# SREE RENGARAAJ ISPAT INDUSTRIES (P) LIMITED

**MM1,2 &5 SIPCOT Industrial Growth Center,**
**Perundurai, Erode district**

## Half Yearly Compliance Report
## (OCTOBER '2017 – MARCH`2018)

**ENVIRONMENTAL CLEARANCE**
**REF. SEIAA/TN/F.2581/EC/1(d) & 3(a)/026/2014 DTD. 30.03.2015**

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DR. H.MALLESHAPPA,I.F.S.,
MEMBER SECRETARY

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY,
TAMILNADU,
3rd Floor, PanagalMaaligai,
No.1 Jeenis Road, Saidapet,
Chennai-15.

Thiru. V. Thangavelu, I.A.S. (Retd.) Chairman | Thiru V. Haridass Member | Dr. H. Malleshappa, I.F.S Member Secretary

Letter No. SEIAA / TN/F. 2581/EC/1(d) &3(a)/ 026/2014 dt.30.03.2015.

To

M/s. Sree Rengaraj Ispat Industries Pvt. Ltd (Power Division),
No. 99, Sankari Main Roasd
Nethimedu
Salem – 636 002
Sir,

**Sub:** SEIAA, TN - Environmental Clearance for the proposed expansion of 20 MW to 30 MW power production and production of 9000 TPM of TMT bars at **Plot No. MM 2 (E), MM2 (W) & MM5 S.F.Nos. Part of 133, 134, 136, 163, 429, 430, 431, 433 SIPCOT Industrial Growth Centre, Perundurai – 638052, Erode District** Tamil Nadu by M/s. Sree Rengaraj Ispat Industries Pvt. Ltd. (Power Division), under Category 'B1'and Schedule S.No. 1(d) & 3(a) - Issued - Regarding.

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This has reference to your applications dated : 03.07.2014, subsequent documents and EIA report submitted dt. 27.02.2015 & 26.03.2015 to the State Level Environment Impact Assessment Authority, Tamil Nadu seeking Environmental Clearance under the Environment Impact Assessment Notification, 2006 for the above mentioned project.

It is noted, interalia that the project proposal is for the proposed to expansion of power production from 20 MW to 30 MW and production of 9000 TPM of TMT bars at **Plot No. MM 2 (E), MM2 (W) & MM5 S.F.Nos. Part of 133, 134, 136, 163, 429, 430, 431, 433 SIPCOT Industrial Growth Centre, Perundurai – 638052, Erode District** Tamil Nadu.

Land requirement will be about 11.42 ha and green belt will be developed in 3.77 ha of plot area. The co-ordinates of the plant site will be located in

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between Latitude –11° 14' 04.40" N ; Longitude –77°33' 35.82" E . It is reported that no National Parks and Wildlife Sanctuaries are located within 10 km radius of the project site. The project does not involve any Rehabilitation & Resettlement. Total cost of the project is Rs. 22 Crores. As per the documents furnished, the project site has existing unit with 20 MW power productions and Production 9000 TPM of M.S Billets.

The following items will be produced :

| S. No. | Products | Quantity(TPM) |
|---|---|---|
| 1. | TMT Bar | 9000 TPM |
| 2. | Electrical power | 30 MW |

It is proposed to utilize the following as raw materials.

| S.No. | Raw material | Quantity(TPD) |
|---|---|---|
| **Production of Electric Power** | | |
| 1. | Coal | 300 |
| 2. | Dolochar | 150 |
| 3. | Limestone | 10 |
| **Production of TMT Bars** | | |
| **S.No.** | **Raw material** | **Quantity(TPM)** |
| 1. | Sponge iron | 6417 |
| 2. | Pig iron & scrap | 2751 |
| 3. | Ferro alloys | 102 |

Fuel for the power plant will be a blend of 65 % of Indonesian coal and 33% of Dolochar and 2% lime stone . The ash and sulphur contents of blended fuel will be 7.96 % and 0.48 % respectively. Coal will be sourced from Indonesia through M/s Thriveni Earthmovers Private Limited. Source of Dolochar for the power plant is waste coal generated from sponge ion located adjacent to the existing M.S billets unit. No ash pond is proposed. A stack of 75 m height will be provided for emissions from boiler of power plant.

Total water requirement of 688.5 KLD will be sourced from SIPCOT Perundurai . Trade effluent of 196.5 KLD will be generated from the power plant, TMT Bar production unit. 24.4 KLD of Sewage will be generated during operation.

Sewage will be treated in existing septic tank followed by soak pit.

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Rejects from RO plant (of power plant) and waste water from neutralization tank [ ie., after neutralization of the waste water from cooling tower bleed off from power plant and boiler blow down from power plant ] will be utilized for dust suppression, road water sprinkling, ash quenching and green belt development.

The Electrostatic precipitator will be provided to the Boiler (115 TPH) with a stack height of 75m, Bag filter is provided to the induction furnace with a stack height of 35m, individual Bag filters are provided to coal conveyer, vibrator screen & crusher, secondary screen & coal conveyer and primary screen & coal conveyer with individual stacks with height of 17m respectively to control the emissions.

Slag of 270 TPM will be collected and sold out to authorized vendors. End cuttings will be reused in the process. Boiler ash about 142.5 TPD will be sold to brick manufacturing industries, Cement industries and bag filter dust about 10 TPM will be disposed to TSDF.

The production capacity of the power plant is 30 MW. Captive consumption for power plant & TMT plant will be 3 MW & 12 MW respectively and the remaining 15 MW will be exported TO TANGEDGO.

The project of 30 MW power production and 9000 TPM of TMT unit, of Category "B1" and comes under S. No. 1(d) and 3(a) in the Schedule of EIA Notification, 2006.

