

F. No. J-11011/131/2017-IA.II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

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Dated: 05.05.2020

To

M/s. Jailaxmi Casting & Alloys Pvt. Ltd.,
Gut no. 74 & 75, Pharola, & Gut no: 53
Mharola Paithan, Aurangabad District,
Maharashtra-431107.

Subject: Production Enhancement of MS, Stainless Steel & Alloy Steel Billet/Ingot (220 to 750 TPD), MS, Stainless Steel & Alloy Steel Bar, Rods & Flat Bars (125 to 750 TPD) & Proposed production of Bright Bars (75 TPD) by **M/s. Jailaxmi Casting & Alloys Pvt. Ltd.,** at Gut no. 74 & 75, Pharola, & Gut no: 53 at Mharola Paithan, Aurangabad District, **Maharashtra- Environment Clearance** - regarding.

Sir,

This is reference to your online application vide proposal No. IA/MH/IND/122469/2017 dated 25/10/2019 in prescribed Form-2 along with copies of EIA/EMP report and other documents seeking Environmental Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical Industries (Ferrous and Non-ferrous) under Category "A" EIA Notification, 2006 and the project is appraised at the Central level.

Details Submitted by the Project Proponent:

2. The expansion proposal of M/s Jailaxmi Casting & Alloys Pvt. Ltd (JCAPL) was initially received in the Ministry vide online proposal No. IA/MH/IND/63071/2017 dated 9th March 2017 for obtaining Terms of Reference (TOR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry-1) [EAC(I)] during 17th meeting of Expert Appraisal Committee held during 6-7th April 2017 and prescribed TORs to the expansion proposal of the project for undertaking detailed EIA study. Accordingly, the Ministry of Environment, Forests and Climate Change (MoEF&CC) had prescribed TORs to the project vide letter no. J-11011/131/2017-IA.II(I) dated 01.05.2017.
3. Based on the TORs prescribed to the project, the project proponent submitted an online application for EC to the Ministry on 25.10.2019 vide proposal no. IA/MH/IND/122469/2017.
4. Company was established in year 2004; hence EC was not required existing capacity. JCAPL have received Consents to Operate from MPCB for existing production vide no: BO/ROA/Aurangabad/137-04/E/CC/147 dated 29.10.2004 and the latest CTO granted by MPCB for production of 220 MTD Billets vide consent no: BO/JD (APC)/TB/UAN No: 0000047772/R/CC valid upto 30/04/2021.
5. The existing project of M/s. M/s Jailaxmi Casting & Alloys Pvt. Ltd is located at Gut no. 74 & 75, Pharola, & Gut no: 53 at Mharola Paithan, Aurangabad District, Maharashtra. The

plant is producing 220 TPD of MS, SS & Alloys, Billet/Ingots and 125 TPD of MS, SS & Alloys Bars & Rods, Flats Bars.

6. The details of proposed expansion are given below:

S.No	Particulars	Capacity, TPD		
		Existing as per CTO	Proposed	Total
1	MS, SS & alloys billet/ingot	220	530	750
2	MS, SS & alloys bars & rods, flats bars	125	625	750
3	Proposed bright bars	--	75	75

7. The total available land is 4.5 ha at Gut No. 74&75 for expansion of facilities and 4.32 ha at Gut No.53 for development of green belt in Mahorala Paithan, Aurangabad, Maharashtra. No water body exists in the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.
8. The topography of the area is flat lies between 19°44'2.02"N to 19°44'4.36"N latitude and 75°17'41.15"E to 75°17'40.87"E longitude. The project is located in Survey of India topo sheet no 47 M/6 while 10 km radius study area covers four topo sheets as 47 M/1, 47 M/2, 47 M/5 and 47 M/6 and Ground elevation at the site is 505 m above MSL.
9. No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve etc. are reported to be in the study area. The area also does not report to form corridor for Schedule-I fauna.
10. The details of raw material requirement and its source is given as below:

