

DATE: 25.05.2024

Place

Work.

Certified



The Director Ministry of Environment, Forest & Climate Change Indira Paryavaran Bhavan Jor Bagh Road New Delhi-1100032, India

Subject: Submission of Half Yearly Compliance Report for the period from 1st October 2023 to 31st March 2024.

Dear Sir,

With reference to the subject cited above we have uploaded the six monthly EC compliance report with due diligence for the period from 1st October 2023 to 31st March 2024 as per the conditions laid down in environmental clearance granted with EC identification no. EC22A008OR121224.

Thanking You,
For Shyam Metalic
PANDLOI
PANDLOI
FOR Encl: As above

CC to: The Regional Office, Bhubaneswar (MoEF&CC)

CC to: The Regional Office, SPCB, Sambalpur, Odisha.

OUR BRANDS:









SHYAM METALICS AND ENERGY LIMITED

REG. OFFICE: Trinity Tower. 7th Floor, 83, Topsia Road, Kolkata - 700 046, West Bengal, CIN: L40109WB2002PLC095491 GSTIN: 19AAHCS5842A2ZD SALES & MARKETING OFFICE: Viswakarma Building, North West Block, 1st, 2nd & 3rd Floor, 86C, Topsia Road, Kolkata - 700 046 T: +91 33 4016 4001 F: +91 33 4016 4025 Email: contact@shyamgroup.com Web: www.shyammetalics.com Follow us on:

25/05/2024, 15:18 Home Page

| Your (Environment Clearance) application has been Submitted with following details | | | | | |
|--|---|--|--|--|--|
| Proposal No | IA/OR/IND/269835/2020 | | | | |
| Compliance ID | 28688956 | | | | |
| Compliance Number(For Tracking) | EC/M/COMPLIANCE/28688956/2024 | | | | |
| Reporting Year | 2024 | | | | |
| Reporting Period | 01 Jun(01 Oct - 31 Mar) | | | | |
| Submission Date | 25-05-2024 | | | | |
| IRO Name | ARTATRANA MISHRA | | | | |
| IRO Email | jhk109@ifs.nic.in | | | | |
| State | ODISHA | | | | |
| IRO Office Address | Integrated Regional Offices, Bhubaneswar | | | | |
| Note:- SMS and E-Mail has been sent to ARTATRANA M | Note:- SMS and E-Mail has been sent to ARTATRANA MISHRA, ODISHA with Notification to Project Proponent. | | | | |











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Welcome Dev Kumar Tiwari, **Project Proponent**

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View Compliance Report at Project Proponent

| Proposal No | IA/OR/IND/269835/2 020 | Category | Industrial Projects - 1 | | |
|------------------------------|--|--|--|--------------------------|----|
| Name of Project | 23,73,566 TPA, Rolled Pr Nm3/Hr, Sinter Plant- 5, | tegrated steel plant to fina oducts - 15,60,000 TPA, Ca 90,625 TPA, Blast Furnace- District- Sambalpur, Odish | ptive Power-308 MW, Pello 3,93,750 TPA by M/s. Shya | ets - 30,00,000 TPA, Pro | • |
| Plot / Survey/ Khasra No. | | Village(s) | | Sub-District(s) | |
| State | ODISHA | District | SAMBALPUR | | |
| MoEF File No | IA- J-11011/495/2006 -IA.II (I) | Name of the Entity/ Corporate Office | M/s. Shyam Metalics and Energy Limited | Entity's PAN | NA |
| Entity Name as per PAN | NA | Entity details mentioned above is correct? | Agree | | |
| Project KML | NA | | | | |

Covering Letter Click to View

Compliance Reporting Details

Reporting Year 2024 **Reporting Period** 01 Jun(01 Oct - 31

Mar)

Remark(if any)

Details of Production and Project Area

Date of 16-08-2022 Commencement of

Project/Activity

| | Project Area as per EC Granted(ha.) | Actual Project Area in Possession(ha.) |
|--------------|-------------------------------------|--|
| Private | 235.924 | 117.296 |
| Revenue Land | 64.38 | 10.58 |
| Forest | 46.754 | 38.393 |
| Others | 00 | 00 |
| Total | 347.058 | 166.26900000000003 |

| Sr.No. | Name of the Product | Units | As per EC Granted | As per CTO Granted | CTO ID | Valid Up To | Production during last financial year |
|--------|---------------------|-------------------------|----------------------|-----------------------|-------------------------|----------------|---------------------------------------|
| 1 | PELLET | Tons per Annum (TPA) | 30,00,000 | 30,00,000 | 4538/IND-I-CON- 5335 | 31-03- 2025 | 16,08,740 |
| 2 | M.S BILLET | Tons per Annum | 23,73,3286 | 8,78,680 | 4538/IND-I-CON- | 31-03- | 7,47,725.561 |

| | | (TPA) | | | 5335 | 2025 | |
|---|--------------------|-------------------------|-----------|----------|-------------------------|----------------|--------------|
| 3 | FERRO ALLOYS | Tons per Annum (TPA) | 2,50,000 | 1,48,600 | 4538/IND-I-CON- 5335 | 31-03- 2025 | 51,667.45 |
| 4 | ROLLING/TMT/WRM/SM | Tons per Annum (TPA) | 15,60,000 | 9,20,000 | 4538/IND-I-CON- 5335 | 31-03- 2025 | 6,58,512.786 |
| 5 | SPONGE IRON | Tons per Annum (TPA) | 20,54,000 | 9,98,000 | 4538/IND-I-CON- 5335 | 31-03- 2025 | 9,61,852.125 |

