# GOVERNMENT OF INDIA <br> MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (IA DIVISION-INDUSTRY-1 SECTOR) 

Dated: 05.05.2023

Date of Zero Draft MoM sent to EAC: 04.05.2023
Approval by Chairman:05.05.2023
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# MINUTES OF THE $29{ }^{\text {TH }}$ EXPERT APPRAISAL COMMITTEE (INDUSTRY-1 SECTOR) MEETING HELD ON $1^{\text {ST }}$ MAY, 2023 

## Venue: Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110003 through Video Conferencing

## Time: 10:30 AM onwards

## DAY: MAY 1, 2023 [MONDAY]

## (i) Opening Remarks by the Chairman, EAC

Shri. Rajive Kumar, Chairman EAC welcomed the Committee members and opened the EAC meeting for further deliberations.

Shri. Rajive Kumar also appreciated the efforts of the Ministry's Team (Industry 1 Sector) for preparation and uploading the agenda of the EAC meetings and draft record of discussion very scientifically, systematically and timely on Parivesh Portal.
(ii) Details of Proposals and Agenda by the Member Secretary

Dr. R. B. Lal, Scientist 'F' \& Member Secretary, EAC (Industry-1 Sector) appraised to the Committee about the details of Agenda items to be discussed during this EAC meeting.
(iii) Confirmation of the Minutes of the $26^{\text {th }}$ Meeting of the EAC (Industry-1 Sector) held during $12^{\text {th }}, 13^{\text {th }}$ and $17^{\text {th }}$ April, 2023 at MoEF \&CC through VC.

The EAC, having taken note that final minutes were issued after incorporating comments offered by the EAC (Industry-1 Sector) members on the minutes of its $2 \mathbf{2 6}^{\text {th }}$ Meeting of the EAC (Industry-1 Sector) held during $\mathbf{1 2}^{\text {th }}$, $\mathbf{1 3}^{\text {th }}$ and $\mathbf{1 7}^{\text {th }}$ April, 2023 conducted through Video Conferencing, and noted that there is some modifications/factual correction, in the minutes of the $26^{\text {th }}$ EAC meeting for the project/activities which are incorporated in the minutes in Agenda No.
29.5. Also, there is some modifications/factual correction, in the minutes of the $23^{\text {rd }}$ EAC meeting for the project/activities which are incorporated in the minutes in Agenda No. 29.4.

Details of the proposals considered during the $29^{\text {th }}$ meeting conducted through Video Conferencing, deliberations made and the recommendations of the Committee are explained in the respective agenda items as under:

## Consideration of Environmental Clearance Proposals

## Agenda No. 29.1

29.1 Expansion in existing steel manufacturing unit from existing capacity of 1,12,000 TPA (Hot Roll) of Steel Ingots/Billets/Rods and 45,000 TPA of Round, TMT Bars, wire rod, Flats and structural steel to 3,50,000 TPA of Steel Ingots/Billets/Rods (Hot Roll) and 3,40,000 TPA of Round, TMT Bars, wire rod, Flats and structural steel through re-heating by M/s Prime Steel Processors, located at Village- Jandiali, Budhewal road, Tehsil - Kum Kalan, District- Ludhiana, Punjab- Consideration of Environmental Clearance.
[Proposal No. IA/PB/IND1/421295/2023; File No. IA-J-11011/185/2013-IA-II(IND-I)]
[Consultant: Chandigarh Pollution Testing Laboratory; Valid up to: 12.02.2025]
29.1.1 M/s Prime Steel Processors has made an online application vide proposal NoIA/PB/IND1/421295/2023 along with copy of EIA report and Forms (Part A, B and C) and certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a) Metallurgical industries (ferrous \& non-ferrous) under Category "B" of the schedule of the EIA Notification, 2006 and attracts general condition due to project falls at a distance of 3.89 km from boundary of Critical Polluted Area, Ludhiana Punjab, and therefore being appraised at Central Level.
29.1.2 Name of the EIA consultant: M/s. Chandigarh Pollution Testing Laboratory [List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2225/RA0250; valid upto 12.02.2025, as on April 29, 2023].

## Details submitted by Project proponent

29.1.3 The details of the ToR are furnished as below:

| Date of <br> Application | Consideration | Details | Date of <br> Accord | ToR <br> Validity |
| :---: | :---: | :---: | :---: | :---: |
| $05^{\text {th }}$ June, <br> 2021 | Standard Terms of <br> Reference issued | Terms of Reference | $08^{\text {th }}$ June, | 07.06 .2025 |
| $24^{\text {th }}$ |  |  |  |  |
| December, | Reconstitute Expert <br> 2021 | Amendment in <br> Appraisal Committee <br> (Industry-I) during its <br> $51^{\text {st }}$ meeting held on <br> $11^{\text {th }}-12^{\text {th }}$ January, 2022 | $27^{\text {th }}$ January, |  |

29.1.4 The project of M/s Prime Steel Processors, located at Village- Jandiali, Budhewal road, Tehsil - Kum Kalan, District- Ludhiana, Punjab is for expansion in existing steel manufacturing unit from existing capacity of 1,12,000 TPA (Hot Roll) of Steel Ingots/Billets/Rods and 45,000 TPA of Round, TMT Bars, wire rod, Flats and structural steel to $3,50,000$ TPA of Steel Ingots/Billets/Rods (Hot Roll) and 3,40,000 TPA of Round, TMT Bars, wire rod, Flats and structural steel through re-heating.
29.1.5 Environmental Site Settings:

| S. No. | Particulars | Details submitted by the PP |  |
| :---: | :---: | :---: | :---: |
| i. | Total land | The existing project area is 11 acres and while obtaining TORs it was proposed to add additional 1.6 acres of land area to make total project of 12.6 acres. Since, it is an existing unit and in order to have proper spacing for parking of vehicles and greenbelt, the industry has to purchased 2.23 acres of land area adjoining to the industrial premises to make total area of 14.83 acres. With this additional area PP has managed to develop $40 \%$ of 14.83 acres of land area as greenbelt/area. The additional 2.23 acres of land area now added has been developed as greenbelt. |  |
| ii. | Land acquisition details as per MoEF\&CC O.M. dated 7/10/2014 | Land acquisition is completed. |  |
| iii. | Existence of <br> habitation $\&$ <br> involvement of <br> R\&R, if any.  | As this is brownfield project, the project doesn't involve any displacement of population and subsequent Rehabilitation \& Resettlement. For expansion, land measuring 3.83 acres had already been acquired and the employment will be hired from local areas. |  |
| iv. | Latitude and Longitude of theproject site | Latitude | $30^{\circ} 52^{\prime} 58.53^{\prime \prime} \mathrm{N}, 30^{\circ} 53^{\prime} 02.30^{\prime \prime} \mathrm{N}$, $30^{\circ} 53^{\prime} 02.33^{\prime \prime} \mathrm{N}, 30^{\circ} 52^{\prime} 54.66^{\prime \prime} \mathrm{N}$, $30^{\circ} 52^{\prime} 54.61^{\prime \prime} \mathrm{N}, 30^{\circ} 52^{\prime} 56.52^{\prime \prime} \mathrm{N}$ $75^{\circ} 59^{\prime} 34.73^{\prime \prime} \mathrm{E}, 75^{\circ} 59^{\prime} 47.97^{\prime \prime} \mathrm{E}$, $75^{\circ} 59^{\prime} 52.61^{\prime \prime} \mathrm{E}, 75^{\circ} 59^{\prime} 51.00^{\prime \prime} \mathrm{E}$, $75^{\circ} 59^{\prime} 39.40^{\prime}$ " $75^{\circ} 59^{\prime} 34.65^{\prime \prime} \mathrm{E}$ |
| v. | Elevation of the project site | 253.6 m |  |
| vi. | Involvement of Forest land if any. | No forest land is involved. |  |
| vii. | Water body exists within the projectsite as well as study area | Project site: Nil <br> Study area: <br> Sirhind Canal - 8.7 km , <br> Buddha Nallah - 4.3 km , |  |
| viii. | Existence of ESZ/ESA/national park/wildlife sanctuary/biosphere reserve/tiger |  |  |


| S. No. | Particulars | Details submitted by the PP |
| :--- | :--- | :--- |
|  | reserve/elephant <br> reserve etc. if any <br> within the study area |  |

