

**F. No. J-11011/257/2013-IA II (I)**  
Government of India  
Ministry of Environment, Forest and Climate Change  
(Impact Assessment Division)

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Dated: ~~30<sup>th</sup>~~<sup>31<sup>st</sup></sup> March, 2015

To

**The Managing Director**  
M/s SLR Metaliks Ltd.,  
Narayandevarakere Village,  
Lokappanahola, near Mariyammanahalli,  
Hagribommanahalli Tq., Bellary Distirct,  
Karnataka-583222.

**Email: [kcs@sirm.co.in](mailto:kcs@sirm.co.in), [info@sirm.co.in](mailto:info@sirm.co.in); Fax No.- 08394-294061**

**Subject: Expansion of existing pig iron manufacturing industry consisting of 262 m3 blast furnace, 33 m2 sinter plant and 6 MW blast furnace off gas power plant by installation of 0.30 MTPA steel, 0.32 MTPA Rolling Mill, 0.12 MTPA coke oven plant, 9 MW coke oven off gas based power plant, 120 TPD oxygen plant and Producer Gas Plant by M/s SLR Metaliks Ltd. at in village Narayanadeverakere, Taluka Hagaribommanahalli Dist. Bellary, Karnataka – Environmental Clearance - regarding**

Sir,

This has reference to your letter No. SLRM/Exp/EC-2 dated 17.09.2014 along with copies of EIA/EMP report seeking environment clearance under the provisions of the EIA Notification, 2006. The ToR was awarded by MoEFCC vide letter dated 16<sup>th</sup> January, 2014 for preparation of EIA/EMP report.

2. The Ministry of Environment, Forest and Climate Change has examined the application for the project cited above. It is noted that M/s SLR Metaliks Ltd. has proposed expansion for utilization of the existing pig iron capacity for the production of Value Added Products at village Narayanadeverakere, Taluka Hagaribommanahalli Dist. Bellary, Karnataka. PP has an operating pig iron complex consisting of Blast furnace (200,000TPA), Sinter Plant (331,000TPA) and 6MW BF off-gas based CPP. PP proposes

to install Steel Plant (300,000TPA), Rolling Mill (320,000TPA), Coke oven Plant (120,000TPA), Coke Oven off-gas based CPP of 9MW (1x9MW), Air Separation Plant of 120 TPD Oxygen Capacity and Producer Gas Plant of 15,000Nm<sup>3</sup>/h and Pulverised Coal Unit of 10ton/h. The proposed expansion is expected to improve the operational economics of the Plant. The existing unit is located in an area of 50 acres and an additional 90 acres of land has been procured for the proposed expansion project in R.S No. 633, 646, 643 & others. The total area of 100 acres has been allotted by KIADB and another 100 acre is under process by KIADB. Nearest village is Lokappannahola at a distance of 1.5km. The cost of the project is Rs 482 crores. Rs 3174 lakhs and Rs. 318 lakhs are earmarked for the capital cost and recurring cost towards the environmental pollution control measures. The total CSR budget is Rs 24.90 crores, which is 5% of the total cost of the project of Rs 482 crores, to be implemented over 5 years.

3. Following are the salient features of the proposed project:

S.N.	Unit/Parameter	Activity	Quantity
1.	Land Area	Existing: 50 acres Built-up area- 33 Greenbelt – 17 Open Vacant area- nil	Existing 50 acres. Additional – 190 acres of which 90 acres have been procured. Built up area: 76 Greenbelt – 65 Open area- 49
2.	Proposed capacity	Steel Plant	300,000 TPA
		Rolling Mill	320,000 TPA
		Coke Oven Plant	120,000 TPA
		Coke Oven off gas based Power Plant	1x9 MW
		Air Separation Plant	120 TPD Oxygen
		Producer Gas Plant	15000Nm <sup>3</sup> /h
		Pulverised Coal Unit	10ton/h
3.	Unit	Basic Raw Material Requirement:	Raw Material
	Steel Plant	1. Hot Metal from BF 2. Pig Iron/PI scrap 3. Plant return scrap/ 4. DRI 5. Fe-Alloys & Additives 6. Lime & Dolomite	210,000 TPA 88,000 TPA 44,000 TPA 44,000TPA 7,500 TPA 18,000 TPA
	Rolling Mill	Steel Shop Billets and purchased billets	300,000 TPA 33,000TPA
	Coke Oven Plant	Coking Coal	171,428 TPA
	Coke Oven off gas based Power Plant	Coke Oven off gas	125 TPH

	Air Separation Plant		
	Producer Gas Plant	Thermal coal (B/C grade)	47,000 TPA
	Pulverised Coal Unit	Anthracite & Bituminous coal	16,800 TPA

4. Main sources of fugitive dust emissions are raw material handling area, crusher area, raw material feed area, and product processing area. Dust extraction system comprising of pulse jet type, bag filter, duct work including suction hoods in the EOF stack house, fume and dust extraction in rolling Mill, spray nozzles, etc in raw material handling area. Steel plant GCP sludge, coke fines, mill scale etc shall be reused in sinter plant, slag shall be used for civil work, road after metal recovery, ash will be used for brick manufacturing.

5. Water quality parameters such as TDS, Total Hardness, Fluoride etc of surface and groundwater in lake and river and in groundwater were found to be within limits of IS:10500 2012 standards. Water drawl permission obtained from Government of Karnataka for 0.19 TMC (5320000m<sup>3</sup>/y) from Tungabhadra Reservoir. The power requirement for the project is 40 MVA.

6. The proposed project activity is listed at S.No. 3(a) in primary metallurgical industry under Category 'A' of the Schedule of EIA notification 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEFCC.

