

F. No. J-11011/679/2008-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

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Dated: 16th April, 2019

To

Shri Madhur Agarwalla,
Director
M/s. Maithan Steel and Power Limited
9, AJC Bose Road, Ideal Centre,
6th floor, Kolkata,
Kanska, Bardhaman,
West Bengal – 700017.

Tel: 033-39877233; E-mail: madhur@maithangroup.com

Subject: Expansion of Steel Melting Shop (IF with LF & CCM: from 135000 TPA to 375000; Rolling Mill: from 90000 TPA to 297000; Cold Drawing Workshop: 33000TPA by M/s. Maithan Steel & Power Limited located at Nakrajoria, PS-Salanpur Dist:- Burdwan(W), West Bengal - **Environmental Clearance –reg.**

Sir,

This refers to the proposal of M/s. Maithan Steel and Power Limited made vide online application no. IA/WB/IND/88715/2017 dated 17th December 2018 along with copies of EIA/EMP report seeking environmental clearance 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 proposal is appraised at Central level.

The proposal cited above was considered in the 3rd meeting of the Reconstituted Expert Appraisal Committee [REAC] (Industry-I) held on 9-11th January, 2019. The EAC proceedings of the proposal cited above is given as below.

Details submitted by the Project Proponent

2.0 The expansion project of M/s. Maithan Steel & Power Ltd located in Village-Nakrajoria, PS-Salanpur, District-Paschim Bardhaman, State-West Bengal was initially received in the Ministry on 15.12.2017 for obtaining Terms of Reference (ToR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 27th meeting held on 03.01.2018 and prescribed ToRs to the project for undertaking detailed EIA study for obtaining environmental clearance. Accordingly, the Ministry of Environment, Forest and Climate Change had prescribed ToRs to the project on 16.01.2018 vide Lr. No. J-11011/679/2008-IA-II(I)].

3.0 The project of M/s. Maithan Steel & Power Ltd. located in Village- Nakrajoria, PS-Salanpur, District-Paschim Bardhaman, State- West Bengal is for enhancement of steel production capacity from 0.135 MTPA to 0.375 MTPA. The existing project was accorded environmental clearance vide Lr.no J-11011/679/2008-IA II (I) dated 27.08.2010. The Status of compliance of earlier EC was obtained from Regional Office, Bhubaneswar vide Lr. No.102-309/08/EPE/3618, dated 05.12.2018. There are no non-compliances reported by Regional officer. The proposed capacity for different products for new site area (including existing units) as below:

Units	Existing Facilities as per EC-J-11011/679/2008-IA II(I)	Existing capacity	Proposed facilities	Proposed Capacity In TPA	Final configuration	Final Capacity In TPA	End use
IF with LF & CCM	3x15 T IF + 1 CCM	1,35,000 billets	5x15T IF + 1 CCM + LRF	2,40,000	8x15T IF + 2 CCM + LRF	3,75,000	Rolling
				billet		billet	Mill & Sale
Rolling mill	1x300 TPD	90,000 hot rolled products	600 TPD	2,07,000	1x600 TPD	2,97,000	Sale
			(Existing 300 TPD RM to be expanded to 600 TPD and 1x300 TPD new to be installed.)	Long & flat product	1x300 TPD	Long products like TMT, Ms Round wire rod and Structural steel & flat product like strips	
Cold drawing workshop	Nil	Nil	1x100 TPD	33,000	1x100 TPD	33000 Cold drawn Torkari (Ribbed bar), Black wire. Nails, corrugated sheets, Wire Mesh, Black pipes etc.	Sale

4.0 The total land required for the project is 10.27ha industrial land. No forestland involved. The entire land has been acquired for the project. No River passes through the project area. It has been reported that no water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

5.0 The topography of the area is flat and reported to lies between to 23° 46' 27.36'' N to 23° 46' 43.85'' N Latitude and 86° 52' 0.19'' E to 86° 52' 53.32'' E Longitude in Survey of India topo sheet No. F45 C 13 & F45 C 14 at an elevation of 153m AMSL. The ground water table

EC for the Proposed Expansion of Steel Melting Shop (IF with LF & CCM: from 135000 TPA to 375000; Rolling Mill: from 90000 TPA to 297000; Cold Drawing Workshop: 33000 TPA by M/s. Maithan Steel & Power Limited located at Nakrajoria, PS-Salanpur Dist:- Burdwan(W), West Bengal.

reported to ranges between 2.0m – 5.0m below the land surface during the post-monsoon season and 10m – 17m below the land surface during the pre-monsoon season. Based on the hydro-geological study, it has been reported that the radius of influence of pumped out water will be 75m. Further, the stage of groundwater development is reported to be 43% and 45-60% in core and buffer zone respectively and thereby these are designated as safe areas.