29.1.6 The existing project was accorded environmental clearance vide letter no. J-11011/185/2013-IA $\mathrm{II}(\mathrm{I})$ dated $14^{\text {th }}$ October, 2015 for expansion of steel manufacturing unit (Induction Furnace from $2 \times 4.5$ TPH to $2 \times 10 \mathrm{TPH}$ and Rolling Mill - 1x10 TPH) for production of MS Ingots - 1, 12,000 TPA and Wire Rods $-45,000$ TPA. The industry has valid CTO's from Punjab Pollution Control Board. CTO under water act vide no. CTOW/RENEWAL/LDH1/2020/12614507 dated 08.06.2020 valid up to 31.03.2024. CTO under Air act vide no. CTOA/RENEWAL/LDH1/2020/12614470 dated 08.06.2020 valid up to 31.03.2024.
29.1.7 Implementation status of existing EC:

| S. <br> No. | Facilities | Units | $\begin{gathered} \hline \text { As per } \\ \text { EC } \\ \text { dated } \end{gathered}$ | Implementation status | $$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Induction | 2x10 | 2x10 | Operational | 1,12,000TPA |
|  | furnace | TPH | TPH |  |  |
|  | Magnetic Transfer System | 2 | 2 | Not Operational |  |
|  | Rolling Mill | 1 | 1 |  |  |
|  | Heating <br> furnace <br> (oil <br> Fired) | 1 | 1 | Operational |  |
|  | Over <br> Head <br> Cranes | 2 | 2 | Operational |  |
|  | Gassifier | 1 | 1 | Not Operational |  |

29.1.8 The unit configuration and capacity of exisiting and proposed project is given as below:

| $\begin{gathered} \text { S. } \\ \text { No. } \end{gathered}$ | Particulars | Existing (As per EC dated 14/10/2015) | Proposed Units | Total after expansion |
| :---: | :---: | :---: | :---: | :---: |
| A | EXISTING \& PROPOSED CAPACITY |  |  |  |
| 1 | Induction Furnace | $\begin{array}{lr} \hline 2 \times 10 \mathrm{TPH} & \\ 1 \times 4.5 \mathrm{TPH} \text { (To be } \\ \text { Replaced) } & \& \\ \text { Concast } & \\ \hline \end{array}$ | $2 \times 30 \mathrm{TPH} \& 1 \mathrm{x} 12 \mathrm{TPH}$ (LRF - 1x30 TPH and conCAST) | $2 \times 25 \mathrm{TPH} \& 1 \mathrm{x} 12 \mathrm{TPH}$ (LRF - 1x30 TPH and conCAST) |


| S. <br> No. | Particulars | Existing (As per <br> EC dated <br> $\mathbf{1 4 / 1 0 / 2 0 1 5 )}$ | Proposed Units | Total after expansion |
| :---: | :--- | :---: | :---: | :---: |
| 2 | Reheating (Oil <br> Furnace (Oil <br> Fired) | On no. of 10TPH | Increase the capacity of <br> Reheating Furnace <br> $(1 \mathrm{x} 40 \mathrm{TPH})$ | $1 \times 40 \mathrm{TPH}$ |
| B | PRODUCTS |  |  |  |
| 1 | Steel <br> Ingot/Billets <br> (TPA) <br> 2 | Rounds, TMT <br> Bars, wire rode, <br> Flats and <br> structural steel | $4,12,000$ | $2,38,000$ |

## Note:

- As per TOR, it was proposed to enhance the capacity of unit by replacing existing 3 no. Induction furnaces ( $2 \times 10 \mathrm{TPH}$ and $1 \times 4.5 \mathrm{TPH}$ ) with two no Induction furnaces of capacity 25 TPH each and one no with 12 TPH Induction Furnace, one LRF of 30TPH capacity, Concast and to enhance the capacity of rolling mill 8 TPH to 40 TPH . Since, the unit is manufacturing special steel for which the main thrust is the composition of the steel. In order to get required composition of the special steel, the heat time required will be more than the ordinary steel melting and casting through an Induction furnace.
- Therefore, after discussing matter with experts and technology advancement in the Induction furnaces, it has been felt to install two number of Induction Furnaces of capacity 30 TPH capacity each instead of two number 25 TPH capacity each in order to increase the heating/melting/holding period of molten metal without increase in the production capacity for which the TORs have been issued the MoEF. By doing so the power rating will not increase as 12 MW power will require for $2 \times 25 \mathrm{TPH}$ Induction Furnaces and same power load will be required for $2 \times 30 \mathrm{TPH}$. However, due to increase in the batch size, total consumables per heat will reduce to significant extent resulting into reduction in the cost to be incurred for each heat.
- Thus, after expansion, production capacity will be $3,50,000 \mathrm{TPA}$ of Steel Billets/Ingots/Rods (Hot roll) by operating $2 \times 30$ TPH \& $1 \times 12$ TPH Induction Furnace and $3,40,000$ TPA of Rounds, TMT Bars, wire rod, Flats and structural steel through re heating with the proposed rolling mill.
29.1.9 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

| S.No. | Raw <br> material | Quantity required per annum |  | Source | Distance <br> in TPA | Mode of <br> from <br> Site | (ransportation |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Existing | Expansion | Total |  |  |  |  |
| 1. | MS <br> Scrap <br> (TPA) | $1,20,960$ | $2,56,340$ | $3,77,300$ | Local and <br> International <br> markets | 100 Km | By Road |
| 2. | Ferro- <br> alloys <br> (TPA) | 1200 | 2300 | 3500 |  |  |  |

