation Power Plant project at Ambivali, Tal Kalyan, Dist Thane by M/s. Balkrihna Paper Mills.

Lgadgil

(Medha Gadgil)
Additional Chief Secretary,
Environment department &
MS, SEIAA

Copy to:

1. Shri. R. C. Joshi, IAS (Retd.), Chairman, SEIAA, Flat No. 26, Belvedere, Bhulabhai desai road, Breach candy, Mumbai- 400026.
2. Shri T. C. Benjamin, IAS (Retired), Chairman, SEAC-I, 602, PECAN, Marigold, Behind Gold Adlabs, Kalyani Nagar, Pune – 411014.
3. Additional Secretary, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
4. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
5. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).
6. Regional Office, MPCB, Thane
7. Collector, Thane
8. IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
9. Select file (TC-3)

(EC uploaded on 7/10/2014)