Conditions

Specific Conditions

| Sr.No. | Condition Heading | Condition Details | Status of Compliance, Remarks / Reason and Supporting Documents | |
|--------|--|--|--|--|
| 1 | Statutory compliance The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures | PPs Submission | We are submitting the Six Monthly Compliance in Parivesh portal within the stipulated time. Environmental protection measures like installation of APCD, plantation, implementation of ZLD etc. will be duly complied as per the commitments made to the Ministry. All the recommendations will be followed as mentioned in the EIA report during the installation of each proposed unit. i. Installation of ESP & Bag filters to achieve 30mg/Nm3 emission standard. ii. Designing of RWH & garland drain. iii. Provision of PPE kit and implementation of all safety norms. iv. Installation of water treatment plant. etc. Complied Attachment:NA | |
| | | relating to the project shall be implemented. | | |
| 2 | WATER QUALITY MONITORING AND PRESERVATION | Tailings from Iron Ore washing plant shall be dewatered in filter press and no slime /tailing pond shall be permitted. | PPs Submission | No tailing pond is envisaged. Complied Attachment:NA |

| 3 | WASTE MANAGEMENT | Sinter Plant shall be equipped with Sinter cooler waste recovery system and suitable technology for control of dioxins and furans emissions from the plant | PPs Submission | The project is under construction and development stage only. Sinter plant is not yet installed. The unit will be installed prior to the expiry of the EC validity period. As per the EC condition, Sinter cooler waste recovery system will be adopted for the Sinter plant. State of art technology will be adopted to control the dioxins and furans. Agreed to Comply Attachment:NA |
|---|---|--|----------------|---|
| 4 | AIR QUALITY MONITORING AND PRESERVATION | Secondary fume extraction system shall be installed on converters of Steel Melting Shop | PPs Submission | Noted. We have not yet installed the SMS Units as per our Expansion proposal, when it will be installed we will provide the Secondary Fume Extraction System. Agreed to Comply Attachment:NA |
| 5 | AIR QUALITY MONITORING AND PRESERVATION | Basic Oxygen Furnace (BOF) gas shall be cleaned dry. | PPs Submission | Noted. Dry Gas Cleaning Plant will be installed for the BOF. Not yet envisaged. Agreed to Comply Attachment:NA |
| 6 | AIR QUALITY MONITORING AND PRESERVATION | Electric Arc Furnace shall be closed type with 4th hole extraction system. | PPs Submission | Noted. We have not yet installed the EAF as granted vide the EC dated 16.08.2022 and during installation we will provide the Closed Type Furnaces with 4th Hole Extraction System. Agreed to Comply Attachment:NA |

| 7 | ENERGY PRESERVATION MEASURES | 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil or Mixed BF/CO gas/Producer gas. | PPs Submission | In step of energy conservation we have adopted Online Hot Rolling/Charging to produce the finished product of good quality and cost saving. There was no need of reheating furnace as hot billets are/will be rolled directly (Online) and are able to achieve the desired temperature at the end. Therefore, no reheating furnace is envisaged. Complied Attachment:NA |
|---|---|---|----------------|--|
| 8 | WATER QUALITY MONITORING AND PRESERVATION | 22,729 KLD of water requirement for the total project shall be met from Hirakud Reservoir after necessary permission. No GW abstraction is permitted. | PPs Submission | Noted. All the water requirement will be met from Hirakud Reservoir. No ground water extraction will be done. Water withdrawal letter is attached as Annexure. Complied Attachment: Click to View |
| 9 | GREENBELT | Three tier Green Belt shall be developed in a time frame of one year with native species all along the periphery of the project site of adequate width and tree density shall not be less than 2500 per ha. In addition, PP shall provide 50-meter-wide green belt towards Reserve Forest located at 0.50 km from project site. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants | PPs Submission | Three tier plantation will be done in entire periphery with density 2500 trees/ ha. Also, development of green belt of 50m towards reserve forest in North Direction is in progress. Total of 138755 nos. of trees have been planted in 55.56 ha out of 166.269 (existing land) as green belt plantation. For expansion proposal the land acquisition process is ongoing and after its completion total of 2,00,025 trees will be planted in 80.01 ha (out of 180.789 ha proposed land) as green belt in 3 years. Total green belt will be 135.57 ha (39.06 %) of total plant area (347.058 ha). Total no of plantation as on date along with species name and survival rate and the plantation photographs are attached as Annexure. Complied Attachment: Click to View |

| | | Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC. | | |
|----|---|--|----------------|--|
| 10 | GREENBELT | Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface. | PPs Submission | We have started three-tier plantation all along the periphery and the details are as mentioned in Annexure A. Apart from improving aesthetics value the area it also capture the fugitive dust from the project area. Soil erosion and washing away of the top soil will also prevent due to development of greenbelt. Paving all around the premises has been completed for the existing units and the same will be done for the expansion proposal as the land acquisition process is ongoing. Photographs of the paved roads are attached as Annexure B. Complied Attachment: Click to View |
| 11 | WATER QUALITY MONITORING AND PRESERVATION | Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report. | PPs Submission | Run-off water from the office areas, shop roofs will be collected and stored for future use. Apart from Surface storage of rain water, there is plan for rain water harvesting through recharging of ground water in the surrounding areas. There are 5 water bodies present inside the proposed area. Out of five ponds two will be used for Rain water harvesting and other three will remain as such as water storage pond for proposed green belt watering. The land acquisition process is ongoing. Rainwater is being collected from the Roof-top catchment area and being channelized through pipelines to the percolation well/recharge pit to recharge the ground water level. The ground water level is being monitored in Pre monsoon and post monsoon to keep a record of the total water recharged by RWH. Being Complied Attachment:NA |
| 12 | WATER QUALITY MONITORING AND PRESERVATION | The proposed project shall be designed as "Zero Liquid Discharge" Plant. No waste water will | PPs Submission | WWTP plant of 7000 KLD (two units having capacity of 3000 & 4000 KLD respectively) is constructed to recycle process water and the treated water will be reused again. The drainage network system is |

| | | be discharged outside the plant boundary. | | designed so as to collect all the Surface Runoff Water adequately. No waste water will be discharged outside the plant boundary. Complied Attachment:NA |
|----|---|---|----------------|--|
| 13 | WATER QUALITY MONITORING AND PRESERVATION | Hirakund water reservoir is at 0.67 km from the Unit. Mitigation measures as committed w.r.t. safeguarding the water bodies shall be implemented. | PPs Submission | Matwali Nala is situated outside the SMEL plant premise which is at a distance of 0.67km from the boundary. As per the direction we have already initiated the plantation drive and for completion of the entire activity we have prepared a detailed action plan which is attached as Annexure. On the other hand, the Greenbelt development area is close to the natural water body for which we have requested the WR Dept. for permission to evaluate the situation and give us necessary approval for the greenbelt development work on both sides of the nala. Our said request is under active consideration of the WR Division, Burla. Once we obtain the approval we will start the activity of plantation as committed. Being Complied Attachment: Click to View |
| 14 | WATER QUALITY MONITORING AND PRESERVATION | Air cooled condensers shall be used in the power plant. | PPs Submission | We have submitted the EC amendment proposal for modification in the mentioned condition from "Air Cooled condensers shall be used in the power plant to Water cooled Condensing System" to the MoEF&CC (Ind-I) and subsequently the EC amendment has been granted vide F. No J-11011/495/2006-IA-II(I) dated 21st April 2023. The EC amendment copy is attached as Annexure. Now we are operating the Water Cooled Condensing System and the same will be continued for the expansion proposal. Complied Attachment: Click to View |
| 15 | WASTE MANAGEMENT | A proper action plan must be implemented to | PPs Submission | Noted. All the e-waste are/will be collected at Central Store and subsequently disposed to authorized recycler/dismantler. E-Waste has disposed off to a Authorized Recycler and the copy of the |

| 5 | | | view | Compliance |
|----|---|---|----------------|--|
| | | dispose of the electronic waste generated. | | annual return (2022-23) is attached as Annexure A and the manifest Copy (Form 6) for the year 2023-24 is attached as Annexure B. Complied Attachment: Click to View |
| 16 | AIR QUALITY MONITORING AND PRESERVATION | The coal dust to be measured at coal handling areas, ball mills, furnace charging areas through personal and area monitoring and to be compared and it should be within 2 | PPs Submission | The monitoring has been carried out quarterly and as per the observation of RO, MOEF&CC we are currently carrying out the Coal Dust monitoring inclusive of the Quartz Percentage by Bureau Veritas along with it. The report will be submitted to the Ministry .The photographs of the monitoring work is attached as Annexure. Being Complied Attachment: Click to View |
| | | mg/m3, respirable dust fraction containing less than 5% quartz as per Indian Factories Act, 1948. | | |
| 17 | AIR QUALITY MONITORING AND PRESERVATION | The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The | PPs Submission | The project is under construction and development stage only. At present carbon sequestered through greenbelt will be 108619.8 T/yr and through Renewable Energy & waste Heat recovery will be 62.35 T/yr. The solar energy produces 3.1 MW which is inside the plant premise. The Carbon Footprint Report is attached as Annexure A. The action plan to implement the Carbon Sequestration initiatives is prepared and attached as Annexure B. Agreed to Comply Attachment: Click to View |
| | | implementation report shall be submitted to the IRO, MoEF&CC in this regard. | | |
| 18 | PUBLIC HEARING | The activities and the action plan proposed by the project proponent to address the issues raised during public hearing and | PPs Submission | Noted. A budget of Rs.12.13 Crores has been allocated to comply all the issues raised during the public hearing. The activities related to socio-economic issues carried out in this period along with the photographs are attached as Annexure. |

| | | socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit. | | Being Complied Attachment: Click to View |
|----|---|--|----------------|--|
| 19 | WASTE MANAGEMENT | Solid waste utilization • PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making. • PP shall recycle/reuse 100 % solid waste generated in the plant. • Used refractories shall be recycled as far as possible. | PPs Submission | APCD Dust of Pellet Plant is/will be reused in the Pellet Plant. Coal Washery rejects & dolochar is/will be used in the AFBC boiler. Slag of SMS has/will be crushed in the crusher unit and all metal parts are recovered through magnetic separators and it has/will be recycled in the induction furnace. Balance nonmetallic parts of SMS slag are/will be used for road bed preparation, filling in the low lying area etc. 100% solid waste recycle/reuse is envisaged. The fly ash is being dumped at a low lying area located at Village-Nishanbhanga, Tehsil-Rengali, Dist-Sambalpur for which we have obtained CTO. The copies area attached as Annexure A. Detailed solid waste management plan is attached as Annexure B. Complied Attachment: Click to View |
| 20 | WASTE MANAGEMENT | Tar shall be recovered from producer gas and shall be sold to registered processors and phenolic water shall be incinerated in After Burn Chamber (ABC) of DRI kilns. | PPs Submission | Noted. Tar from PGP will be sold to authorized recyclers and the manifest copy (form-10) of the recycler is attached as Annexure . Phenolic water is being treated in ETP and will be incinerated in After Burn Chamber (ABC) of DRI kilns. Being Complied Attachment: Click to View |
| 21 | AIR QUALITY MONITORING AND PRESERVATION | Dust emission from Steel Plant stacks shall be up to 30 mg/Nm3. | PPs Submission | All stacks in the expansion project will be designed to keep the emissions below 30 mg/Nm3. For the other existing stacks emission standard as prescribed in CTO letter No 4538/IND-I-CON-5335 dated 23.03.2023 are being followed. The quarterly monitoring report of all process stacks is attached as Annexure. |

| 45 | | | View Compliance | | |
|----|------------------------------|--|-----------------|--|--|
| | | | | Being Complied Attachment: Click to View | |
| 22 | GREENBELT | Manmade pits exist in the proposed site for expansion along-with Hirakud Reservoir and rivers and nallahs exists within the study area from the project site. The water bodies shall not be disturbed. Landscaping shall be done on both embankments, with green belt covering 10 m land on both sides of the nallah. This shall be in addition to the 33% green belt development. | PPs Submission | The man made pits will be used as Rain Water Harvesting and water storage ponds. Land acquisition of the proposed expansion proposal is ongoing and the project at the designated areas has not been started. We will carry out the committed activities after completion of the Land Acquisition process. Matwali Nala is situated outside the SMEL plant premise which is at a distance of 0.67km from the boundary. The Greenbelt development area is close to the natural water body for which we have requested the WR Dept. to evaluate the situation and give us necessary approval for the greenbelt development work on both sides of the nala. A detailed action plan which is attached as Annexure. Being Complied Attachment: Click to View | |
| 23 | ENERGY PRESERVATION MEASURES | Blast Furnaces shall be equipped with Top Recovery Turbine (capacity more than 450m3), dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility. | PPs Submission | Noted, The blast Furnace is not yet envisaged. Blast Furnace will be equipped TRT, having (capacity more than 450m3) dry gas cleaning plant, stove waste heat recovery, cast house and stock house ventilation system and slag granulation facility. Agreed to Comply Attachment:NA | |

| 24 | AIR QUALITY MONITORING AND PRESERVATION | Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC. | PPs Submission | The performance Evaluation study for all APCD devices is ongoing by National institute of Technology, Rourkela. The photographs of the ongoing activity are attached as Annexure. After obtaining the final report, it will be submitted to the ministry. Complied Attachment: Click to View |
|----|---|--|----------------|--|
| 25 | Corporate Environmental Responsibility | PP shall ensure the education benefits demanded in PH reach to the beneficiaries directly (in terms of no. of youth sponsored for post-school education, from the local villages) and donations to the ITI should not be counted against this. | PPs Submission | To collect all the details of beneficiaries along with their requirement for post-schooling education we have submitted a request letter to the District Education Officer, Sambalpur. We will work on the obtained data and the progress report will be submitted to the Ministry along with the Six Monthly EC Compliance report. The receiving copy of the said letter is attached as Annexure. We have been granted the EC in Aug 2022 and as committed we will invest the total CER capital budget within a period of 3 years. The recurring budget for all the maintenance and continuous work will be continued. Being Complied Attachment: Click to View |
| 26 | Corporate Environmental Responsibility | As committed earlier, Rs. 2.00 Crores shall be earmarked for setting up of Industrial Training Institute (ITI) in consultation with the State Government and progress shall be reported to the Ministry's Integrated Regional Office. | PPs Submission | We have approached to the district magistrate & collector, Sambalpur vide letter dated 02.06.2022 (Annexure A) showing our earlier letters given to the collector & also to request him to provide us suitable land for construction of ITI or to give necessary permission to adopt any ITI situated in our periphery. In response to our above said letter, Honourable District Magistrate & collector, Sambalpur vide his letter No.619/SPL/LA dated 10.06.2022 (Annexure B) intimated us the following: • "As per the specific condition mentioned in the EC you are directed to select a suitable patch of Govt. land in consultation with the Tehsildar, Rengali for establishment of ITI in your periphery area. In this connection necessary permission may be accorded for the same. • Further, you are also directed to consult with the director, Technical Education, Odisha for adoption of an ITI situated in your periphery area at your own cost. In this regard action taken report may kindly be |