S.No	Name	Existing (TPD)	Proposed (TPD)	Total (TPD)	Source	Transportation
1	Sponge Iron	95	229	324	Local	Road
2	Scrap	143	343	486	Local	Road
Ferro Alloys as						
3	FeMn	0.95	6.55	7.5	Local	Road
4	SiMn	0.25	1.75	2.0	Local	Road
5	Moly	0.06	0.44	0.5	Imported	Road
6	Ni	0.12	0.88	1.0	Imported	Road

11. The Configuration of the existing and proposed facilities for expansion are given as below:

S.No	Particulars	Existing	Proposed	Total
1	Induction Furnace	25 TX1 Nos	--	25 TX1 Nos
2	Arc Furnace	--	25 TX1 Nos	25 TX1 Nos
3	Re-heating Furnace	20 TX1 Nos	--	20 TX1 Nos

12. The raw materials will get melted into Induction and Arc furnace with the help of graphite electrode and oxygen blowing. Lime and dolomite is added during the process of melting. After melting process is completed liquid steel is transferred to ladle refining furnace for removal of inclusion in the steel and final chemistry is achieved with the addition of ferro alloys accordingly. Then the liquid steel is transferred to vacuum degassing station where vacuum is achieved at 1 milibar to removal of inclusion of oxygen, hydrogen and nitrogen.

13. Baseline Environmental Studies were conducted during post monsoon season i.e. from October 2017 to December 2017. Ambient air quality monitoring has been carried out at eight locations and the data submitted indicated: PM₁₀ (45.32 to 87.12 µg/m³), PM_{2.5} (17.51 to 41.74 µg/m³), SO₂ (14.27 to 29.55 µg/m³) and NO_x (18.34 to 41.74 µg/m³).
14. Ground water quality has been monitored in eight locations in the study area and analyzed. pH: 6.98 to 7.29, Total Hardness: 117 to 167 mg/l, Chlorides: 53 to 86 mg/l, Fluoride 0.12 to 0.44 mg/l. Heavy metals are within the limits. Surface water samples were analyzed from six locations. pH: 7.16 to 7.6; and BOD <4 mg/l. COD from 10 to 32mg/l.
15. Noise levels are in the range of 50.7 to 60.5 dB(A) for daytime and 41.8 to 52.9 dB(A) for night time.
16. AAQ modeling results are as given below:

Pollutants	Maximum Incremental Levels, µg/m ³	Distance, km	Direction
PM ₁₀	0.52	2.20	W
SO ₂	1.80	4.05	W
NO _x	1.40	4.40	W
CO	0.03	5.04	WS

17. Power and fuel other requirements are as given below:

S.No	Particulars	Existing	Proposed	Total
Resource Requirement				
i.	Plot Area	Gut No. 74 & 75 (Project Activity) - 45,000 m ²	Gut No. 53 (For development of Greenbelt) - 43,200 m ²	Gut No. 74, 75 & 53 - 88,200 m ² .
ii.	Manpower	160	400	560
iii.	Power (MW)	10	20	30
iv.	DG Set (kVA)	--	1x1000	1x1000
v.	Water (m ³ /day)	35	131	166
Fuel Requirement				
i.	HSD (DG Set)	--	200 Liters/hr	200 Liters/hr
ii.	Coal/FO for Re-Heating furnace	Coal: 10 TPD or FO: 3.4 KLPD	Coal: 50 TPD or FO: 16.6 KLPD	Coal: 60 TPD or FO: 20 KLPD

18. Water requirement is basically for cooling application and will be met by artificial farm lake/tankers. The total water requirement after proposed expansion will be around 166 m³/day.
19. Out of 28 m³/day of total effluent, around 20 m³/day of effluent will be generated from domestic activity, 3 m³/day of effluent will generate from DM Plant and 5 m³/day from cooling system. Effluent from DM Plant and cooling system will be recycled back to the cooling system. i.e. 8 m³/day and sewage will be treated in STP of 25 m³/day capacity.
20. The EMP Budget provision for Capital Investment is approx. ₹ 264 lakhs and Recurring Expenditure is approx. ₹44.89 lakhs/year.
21. Considering paucity of land for development of greenbelt, company has procured land at Gut No 53 in adjacent village viz, Mharola with plot area of 43,200 m², for greenbelt development.
22. Cost of Proposed Project is ₹ 73.72 Cr. Employment generation will be 400 nos through direct employment.

