

JAI BALAJI INDUSTRIES LIMITED

Ref No.: JBIL/HO/2015-16/58

Date: 15/09/2015

The Director,

Ministry of Environment, Forest & Climate Change (IA Division)
Indira Paryavaran Bhawan,
Aliganj, Jorbagh Road,
New Delhi-110003

Sub: Integrated Steel Plant (5.00MTPA), Cement Grinding Unit (3.00 MTPA) and 1215 MW coal based power project at Village Durmut, Raghunathpur Block, District Purulia, West Bengal by M/s Jai Balaji Industries Limited – Application for Extension of validity of issued Environmental Clearance reg.

Ref: Your letter F No. J-11011/879/2008-IA II (I) dated 21st October, 2010 and subsequent amendment dated 25th January, 2011.

Dear Sir,

In accordance with EIA Notification 2006, an Environmental Clearance has been accorded to us for setting up of an Integrated Steel Plant (5.00 MTPA), Cement Grinding Unit (3.00 MTPA) and 1215 MW coal based power project at Village Durmut, Raghunathpur Block, District Purulia, West Bengal vide your letter F. No. J-11011/879/2008-IA II (I) dated 21st October, 2010 which was further amended vide letter dated 25th January, 2011 (copy of the letters enclosed for your ready reference).

In this context we would like to state that project activities of the above referred proposal could not be started till date due to some unavoidable reasons. Since as per prevailing act, environmental clearance of the above category is valid for a period of 05 (five) years, the issued environmental clearance is going to be expired on 21.10.2015.

As we are very much hopeful to start our project activities in near future, therefore, we request your goodself to kindly extend the validity of Environmental Clearance for another 05 years in favour of our above referred project proposal.

Thanking you.

Yours faithfully,

for JAI BALAJI INDUSTRIES LIMITED

GAURAV JAJODIA

DIRECTOR

Encl: As above

F. No. J-11011/879/2008- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan CGO Complex, Lodhi Road New Delhi – 110 003 E-mail: ms.industry-mef@nic.in Tele/fax: 011 – 2436 3973

Dated: 21st October, 2010

To.

The Director,
M/s Jai Balaji Industries Limited,
5, Bentink Street, 2nd Floor
Kolkata- 700 0001, West Bengal

E-mail: jbalaji@vsnl.net

Sub: Integrated Steel Plant (5.00 MTPA), Cement Grinding Unit (3.0 MTPA) at Village Durmut, Raghunathpur Block, District Purulia, West Bengal by M/s Jai Balaji Industries Limited regarding environmental clearance

Sir.

This has reference to your letter No. Nil dated Nil along with copies of final EIA /EMP and public hearing reports and subsequent communication dated 10.7.2010 seeking environment clearance under the provisions of EIA Notification, 2006.

The Ministry of Environment and Forests has examined the proposal. It is noted that M/s Jai Balaji Industries Ltd. have proposed for the Integrated Steel Plant (5.0 MTPA), Cement Grinding Unit (3.0 MTPA) and captive Power Plant (1.215 MW) at Village Durmut. Raghunathpur, Block, District Purulia, West Bengal. Total project area is 3,800 acres and is allotted by the West Bengal Industrial Development Corporation Ltd. Part of the of the project land inside the Industrial zone at Raghunathpur Block-I, District Purulia, West Bengal. About 1255 acres of plant area will be brought under green belt. There will be land oustees and no displacement of people. There will be about 7672 project affected people for which resettlement and rehabilitation plan has been prepared. No forest land is involved. No national park/wild life sanctuary/reserve forest is located within 10 km radius of the project site and DFO has issued a letter dated 19th February, 2010 confirming the same. The coal requirement for the captive power plant will be met from the Jaganathpur "A and Jaganathpur "B" Coal Blocks for which MOU has been singed on 31.3.2010 between M/s West Bengal mineral Development and Trading Corporation Ltd and M/s Jai Balaji Industries Ltd. Total cost of the project is Rs. 16,000.00 Crores of which Rs 1,344.21 Crores and Rs. 128.60 Crores towards capital cost and recurring cost/annum has been earmarked.