| | | | | acknowledged to the undersigned. Accordingly, we have submitted a letter to Tehsildar, Rengali & to Director, Technical Education on Dt. 13.06.2022. Tehsildar in reply has directed RI to search a suitable patch of Govt. Land vide memo No. 2908, Dt. 21.06.2022. Further, we have received a letter from Tahsildar Office vide letter No.1605 dated 11.04.2023 mentioning the land schedule and land plan of Rengali Village submitted by Revenue Inspector, Rengali for setting up an ITI. Land acquisition is under process with District Administration. The land details are: Khata No.:502, Plot No.: 3720/6769, Land Area: 2.0 Acres (Annexure C). Being Complied Attachment: Click to View |
|----|-----------------------------|---|----------------|---|
| 27 | Human Health Environment | During operational phase-at coke oven areas the PP shall monitor the benzene, toluene, xylene (BTX) and Polycyclic Aromatic Hydrocarbons (PAHs) in the occupational environments and the concentrations found to be compared with permissible limits for these chemicals as per Indian Factories Act, 1948. | PPs Submission | Coke Oven Plant is not envisaged to be installed. Complied Attachment:NA |
| 28 | Statutory compliance | The recommendations of the approved Site-Specific Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six- | PPs Submission | Wildlife Conservation Plan along with approved letter from PCCF, Chief wildlife Warden, Odisha vide letter No. 7752/7 WL-FD & WLC-147/2020 dated 29th September, 2020 has been given as Annexure No A. As per the Approved Site specific Wildlife management Plan we have deposited an amount of Rs. 65.586 lakh to the State CAMPA. Payment Copy is attached as Annexure B. A letter to the PCCF Wildlife office, Odisha seeking the details of implementation of the deposited fund has been submitted and the letter is attached as Annexure C. |

| monthly compliance report to the concerned | Complied Attachment: Click to View |
|--|------------------------------------|
| Regional Office of the MoEF&CC. | |

General Conditions

| Sr.No. | Condition Heading | Condition Details | Status of Compliand | ce,Remarks / Reason and Supporting Documents |
|--------|---|---|---------------------|--|
| 1 | Statutory compliance | The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ | PPs Submission | EC for the expansion unit has been obtained vide F. No. IA- J-11011/495/2006 -IA.II (I), Dt. 16.08.2022. Any other statutory requirements required will be obtained as we progress. Agreed to Comply Attachment:NA |
| | | construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project. | | |
| 2 | AIR QUALITY MONITORING AND PRESERVATION | The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these | PPs Submission | At present Continuous Emission Monitoring System for all process stacks for the existing units are installed and the data transmission to RTDAS server is going on continuously. For all the proposed units, CEMS at each process stack will be installed. There are 4 no of Ambient Air Quality Monitoring have been installed and additional will be installed as the proposed expansion will be completed. Calibration of all CEMS equipment is being done periodically. CEMS & AQMS Present data transmission report has been attached as Annexure . Complied Attachment: Click to View |

| | | according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. | | |
|---|---|---|----------------|--|
| 3 | AIR QUALITY MONITORING AND PRESERVATION | The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. | PPs Submission | Fugitive emission monitoring has been carried out on regular interval in each quarter. The monitoring report is attached as Annexure . Complied Attachment: Click to View |
| 4 | AIR QUALITY MONITORING AND PRESERVATION | Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions | PPs Submission | Sampling facility at all process stacks have been/will be provided as per the CPCB guidelines for the manual monitoring. Complied Attachment:NA |
| 5 | AIR QUALITY MONITORING AND PRESERVATION | 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. | PPs Submission | To suppress fugitive emission 260 nos. of water sprinkler system installed in the various parts of internal road of the plant and additionally 80 nos. will be installed. 4 no. of mist cannon fogging system and also heavy-duty mechanical sweeping machine have been engaged for dust suppression and additional units are under procurement. 15 no of ESP are attached at DRI, Power Plant and pellet plant units. Bag-filters have been installed at all material handling sections, process and other vulnerable sources have been installed and the same will be carried out in the proposed expansion as well. Dry Fog Unit at material stack yard and rain guns/sprinklers all along the internal roads are installed to control the fugitive emission. Being Complied Attachment:NA |

| 6 | AIR QUALITY MONITORING AND PRESERVATION | The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags. | PPs Submission | Pulse Jet type mechanized bag cleaning system has been adopted for the Bag filter. Leakage detection is being done by measuring the differential pressure at the inlet and outlet of the bag filter. The same method will be adopted for the proposed expansion project as well. Being Complied Attachment:NA |
|---|---|---|----------------|--|
| 7 | AIR QUALITY MONITORING AND PRESERVATION | Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly. | PPs Submission | We have engaged mechanical sweeping machine to clean plant roads, shop floors, roofs, regularly and one additional unit is under procurement which will cover the proposed expansion area. Being Complied Attachment:NA |
| 8 | AIR QUALITY MONITORING AND PRESERVATION | 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. | PPs Submission | APCD dust of 1,28,730 TPA is generated from the Pellet plant which are reused in the process. Middlings of 66000 TPA from the Coal washery unit & Dolchar of 4,70,357 TPA from the DRI kilns are being reused in the FBC Boiler. Mill scale of 10400 TPA from the Rolling mill is being used in the SMS IF. The process of recycle/reuse of APCD dust will be carried out in the proposed expansion project as well. Being Complied Attachment:NA |
| 9 | AIR QUALITY MONITORING AND PRESERVATION | The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin. | PPs Submission | Trucks transporting materials especially fine materials are/will be covered with tarpaulin and being/will be made sure to prevent spillage proof. Being Complied Attachment:NA |