6.0 No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in the core and buffer zone of the project. The area also does not report to form corridors for Schedule-I fauna.

7.0 The process of project: Sponge iron, Pig iron and iron scrap mixture in the mass percentage ratio of approx. 85:10:5 will be melted using eddy current of coreless, medium frequency Induction Furnace. Slag deposit over molten metal will be scooped out and ferroalloys to be added to molten metal as per demand then molten metal will be casted to billet in continuous billet caster. Slag will be cooled down, ground and residual iron to be recovered from slag using magnetic separator. Red hot billets to be drawn in rod rolling mill, quenched in water bath for short period and thus TMT rods & Coils are to be produced. From red hot billet flat products will also be rolled in rolling mill complex. Scrap from billet cutting, iron recovered from slag to be recycled to IF for melting along with fresh feed. Slag to be used for construction work and land fill. In cold drawing workshop low carbon steel purchased from outside to be drawn into products like Torkari, Black wire, corrugated sheet, wire mesh and nail etc.

8.0 The targeted production capacity of the project is 0.33 MTPA Long & Flat hot rolled, Coils & Cold Drawn Products and 0.375 MTPA Billets taken together. Sponge Iron ore & pig for the plant would be purchased from sister concern/open market. The material transportation will be done through Road.

9.0 The fresh water requirement of the project is estimated at 1,250 m³ /day. At present the water is being drawn from Water reservoir/pond inside the plant. Application has been made to Damodar Valley Reservoir Regulation Committee for supplying water for the project.

10.0 The power requirement of the project is estimated as 44MVA. At present agreement has been made for drawl of 25 MVA from DVC, vide Lr no-Coml/CD/18-19/ Kalyaneshwari/MSPL/2770 dt.03.08.2018. Application has been made for enhancement.

11.0 Baseline Environmental Studies were conducted during winter season i.e. 1st December 2017 to 28th February 2018. Ambient air quality monitoring has been carried out at 8 locations during 01.12.2017 to 28.02.2018, and the data submitted indicated: PM₁₀ (66.6 to 93.6 µg/m³), PM_{2.5} (31.3 to 56.4 µg/m³), SO₂ (12.1 to 22.8 µg/m³) and NO_x (14.4 µg/m³ to 27.6 µg/m³). The results of the modelling study indicate that the maximum increase of GLC for the proposed project is 0.75 µg/m³ with respect to the PM₁₀, 0.57 µg/m³ with respect to PM_{2.5}.

12.0 Ground water quality has been monitored in 8 locations in the study area and analysed. pH: 7.2 to 7.5, Total Hardness 116 to 144 mg/l, Chlorides: 46.4 to 51.6 mg/l, Fluoride: 0.35 to 0.48 mg/l. Heavy metals are within the limits. Surface water samples were analysed from 8 locations. pH: 7.2 to 7.8; DO: 5.2 to 6.6 mg/l and BOD: 4.8 to 7.2 mg/l & no COD: 29.1 to 40.3 mg/l.

13.0 Noise levels are in the range of 49.5 to 65.2 dB(A) for daytime and 42.3 to 50.8 dB(A) for night time.

14.0 It has been reported that there is no settlement in the core zone of the project. No R&R is involved.

15.0 It has been reported that a total of 50,500 TPA of solid waste will be generated due to the project, which will be used as construction material. It has been envisaged that an area of 3.4ha will be developed as green belt around the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

16.0 It has been reported that the Consent to Operate from the West Bengal State Pollution Control Board obtained vide letter no. C0110133 dated 30.07.2018 and consent is valid up to 30.06.2023.

17. The Public hearing of the project was held on 17.08.2018 at Conference Hall of Panaroma Country club & Resort, Salanpur under the chairmanship of Kaushik Mukherjee, WBCS(Exe), representative of District Magistrate for production of 0.33 MTPA Long & Flat hot rolled, Coils & Cold Drawn Products and 0.375 MTPA Billets under the expansion activity.