Based on the documents and additional details furnished by the proponent this proposal was placed before **62nd SEAC meeting held on 27.11.2014 , the committee has decided to issue ToR with public consultation for preparation of EIA report.** The mean time the exemption from public consultation, as provided for under para 7(i) III, stage (3)(i)(b) of EIA Notification, 2006 is available to the projects or activities or units located within the Industrial Estates or Parks, which were notified prior to 14.09.2006, After submission of EIA report , the proposal was appraised by the SEAC in its 64th SEAC meeting held on 20.3.2015 & 21.03.2015 and the committee decided to recommend the proposal to SEIAA, for the grant of EC after calling for certain details. The details were submitted by the proponent to SEIAA vide letter dated 26.03.2015.

The proposal was considered by the SEIAA, Tamil Nadu vide Item No.124 – 04 in its meeting held on 27.03.2015 and the proposal was discussed in detail and decided

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to issue EC with usual conditions. SEIAA hereby accords Environmental Clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 as amended, with validity for a period of 5 years to start operations by the plant, subject to the condition that and strict compliance of the terms and conditions stipulated below:

**Part A- Conditions for pre-construction phase:**

i. The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the TNPCB and may also be seen at Website of the SEIAA, TN at http://seiaa.tn.gov.in.

ii. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad / 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 website of the Company by the proponent.

iii. "Consent for Establishment" shall be obtained from Tamil Nadu Pollution Control Board (TNPCB) and a copy of the same shall be furnished to the State Environment Level Impact Assessment Authority, Tamil Nadu (SEIAA, TN) before start of project construction activity at the site.

iv. The project authorities shall inform the Regional Office of the MoEF, Chennai as well as the SEIAA, TN regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.

**Part B- Conditions for construction phase:**

i. 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

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etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

ii. As proposed, green belt shall be developed in atleast 33% of total plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the District Forest Officer (DFO). Green belt development shall be started within three months after obtaining EC and completed within three years or before commissioning of the plant whichever is earlier.

iii. Green Belt consisting of three tiers of plantations of native species around plant and at least 50 m width shall be raised. Tree density shall not be less than 2500 numbers per ha with survival rate not less than 80 %.

iv. 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.

v. CFBC (Circulating Bed Combustion Boiler) boiler shall be installed.

vi. Chimney of 75 m height shall be provided for boiler emissions from power plant with continuous online monitoring equipments for $SO_x$, $NO_x$ and Particulate Matter ($PM_{2.5}$ & $PM_{10}$). Mercury emissions from stack shall also be monitored on periodic basis.

vii. High Efficiency Electrostatic Precipitators (ESPs) shall be installed for control of boiler emissions and to ensure that particulate emission does not exceed 50 mg/$Nm^3$.

viii. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks should be provided and sufficient air pollution control devices viz., Electrostatic precipitator (ESP), cyclones, bag filters etc. shall be provided to keep the emission levels below 50mg/$Nm^3$ by installing energy efficient technology.

ix. Dust suppression system and bag filters shall be installed to control the fugitive dust emissions at conveyor and transfer points, product handling, loading and unloading points.

x. 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.

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xi. 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 shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

xii. Storage facilities for auxiliary liquid fuel such as LDO/ HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.

xiii. The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000. Authorization from the TNPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.

xiv. The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the TNPCB must be obtained for collection / treatment / storage / disposal of hazardous wastes.

xv. An Environmental Cell comprising of at least one expert in environmental Science / Engineering, occupational health and social scientist, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the head of the organization who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.

xvi. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the environmental management and monitoring functions.

xvii. As proposed, Rs. 180 lakhs and Rs. 37 lakhs shall be earmarked towards total capital cost and recurring cost/annum for environmental pollution control

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measures and judiciously used to implement the conditions stipulated by the SEIAA,TN as well as the State Government. A time bound implementation schedule shall be submitted to the SEIAA, TN and the Regional Office of the MoEF at Chennai to implement all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.

xviii. Risk and Disaster Management Plan along with the mitigation measures should be prepared and a copy submitted to the Regional Office of the MoEF at Chennai, TNPCB and CPCB within 3 months of issue of environment clearance letter.

xix. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Plants should be implemented.

xx. At least 5% of the total cost of the project should be earmarked towards the Enterprise Social Commitment (ESC) and item-wise details along with time bound action plan should be prepared and submitted to the Regional Office of the MoEF at Chennai. Implementation of such program should be ensured accordingly in a time bound manner.

xxi. Adequate amount shall be earmarked for activities to be taken up under CSR during construction phase of the Project. Recurring expenditure for CSR thereafter shall be as per CSR guidelines of Govt. of India till the life of the plant.

xxii. For proper and periodic monitoring of CSR activities, a CSR committee or a Social Audit committee or a suitable credible external agency shall be appointed. CSR activities shall also be evaluated by an independent eternal agency. This evaluation shall be both concurrent and final.

xxiii. CSR schemes identified based on need based assessment shall be implemented in consultation with the village Panchayat and the District Administration starting from the development of project itself. As part of CSR prior identification of local employable youth and eventual employment in the project after imparting relevant training shall be also undertaken. Company shall provide separate budget for community development activities and income generating programmes.

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**Part C- Conditions for post-construction/operation phase:**

i. The main raw material, iron ore shall be sourced from iron ore mines in India only and no imported iron ore shall be used.

ii. Only 65% Imported Coal from Indonesia and 33% Dolocharl from sponge iron unit, 2% of lime stone shall be used as fuel as reported. No other fuel including domestic coal/Indian coal shall be used in the power plant, without specific permission of SEIAA,TN.

iii. Sulphur and ash contents in the blended fuel (65% Indonesian Coal & 33% Dolochar from Sponge Iron unit) to be used in the project shall not exceed 7.96 % and 0.48 % respectively at any given time. In case of variation of blended fuel quality at any point of time, fresh reference shall be made to the SEIAA,TN for suitable amendments to environmental clearance condition (s) wherever necessary.

iv. Transportation of coal from Tuticorin Port in Tamil Nadu to the plant site shall be done via mechanically covered trucks or by dedicated closed conveyor system.

v. Efforts shall be made to reduce impact due to the transport of imported coal on the surrounding environment including agricultural land.

vi. 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. Measures shall be taken for maintenance of trucks/vehicles used in transportation of coal. Only mechanically covered trucks should be used for transportation of coal and shall not be overloaded.

vii. In case, source of fuel supply has to be changed at a later stage for the proposed 30 MW power plant, now proposed to be run on imported coal from Indonesia and Charcoal from sponge iron/ TMT unit, the project proponent shall intimate the SEIAA,TN well in advance along with necessary requisite documents for its concurrence for allowing the change.

viii. Fly ash shall be collected in dry form and storage facility (silos) shall be provided. No ash shall be disposed off in low lying area.