| 10 | AIR QUALITY MONITORING AND PRESERVATION | Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility). | PPs Submission | Installation of Coke Oven plant is not envisaged. The condition is not applicable as of now. Complied Attachment:NA |
|----|---|---|----------------|---|
| 11 | AIR QUALITY MONITORING AND PRESERVATION | Land-based APC system shall be installed to control coke pushing emissions. | PPs Submission | Installation of Coke Oven plant is not envisaged. The condition is not applicable. Complied Attachment:NA |
| 12 | AIR QUALITY MONITORING AND PRESERVATION | Monitor CO, HC and O2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber. | PPs Submission | Installation of Coke Oven plant is not envisaged. The condition is not applicable as of now. Complied Attachment:NA |
| 13 | AIR QUALITY MONITORING AND PRESERVATION | Vapour absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens. | PPs Submission | Installation of Coke Oven plant is not envisaged. The condition is not applicable as of now. Complied Attachment:NA |
| 14 | AIR QUALITY MONITORING AND PRESERVATION | Wind shelter fence and chemical spraying shall be provided on the raw material stock piles. | PPs Submission | The wind shelter fence will be constructed at the raw material and will be completed within a period of 3 months. Complied Attachment:NA |
| 15 | AIR QUALITY MONITORING AND PRESERVATION | Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars. | PPs Submission | The ventilation system of motor houses and oil Cellars has been designed as such that no air accumulation will be there during any emergency. Predominant wind direction has been considered while designing the same. Exhaust fans of 10 |

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| | | | | times of the volume of the room has been installed at each room. These best practices will be followed in construction work of the proposed expansion project as well. Complied Attachment:NA |
| 16 | WATER QUALITY MONITORING AND PRESERVATION | AND 24x7 continuous effluent | PPs Submission | We have an EQMS system installed in our ETP of capacity 65 KLD (Two units of 15 & 50 KLD) to monitor the standard of effluent and the system is being calibrated periodically through authorized labs. The real time report of the online data transmission is attached as Annexure . Complied Attachment: Click to View |
| | Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) 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 recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. | | | |
| 17 | 7 WATER QUALITY MONITORING AND PRESERVATION 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 recognized | PPs Submission | During quarterly monitoring the ground water samples are collected and analyzed through authorized labs and will continue the monitoring after the expansion project. The monitoring report is attached as Annexure . Complied Attachment: Click to View | |
| | | under Environment (Protection) Act, 1986 and NABL accredited laboratories. | | |

| 18 | WATER QUALITY MONITORING AND PRESERVATION | Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards. | PPs Submission | The STP is under designing stage which will suffice the proposed expansion project as well. It will be in operation within 6 months. Being Complied Attachment:NA |
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| 19 | WATER QUALITY MONITORING AND PRESERVATION | 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. | PPs Submission | Garland drains and collection pits have/will be/been constructed for each stock pile and during the monsoon the surface runoff is being collected and treated prior to disposal. Photographs are attached as Annexure . Complied Attachment: Click to View |
| 20 | WATER QUALITY MONITORING AND PRESERVATION | Tyre washing facilities shall be provided at the entrance of the plant gates. | PPs Submission | We have already installed a wheel washing system in our dispatch gate to wash the tyres of the vehicles. Photograph of the same is attached as Annexure A. Also one more no. of wheel washing system is already under procurement and will be installed within 4 months. The PO copy has already been issued in favor of Excel combine which is attached as Annexure B. Complied Attachment: Click to View |
| 21 | WATER QUALITY MONITORING AND PRESERVATION | Water meters shall be provided at the inlet to all unit processes in the steel plants. | PPs Submission | Water meter has been installed at our inlet and the same practice will be continued during the execution of the proposed expansion project as well. Complied Attachment:NA |
| 22 | Noise Monitoring & Prevention | Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) | PPs Submission | Noise Pollution is/will be/being monitored during the quarterly monitoring at 5 different locations and the report is |

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| | | Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report. | | attached as Annexure . Complied Attachment: Click to View |
| 23 | ENERGY PRESERVATION MEASURES | Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles. | PPs Submission | Ladles with proper covers are/will be/being used to restrict the decrease in temperature of the hot metal. Complied Attachment:NA |
| 24 | ENERGY PRESERVATION MEASURES | Restrict Gas flaring to < 1%. | PPs Submission | During emergency, when pressure is higher it automatically opens up the Emergency Valve and the gas is being flared. We are not using the flaring system in any other time except emergency situation restricting it to <1%. The same practice will be followed for blast furnace as well during operation. Currently its not been established. Complied Attachment:NA |
| 25 | ENERGY PRESERVATION MEASURES | 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 | PPs Submission | We have installed a solar power plant having annual capacity of 3.1 MW. The solar power is being utilized in lighting the common areas of Admin Building, and street lights, parking around project area. Solar Panel will be installed on the rooftop of all buildings of the proposed expansion project. Photographs are attached as Annexure. Complied Attachment: Click to View |
| | project area and maintain the same | | rooftop of all buildings of the proposed expansion proje Photographs are attached as Annexure. Complied | |