3. Details of the units along with the production capacity are given below:

S.N.	Units	Capacity
1.	Coal washery	15.60 MTPA
2.	Iron Ore Beneficiation plant	16.00 MTPA
3.	Sinter Plant	3.70 MTPA
4.	Iron Ore Beneficiation plant	8.0 MTPA
5.	Producer Gas Plant	1,50,000 Nm ³ /hr.
6.	Direct Reduction Plant (DRI)	3.9 MTPA(Coal Based DRI Plant- 1.5 MTPA and Gas based DRI Plant - 2.4 MTPA)
7.	Coal Gasification Unit	2,25,000 Nm ³ /hr.
8.	Blast Furnace	2.68 MTPA
9.	Coke Oven & By products Plant	1.519 MTPA
10.	Pig Casting Machine	1.0 MTPA (3000TPD)
11.	Induction Furnace	0.6 MTPA(50000 TPM)
12.	Electric Arc Furnace (EAF) with Laddle Refining Furnace	4.8 MTPA
13.	RH-TOP (Degassing Unit)	0.132 MTPA
14.	Argon - Oxygen Decarburization (AOD) Unit	0.033 MTPA
15.	Vaccum Oxygen De-Carburization (VOD) Unit	0.033 MTPA
16.	Continuous Caster	5.0 MTPA
17.	Product Mix HR Coil -2.085 MTPA Bar Mill - 0.9 MTPA Wire & Rod Mill - 1.1 MTPA (2 x 0.55 MTPA) Medium Structural Mill - 1.0 MTPA	5.085 MTPA
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19.	Lime Calcination Plant	0.40 MTPA
20.	Calcined Dolomite Plant	0.20 MTPA
21.	Submerged Arc Furnace (Ferro Alloys)	0.25 TPD
22.	Captive Power Plant	1,215 MW
23.	Cement plant	3 MTPA

- It is noted that ESP with stack will be provided to sinter plant, pellet plant, CFBC power plant, cement and DRI plant to control emissions within 50 mg/Nm3. Flue gas desulphurization unit and NOX burners will also be installed to control SO2 and NOX emissions from the captive power plant. Dust catcher followed by a venturi scrubber and chimney will be provided to blast furnace plant/PCM. Coke oven gases will be used for heating purpose in the steel plant. Sulphur of the coke oven plant will be recovered in the recovery plant. Dust suppression system with bag filters and a chimney will be provided to coke oven. ESP, bag filters, gas coolers and chimney will be provided to Steel Melting Shop/ EAF/LF/Slab caster. Fume extraction system with bag filter, ID fan and chimney will be provided to Ferro Alloy Plant. Bag filter, dust suppression system and chimney will be provided to coal washery, ash silo, fuel/coal handling plant, tube mill, conveying system, cyclone separator and unloading section of cement plant. Bag filters will be provided to cement plant, lime and dolo plant. Dust suppression system will be provided at raw material/material handling area. The reverse air bag house to control particulate emissions below mg/Nm3 will be provided to the Cement Grinding Unit. Bag Filter and dust suppression system will be installed to control the particulate emissions from the Ferro manganese plant and raw material charging point.
- 5. Make up water requirement from Panchet Dam under Damodar Valley River Reservoir Corporation will be 7,552m³/hr. The water consumption will be reduced due to adoption of air quenching in the coke oven and air cool condensers in the captive power plant. Due to adoption of air cooled condensers about 914m³/hr will be required as make up water against 8940m³/hr in case of water cool condensers, thereby saving a huge quantity of water to the tune of 8026m³/hr. Permission for 1,927m³/hr (10.30 MGD) has been obtained from the Central Water Commission vide letter no. MD/DVRR/W-6-116/2008/595-601 dated 11th September, 2008. PAs informed that application has been submitted to DVRRC for 54 MGD of water of which 10.5 MGD water was already allotted. The plant will be designed as zero discharge plant for the process effluent. The water will be re-circulated through cooling and treatment. No effluent will be discharged out side the plant premises. The entire treated waste water will be recycled for various purposes within the plant.
- 6. Coal fines, middlings from coal washery, dolochar and coal will be used in CFBC boiler. EAF/IF slag will be used for road construction or filling low lying areas. Balance slag will be dumped for land filling at a separate earmarked area. BF slag will be granulated and used in cement plants. Fly ash will be used in the cement manufacturing. The bottom ash