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ix. Fugitive emission of fly ash (dry or wet) shall be controlled such that no agricultural or non-agricultural land is affected. Damage to any land shall be mitigated and suitable compensation provided in consultation with the local Panchayat.

x. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2010. All the fly ash should be sent to cement and brick manufacturers for further utilization and Memorandum of Understanding should be submitted to the Regional Office of the MoEF at Chennai.

xi. Bottom ash shall be disposed to brick manufacturers for beneficial use as reported.

xii. Efforts shall further be made to use maximum water from the rain water harvesting 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. All the effluent should be treated and used for green belt development, ash handling, road sprinkling and dust suppression. No effluent shall be discharged and 'zero' discharge shall be adopted.

xiii. Gaseous emission levels including secondary fugitive emissions from all the sources should be controlled within the latest permissible limits issued by the MoEF, New Delhi vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB should be followed.

xiv. At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.

xv. The gaseous emissions from various process units shall conform to the load/mass based standards notified by the MoEF, New Delhi 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.

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xvi. Usage of Personal Protective Equipments (PPEs) by all employees/ workers shall be ensured.

xvii. Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act, 1948.

**Part D- Conditions for entire life of the project:**

i. The project authorities shall strictly adhere to the stipulations made from time - to - time by the Tamil Nadu Pollution Control Board (TNPCB) and the State Govt. regarding the project.

ii. Total water requirement shall not exceed 688.5 KLD. The water consumption shall not exceed as per the standard prescribed for the power/steel plants.

iii. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater should meet the norms prescribed by the Tamil Nadu Pollution Control Board or described under the Environment (Protection) Act, 1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Regional Office of the MoEF at Chennai, TNPCB and CPCB.

iv. 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 from time to time. The treated wastewater shall be utilized for green belt development , ash handling, road sprinkling and dust suppression.

v. The National Ambient Air Quality Standards issued by the Ministry of Environment and Forest (MoEF), New Delhi vide G.S.R. No. 826(E) dated 16th November, 2009 should be followed.

vi. 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, $SO_2$ and $NO_X$ are anticipated in consultation with the TNPCB. Data on ambient air quality and stack emission shall be regularly submitted to the SEIAA, TN including the Regional Office of the MoEF at Chennai and the TNPCB/CPCB once in six months.

vii. Proper Housekeeping programmes shall be taken up.

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viii. The project proponent shall also comply with all the environmental protection measures and safeguards proposed 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. The project proponent shall also adequately contribute in the development of the neighbouring villages. Special package with implementation schedule for free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.

x. The proponent shall upload the status of compliance of the stipulated environmental 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 MoEF at Chennai, the respective Zonal Office of CPCB and the TNPCB. The criteria pollutant levels namely; SPM, RSPM ($PM_{2.5}$& $PM_{10}$), $SO_2$, $NO_x$ (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.

xi. The environment statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the Tamil Nadu 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 Regional Office of the MoEF, Chennai by e-mail.

xii. The project proponent shall also submit six monthly reports on the status of 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 the MoEF, Chennai, the Zonal Office of CPCB, Bengaluru and the TNPCB. This shall also be put on the website of the Company by the proponent.

*xiii.* Regional Office of the Ministry of Environment & Forests, Chennai will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office of the MoEF, Chennai for their

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use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels including $NO_x$ (from stack & ambient air) shall be displayed at the main gate of the power plant.

xiv. Full cooperation shall be extended to the Scientists/Officers from the SEIAA, TN / Regional Office of the MoEF, Chennai / CPCB/ TNPCB who would be monitoring the compliance of environmental status.

xv. Full cooperation shall be extended to the Scientists/Officers from the SEIAA, TN / Regional Office of the MoEF, Chennai / CPCB/ TNPCB who would be monitoring the compliance of environmental status.

xvi. The Environmental Clearance does not absolve the applicant/proponent of his obligation/requirement to obtain other statutory and administrative clearance from the concerned statutory and administrative authorities.

xvii. No further expansion or modifications in the plant shall be carried out without prior approval of the State Environment Impact Assessment Authority, Tamil Nadu (SEIAA,TN). In case of deviations or alterations in the project proposal from those submitted to the SEIAA,TN for clearance, a fresh reference shall be made to the SEIAA,TN to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

xviii. The SEIAA, TN reserves the right to revoke or suspend the clearance if conditions stipulated are not implemented to the satisfaction of the SEIAA, TN. The SEIAA, TN reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xix. Environmental Clearance is issued based on the details furnished as above. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xx. The environmental clearance accorded **shall be valid for a period of 5 years** to start operations by the plant.

xxi. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control

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of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management, Handling & Transboundary Movement) Rules, 2008 and its amendments, the Public Liability Insurance Act, 1991 and its amendments.

xxii. Any appeal against this Environmental Clearance shall be with the Hon'ble National Green Tribunal, if prepared with in a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.

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Copy to:-

1. The Secretary to Government, Environment & Forests Dept, Govt. of Tamil Nadu, Fort St. George, Chennai - 9.
2. The Chairman, Central Pollution Control Board, PariveshBhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi 110032.
3. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai-600 032.
4. The APCCF (C) , Ministry of Environment & Forest Regional Office, 34, HEPC Building, 1st & 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai – 600 034.
5. Monitoring Cell, I A Division, Ministry of Environment & Forests, ParyavaranBhavan, CGO Complex, New Delhi 110003.
6. The District Collector, Erode District
7. Stock File.