| 26 | ENERGY PRESERVATION MEASURES | Provide LED lights in their offices and residential areas. | PPs Submission | LED lights at all sections have been installed and will be implemented in the proposed expansion as well. Complied Attachment:NA |
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| 27 | ENERGY PRESERVATION MEASURES | Ensure installation of regenerative/ recuperative type burners on all reheating furnaces. | PPs Submission | Online hot metal transfer system has been implemented in order to restrict the heat loss during transfer of the same. Complied Attachment:NA |
| 28 | WASTE MANAGEMENT | Kitchen waste shall be composted or converted to biogas for further use. | PPs Submission | Keeping in view of the expansion proposal as well we have released purchase order for installation of Composting unit of 70 kg/Day. It will be completed within a period of 2 months. The PO Copy in favour of Open Path Ventures is attached as Annexure. Complied Attachment: Click to View |
| 29 | GREENBELT | Green belt shall be developed in an area equal to 33% of the plant area with native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant. | PPs Submission | Total of 138755 nos. of trees have been planted in 55.56 ha out of 166.269 (existing land) as green belt plantation. Total of 2,00,025 trees will be planted in 80.01 ha (out of 180.789 ha proposed land) as green belt in 3 years. Total green belt will be 135.57 ha (39.06 %) of total plant area (347.058 ha). Thick greenbelt has been developed all along the periphery of the plant. Details are attached as Annexure . Complied Attachment: Click to View |
| 30 | GREENBELT | The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same | PPs Submission | The GHG report is being prepared by a reputed institute i.e M/s Centre for Envotech and Management Consultancy Pvt Ltd and the report of the same is attached as Annexure A. The |

| | | including carbon sequestration by trees in the plant premises. | | action plan to implement the Carbon Sequestration initiatives is prepared and attached as Annexure B . Complied Attachment: Click to View |
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| 31 | GREENBELT | Project proponent shall submit a study report on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/assessments should be measurable and monitorable with defined time frames. | PPs Submission | As per the report being submitted by M/s Centre for Envotech and Management Consultancy Pvt Ltd. under section 1.12, few mitigation measures have been suggested for the Carbon Sequestration program. Accordingly we have prepared a time bound action plan which is attached as Annexure . Complied Attachment: Click to View |
| 32 | PUBLIC HEARING | Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented. | PPs Submission | The Work Order in favour of KD Engineering has already been floated to prepare an Onsite Emergency Plan as per the existing units and the final report will be submitted to the Ministry in due time. The WO copy is attached as Annexure. The disaster management plan is prepared in accordance with the DDMP, Sambalpur. We will implement the same as necessary. Complied Attachment: Click to View |
| 33 | PUBLIC HEARING | The project proponent shall carry out heat stress analysis for the workmen who work in high | PPs Submission | The service order of the heat stress analysis has already been floated in favour of Sun Consultancy an authorized organization by Factory & Boilers Office, Sambalpur. The |

| 40 | | | view Comp | mance |
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| | | temperature work zone and provide Personal Protection Equipment (PPE) as per the norms. | | work has already been started and the reconnaissance survey has been completed. The final report will be submitted to the ministry. The WO copy is attached as Annexure . Complied Attachment: Click to View |
| 34 | PUBLIC HEARING | Occupational health surveillance of the workers shall be done on a regular basis and records maintained. | PPs Submission | The health check up camp has been organized in our organization from dt.25.11.2023 to 5.12.2023. Various physical tests like ECG, Blood pressure, Spirometry etc. have been done to monitor fitness status of the employees. Total 1012 nos. of employees has been participated in the Health check up program. The details have been attached as Annexure . The health record is being maintained. Complied Attachment: Click to View |
| 35 | Corporate Environmental Responsibility | The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. | PPs Submission | The public hearing issues will be complied as per the provisions mentioned in the said OM of MoEF&CC. The timeline as committed to the Ministry will be adhered to. The CER activities carried out in this period is attached as Annexure along with the photograph. Being Complied Attachment: Click to View |
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| 36 | MISCELLANEOUS | 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 | PPs Submission | The information has been made public by advertising regional newspaper "Pratidin" and "The Statesman" on Dt. 24.08.2022. The news paper cutting is attached as Annexure. The EC copy has also been displayed in the company's website. Website link: https://www.shyammetalics.com/wp-content/uploads/2023/09/Environmental-Clearance-EC-Orrisa-Sambhalpur.pdf Complied Attachment: Click to View |
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| | | project proponent's website permanently. | | |
| 37 | MISCELLANEOUS | 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. | PPs Submission | The copy of EC has been circulated to the Tehsildar Office and the receiving copy is attached. Receiving copy of the same is attached as Annexure . Complied Attachment: Click to View |
| | | | | |
| 38 | MISCELLANEOUS | 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. | PPs Submission | Noted. The half-yearly compliance will be submitted to MoEF & CC along with the monitoring data & the same will also be displayed on the company's website: https://www.shyammetalics.com/investors/environment/ Being Complied Attachment:NA |
| 39 | MISCELLANEOUS | The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and | PPs Submission | The CEMS stations have been installed for the measurement of criteria pollutants namely PM10, SO2, NOx for both ambient as well as stack. A display board has been set up at the entrance of Gate no.1. Photographs of the display board is attached as Annexure . |