will be stored in the Ash pond for which 135 acres of area has been earmarked. The Ash pond will be lined with Stone and Geo Synthetic Lining material to prevent leaching. The bottom ash will be used for land filling, construction of roads for villages and abandoned mine disposal. Mill scale will be used as raw material for sinter plant. Scrap will be recycled to SMS. Sinter dust, BG flue dust, EAF dust will be used in sinter plant. Scrap, scales, mill scales, mill scraps will be used in EAF/IF. Tar slag will be sent to coal yard. The Ferro Manganese Slag will be used in the Silico Manganese Plant as raw material. The Silico Manganese Slag will be dumped in the area earmarked for dumping on road building. Total power requirement of 1174 MW would be initially met from Damodar Valley Corporation and later from CPP after its commissioning.

- 7. All the Integrated Steel Plants, Cement Grinding Unit and Captive Power Plant are kept at S. N. 3 (a) under Primary Metallurgical Industries, 3(b) and 1(d) respectively under EIA Notification, 2006 and appraised by the Expert Appraisal Committee I (Industry) at the Central level.
- 8. The proposal was considered by Expert Appraisal Committee-1 (Industry) in its 8th meeting held on 2nd & 3rd March, 2010. The Committee sought additional information for reconsideration of the project.. On receipt of additional information, the proposal was reconsidered by the Expert Appraisal Committee-1 (industry) in its 13th meeting held during 26th -28th August, 2010. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing of the project was held on 8th April, 2010.
- 9. Based on the information submitted by you, presentation made by you and consultant, M/s Environtech East Pvt. Ltd, Kolkata, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September 2006 subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITIONS:

- The proposal for 1215 MW coal based captive power plant will be considered when the firm coal linkage is available.
- ii. Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), gas cleaning plant, venturi scrubber, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³ by installing energy efficient technology.

- iii. As proposed, Electrostatic precipitator (ESP) shall be provided to sinter plant, CFBC, DRI plants; Pellet plant and dust catcher followed by venturi scrubbers to blast furnace to control SPM levels within 50 mg/Nm³. Fume extraction system shall be provided to induction / electric arc furnaces to control the emissions within the prescribed standards. The dust collectors shall be installed to control the particulate emissions at the dust generating points in the cement plants. The reverse air bag house shall be installed for the cement mill. Dust extraction system with efficiency not less than 98 % shall be installed to the coal washery, iron beneficiation plant, coal gasification plant, DRI plant and sinter plant.
- iv. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- v. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines/Code of Practice issued by the CPCB shall be followed. New standards for the sponge iron plant issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 should be followed.
- vi. The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points, raw mill handling (unloading, conveying, transporting, stacking), vehicular movement, bagging and packing areas etc. All the raw material stock piles shall be covered. Covered sheds for storage of raw materials and fully covered conveyers for transportation of materials shall be provided besides coal, cement, fly ash and clinker shall be stored in silos. Pneumatic system shall be used for fly ash handling.
- vii. Asphalting/concreting of roads and water spray all around the stockyard and loading/unloading areas in the cement plant shall be carried out to control fugitive emissions. Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of RSPM such as haul road, loading and unloading points, transfer points and other vulnerable areas. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- viii. All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process used for cement manufacturing. Spent oil and batteries should be sold to authorized recyclers / reprocessors only.
- ix. Hot gases from DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely and used in waste heat recovery boiler (WHRB). The BF and Coke oven gas shall be fully utilized in the process. The gas then shall be cleaned in ESP before leaving out into the atmosphere through ID fan and stack.