7. The proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 25<sup>th</sup> meeting held during 13<sup>th</sup> – 14<sup>th</sup> October, 2014. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. The Karnataka State Pollution Control Board has conducted Public Consultation on 15.07.2014 at the proposed site under the Chairmanship of Deputy Commissioner, Bellary. The members asked the management to provide jobs to the locals, drinking water to the nearby villages, toilets to the village schools greenery development in the vicinity of the site. Technical training to the village unemployed youth. The company has agreed to comply with the above needs of the public.

8. Based on the information submitted and presentation made before the Committee, the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006 subject to strict compliance of the following Specific and General conditions:

**A. SPECIFIC CONDITION:**

- i. 24X7 monitoring of emission and effluent should be conducted, as prescribed by CPCB from time to time.

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- ii. 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), and bag filters etc. shall be provided to keep the emission levels below  $50 \text{ mg/Nm}^3$  by installing energy efficient technology.
- iii. In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Dust extraction and suppression system shall be provided at all the transfer points, coal handling plant and coke sorting plant of coke oven plant. Bag filters shall be provided to hoods and dust collectors to coal and coke handling to control dust emissions. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.
- iv. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30<sup>th</sup> May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- v. Multi stage scrubber, cyclone and bag filters etc. to control particulate emissions within the prescribed limits from coke oven shall be provided. Carbon monoxide (CO) shall also be monitored along with other parameters and standards notified under Environment (Protection) Act shall be followed. The reports shall be submitted to the Ministry's Regional Office at the Bhubaneshwar, CPCB and SPCB.
- vi. Hot gases from the DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely. The gas then shall be cleaned in ESP before dispersion out into the atmosphere through ID fan and stack. ESP shall be installed to control the particulate emissions from the WHRB.
- vii. Total water requirement after the proposed expansion shall not exceed  $9012 \text{ m}^3/\text{day}$ . The water consumption shall not exceed as per the standard prescribed for the sponge iron plants and steel plants.
- viii. Efforts shall further be made to use maximum water from the rain water harvesting sources. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly.



- ix. All the effluents shall be treated and used for dust suppression and green belt development. No effluent shall be discharged outside the premises via drains and 'zero' discharge shall be adopted. Domestic wastewater will be treated in the Sewage Treatment Plant.
- x. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall 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 Bangalore, SPCB and CPCB.
- xi. Prior approval of this Ministry shall be obtained in case change of fuel.
- xii. Risk Assessment and Disaster Management Plan for the project focussing on Disaster Prevention shall be prepared and implemented in conjunction with District Disaster Management Plan.
- xiii. A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xiv. All the blast furnace (BF) slag shall be granulated and provided to cement manufacturers for further utilization. Slag generated shall be given for metal recovery or properly utilized. All the other solid waste including broken refractory mass shall be properly disposed off in environment-friendly manner.
- xv. Coal and coke fines shall be recycled and reused in the process. The breeze coke and dust from the air pollution control system shall be reused in sinter plant. The waste oil shall be properly disposed of as per the Hazardous Waste (Management, Handling, Handling and Transboundary Movement) Rules, 2008.
- xvi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants and Coke Oven Plants shall be implemented.
- xvii. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program shall be ensured accordingly in a time bound manner.
- xviii. The Company shall submit their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to being into focus any infringement/deviation/violation of

environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.

- xix. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 15.07.2014 shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Bangalore.
- xx. Provision shall be made for the housing of 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.
- xxi. Haulage roads shall be sprinkled with water at regular intervals for which water tankers with sprinkler arrangement are deployed. Regular sweeping of roads shall be practiced with vacuum sweeping machine or water flushing to minimize dust.
- xxii. Trucks carrying coal and other raw material shall be covered with tarpaulin to prevent spreading of dust during transportation.
- xxiii. Greenbelt of 20-30 meters in width and greenery shall be developed around storage yards, around plants, either side of roads and around the periphery of the industry as per CPCB Guidelines

**B. GENERAL CONDITIONS:**

- i. The project authorities must strictly adhere to the stipulations made by the Karnataka Pollution Control Board and the State Government.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).
- iii. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> 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 Bangalore and the SPCB/CPCB once in six months.



- iv. Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May, 1993 and 31<sup>st</sup> December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.
- v. 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).
- vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vii. The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
- viii. 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.
- ix. Requisite funds 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, Forest and Climate Change (MoEFCC) 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 Bangalore. The funds so provided shall not be diverted for any other purpose.
- x. 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.
- xi. 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 MOEFCC at Bangalore. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (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.

- xii. 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 MOEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bengalore / CPCB / SPCB shall monitor the stipulated conditions.
- xiii. The environmental statement for each financial year ending 31<sup>st</sup> 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 environmental conditions and shall also be sent to the respective Regional Office of the MOEFCC at Bengalore by e-mail.
- xiv. 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 available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEFCC) 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 Bengalore.
- xv. 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 and the date of commencing the land development work.

9. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.


10. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

11. 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.

  
(Dr. Satish. C. Garkoti)  
Director

**Copy to:-**

1. The Secretary, Department of Environment, Govt. of Karnataka.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi, 110 032.
3. The Chairman, Karnataka Pollution Control Board, Parisara Bhavan, 49, Church Street, Bangalore-560001.
4. The Additional Principal Chief Conservator of Forests (C) Ministry of Environment, Forest and Climate Change Regional Office (SZ), Kendriya Sadan, IVth Floor, E&F Wings, 17<sup>th</sup> Main Road, Koramangala II Block, Bangalore-560034(Karnataka)
5. Guard File / Record File/Monitoring file.

  
31/03/2015  
**(Dr. Satish. C. Garkoti)**  
Director  