29.1.10 The total water requirement of the project is estimated at 513 KLD . Domestic water requirement is 21.0 KLD and for cooling purposes is 492 KLD . The daily requirement of water will be met
through the Ground Water, for which application to PWRDA has already been filled on dated $02^{\text {nd }}$ February, 2023.
29.1.11 The total power requirement for the proposed project is estimated as $41,000 \mathrm{kVA}$. The demand of electricity will be sourced from Punjab State Power Corporation Limited (P.S.P.C.L.).
29.1.12 Baseline Environmental Studies:

| Period | January to March, 2020 |
| :---: | :---: |
| AAQ parameters at 8 locations | - $\quad$ PM10 $=75.1$ to $95.4 \mu \mathrm{~g} / \mathrm{m} 3$ <br> - PM2.5 = 35.1 to $52.4 \mu \mathrm{~g} / \mathrm{m} 3$ <br> - $\mathrm{SO} 2=8.2$ to $12.5 \mu \mathrm{~g} / \mathrm{m} 3$ <br> - $\mathrm{NO} 2=25.1$ to $32.5 \mu \mathrm{~g} / \mathrm{m} 3$ <br> - $\mathrm{CO}=0.41$ to $0.60 \mathrm{mg} / \mathrm{m} 3$ |
| AAQ modelling (Incremental GLC) | For PM <br> The maximum predicted GLC for 24 hourly average concentrations after the proposed expansion at site shall be $5.58 \mathrm{ug} / \mathrm{m} 3$. The maximum predicted concentration of PM10 after unit operation will be $95.4 \mathrm{ug} / \mathrm{m} 3$ which is below the prescribed standard of $100 \mathrm{ug} / \mathrm{m} 3$. |
| Period | Mid-September-Mid October, 2021 |
| AAQ parameters at 8 locations | - $\mathrm{PM}_{10}=73.7$ to $92.4 \mu \mathrm{~g} / \mathrm{m}^{3}$ <br> - $\mathrm{PM}_{2.5}=35.2$ to $55.8 \mu \mathrm{~g} / \mathrm{m}^{3}$ <br> - $\mathrm{SO}_{2}=8.1$ to $13.3 \mu \mathrm{~g} / \mathrm{m}^{3}$ <br> - $\mathrm{NO}_{2}=22.6$ to $35.4 \mu \mathrm{~g} / \mathrm{m}^{3}$ <br> - $\mathrm{CO}=0.51$ to $0.65 \mathrm{mg} / \mathrm{m}^{3}$ |
| AAQ modelling (Incremental GLC) | For PM <br> The maximum predicted GLC for 24 hourly average concentrations after the proposed expansion at site shall be $3.86 \mathrm{ug} / \mathrm{m}^{3}$. The maximum predicted concentration of $\mathrm{PM}_{10}$ after unit operation will be $93.68 \mathrm{ug} / \mathrm{m}^{3}$ which is below the prescribed standard of $100 \mathrm{ug} / \mathrm{m}^{3}$. |
| Ground water quality at 8 locations | January-March, 2020 <br> pH- 7.21-7.42 <br> Total Hardness: 210-246 mg/l <br> Fluorides: $1.00-1.20 \mathrm{mg} / \mathrm{l}$ <br> Chlorides: 12.0 to $18.0 \mathrm{mg} / \mathrm{l}$ <br> Total Dissolved Solids: 310-341 mg/l <br> Heavy metals arewithin the limits. <br> Mid-September-Mid October, 2021 <br> pH- 7.21-7.98 <br> Total Hardness: 218-280 mg/l <br> Fluorides: $1.1-1.4 \mathrm{mg} / \mathrm{l}$ <br> Chlorides: 14.9 to $24.6 \mathrm{mg} / \mathrm{l}$ <br> Total Dissolved Solids: $320-354 \mathrm{mg} / \mathrm{l}$ <br> Heavy metals arewithin the limits. |
| Surface water quality at 2 locations | January-March, 2020 <br> Sirhind Canal <br> pH of the surface water collected ranged from $7.84-7.88$ <br> TDS was found to be $298-320 \mathrm{mg} / \mathrm{l}$. The tolerance limit is $1,500 \mathrm{mg} / \mathrm{l}$ as per IS:2296 <br> Total hardness was found to be $136-142 \mathrm{mg} / \mathrm{l}$. |


|  | Total Coliform in water was $550-889$ MPN/100ml. The likely source of bacteriological contamination may be due to the proximity to residential area <br> All the heavy metals were not detectable. <br> Buddha Nallah <br> pH of the surface water collected ranged from 7.62-7.82. <br> TDS was found to be $984-1120 \mathrm{mg} / \mathrm{l}$. The tolerance limit is $1,500 \mathrm{mg} / \mathrm{l}$ as per IS:2296 <br> Total hardness was found to be $520-580 \mathrm{mg} / \mathrm{l}$. <br> Total Coliform in water was $14000-20000$ MPN/100ml. The likely source of bacteriological contamination may be due to discharge of untreated/partially treated /treated sewage being only the source for discharge of sewage for Ludhiana city. <br> All the heavy metals were not detectable. <br> Mid-September-Mid October, 2021 <br> pH of the surface water collected ranged from 7.87-7.96. <br> TDS was found to be $788-910 \mathrm{mg} / \mathrm{l}$. The tolerance limit is $1,500 \mathrm{mg} / \mathrm{l}$ as per IS:2296 <br> Total hardness was found to be $470-530 \mathrm{mg} / \mathrm{l}$. <br> Total Coliform in water was $18000-24000 \mathrm{MPN} / 100 \mathrm{ml}$. The likely source of bacteriological contamination may be due to discharge of untreated/partially treated /treated sewage being only the source for discharge of sewage for Ludhiana city. <br> All the heavy metals were not detectable. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Noise levels at 8 locations | January-March, 2020 <br> Noise levels in the study area vary from 50.4 to 72.1 dB (A) during day time and 42.5 to $65.8 \mathrm{~dB}(\mathrm{~A})$ at night time. The highest levels were observed at Project Site. <br> Mid-September-Mid October, 2021 <br> Noise levels in the study area vary from 51.6 to 71.4 dB (A) during day time and 41.2 to $68.6 \mathrm{~dB}(\mathrm{~A})$ at night time. The highest levels were observed at Project Site. |  |  |  |  |  |
| Traffic assessment study findings | From the traffic study, it is inferred with the proposed expansion coming into being an average 54 trucks/day each @ 20 ton will be added to the existing traffic. The traffic study on both sides was conducted by physical count of the vehicles for 24 hrs . From the traffic study it is observed that, there will be insignificant impact on the link road due to proposed expansion, and the existing road network is sufficient to cater the load. <br> Existing Traffic Scenario \& LOS-Point 'A' |  |  |  |  |  |
|  | Road | V | C | V/C ratio | LOS | Performance |
|  | At junction of  <br> Sahibana - <br> Jiandali link <br> road and <br> Budhewal road  | 1460.5 | 5700 | 0.26 | B | Very good |
|  | Existing Traffic Scenario \& LOS-Point 'B' |  |  |  |  |  |
|  | Road | V | C | V/C ratio | LOS | Performance |
|  | On Budhewal | 631.5 | 1800 | 0.35 | B | Very good |


|  | Road |  |
| :--- | :--- | :--- | :--- | :--- |
| Flora and fauna | None of reported species in study area belongs to Rare, Endangered or <br> Threatened category, and as per Indian Wild Life (Protection) Act, 1972, no <br> Schedule-I species were found during study period. |  |

29.1.13 The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

| S. No. | Waste | Source | Quantity | Disposal |
| :---: | :---: | :---: | :---: | :--- |
| 1. | APCD <br> Dust | Induction <br> Furnace | 3.2 TPD | Shall be given to authorized M/S Bhawani <br> Chemicals/M/s Madhav Alloys/ M/s Joginder <br> Castings Pvt. Ltd. for metal recovery. |
| 2 | Furnace <br> Slag | Induction <br> Furnace | 61.0 TPD | Slag is/will be sent to cement manufacturing <br> plant for final use. |
| 3 | Used Oil | DG sets | 0.8 <br> Kl/Annum | Will be re-used as lubricants for machines |