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**STATUS OF COMPLIANCE OF**
**STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE VIDE REF. SEIAA/TN/F.2581/EC/1(d) & 3(a)/026/2014 DTD. 30.03.2015**

| S.NO | EC CONDITIONS | COMPLIANCE |
|---|---|---|
| | **Part –A Conditions for pre-construction phase** | |
| i. | The project proponent shall advertise in at least two local newspaper widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter are available with the TNPCB and may also be seen at website of the SEIAA,TN at http://seiaa.tn.gov.in | Complied. The information of Environmental Clearance granted to our unit was already published in widely circulated News papers (Tamil and English) on 03.04.2015. |
| ii. | A copy of the 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 website of the company by the proponent. | Complied. We have already uploaded the copy of EC in our website and can be viewed through link: **www.sriipl.com/images/ec.pdf** |
| iii. | Consent for establishment shall be obtained from Tamil Nadu Pollution Control Board (TNPCB) and a copy of the same shall be furnished to the State Level Environment Impact Assessment Authority, Tamil Nadu (SEIAA,TN) before start of project construction activity at site. | We have already obtained Consent to Establish for the establishment of Hot rolling mill from TNPCB vide proceedings no. T4/ TNPCB/ F.0180PND/ RL/PND/A/2016 DATED: 01/11/2016 valid upto 31.10.2018**.** |
| iv. | The project authorities shall inform the Regional Office of the MoEF, Chennai as well as the SEIAA,TN regarding the date of financial closure and financial approval of the project by the concerned authorities and the date of start of land development work and commissioning of plant. | The financial implications for the establishment are not yet completed and hence the installations activities will be started after financial closure. We will carryout the pre-construction activities only after prior information to the Regional Office, MoEF & SEIAA, TN before start up. |

| S.NO | EC CONDITIONS | COMPLIANCE |
|---|---|---|
| | **Part –B Conditions for Construction phase** | |
| i. | 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. | Local workers will be deputed for our construction activity and hence no housing facility at site would be required. However, the temporary sheds will be provided for the storage of Construction materials.<br>The infrastructure such as canteen, toilets facilities, drinking water etc. were already available will be made available to the construction workers. |

| | | |
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| ii. | As proposed green belt shall be developed in atleast 33% of total plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the District Forest Officer (DFO). Green belt development shall be started within three months after obtaining EC and completed within three years or before commissioning of the plant whichever is earlier. | An area equal to 35% of total extent was earmarked and extensive green belt development is being carried out as per the guideline. Additional green belt will be developed in the open areas in consultation with the DFO, Erode as per the condition. |
| iii. | Green belt consisting of three tiers of plantations of native species around plant and at least 50 m width shall be raised. Tree density shall not be less than 2500 numbers per Ha with survival rate not less than | The Green belt development is being developed in the earmarked area as per the standard guidelines of CPCB. |
| iv. | 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. | The surface run offs are properly diverted to pond for beneficial re-uses such as green belt development, dust suppression etc., |
| v. | CFBC (Circulating Bed Combustion Boiler) boiler shall be installed. | Complied. |
| vi. | Chimney of 75 m height shall be provided for Boiler emissions from Power Plant with continuous online monitoring equipments for SOx,NOx and Particulate matter (PM2.5 & PM10). Mercury emission from stack shall also be monitored on periodic basis | Complied.<br>➢ The emission from the CFBC boiler (coal based) is being treated in ESP followed by Stack of height 75mt.<br>➢ The emission from the boiler is regularly monitored by Continuous Emission Monitoring System (CEMS) provided in the stack. |
| vii. | High efficiency electrostatic precipitators (ESPs) shall be installed for control of boiler emission and to ensure that particulate emission does not exceed 50 mg/ $Nm^3$ | Complied. We have installed high efficiency ESP for treating the Boiler flue and the emission parameters are achieving the prescribed limits of CPCB / TNPCB. The copy of analysis report Stack emission conducted through DEL, TNPCB is enclosed as **Annexure I.** |
| viii. | Online Ambient air quality monitoring and continuous stack monitoring facilities for all the stacks should be provided and sufficient air pollution control devices viz. Electrostatic Precipitators (ESP),cyclones, Bag filters etc., shall be provided to keep the emission level below 50 mg/ $Nm^3$ by installing energy efficiency technology | ➢ We have already installed Continuous Emission Monitoring System for Boiler stack and connected to CAC, TNPCB.<br>➢ APC measures such ESP, Bag filters & Water sprinklers were already provided to control the emission level to meet the prescribed standards.<br>➢ We have already installed CAAQMS in our unit to assess the existing Ambient Air quality level (PM10,SO2 & NOx).<br>➢ The AAQ was conducted through DEL,TNPCB to assess the air quality level. **(Copy of AAQ survey report is attached as Annexure II)** |

| | | |
|---|---|---|
| ix. | Dust suppression system and bag filters shall be installed to control the fugitive emissions at conveyor, and transfer points, product handling, loading and unloading points | Complied. The water sprinklers & de-dusting system are provided for the belt conveyors and transfer points. The sprinklers are regularly operated to control the fugitive emission in the coal handling areas, transfer points etc.,**(Photograph of Dust suppression system is enclosed as Annexure III).** |
| x. | 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 | The fugitive emission due to handling of raw materials and vehicle movement are effectively controlled by the following mitigate measures<br>1. Bag filters provided in Coal handling plants<br>2. Water sprinklers arrangements in coal conveyors<br>3. Regular water sprinkling through trucks<br>4. Covered Storages for Coal and RCC silos for Ash. |
| xi. | 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 enclosures etc., on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules,1989 viz.75 dBA (day time) and 70 dBA (night time) | The noise generating sources such as Turbines, Motors, Pumps etc are properly housed in sepearte rooms to avoid the propagation of Noise level in the surrounding areas.<br><br>The noise level survey are regularly carried out through DEL,TNPCB and the report is enclosed as **Annexure IV**. |
| xii. | Storage facilities for auxiliary liquid fuel such as LDO / HFO / LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventually in case of an accident taking place due to storage of Oil. | Complied.<br>➢ We have provided Storage Tanks (AG) for diesel and obtained necessary License from Chief Controller of Explosives, Department of Explosives, Nagpur. We have already conducted DMP studies by NABET expert and recommendations were already implemented. |
| xiii. | The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules,1989 as amended in October 1994 and January 2000.Authorization from the TNPCB shall be obtained for collection, treatment storage and disposal of hazardous waste. | We have already obtained Authorization under Hazardous Waste Rules (M & TM) from TNPCB for storage, Handling and disposal of spent oil generated from process. Also, we are strictly adhering with the provisions of the said Rules. |
| xiv. | The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management & Handling) Rules, 2003 Authorization from the TNPCB must be obtained for collection / treatment /storage /disposal of Hazardous waste. | We have already obtained Authorization under Hazardous Waste Rules (M & TM) from TNPCB for storage, Handling and disposal. Also, we are strictly adhering with the provisions of the said Rules. |