- x. The makeup water requirement from Damodar Valley River Corporation shall not exceed 7,552 m³/hr. Efforts shall further be made to use maximum water from the rain water harvesting sources. The company shall install air cooled condensers for the Captive Power Plant and Dry Quenching Process shall be adopted in the Coke Oven Plant. All the effluent should be treated and used for ash handling, dust suppression and green belt development. No effluent shall be discharged and 'zero' discharge shall be adopted. Sanitary sewage should be treated in septic tank followed by soak pit.
- xi. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.
- xii. Regular monitoring of influent and effluent surface, sub-surface and ground water (including chromite) should be ensured and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bhubaneswar, WBPCB and CPCB.
- xiii. The water consumption shall not exceed as per the standard prescribed for the steel plants and cement grinding units.
- xiv. All the coal fines, middling's from coal washery char from DRI plant and washery rejects shall be utilized in CFBC boiler of power plant and no char shall be used for briquette making or disposed off anywhere else. CFBC boiler shall be installed simultaneously along with the DRI plant to ensure full utilization of char from the beginning. All the blast furnace (BF) slag shall be provided to the cement manufacturers. Scrap shall be used in steel melting shop (SMS) and SMS slag and kiln accretions shall be properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner. The BF granulated slag shall be used in the Cement Plant. The BF Flue dust and EF dust shall be used in the Sinter Plant.
- xv. The Slag from the ferro manganese unit shall be used for manufacture of Silico Manganese and the Slag from the Silico manganese after metal recover shall be used for construction and filling up of low lying areas.
- xvi. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and its subsequent amendment.
- xvii. The ash pond shall be lined with HDPE /LDPE lining or any other suitable impermeable media so that no leachate takes place at any point of time. Adequate safety measures shall be implemented to prevent breaching of ash dyke.
- Xviii. Vehicular pollution due to transportation of raw material and finished products shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.

- Transportation of raw coal during the initial phase shall be by 40-T mechanically covered or tarpaulin covered trucks from the coalmines to the washery. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site(s) within sheds/stockyards fitted with wind breakers/shields. Adequate measures hall be taken to ensure that the stored minerals do not catch fire.
- xx. Hoppers of the coal crushing unit at the crushing shed and washery unit shall be fitted with high efficiency bag filters/Dust extractors and mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of belt conveyor systems which shall be closed and from transportation roads.
- xxi. All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the roads. Facilities for parking of trucks carrying raw coal from the linked coalmines shall be created within the Unit.
- The washery unit shall be a zero-discharge facility and no wastewater shall be discharged from the washery into the drains/natural watercourses. Recycled water shall be used for development and maintenance of green belt and in dust suppression from Plant operations.
- xxiii. Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste should be submitted to the Ministry's Regional Office at Bhubaneswar, WBPCB and CPCB.
- xxiv. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xxv. Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Bhubaneswar, WBPCB and CPCB within 3 months of issue of environment clearance letter.
- xxvi. As proposed, green belt shall be developed in 33 % of plant area as per the CPCB guidelines in consultation with the DFO.
- XXVII. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants should be implemented.
- All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 8th April, 2010 should be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhubaneswar.

- xxix. At least 5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner.
- Rehabilitation and Resettlement Plan for the project affected population including tribals, if any shall be implemented as per the policy of the State Govt. in consultation with the State Govt. of West Bengal. Compensation paid in any case should not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy, 2007.
- The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

B. GENERAL CONDITIONS:

- The project authorities must strictly adhere to the stipulations made by the West Bengal State Pollution Control Board and the State Government.
- No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.
- iv. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO₂ and NO_X are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the SPCB/CPCB once in six months.
- v. Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.

- vi. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- viii. The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
- The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
- x. Requisite amount shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose.
- xi. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body 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 web site of the company by the proponent.
- The project proponent shall upload the status of compliance of the stipulated environment clearance 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 the MOEF at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO₂, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xiii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhubaneswar/ CPCB / SPCB shall monitor the stipulated conditions.

- 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 xiv. Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Bhubaneswar by e-mail.
- The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are XV. available with the SPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bhubaneswar.
 - Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities xvi. and the date of commencing the land development work.
- The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 12. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.
- The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.

Copy to:

- 1. The Secretary, Department of Environment, Govt. of West Bengal, Kolkata, West Bengal.
- 2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office
- Complex, East Arjun Nagar, Delhi-110032. 3. The Chairman, West Bengal Pollution Control Board, Parivesh Bhawan, 10A Block-LA, Sector-III, Salt Lake, Kolkata - 700091, West Bengal.

4. The Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment and Forests A-3, Chandrashekharpur, Bhubaneswar - 751 023, Orissa

5. Adviser (IA-II), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex,

New Delhi.

- 6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
- 7. Guard File.
- 8. Monitoring File.
- 9. Record File.

(Dr. P.L. Ahujarai) Scientist 'F' F. No. J-11011/879/2008- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan CGO Complex, Lodhi Road New Delhi – 110 003 E-mail: ms.industry-mef@nic.in Tele/fax: 011 – 2436 3973

Dated: 25th January, 2011

To.