29.1.14 Public Consultation:

| Details of advertisement <br> given | Public hearing notice was published on 21.02.2022 in a prominent <br> newspapers namely 'Hindustan Times' and 'Punjabi Tribune'. |
| :--- | :--- |
| Date of public <br> consultation | Public hearing was conducted at project site on <br> $23^{\text {rd }}$ March,2022. |
| Venue | Village- Jandiali, Budhewal road, Tehsil- Kum Kalan, Ludhiana, Punjab |
| Presiding Officer | Additional Deputy Commissioner (General), Ludhiana |
| Major issues raised | The following issues were raised during public hearing <br> 1. Impact and Mitigation measures for air and water pollution <br> 2. Development of lawn in Government middle school of village <br> Budhewal, District Ludhiana |

Action plan as per MoEF\&CC O.M. dated 30/09/2020:

| Sr. | Physical Activity to be done | Timeline |  |  | Budget |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Installation of New APCD on | $1^{\text {st }}$ Year | $\begin{gathered} \mathbf{2}^{\text {nd }} \\ \text { Year } \\ \hline \end{gathered}$ | $\begin{gathered} 3^{\text {rd }} \\ \text { Year } \\ \hline \end{gathered}$ |  |
|  | Two Induction Furnace of 30 TPH | Bag filter house <br> containing  <br> membrane. PTFE | - | - | 250.0 |
|  | One Induction Furnace of 12 TPH | Bag filter house containing PTFE membrane. |  |  |  |
|  | Reheating Furnace of capacity 40 TPH | Double Cyclone followed by wet scrubber |  |  |  |


|  | DG Set of capacity 320 KVA | Stack of adequate <br> height |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| 2. | Development of lawn in Government <br> middle school of village Budhewal, <br> District Ludhiana. | Tree plantation | - | - | 4.0 |
| TOTAL COST ALLOCATED |  |  |  | $\mathbf{2 5 4 . 0}$ |  |

29.1.15 The capital cost of the project is Rs. 135 Crores including the cost of expansion (Rs. 90 Crores) and the capital cost for environmental protection measures is proposed as Rs 416 Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs 155.1 Lakhs. The proposed project will provide employment to total 450 number of people. The details of cost for environmental protection measures is as follows:

| Expenditure on Environment Measures (EMP- Cost) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| S.No. | Heading | Approximate Capital Cost (Rs Lakhs) | Approximate Recurring Cost (Rs Lakhs) | Basic of Cost Estimate |
| 1. | Air Pollution | 250.0 | 90.0 | Capital Cost: Dust Collection, Scrubber, Fume extraction system, Adequate stack APCD, OCEMS, etc. Recurring Cost: Cost of stock management, operations \& maintenance. |
|  | Fogger | 6.0 | 1.0 | For control of fugitive emissions to be generated during construction phase \& operational phase |
| 2. | Water Pollution | 40.0 | 25.0 | Capital Cost: Installation of ETP, STP, Manpower, Cost of chemicals, RWH \& Water Conservation measures <br> Recurring Cost: Effluent analysis, Maintenance of RWH structures, Waste water utilization etc. |
| 3. | Noise Pollution | 5.0 | 0.50 | Capital Cost: Installation of acoustic enclosures. <br> Recurring Cost: Monitory and Maintenance cost |
| 4. | Solid \& Hazardous Management | 10.0 | 1.5 | Capital Cost: Maintenance of TSDF, storage area for different type of wastes. <br> Recurring Cost: Cost of transportation \& storage of solid \& Hazardous waste. |
| 5. | Green Belt | 49.0 | 30.0 | Capital Cost: <br> development cost. Green belt <br> Recurring Cost: <br> maintenance cost Green belt |
| 6. | Occupational Health \& Safety | 50.0 | 5.0 | Capital Cost: Occupational Health center, PPE etc. |


| Expenditure on Environment Measures (EMP- Cost) |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| S.No. | Heading | Approximate <br> Capital Cost <br> (Rs Lakhs) | Approximate <br> Recurring <br> Cost (Rs <br> Lakhs) | Basic of Cost Estimate |  |
|  |  |  | Annual health checkup \& work place <br> monitory. |  |  |
| 7. | Environmental <br> Monitoring | -- | 2.0 | Environmental monitoring of Water, <br> Air, Noise and Soil through NABL <br> approved Laboratory |  |
| 8. | Energy Conservation | 2.0 | 0.10 |  |  |
| 9. | Issues raised during <br> public hearing | 4.0 | -- | Tree plantation and development of <br> lawn in the Government Middle <br> School of Village Budhewal |  |
| Total |  |  |  | $\mathbf{4 1 6 . 0}$ |  |

### 29.1.16 CEPI Guidelines compliances for CPA

In order to ameliorate the adverse environmental impacts of project for scientific development a comprehensive Environmental Management Plan (EMP) shall be prepared based on the existing environmental conditions, impacts appraisal and environmental prediction. The EMP will take care of formulation, implementation and the monitoring of environmental protection measures during the construction and operation of project. The project is located within 5 km of Critically Polluted Area, the terms for EIA study shall be as per the Ministry's OM vide F. No. 22-23/ 2018-IAIII(Pt) dated 31.10.2019 following are the additional measures taken as per the abovementioned OM:

| Air Pollution Control Measures | i. Pulse Jet Bag filter house having PTFE membrane bag filters, which will be cleaned with offline technology by compartmentalizing the bag filters, to achieve the emission standard of $30 \mathrm{mg} / \mathrm{N} \mathrm{m}^{3}$. <br> ii. Particulate matter (PM) standard at stack emission will be considered as $30 \mathrm{mg} / \mathrm{Nm}^{3}$ in place of $115 \mathrm{mg} / \mathrm{Nm}^{3}$. <br> iii. Online Continuous emissions monitoring system (OCEMS) will be installed to get the real time data of PM to be discharged into the Atmosphere. This OCEMS shall be got calibrated from time to time. This system shall be attached with the server of the PPCB/CPCB. <br> iv. For process emissions to be generated from the induction furnaces, side hood will be installed to collect the entire emissions. This hood will remain in position for suction of emissions even during charging of raw material in the furnaces. <br> v. Transportation of materials will be done through trucks. <br> vi. Induction furnace will run on electricity and HSD will be used as fuel in the DG sets, which will be used to supply the electricity for lightning purpose during failure of power supply. <br> vii. Best available Technology based Induction furnace will be installed. <br> viii. $40 \%$ i.e. 23325.33 sqm of the total project area ( 58313.34 sqm ) will be developed as green belt. However, being an environment friendly unit, 8224 no. of trees has already been planted conducive to local monitoring in association with renowned NGO 'Eco Sikh' in the mission 'Lungs of Ludhiana' striving to make Ludhiana the greenest city of Asia by adopting |
| :---: | :---: |


|  | ix. | 'Miyawaki Forest Methodology'. <br> 2325 trees will be planted in the left out area. |
| :--- | ---: | ---: | :--- |
| Water <br> pollution <br> control <br> measures | i.Treated domestic waste-water will be used for plantation within the <br> premises. |  |
| This industry doesn't use water in manufacturing process. Water is only |  |  |
| required for domestic purpose and cooling tower make-up. |  |  |
| The management of the M/s Prime Steel Processors desire to harvest |  |  |
| rain water falling on various rooftops of the building during monsoon |  |  |
| \& non-monsoon period to reuse that water for green belt within the |  |  |
| industry and also one pond of at Jandiali, Ludhiana |  |  |
| No waste-water will be thrown out-side the premises, it will follow ZLD |  |  |
| system. |  |  |
| Domestic waste-water generation is about 16.8 KLD, which will be |  |  |
| treated in STP of 25 KLD and the same water will be used for |  |  |
| plantation. |  |  |