| | | |
|---|---|---|
| xv. | An environment Cell comprising of at least one expert in Environmental Science /Engineering, occupational health and social scientist, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the Head of the Organization who would be accountable for implementation of environment regulations and social impact improvement / mitigations measures. | An Environmental Management Cell Headed by the Board of Directors has already been constituted and necessary environment management activities viz, Air quality, Water conservation, Solid waste management etc., are being carried out. The Composition of Environment Management Cell is shown in **Annexure – V.** |
| xvi. | A separate Environment Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the environmental management and monitoring functions. | Environmental Management Cell was formed to implement the EMP activities and environmental survey conducted by external lab accredited by NABL. |
| xvii. | As proposed Rs.180 Lakhs and Rs.37 lakhs shall be earmarked towards total capital cost and recurring cost /annum for environmental pollution control measures and judiciously used to implement the conditions stipulated by the SEIAA,TN as well as the State Government. A time bound implementation schedule shall be submitted to the SEIAA,TN and the Regional Office of the MoEF Chennai to implement all the conditions stipulated herein. The funds so provided shall not diverted for any other sources. | Complied.<br><br>We will submit the Action Plan of EMP measures within the stipulated time. |
| xviii. | Risk and Disaster Management Plan along with the mitigation measures should be prepared and copy submitted to the Regional Office of the MoEF at Chennai, TNPCB and CPCB within 3 months of issue of environmental clearance letter. | Complied.<br><br>We have already submitted the copy of the same to the concerned authorities. |
| xix. | All the recommendations made in the Charter on Corporate Responsibility for Environment protection (CREP) for the Steel Plants should be implemented | Complied. |
| xx. | At least 5% of the total cost of the project should be earmarked towards the Enterprise Social commitment (ESC) and item wise details along with time bound action plan should be prepared and submitted to the Regional Office of the MOEF at Chennai. Implementation of such program should be ensured accordingly in a time bound manner. | Will be complied. |

| | | |
|---|---|---|
| xxi. | Adequate amount shall be earmarked for activities to be taken up under CSR during construction phase of the Project. Recurring expenditure for CSR thereafter shall be as per CSR guidelines of Govt. of India till the life of the plant. | Will be Complied. |
| xxii. | For proper and periodic monitoring of CSR activities, a CSR committee or Social Audit Committee or a suitable credible agency shall be appointed. CSR activities shall also be evaluated by an independent eternal agency. This evaluation shall be both concurrent and final. | CSR team under the head of the Board of Directors has already been formed and activities are being planned. |

| S.NO | EC CONDITIONS | COMPLIANCE |
|---|---|---|
| | **Part –C Conditions for Post Construction / Operation phase** | |
| i. | The main raw material, iron ore shall be sourced from Iron ore mines in India and no imported ore shall be used. | The main raw material for Furnace division is Sponge iron which is met through the existing DRI plant. |
| ii. | Only 65% Imported Coal from Indonesia and 33% Dolochar from Sponge iron unit, 2% of limestone shall be used as fuel in the power plant, without specific permission of SEIAA,TN. | Complied. |
| iii. | Sulphur and ash contents in the blended fuel (65% Indonesian Coal 33%, Dolochar from Sponge Iron Unit) to be used in the project shall not exceed 7.96% and 0.48% respectively at any given time. In case of variation of blended fuel quality at any point of time, fresh reference shall be made to the SEIAA,TN for suitable amendments to environmental clearance condition (s) wherever necessary | Complied. |
| iv. | Transportation of Coal from Tuticorin Port in Tamil Nadu to the plant site shall be done via mechanically covered trucks or by dedicated closed conveyor system. | Complied. Only covered Trucks are being utilized for coal transportation from the port to our site. The handling of coal is carried out through closed belt conveyors fitted with water sprinklers and dust extraction system |
| v. | Efforts shall be made to reduce impact due to transport of imported coal on the surrounding environment including agricultural land | No adverse impacts due to transportation of coal as we are handled through closed system. |
| vi. | 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 products. Measures shall be taken for maintenance of trucks / vehicles used in transportation of coal. Only mechanically covered trucks should be used for transportation of coal. | Complied.<br>➢ Transportation of coal through closed trucks from the port to the site<br>➢ Storage of raw materials in covered sheds and bins.<br>➢ Transportation of raw materials through closed belt conveyors fitted with water sprinklers |