The Director, M/s Jai Balaji Industries Limited, 5, Bentink Street, 2nd Floor Kolkata- 700 0001, West Bengal

E-mail: gaurav@jaibalajigroup.com

Sub: Integrated Steel Plant (5.00 MTPA), Cement Grinding Unit (3.0 MTPA) and 1215 MW coal based power project at Village Durmut, Raghunathpur Block, District Purulia, West Bengal by M/s Jai Balaji Industries Limited - regarding amendment in environmental clearance

Sir,

This has reference to your letter no. Nil dated 7th December, 2010 and 20th December, 2010 requesting the Ministry to amend the environmental clearance accorded vide letter of even no. dated 21st October, 2010 by inclusion of 1215 MW coal based power plant as was in the original application, as the company has entered into Memorandum of Understanding (MOU) for supply of Imported coal for 1215 MW coal based power plant and correction of some factual errors.

- 2. The proposal has been examined. In para 3 and SI. No. 4, of the environmental clearance order dated 21st October, 2010 it should be read as iron ore pellet and instead of iron ore beneficiation plant. At SI. No. 21 of para 3, the capacity of the Submerged arc furnace (ferro alloys) may be read as 0.25 MTPA instead of 0.25 TPD.
- 3. It is noted that based on the ambient air quality prediction carried based on the use of imported coal, the maximum Ground Level Concentration (GLC) of SO2 will reduce from 30.97 ug/m3 due to use of indigenous coal to 28.4 ug/m3 due to use of imported coal. However, the GLC for other parameters like PM and NOx will remain at same level as per the indigenous coal.
- The proposal for integrated Steel plant (5.0 MTPA), Cement Grinding unit (3.0 MTPA) and Captive Power Plant (1215 MW) was recommended by the Expert Appraisal Committee (Industry) in its meeting held during 26th -28th August, 2010.

- In view of the above, following additional conditions are being stipulated for compliance:
 - i. In case source of fuel supply for 1215 MW power project now proposed to be run on imported coal, is proposed to be changed to domestic coal at a later stage, the project proponent shall intimate to the Ministry well in advance along with the necessary requisite documents for its concurrence for allowing the change. In such a case, the necessity for conducting public hearing may be decided by the Ministry in consultation with the Expert Appraisal Committee.
 - ii. A stack height shall be provided as mentioned in EIA report with continuous online monitoring equipments for SO_x, NO_x and Particulate Matter (PM_{2.5} & PM₁₀). Exit velocity of flue gases shall not be less than 22 m/sec. Mercury emissions from stack may also monitored on periodic basis.
- iii. Provision for installation of FGD shall be provided for future use.
- iv. High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm3. Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.
- v. COC of 5.0 shall be adopted. The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluents and storm water do not get mixed. A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.
- vi. Utilisation of 100% Fly Ash generated shall be made from 4th year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.
- vii. Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry. Mercury and other heavy metals (As,Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.
- viii. For disposal of Bottom Ash in abandoned mines (if proposed to be undertaken) it shall be ensured that the bottom and sides of the mined out areas are adequately lined with clay before Bottom Ash is filled up. The project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity.

- The company shall carry ground water quality monitoring around the ash pond area to assess the contamination due to leaching of ash and submit the report to the Ministry's Regional Office at Bhubaneshwar / CPCB / SPCB
- 6 All the conditions stipulated vide Ministry's letter of even no. dated 21st October, 2010 shall be complied.
- In case of change of the scope of the project the company shall apply for fresh environmental clearance.
- 8 This issues with the approval of the Competent Authority.

(Dr. P.L. Ahujarai) Scientist 'F'

Copy to:

- 1 The Secretary, Department of Environment, Govt. of West Bengal, Kolkata, West Bengal
- The Chairman, Central Pollution Control Board. Parivesh Bhavan. CBD-cum-Office Complex, East Arjun Nagar. Delhi-110032.
- 3 The Chairman, West Bengal Pollution Control Soard, Parivesh Bhawan, 10A Block-LA, Sector-III, Salt Lake, Kolkata - 700091, West Bengal.
- 4 The Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment and Forests A-3, Chandrashekharpur, Bhubaneswar - 751 023, Orissa
- Adviser (IA-II), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
- Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
- Guard File / Monitoring File / Record File.

(Dr. P.L. Ahujarai) Scientist 'F'