29.1.17 Proposed greenbelt will be developed in $40 \%$ of project area. 8224 no. of trees has already been planted conducive to local monitoring in association with renowned NGO 'Eco Sikh' in the mission 'Lungs of Ludhiana' striving to make Ludhiana the greenest city of Asia by adopting 'Miyawaki Forest Methodology'. Additional 2325 trees will be planted in the left-out area. With the additional area PP has managed to develop $40 \%$ of 14.83 acres of project land area i.e. 5.932 acres as greenbelt/area. The additional 2.23 acres of land area now added has been developed as greenbelt.
29.1.18 It is submitted that there there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

## Certified compliance report from Regional Office MoEFCC:

29.1.19 The status of compliance of earlier EC was obtained from regional office, Chandigarh vide letter no. 5-455/2013-IRO/649-650-651-652 dated 06.02.2023 in the name of M/s Prime Steel Processors. The Action taken report regarding the partially/non-complied condition was submitted to Regional officer MoEF\&CC, Chandigarh vide letter dated NIL.

| S. No. | Observation of IRO | Action Taken / Reply of PP |
| :---: | :--- | :--- |
| 1. | Continuous Emission Monitoring <br> System has not been connected with <br> the PPCB and CPCB online <br> monitoring system [Sp Cond. No.(i)] | Continues Emission Monitoring system <br> has been installed, commissioned and the <br> process of connectivity to PPCB/CPCB <br> server is in progress. |
| 2. | The details of the plantation (e.g. area <br> covered, no. of plants planted, <br> species, expenditure etc.) have not <br> been submitted by the PP till date [Sp. <br> Cond. No. (viii)]. | A total of 8224 tree saplings of 33 different <br> varieties conducive to local climatic <br> conditions lrave been planted in an area of <br> $33 \%$ of the total area as per copy of <br> plantation details submitted. |
| 3. | PP has not submitted authorization <br> under HWMH rules copy of PLI has <br> not been Submitted yet. [GC No. (i)]. | Copy of authorization as required under <br> H.W.M Rules is submitted. |
| 4. | PP has not submitted the occupational <br> health surveillance system with the <br> details of the surveillance programe <br> adopted by the industry [GC No. (vi)]. | Details of Occupational Health \& Safety <br> being practiced in the unit is submitted. |
| 5. | Neither the copy of EC nor the <br> compliance reports were not found on <br> the PP's website [GC No. (xi)]. | Copy of EC and the EC compliance has <br> already been uploaded on the company <br> website for which the below mentioned <br> link may be referred |
| 6. | Six rnonthly compliance reports and <br> Environment Statement are not being <br> submitted to RO regularly [GC No. <br> (xii)] | Tttps://www.primesteels.in/compliance- <br> report.php. |
| The Six-monthly compliance repprt and |  |  |
| Environment Statement could not be |  |  |
| submitted due to the prevailing COVID-19 |  |  |
| Pandemic. However, the compliance report |  |  |
| for the last 6 month has already been sent |  |  |
| for which the compliance verification has |  |  |
| been undertaken on 13.12.2022. |  |  |

## Deliberations by the Committee

29.1.20 The Committee noted the following:

1. The instant proposal is for expansion in existing steel manufacturing unit from existing capacity of 1,12,000 TPA (Hot Roll) of Steel Ingots/Billets/Rods and 45,000 TPA of Round, TMT Bars, wire rod, Flats and structural steel to 3,50,000 TPA of Steel Ingots/Billets/Rods (Hot Roll) and 3,40,000 TPA of Round, TMT Bars, wire rod, Flats and structural steel through re-heating.
2. Initially as per TOR, it was proposed to enhance the capacity of unit by replacing existing 3 no. Induction furnaces ( $2 \times 10 \mathrm{TPH}$ and $1 \times 4.5 \mathrm{TPH}$ ) with two no. Induction furnaces of capacity 25 TPH each and one no with 12 TPH Induction Furnace, one LRF of 30TPH capacity, Concast and to enhance the capacity of rolling mill 8TPH to 40TPH. However due to technological reasons it is proposed to install two number of Induction Furnaces of capacity 30 TPH capacity each instead of two number 25 TPH capacity each in order to increase the heating/melting/holding period of molten metal without increase in the production capacity for which the TORs have been issued.
3. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
4. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
5. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The Committee deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The Committee suggested that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.
6. The existing project was accorded environmental clearance vide letter no. J-11011/185/2013-IA II(I) dated $14^{\text {th }}$ October, 2015 for expansion of steel manufacturing unit (Induction Furnace from $2 \times 4.5$ TPH to $2 \times 10$ TPH and Rolling Mill - $1 \times 10 \mathrm{TPH}$ ) for production of MS Ingots $-1,12,000$ TPA and Wire Rods $-45,000$ TPA. The industry has valid CTO's from Punjab Pollution Control Board. CTO under water act vide no. CTOW/RENEWAL/LDH1/2020/12614507 dated 08.06.2020 valid up to 31.03.2024. CTO under Air act vide no. CTOA/RENEWAL/LDH1/2020/12614470 dated 08.06 .2020 valid up to 31.03.2024.
7. The total project area is 14.83 acre. The existing project area is 11 acres and while obtaining TORs it was proposed to add additional 1.6 acres of land area to make total project of 12.6 acres. Since, it is an existing unit and in order to have proper spacing for parking of vehicles and greenbelt, the industry has to purchased 2.23 acres of land area adjoining to the industrial premises to make total area of 14.83 acres. With this additional area PP has
managed to develop $40 \%$ of 14.83 acres of land area as greenbelt/area. The additional 2.23 acres of land area now added has been developed as greenbelt.
8. The project site falls at a distance of 3.89 km from boundary of Critical Polluted Area, Ludhiana Punjab. PP has further submitted the compliance to CEPI guidelines. The EAC deliberated on the same and is of the opinion that the submitted action plan shall be strictly implemented.
9. The total water requirement of the project is estimated at 513 KLD which is proposed to be met through the Ground Water, for which application to PWRDA has already been filled on dated $2^{\text {nd }}$ February, 2023. The EAC is of the opinion that water permission shall be obtained from the Competent Authority prior to commencement of project.
10. The Committee has found that the baseline data and incremental GLC due to the proposed project and is of the view that mitigation measures as proposed shall be strictly implemented.
11. The PP has submitted that greenbelt will be developed in $40 \%$ of project area i.e. 5.932 acres. 8224 no. of trees has already been planted conducive to local monitoring in association with renowned NGO 'Eco Sikh' in the mission 'Lungs of Ludhiana' striving to make Ludhiana the greenest city of Asia by adopting 'Miyawaki Forest Methodology'. Additional 2325 trees will be planted in the left-out area. The additional 2.23 acres of land area now added has been developed as greenbelt. The EAC is of the opinion that remaining greenbelt ( $⿴ 囗 2500$ saplings/ha) shall be completed within $1^{\text {st }}$ year of grant of EC
12. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
13. The Committee also deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory.
14. The Committee deliberated on the certified compliance report of IRO and the action taken report and is of the opinion that the observations of IRO shall be completely addressed.
15. The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance.
16. The environmental clearance recommended to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/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. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction \& operation of the project.