| | | |
|---|---|---|
| vii. | In case, source of fuel supply has to be changed at a later stage for the proposed 30 MW power plant, now proposed to be run on imported coal from Indonesia and charcoal from sponge iron /TMT unit, the project proponent shall intimate the SEIAA, TN well in advance along with necessary requisite documents for its concurrence for allowing the change. | Noted. |
| viii. | Fly ash shall be collected in dry form and storage facility (silos) shall be provided. No ash shall be disposed off in low lying area. | Complied. The fly ash are being handled by Ash Handling system and transported to silos pneumatically. The fly ash is being sent to Brick and Cement manufacturers through proper agreements. |
| ix. | Fugitive emission of fly ash (dry or wet) shall be controlled such that no agricultural or non agricultural land is affected. Damage to any land shall be mitigated and suitable compensation provided in consultation with the local Panchayat. | Complied.<br>Closed silos are provided for the storage of fly ash to avoid fugitive emission and hence no impact on surrounding environment. |
| x. | Proper Utilization of fly ash shall be ensured as per Fly Ash Notification,1999 and subsequent amendment in 2003 and 2010. All the fly ash should be sent to cement and brick manufacturers for further utilization and Memorandum of Understanding should be submitted to the Regional Office of the MoEF at Chennai. | Complied. |
| xi. | Bottom Ash shall be sent to Brick manufacturer for beneficial use as reported | Complied. |
| xii. | Efforts shall further be made to use maximum water from the rain water harvesting 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. All the effluent should be treated and used for green belt development, ash handling, road sprinkling and dust suppression. No effluent shall be discharged and Zero discharge shall be adopted. | Complied.<br>1. Air Cooled condenser is already installed for our power generation scheme to conserve fresh water usage.<br>2. The trade effluent is being neutralized and completely utilized for green belt development, dust suppression & road sprinkling, ash quenching etc. No discharge of trade effluent outside the premises and hence the concept of zero liquid discharge is achieved. |
| xiii. | Gaseous emission levels including secondary fugitive emissions from all the sources should be controlled within the latest permissible limits issued by the MoEF, New Delhi vide GSR 414(E) dated 30th May 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB should be followed. | Complied. The code of practice for Air pollution control management, water conservation, solid waste management delineated by CPCB is being followed strictly. |
| xiv. | At no time, the emission shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved | Noted |

| | | |
|---|---|---|
| xv. | The gaseous emissions from various process units shall conform to the load /mass based standards notified by the MoEF, New Delhi on 19th May,1993 ad 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. | Agreed |
| xvi. | Usage of Personal Protective Equipment (PPEs) by all employees/ workers shall be ensured. | Complied. PPEs such as helmets, safety shoes, dust masks, ear plugs are provided to workers subjected to dusty and high prone noise. |
| xvii. | Occupational health surveillance of the workers shall be carried out on regular basis and records shall be maintained as per the Factory Act,1948. | Complied. |

| S.NO | EC CONDITIONS | COMPLIANCE |
|---|---|---|
| **Part – D Conditions for entire life of the project** | | |
| i. | The project authorities shall strictly adhere to the stipulations made from time to time by the Tamil Nadu Pollution Control Board (TNPCB) and the State Govt. regarding the project | Complied. |
| ii. | Total Water requirement shall not exceed 688.5 KLD. The water consumption shall not exceed as per the standard prescribed for the power / steel plants. | Complied.<br>We are meeting the specific water consumption standards prescribed by MOEF/ CPCB for our plants. |
| iii. | Regular monitoring of Influent and effluent surface, sub surface and ground water shall be ensured and treated waste water should be meet the norms prescribed by the Tamil Nadu Pollution Control Board or described under the Environment Protection Act,1986 whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Regional Office of the MoEF at Chennai, TNPCB and CPCB. | The waste water such as RO reject, DM regeneration etc are neutralized and reused for gardening, ash handing and dust suppression system. The waste water generated are non toxic and hence no impact on ground water quality.<br><br>Also, we have installed Continuous Effluent Analyzer to assess the load of pH & TSS as per CPCB requirement. |
| iv. | Industrial waste water shall be properly collected, treated so as to confirm to the standards prescribed under GSR 422 (E) dated 19th May,1993 and 31st December,1993 or as amended from time to time. The treated wastewater shall be utilized for green belt development, ash handling, road sprinkling and dust suppression. | Complied.<br>The waste water such as RO reject, DM regeneration etc are neutralized and reused for gardening, ash handing, road sprinkling and dust suppression system. |
| v. | The National Ambient Air Quality Standards issued by the Ministry of Environment and Forest (MoEF), New Delhi vide GSR No. 826(E) dated 16th November,2009 should be followed | Complied. |

| | | |
|---|---|---|
| vi. | At least four Ambient air quality monitoring stations should be established in the downwind direction as well as where maximum Ground level concentration of PM10, $SO_2$, $NO_x$, is anticipated in consultation with the TNPCB. Data on Ambient air quality and stack emission shall be regularly submitted to the SEIAA,TN including the Regional office of the MOEF at Chennai and the TNPCB / CPCB once in six months | Complied.<br>The data will be submitted along with every Half yearly Compliance report during each Calendar Period. |
| vii. | Proper House keeping programmes shall be taken up. | Being Complied. |
| viii. | The project proponent shall also comply with all the environmental protection measures and safeguards proposed 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. | Complied.<br>An amount equal to 3% of total profit is earmarked for CSR plan will be utilized for up-gradation of nearby schools, drinking water facilities, medical camps etc., |
| ix. | The Project proponent shall also adequately contribute in the development of the neighbouring villages. Special package with implementation schedule for free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner | Complied.<br>An amount equal to 3% of total profit is allotted for CSR activities viz., up-gradation of nearby schools, providing drinking water supply, health camps etc., |
| x. | The proponent shall upload the status of compliance of the stipulated environmental 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 MoEF at Chennai, the respective Zonal office of CPCB and the TNPCB. The criteria pollutant levels namely SPM, RSPM (PM 2.5 & PM10), SO2,NOx(ambient level as well as stack emission) 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. | Complied. |
| xi. | The environment statement for each financial year ending 31st March in Form V as is mandated to be submitted by the project proponent to the Tamil Nadu Pollution Control Board as prescribed under the Environmental Protection Rules, 1986 amended subsequently, shall be put on the website of the company along with the status of compliance conditions and shall also be sent to the Regional Office of the MoEF,Chennai by email. | Complied. |