| | | display the same at a convenient location for disclosure to the public and put on the website of the company. | | Complied Attachment: Click to View |
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| 40 | MISCELLANEOUS | 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. | PPs Submission | Noted. The Six Monthly compliance is being uploaded on the Parivesh Site with due diligence for the period of Oct-March 2024 and the same practice will be continued to do so. Complied Attachment:NA |
| 41 | MISCELLANEOUS | 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. | PPs Submission | The environmental statement for 2022-2023 financial year in Form-V is attached here as Annexure and will continue the same after expansion. Website link: https://www.shyammetalics.com/wp-content/themes/shyam/assets/investors/environment-clearance/Env-Statement-22-23.pdf Complied Attachment: Click to View |
| 42 | MISCELLANEOUS | 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. | PPs Submission | EC has been obtained dated 16 August, 2022 and the valid CTE is attached and for all operational units CTO has been obtained & attached. Information regarding production has been given timely. Our expansion is totally based on internal accrual; therefore financial closure is not required. Complied Attachment:NA |
| 43 | MISCELLANEOUS | 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 | PPs Submission | Noted. All the commitments made during the Public Hearing and also during the EC Presentation will be followed as per the time frame. |

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| | | during their presentation to the Expert Appraisal Committee. | | Being Complied Attachment:NA |
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| 44 | MISCELLANEOUS | 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). | PPs Submission | Noted. No further expansion or modifications in the plant will be done prior to obtaining the approval from MoEF&CC. Complied Attachment:NA |
| 45 | MISCELLANEOUS | The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain. | PPs Submission | Noted. All the information related to environment related expenditure, expenditure related to Action Plan on the PH issues will be displayed and will be kept updated in the company website. https://www.shyammetalics.com/investors/environment/ Complied Attachment:NA |
| 46 | MISCELLANEOUS | 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. | PPs Submission | Noted. All the data to be provided will be strictly adhered to the best practices and no false information will be submitted. Complied Attachment:NA |
| 47 | MISCELLANEOUS | The Ministry may revoke or suspend the clearance, if implementation of any of the | PPs Submission | Noted. Due care will be taken to implement all the conditions stipulated here. |

| | | above conditions is not satisfactory. | | Agreed to Comply Attachment:NA |
|----|----------------------|--|----------------|--|
| 48 | MISCELLANEOUS | The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions. | PPs Submission | Noted and will follow any additional condition if given by the respected authority. Complied Attachment:NA |
| 49 | MISCELLANEOUS | 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 | PPs Submission | Noted. Cooperation in the fully extended manner will be provided to the Regional Office by furnishing the requisite data / information/monitoring reports. Agreed to Comply Attachment:NA |
| 50 | AMEGEL ANEQUE | | | |
| 50 | MISCELLANEOUS | 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. | PPs Submission | Noted. Will respect Honorable NGT in this regard. Agreed to Comply Attachment:NA |
| 51 | WASTE MANAGEMENT | Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area. | PPs Submission | The collected used oil is stored in a container temporarily on the specific unit and immediately it being transported to the central Store for further disposal of the same to an authorized processor. We are implementing the same and follow after expansion of project. Complied Attachment:NA |
| 52 | Statutory compliance | The company shall have a well laid down environmental policy duly approve by the Board of Directors. | PPs Submission | As per the EC condition the policy has been prepared. Copy of the Board resolution for Env. Policy is attached as |

| | | 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 | | Annexure. Complied Attachment: Click to View |
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| 53 | Statutory compliance | 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. | PPs Submission | M/s. Shyam Metalics & Energy Limited has well established cell for Environmental management like implementation of all the conditions stipulated in EC & CTO, monitoring of all APCD & Waste Water Treatment plant Essentially, this department has been responsible for monitoring of the environmental pollution levels by measuring fugitive emissions, ambient air quality, water and effluent quality, noise level, greenbelt, statutory environmental compliances etc., either departmentally or by appointing external agencies wherever necessary. In case, the monitored results of environmental pollution are found to exceed the allowable values, the EMC recommends remedial actions and ensure that the same are implemented through the concerned plant authorities. We have a dedicated team for the maintenance of all OCEMS, EQMS & AQMS stations. The Core team of Environment Comprises of below Mentioned Persons who report directly to the Director of the organization in case of any non-compliance of statutory requirements. Mr. Anup Kumar Sahu Mr. Tanmaya Kumar Patel Mr. Rajesh Mishra |

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Complied Attachment:NA

Document uploaded by the PP

Last Site Visit Report NA (if available)

Last Site Visit Report
Date (if available)

Additional
Attachment (if any)

NA

Additional Remarks (if any)

I 'M/s. Shyam Metalics and Energy Limited' hereby give undertaking that the data and information given in the filed compliance and enclosures are true to be best of my knowledge and belief and I am aware that if any part of the data and information found to be false or misleading at any stage, the clearance given to the project will be revoked at our risk and cost. In addition to above, I hereby give undertaking that no activity such as change in project layout, construction, expansion, etc. has been taken up without due approval.

Cover Letter From RO/SRO

Cover Letter From NA

RO/SRO

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