## Recommendations of the Committee:

29.1.21 In view of the foregoing and after detailed deliberations, the committee recommended the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to the stipulation of following specific conditions and general conditions as per the Ministry's Office Memorandum No. 22-34/2018-III dated 9/8/2018 based on project specific requirements:

## A. Specific Condition:

i. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, or any direction issued by statutory body, if any, as may be applicable to this project.
ii. 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 relating to the project shall be implemented.
iii. 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 implementation report shall be submitted to the IRO, MoEF\&CC in this regard.
iv. In pursuance to MoEF\&CC OMs dated 31st October, 2019 \& 30th December, 2019 issued in compliance of the order of Hon'ble NGT in OA No. 1038/2018 dated 19 ${ }^{\text {th }}$ August, 2019, the compliance of all the conditions applicable to CEPI shall be implemented as per the submitted plan.
v. The water requirement for the project is 513 KLD which is proposed to be met through the Ground Water. Necessary permission shall be obtained from the Competent Authority in this regard. PP shall also explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.
vi. Rain water harvesting shall be implemented to recharge/harvest water as per the action plan submitted in the EIA/EMP report.
vii. TCLP analysis of the slag samples shall be carried out periodically. In case of presence of hazardous material, the same shall be sent to TSDF. In case of non-hazardous material, slag shall be utilized at project site for brick manufacturing and construction work after the recovery of metal.
viii. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Integrated Regional Office of the MoEF\&CC.
ix. Online stack monitoring system for IF and RHF shall be installed and monitoring report shall be submitted to the concerned Regional Office of the MoEF\&CC along with the six monthly compliance report.
x. Two online Continuous Ambient Air Quality Monitoring station shall be set up. The location of the CAAQMS shall be decided in consultation with the SPCB.
xi. All stockyards shall have impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains and catch pits to
trap the run off material and shall be implemented as per the action plan submitted in EIA/EMP report.
xii. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be implemented.
xiii. $\quad 85-90 \%$ of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil or LSHS as a fuel.
xiv. Low NOx Burners will be installed at Reheating Furnace for control of Gaseous emissions generated while using PNG.
xv. Following additional arrangements to control fugitive dust shall be provided:
a. Fog / Mist Sprinklers at all on bulk raw material storage area (at the transfer points) like Iron Ore, Coal and for Fly Ash and similar solid waste storage areas.
b. Proper covered vehicle shall be used while transport of materials.
c. Wheel washing mechanism shall be provided in entry and exit gates with complete recirculation system.
xvi. The particulate matter emissions from the process stacks shall be less than $30 \mathrm{mg} / \mathrm{Nm}^{3}$ and measures shall be undertaken as per the submitted action plan. Efficient Air monitoring equipment shall be installed.
xvii. Water Sprinklers/Water mist system shall be installed near raw material yards, operational units and other strategic locations to control fugitive emissions from the plant.
xviii. Bag filters shall be cleaned regularly and efficiency of bag filter system shall be monitored at regular intervals.
xix. The proposed project shall be designed as "Zero Liquid Discharge" Plant. ETP shall be installed and there shall be no discharge of effluent from the plant. Domestic effluent shall be treated in Sewage Treatment Plant. Suitable measures shall be adopted for sewage water handling to ensure no contamination of any kind of water body.
xx. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
xxi. Three tier Green Belt shall be developed in at least $40 \%$ of the project area 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. Survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. PP shall also emphasize on road side plantation. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF\&CC.
xxii. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
xxiii. All the commitments made towards socio economic development of the nearby villages shall be satisfactorily implemented. The action plan based on the social impact assessment study of the project as per the EMP in accordance to the Ministry's OM dated 30.09 .2020 shall be strictly implemented and progress shall be submitted to the Regional Office of MoEF\&CC. PP shall adopt nearby villages and prepare and implement a robust plan to develop them into model villages in next 10 years.
xxiv. The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has
issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on $12 / 08 / 2021$. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.
xxv. The project proponent shall adopt the Clean Air practices like mechanical collectors, wet scrubbers, fabric filters (bag houses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation. Controlling emissions related to transportation shall include emission controls on vehicles as well as use of cleaner fuels. Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be procured and operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere.

## B. General conditions:

## I. Statutory compliance:

i. 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/ 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.

## II. Air quality monitoring and preservation

i. The project proponent shall install $24 \times 7$ continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
ii. The project proponent shall carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO 2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of $120^{\circ}$ each), covering upwind and downwind directions.
iii. 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.
iv. 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.
v. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
vi. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
vii. The project proponent shall provide primary and secondary fume extraction system at all heat treatment furnaces.
viii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
ix. Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars.

## III. Water quality monitoring and preservation

i. 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 under Environment (Protection) Act, 1986 and NABL accredited laboratories.
ii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
iii. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) $31^{\text {st }}$ March 2012 (applicable to IF/EAF) as amended from time to time.

## IV. Noise monitoring and prevention

i. Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

## V. Energy Conservation measures

i. Energy conservation measures may be adopted such as adoption of solar energy and provision of LED lights etc., to minimize the energy consumption.

## VI. Waste management

i. Used refractories shall be recycled as far as possible.
ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces
iii. Kitchen waste shall be composted or converted to biogas for further use.

## VII. Green Belt

i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the Programme for reduction of the same including carbon sequestration including plantation.
ii. Project proponent shall submit a study report on Decarburization program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon capture, use and storage and 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 monitor able with defined time frames.

## VIII Public hearing and Human health issues

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

## IX. Environment Management

i. 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. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socioeconomic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed.
ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholder's / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF\&CC as a part of six-monthly report.
iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

## X. Miscellaneous

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

## Agenda No. 29.2

29.2 Expansion of Steel Plant-Sponge Iron from 1,20,000 TPA to 4,17,000 TPA, MS Ingots/Hot Billets from 90,000 TPA to $2,38,500$ TPA, TMT bars/Rolled products from 90,000 TPA to $\mathbf{2 , 5 5 , 0 0 0}$ TPA (or) MS Strip Mill of $\mathbf{1 , 6 5 , 0 0 0}$ TPA (oR) MS Pipe Mill of $\mathbf{1 , 6 5 , 0 0 0}$ TPA, WHRB Power from 8.0 MW to 28 MW , FBC Power from 4 MW to 14MW,Ferro Alloys 2 $x 9$ MVA (FeSi-14,000 TPA/FeMn-50,400 TPA / SiMn-28,800 TPA/Fecr30,000 TPA/Pig Iron-50,400 TPA), New Briquetting Plant ( $200 \mathrm{Kg} / \mathrm{hr}$ ) \& Fly Ash Brick Making unit (55,000 B) by M/s. Raigarh Ispat and Power Private Limited, located at Delari \& Saraipali Villages, Tehsil: Raigarh, District: Raigarh, Chhattisgarh- Consideration of Terms of Reference under SOP dated 07.07 .2021 .