| | | |
|---|---|---|
| xii. | The project proponent shall also submit six monthly reports on the status of compliance of the stipulated environment conditions including results of monitored data (both in hard as well as in mail) to the Regional Office of the MoEF ,Chennai, the Zonal Office of CPCB , Bengaluru and the TNCPB. This shall also be put on the website of the company by the proponent. | Complied. |
| xiii. | Regional Office of the Ministry of Environment & Forests, Chennai will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environmental Management plan along with the additional information submitted from time to time shall be forwarded to the Regional office of the MoEF,Chennai for their use during monitoring. Project proponent will up load the compliance status in their website and update the same from time to time at least six monthly basis. Criteria Pollutants levels including NOx (from stack and ambient air) shall be displayed at the main gate of the Power Plant | Complied. |
| xiv. | Full cooperation will be extended to the Scientist/ Officers from the SEIAA,TN / Regional Office of the MOEF,Chennai /CPCB / TNPCB who would be monitoring the compliance of environmental status. | Agreed upon. |
| xv. | Full cooperation will be extended to the Scientist/ Officers from the SEIAA,TN / Regional Office of the MOEF,Chennai /CPCB / TNPCB who would be monitoring the compliance of environmental status. | Agreed upon. |
| xvi. | The Environmental Clearance does not absolve the applicant / proponent of his obligation / requirement to obtain other statutory and administrative clearances from the concerned statutory and administrative authorities. | Agreed. |
| xvii. | No further expansion or modifications in the plant shall be carried out without prior approval of the State Environment Impact Assessment Authority, Tamil Nadu (SEIAA,TN). In case of deviations or alterations in the project proposal from those submitted to the SEIAA, TN to assess the adequacy of conditions imposed and to add additional environmental protection measures required , if any, | Complied. Any changes in the project proposal will be carried only after obtaining proper approval from the Statutory bodies before commencement. |
| xviii. | The SEIAA,TN reserves the right to revoke or suspend the clearance in conditions stipulated are not implemented to the satisfaction of the SEIAA,TN . The SEIAA, TN reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions. | Noted and Agreed. |

| | | |
|---|---|---|
| xix. | Environmental Clearance issued based on the details furnished as above. Concealing factual data or submission of false / fabricated data and failure to comply with any of the Conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986. | Agreed |
| xx. | The environmental clearance accorded shall be valid for a period of 5 years to start operations by the plant. | Noted |
| xxi. | The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act,1974, the Air (Prevention and Control of Pollution) Act 1986 and rules there under, Hazardous Wastes (Management , Handling & Tansboundary Movement) Rules, 2008 and its amendment, the Public Liability Insurance Act,1991 and its amendments. | Agreed |
| xxii. | Any appeal against this Environmental Clearance shall be with the Hon'ble National Green Tribunal, if prepared with in a period 30 days as prescribed under section 16 of the National Green Tribunal Act 2010. | -- |

# TAMILNADU POLLUTION CONTROL BOARD

District Environmental Laboratory - Tiruppur

AMBIENT AIR QUALITY SURVEY – Report of Analysis

Report No. 35 / AAQS/2017-2018 Date.20.07.2017

1. Name of the Industry : M/s. Sree Rengaraj Ispat Industries (P) Ltd, (Power Div).

2. Address of the Industry : MM 1, 2 & 5, Sipcot Industrial Growth Centre, Perundurai, Erode - 638 052.

3. Date of Survey : 13.07.2017

4. Duration of Survey : 8 Hours

5. Category : Red / Large

6. Land use classification : Industrial

**Meteorological Conditions**

| | | | | | |
|---|---|---|---|---|---|
| Ambient Temperature ($^0$C) | Min | Max | Relative Humidity ( % ) | Min | Max |
| | 28.1 | 29.7 | | 46 | 58 |
| Weather Condition | Cloudy | | Rain Fall (mm) | Nil | |
| Predominant Wind Direction | SW—NE | | Mean Wind Speed (km/hr) | 2.11 Km/Hr | |

**Ambient Air Quality Survey Results**

| Sl. No. | Location | Direction * | Distance ( m ) * | Height From GL (m) | Pollutants Concentration (microgram / m$^3$) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | PM 2.5 | PM 10 | $SO_2$ | NOx |
| 1. | Near Karuppurayan koil | NE | 136 | 2 | 33 | 68 | 12 | 21 |
| 2. | New Adminstration area | E | 189 | 2 | - | 63 | 10 | 18 |
| 3. | 110 KVA Sub Station | SE | 120 | 2 | - | 61 | 9 | 23 |
| 4. | Near Coal Stack godown back side | SW | 209 | 2 | - | 58 | 13 | 20 |
| 5. | Workers Quarters | NW | 212 | 2 | - | 64 | 8 | 17 |

note: * With respect to major emission sources.

Dy. Chief Scientific Officer,
District Environmental Laboratory
Tamil Nadu Pollution Control Board
TIRUPPUR.

| Test Performed | Test Method |
|---|---|
| PM10 | IS 5182 : (Part 23) – 2006 |
| SO2 | Modified West – Graeke / IS 5182 : (Part 2) – 2001 RA: 2012 |
| NOx | Jacobs – Hochheiser IS 5182 : (Part 6) – 2006 RA:2012 |

E.S.

D.C.S.O 20/07/17

Dy.Chief Scientific Officer
DEL., TNPCB, Tiruppur

Annexure - II

# TAMILNADU POLLUTION CONTROL BOARD

District Environmental Laboratory - Tiruppur.

## AMBIENT AIR QUALITY SURVEY – Report of Analysis

Report No. 79 / AAQS/2017-2018 Date.22.12.2017

1. Name of the Industry : M/s. Sree Rengaraj Ispat Industries (P) Ltd, (Sponge Iron),
2. Address of the Industry : MM 1, 2 & 5, Sipcot Industrial Growth Centre, Perundurai, Erode - 638 052.
3. Date of Survey : 20.12.2017
4. Duration of Survey : 8 Hours
5. Category : Red / Large
6. Land use classification : Industrial

**Meteorological Conditions**

| | | | | | |
|---|---|---|---|---|---|
| Ambient Temperature ($^0$C) | Min | Max | Relative Humidity ( % ) | Min | Max |
| | 26.5 | 30.3 | | 37 | 52 |
| Weather Condition | Clear Sky | | Rain Fall (mm) | Nil | |
| Predominant Wind Direction | NE - SW | | Mean Wind Speed (km/hr) | -- | |

**Ambient Air Quality Survey Results**

| Sl. No. | Location | Direction * | Distance ( m ) * | Height Form GL (m) | Pollutants Concentration (microgram / m$^3$ ) | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | PM 2.5 | PM 10 | $SO_2$ | NOx |
| 1. | On top of the scaffolding near the Site office | N | 75 | 2 | - | 50 | 9 | 11 |
| 2. | On top of the scaffolding near New Admn Building | E | 395 | 2 | - | 55 | 9 | 11 |
| 3. | On top of the scaffolding near MCC-4 | SE | 75 | 2 | - | 66 | 12 | 15 |
| 4. | On top of the scaffolding near SMW cooling tower | SW | 295 | 2 | - | 76 | 17 | 17 |
| 5. | On top of the scaffolding near Ro Plant | NW | 295 | 2 | 47 | 75 | 12 | 13 |

note: * With respect to major emission sources.