23. The Public Hearing for the expansion project was conducted on 03.08.2019 within the premises of JCAPL. Public Hearing was chaired by Additional District Magistrate. CER activities are proposed in accordance with the MoEF&CC's O.M vide. F.No. 22-65/2017-IA III.
24. EIA Consultant: M/s Enviro Resources, E-604, Crystal Plaza, New Link Road, Andheri (W), Mumbai, NABET Certificate No. NABET/EIA/1821/IA0038.
25. The proposal was considered in the Reconstituted Expert Appraisal Committee (REAC) 13th meetings held during 27th – 29th November, 2019.

Observations of the Committee:

26. Proposed project will meet water requirement from the lake owned by the Project Proponent and other farm lakes in the local area with the approval of local authorities.
27. The Project proponent has acquired an additional area of 4.32 ha for green belt near the existing plant location.

Recommendations of the Committee:

28. In view of the forgoing and after detailed deliberations, the committee recommended the project for grant of Environmental Clearance under the provisions of EIA Notification, 2006 subject to the following specific conditions in addition to the applicable general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 for steel plant operating with induction furnace.
 - i. CER shall be completed in three years.
 - ii. Reheating is permitted only with HSD.
 - iii. Fourth hole extraction shall be provided in the furnaces to control secondary emissions.
 - iv. 100% waste utilization would be ensured.
 - v. No ground water abstraction is permitted.
 - vi. Water stored in the reservoir shall be used.
 - vii. Particulate emissions from the stacks shall be less than 30 mg/Nm³ with bag house as APCD.
 - viii. Green belt development shall be completed in a time frame of three years.

Decision of MoEF&CC

29. The Ministry considered the above recommendation of EAC and here by decided to accord Environmental Clearance for expansion of existing steel plant of **M/s. Jailaxmi Casting & Alloys Pvt. Ltd.** for 'Production Enhancement of MS, Stainless Steel & Alloy Steel Billet/Ingot (220 to 750 TPD), MS, Stainless Steel & Alloy Steel Bar, Rods & Flat Bars (125 to 750 TPD) & Proposed production of Bright Bars (75 TPD)' at location – Gut no. 74 & 75, Pharola, & Gut no: 53 at Mharola Paithan, Aurangabad District, Maharashtra along with specific conditions above at para 28 and following general conditions.

I. Statutory compliance

- i. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.

- ii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- iii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015(Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- ix. The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- x. The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.
- xi. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
- xii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- viii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- ii. Practice hot charging of slabs and billets/blooms as far as possible.
- iii. Ensure installation of regenerative type burners on all reheating furnaces.
- iv. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- v. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

- i. Used refractories shall be recycled as far as possible.

- ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- v. Kitchen waste shall be composted or converted to biogas for further use.

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of

implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent 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, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. 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 and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

This issues with the approval of Competent Authority.



(A.K. Agrawal)
Director

Copy to:-

1. **Secretary**, Department of Environment, Government of Maharashtra, Secretariat Mumbai.
2. **Deputy Director General of Forests(C)**, Ministry of Environment, Forest and Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building Civil Lines, Nagpur-440001
3. **Chairman**, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
4. **Member Secretary**, Central Ground Water Authority, 18/11, Jamnagar House, Man Singh Road, New Delhi-110011.
5. **Chairman**, Maharashtra Pollution Control Board, Kalpatru Point, Sion Circle, Sion (East), Mumbai-400 022,
6. **District Collector**, Aurangabad District, State Maharashtra.
7. Guard File/Record File/Monitoring File.
8. MoEF&CC Website.



(A.K. Agrawal)
Director