## [Proposal No. IA/CG/IND1/415808/2023; File No. IA-J-11011/45/2023-IA-II(IND-I)] [Consultant: Pioneer Enviro Consultants Private Limited; Valid upto 06.06.2023]

29.2.1 M/s. Raigarh Ispat and Power Private Limited has made ToR application online vide proposal no. IA/CG/IND1/415808/2023 dated 20th April 2023 along with the application in prescribed format (CAF, Form - I Part A \& B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at S. No. 3(a), Metallurgical Industry (Ferrous \& Non-Ferrous) and 1 (d) Thermal Power Plant, under Category 'A' of the schedule of the EIA Notification, 2006 and appraised at the Central Level. The PP has also reported that the company has installed Rolling mill plant and obtained CTO from CECB vide no. 2736/TS/CECB/ 2022 dated $15 / 07 / 2022$ which is after expiry of existing EC. Therefore the proposal to be appraised under violation category as per the provisions contained in the MoEF\&CC Standard Operating Procedure dated 07.07.2021.
29.2.2 Name of the EIA consultant: M/s. Pioneer Enviro Consultants Private Limited [List of ACOs with their Certificate / Extension Letter No: QCI/NABET/ENV/ACO/23/2699 valid till 06.06.2023, as on April 29, 2023].

## Details submitted by Project proponent

29.2.3 The project of M/s. Raigarh Ispat and Power Private Limited, located at Delari \& Saraipali Villages, Tehsil: Raigarh, District: Raigarh, Chhattisgarh is for Expansion of Steel PlantSponge Iron from $1,20,000$ TPA to $4,17,000$ TPA, MS Ingots/Hot Billets from 90,000 TPA to 2,38,500 TPA, TMT bars/Rolled products from 90,000 TPA to 2,55,000 TPA (or) MS Strip Mill of $1,65,000$ TPA (oR) MS Pipe Mill of $1,65,000$ TPA, WHRB Power from 8.0 MW to 28 MW , FBC Power from 4 MW to 14MW,Ferro Alloys 2 x 9 MVA (FeSi-14,000 TPA/FeMn-50,400 TPA / SiMn-28,800 TPA/Fecr30,000 TPA/Pig Iron-50,400 TPA), New Briquetting Plant (200 $\mathrm{Kg} / \mathrm{hr})$ \& Fly Ash Brick Making unit (55,000 B). The PP has also reported that the company has installed Rolling mill plant and obtained CTO from CECB vide no. 2736/TS/CECB/ 2022 dated $15 / 07 / 2022$ which is after expiry of existing EC. Therefore the proposal to be appraised under
violation category as per the provisions contained in the MoEF\&CC Standard Operating Procedure dated 07.07.2021.
29.2.4 Environmental site settings:

| S.No. | Particulars | Details |  |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Total land | Total land: 34.5 Ha. (85.25 Acres) Existing Land: 22.72 Ha. (56.15 Acres) Additional Land: 11.78 Ha. (29.10 Acres |  |  | Land use: Industrial Land |
| ii. | Land acquisition details as per MoEF\&CC O.M dated 7/10/2014 | Total 34.5 Ha. (85.25 Acres) <br> - Registered land- 27.404 Ha. (67.72 Ac.) <br> $\checkmark$ Diverted Land-21.525 Ha. <br> $\checkmark$ Un-diverted Land - 5.879 На. <br> - Agreements entered - 7.096 На. (17.53 Ac.) |  |  | -- |
| iii. | Existence of habitation \& involvement of R \& R, if any. | Plant site: <br> No habitation exists in plant site; Hence no R \& R is involved. <br> Study area: <br> Nearest habitation: Delari -0.3 Kms. (SEE) |  |  | --- |
| iv. | Latitude and Longitude of the plant site | Latitude and Longitude of the plantsite: |  |  | --- |
|  |  | Point |  | inates |  |
|  |  | 1 | $22^{\circ} 0^{\prime} 39.68{ }^{\prime \prime} \mathrm{N}$ | 83 $19^{\circ} 41.59^{\prime \prime} \mathrm{E}$ |  |
|  |  | 2 | $22^{\circ} 0{ }^{\prime} 39.74{ }^{\prime \prime} \mathrm{N}$ | $83^{\circ} 19^{\prime} 47.14^{\prime \prime} \mathrm{E}$ |  |
|  |  | 3 | $22^{\circ} 0^{\prime} 31.99{ }^{\prime \prime} \mathrm{N}$ | $83^{\circ} 19^{\prime} 47.45{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 4 | $22^{\circ} 0 \cdot 31.54{ }^{\prime \prime} \mathrm{N}$ | $83^{\circ} 19^{\prime} 47.74{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 5 | $22^{\circ} 0 \cdot 29.81{ }^{\prime \prime} \mathrm{N}$ | $83^{\circ} 19^{\prime} 54.07{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 6 | $22^{\circ} 0{ }^{\prime} 27.30$ "N | $83^{\circ} 19^{\prime} 54.20{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 7 | $22^{\circ} 0^{\prime} 27.222^{\prime \prime} \mathrm{N}$ | $83^{\circ} 19^{\prime} 55.35{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 8 | $22^{\circ} 0 \cdot 24.95{ }^{\prime \prime} \mathrm{N}$ | $83^{\circ} 19^{\prime} 54.94{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 9 | $22^{\circ} 0^{\prime} 25.08{ }^{\prime \prime} \mathrm{N}$ | $83^{\circ} 19^{\prime} 58.63{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 10 | $22^{\circ} 0 \cdot 22.18{ }^{\prime \prime} \mathrm{N}$ | $83^{\circ} 19^{\prime} 59.54{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 11 | $22^{\circ} 0^{\prime} 22.80$ "N | $83^{\circ} 19^{\prime} 56.46{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 12 | $22^{\circ} 0^{\prime} 23.14{ }^{\prime \prime} \mathrm{N}$ | $83^{\circ} 19^{\prime} 56.56{ }^{\text {E }}$ |  |
|  |  | 13 | $22^{\circ} 0{ }^{\prime} 23.355^{\prime \prime} \mathrm{N}$ | $83^{\circ} 19^{\prime} 54.26{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 14 | $22^{\circ} 0^{\prime} 23.15{ }^{\prime \prime N}$ | $83^{\circ} 19^{\prime} 54.23{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 15 | $22^{\circ} 0{ }^{\prime} 34.13$ "N | $83^{\circ} 19^{\prime} 26.26{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 16 | $22^{\circ} 0{ }^{\prime} 22.29{ }^{\prime \prime} \mathrm{N}$ | $83^{\circ} 19^{\prime} 54.35{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 17 | $22^{\circ} 0^{\prime} 22.41{ }^{\prime \prime N}$ | $83^{\circ} 19^{\prime} 53.39^{\prime \prime} \mathrm{E}$ |  |
|  |  | 18 | $22^{\circ} 0^{\prime} 20.19{ }^{\prime \prime} \mathrm{N}$ | $83^{\circ} 19^{\prime} 52.53{ }^{\prime \prime} \mathrm{E}$ |  |
|  |  | 19 | $22^{\circ} 0{ }^{\prime} 18.28 " \mathrm{~N}$ | $83^{\circ} 19^{\prime} 53.52 \mathrm{LE}$ |  |
| v. | Elevation of the plant site | MSL of the plant area - 94.5 m to 109.5 m |  |  | --- |
| vi. | Involvement of Forest land if any. | No Forest land is involved in the plant site. Status of Stage I Forest Clearance: Not applicable |  |  | --- |
| vii. | Water body exists within the project site as well as study area | Project site: NilStudy area: |  |  | --- |