18.0 An amount of INR 127 Lakhs (1% of 100 cr + 0.75 % of next 36.5 cr Project cost) has been earmarked for CER based on public hearing issues and socio economic study report. CER Budget is as follows:

S.No.	Item	Description	Ist Yr (in lacs)	2nd Yr (in lacs)	Total (in lacs)
1	Drinking water	Sinking of new bore wells, pipelines in villages.	20	15	35
2	Women Empowerment	Engaging under privilege women in self-help group to make them sustainable	7	3	10
3	Support to Local Farmers	Providing supports & awareness to local farmers.	3	2	05
4	Strengthening of approaching road	Strengthening of villages approach roads, making drainages etc.	15	10	25
5	Health	Health Camp and Health Care facilities to villages	8	7	15
6	Plantation	Avenue plantation & plantation in community	6	4	10
7	Primary School renovation	Infrastructure developments & assisting school in other renovation job.	12	8	20
8	Others	Miscellaneous Expenses	6	4	10
TOTAL			130		

19.0 The capital cost of the project is Rs. 136.5 Crore and the capital cost for environmental protection measures is proposed as Rs.550 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 60.00lakhs. The detailed CER plan has been provided in EMP in its section 7.9 of Chapter-7.

20.0 Greenbelt will be developed in **3.4 ha** which is about **33%** of the total acquired area. A wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEFCC, New Delhi guidelines. Local and native species will be planted with a density of 1500 trees per hectare. Total no. of 5,116 saplings will be planted and nurtured in 3.4 hectares of land.

21.0 The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

22.0 EIA Consultant: Global Tech Enviro Experts Pvt. Ltd., Bhubaneswar.

23.0 The proposal cited above was considered during the 3rd meeting of Reconstituted Expert Appraisal Committee [REAC] (Industry-I) held on 9-11th January, 2019. The committee observed that the public hearing was chaired by Shri Kaushik Mukherjee, Dy Magistrate & Dy Collector, who is below the rank of ADM. The committee noted that the Addl Chief Secretary, West Bengal has requested the ministry to consider the public hearing chaired by the Dy. Collector as the district has formed newly and shortage of ADM level officers. The competent authority has approved for consideration of the public consultation convened under chairmanship of Dy. Collector. After detailed deliberations, the committee recommended for grant of Environmental Clearance with specific conditions and general conditions.

24.0 The Ministry of Environment, Forest and Climate Change has considered the application based on the recommendations of the Expert Appraisal Committee (Industry-I) and hereby decided to grant Environmental Clearance for the "*Expansion of Steel Melting Shop (IF with LF & CCM: from 135000 TPA to 375000; Rolling Mill: from 90000 TPA to 297000; Cold Drawing Workshop: 33000TPA by M/s. Maithan Steel & Power Limited located at Nakrajoria, PS-Salanpur Dist:- Burdwan(W), West Bengal*" under the provisions of EIA Notification, 14th September, 2006, as amended, subject to strict compliance of the following Specific and General Conditions:

A. Specific conditions:

- i. The project proponent shall plan for re-charging of rain water equivalent to the amount of the water abstracted from ground.
- ii. 100% hot charging has to be done and no reheating furnace will be used.

B. 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 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 emissions with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008 as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connect the system 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 carryout 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, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better functioning of baghouses.
- vii. Provide pollution control system in the sponge iron plant as per the CREP Guidelines of CPCB.
- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- ix. 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.

- x. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation;
- xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

III. Water quality monitoring and preservation

- i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; 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. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly the 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. 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.
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation and treatment 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 on the DRI Kilns.
- ii. The dolochar generated shall be used for power generation.
- iii. 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.
- iv. Provide LED lights in their offices and residential areas.

VI. Waste management

- i. Used refractories shall be recycled as far as possible.
- ii. 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.
- iii. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- iv. 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 approved 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 shareholder's / 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 report 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 should 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 Sponge Iron 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 in atleast 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.

25.0 This issues with approval of Competent Authority.


(A.K. Agrawal)
Director

Copy to:-

1. **The Secretary**, Department of Environment, Government of West Bengal, Secretariat Kolkata.
2. **The Additional Director General** (Central), Ministry of Environment, Forest and Climate Change, Regional Office (EZ), A/3, Chandrasekharpur, Bhubneshwar-751 023.
3. **The Chairman**, West Bengal State Pollution Control Board, Paribesh Bhawan, 10A-Block LA, Sector -III, Salt Lake City, KOLKATTA – 700 098.
4. **The Member Secretary**, Central Ground Water Authority, A-2, W3, Curzon Road Barracks, K.G. Marg, New Delhi-110001.
5. **The District Collector, Burdwan (W) District**, State of West Bengal.
6. **Guard File / Record file / Monitoring file.**
7. **MOEF&CC Website.**


(A.K. Agrawal)
Director