Dy. Chief Scientific Officer,
District Environmental Laboratory
Tamil Nadu Pollution Control Board
TIRUPPUR.

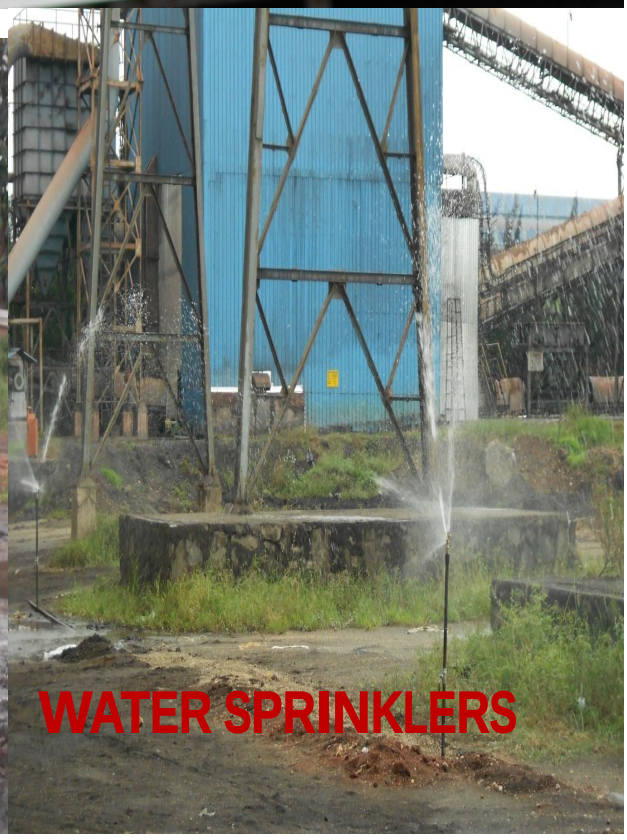
| Test Performed | Test Method |
|---|---|
| PM10 | IS 5182 : (Part 23) – 2006 |
| SO2 | Modified West – Graeke / IS 5182 : (Part 2) – 2001 RA: 2012 |
| NOx | Jacobs – Hochheiser / IS 5182 : (Part 6) – 2006 RA:2012 |

E.S. D.C.S. Dy,Chief Scientific Officer DEL, TNPCB, Tiruppur.

# ANNEXURE - III

## CLOSED BELT CONVEYOR WITH SPRINKLER ARRANGEMENTS

WATER SPRINKLING THROUGH TRUCKS



WATER SPRINKLERS

Annexure -IV

# TAMILNADU POLLUTION CONTROL BOARD

District Environmental Laboratory - Tiruppur.

## AMBIENT/SOURCE NOISE LEVEL SURVEY - Report of Analysis

Report No: 79/ NLS/2017-2018 Date:22.12.2017

| | | |
|---|---|---|
| 1. | Name of the Industry | M/s. Sree Rengaraj Ispat Industries (P) Ltd. (Sponge Iron). |
| 2. | Address of the Industry | MM 1, 2 & 5, Ipcot Industrial Growth Centre, Perundurai, Erode - 638 052. |
| 3. | Date of Survey | 20.12.2017 |

| | | | |
|---|---|---|---|
| **Category** | Red / Large | **Land use Classification** | Industrial |
| **Type of Survey** | Ambient | **Time of Survey** | DAY |
| **Meteorological conditions** | | | Clear sky |

**Logging Parameters**

| | | | | | |
|---|---|---|---|---|---|
| **Instrument Used** | Larson & Davis | | **Serial No** | | 814 |
| **Logging Interval** | 10 Minutes each point | | **Measuring Range** | | 40-100 |
| **Weighting** | "A" | Peak Weighting "C" | **Time Weighting** | | FAST |
| **Sound Incidence** | RANDOM | | **Time in hrs** | | 11.45 AM to 1.15 PM |

**Report of Noise Level Monitoring**

| Sl No | Location | Duration (min) | Distance (M) | Direction | Sound Level – dB (A) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Leq | L50 | L90 | L10 | Min | Max |
| 1. | New Site Office | 10 | 75 | N | 52.3 | 51.6 | 60.1 | 64.7 | 49.1 | 68.3 |
| 2. | Near New Admin Office Building | 10 | 375 | E | 52.0 | 51.0 | 58.8 | 64.5 | 48.7 | 64.0 |
| 3. | Near MEC 4 Building | 10 | 75 | SE | 63.0 | 51.2 | 59.5 | 64.5 | 62.3 | 66.0 |
| 4. | Near the 8 MW Cooling Tower | 10 | 295 | SW | 63.5 | 65.0 | 64.2 | 64.9 | 62.2 | 67.7 |
| 5. | Near Raw Water Storage tank | 10 | 440 | NW | 58.8 | 57.9 | 63.7 | 64.8 | 56.4 | 69.4 |

**Note:** L90 Value refers to background noise: L50 Value refers to mean noise. L10 value refers to nuisance or annoyance level : Leq value is the average energy for the measured period.

L.S

D.C.S.Gopinath

Dy. Chief Scientific Officer,
District Environmental Laboratory
Tamil Nadu Pollution Control Board
TIRUPPUR.

***Sree Rengaraj Ispat Industries – Environment Management Cell***