| S.No. | Particulars | Details |  |  | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Water Body | Distance | Directio <br> n |  |
|  |  | Banjari nallah | 0.2 Kms . | S |  |
|  |  | Kelo River | 5.7 Kms . | E |  |
|  |  | Dewanmunda nallah | 3.0 Kms | N |  |
|  |  | Korpali Nallah | 2.6 Kms | N |  |
|  |  | Barade Nallah | 3.7 Kms | NWW |  |
|  |  | Rabo DAM catchment area | 8.7 Kms | NWW |  |
| viii. | Existence of ESZ / ESA / National Park / Wildlife sanctuary / Biosphere reserve / Tiger reserve / Elephant reserve, etc. if any within the study area | Nil. |  |  |  |
|  |  | Name | Distance | $\begin{array}{\|l\|} \hline \text { Directio } \\ \mathrm{n} \end{array}$ |  |
|  |  | Unnamed PF | 0.1 Kms . | NWW |  |
|  |  | Urdana RF | 0.6 Kms . | S |  |
|  |  | Taraimal RF | 2.4 Kms | N |  |
|  |  | Barkachhar PF | 8.5 Kms | E |  |
|  |  | Khardungari PF | 8.0 Kms | E |  |
|  |  | Rabo RF | 2.4 Kms | W |  |
|  |  | Samaruma RF | 8.5 Kms | N |  |
|  |  |  |  |  |  |

29.2.5 The existing project was initially accorded Consent to Establish (CTE) vide letter No. 442/TS/CECB/2005, dated 25.01 .2005 for installation of $2 \times 100$ TPD DRI Kilns for production of 60,000 TPA of Sponge Iron. The company then obtained Environment Clearance from MoEF\&CC vide letter dated J-11011/1040/2007/IA.II.(I) dated 27.01.2010 for Expansion of Sponge Iron Plant ( $2 \mathrm{x}, 100 \mathrm{TPD}$ ) to Integrated Steel plant [Sponge Iron Plant ( 2 x 100 TPD ), Steel Melting Shop (Biilets, 300 TPD), Roiling Mill (TMT Bars, 300 TPD), Ferro Alloy Plant (100 TPD), Coal Washery (1.0 MTPA) and Captive Power Plant (WHRB, 8 MW; FBC, 46 MW). Latest Consent to Operate has been granted vide letter No. 2736/TS/CECB/2022 dated 15.07.2022 for Sponge Iron Plant ( $4 \times 100$ TPD - 1,20,000 TPA), Induction Furance ( 90000 TPA), WHRB - 8 MW, APFB - 4 MW and Hot Charging Rolling Mill - 90000 TPA. The validity of CTO is upto 29.02 .2024 except Hot Charging Rolling Mill which was up to 28.02.2023. The chronology of the permissions (EC/CTE) obtained along with status of implementation is as follows:

| S.No. | EC/CTE /EC <br> Extension Permissions | Units permitted | Date of permission | Units implemented (CTO) | Date of $\mathbf{1 s}^{\text {st }}$ CTO obtained from SPCB | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | CTE <br> No. <br> 442/TS/CECB <br> /2005, Raipur | $\begin{array}{\|l\|} \hline \mathbf{1}^{\text {st }} \& \mathbf{2}^{\text {nd }} \text { DRI Kilns- } \\ \text { 60,000 TPA } \\ \text { (2x100 TPD) } \end{array}$ | 25-01-2005 |  | 16.11.2005 | ---- |
| 2 | --Same as above-- | $\begin{aligned} & \mathbf{1}^{\text {st }} \boldsymbol{\&} \mathbf{2}^{\text {nd }} \text { DRI Kilns- } \\ & 60,000 \text { TPA } \\ & \text { (2x100 TPD) } \end{aligned}$ | 25-01-2005 |  | 20.06.2008 | ---- |
| 3 | EC <br> (expansion) <br> Issued by <br> MOE\&F <br> Vide no. J- <br> 11011/1040/2 <br> 007/ IA II (I) |  <br> $\mathbf{3}^{\text {rd }} \boldsymbol{\&} \mathbf{4}^{\text {th }}$ DRI Kilns- <br> 60,000 TPA <br> (2x100 TPD) <br> CPP: <br> 54 MW CPP <br> (WHRB $-\mathbf{4 x 2 . 0}$ <br> MW + FBC - 46 <br> MW) <br> SMS: <br> 90,000 TPA <br> (3 x 10 T) <br> Induction Furnace <br> with CCM <br> Rolling Mill <br> 90,000 TPA <br> (1x300 TPD) <br> Ferro Alloys <br> 30,000 TPA <br> (39 MVA) <br> Coal Washery <br> 1.0 mtpa | 27-01-2010 |  | 21.03.2018 | After obtaining Extension validity of E.C. dated 06-08-2015 |
| 4 | $\begin{aligned} & \hline \text { CTE } \\ & \text { (prior to EC) } \\ & \text { No. } \\ & 2433 / T S / \text { CEC } \\ & \text { B/2010, } \\ & \text { Raipur } \end{aligned}$ |  | 26.07.2010 |  | 21.03.2018 | After obtaining Extension validity of E.C. $\&$ CTE dated 06-08-2015 $\boldsymbol{\& 2 4 - 1 2 -}$ $\mathbf{2 0 1 6}$ |


| S.No. | EC/CTE/EC <br> Extension Permissions | Units permitted | Date of permission | Units implemented (CTO) | ```Date of \(\mathbf{1}^{\text {st }}\) CTO obtained from SPCB``` | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 30,000 TPA <br> (3x9 MVA) <br> Coal Washery <br> 1.0 mtpa |  |  |  |  |
| 5 | EC(expansion) <br> Issued by <br> MOE\&F <br> Vide no. J- <br> 11011/1040/2 <br> 007/ IA II (I) | ```\(3^{\text {rd }} \& 4^{\text {th }}\) DRI Kilns- 60,000 TPA (2x100 TPD) CPP: 54 MW CPP (WHRB - 4x2.0 MW + FBC - 46 MW) SMS: 90,000 TPA ( \(3 \times 10 \mathrm{~T}\) ) Induction Furnace with CCM Rolling Mill 90,000 TPA (1x300 TPD) Ferro Alloys 30,000 TPA (3x9 MVA) Coal Washery 1.0 mtpa``` | 27-01-2010 |  | 07.09.2018 | After obtaining Extension validity of E.C. \& CTE dated $06-08-2015$ $\boldsymbol{\& 2 4 - 1 2 -}$ 2016 |
| 6 | EC(expansion) <br> Issued by <br> MOE\&F <br> Vide no. J- <br> 11011/1040/2 <br> 007/ IA II (I) |  | 27-01-2010 | $\mathbf{1}^{\text {st }} \mathbf{C T O}$ <br> SMS: <br> 90,000 TPA <br> (3 $\times 10 \mathrm{~T}$ ) <br> Induction Furnace with CCM <br> CPP: <br> 12 MW CPP (WHRB $\begin{aligned} & -4 \times 2.0 \mathrm{MW}+\mathrm{FBC} \\ & -4.0 \mathrm{MW}) \end{aligned}$ | $\begin{array}{\|l\|} \hline 04.03 .2020 \\ \\ \text { (application } \\ \text { submitted for } \\ \text { CTO on 10-12- } \\ \text { 2019) } \end{array}$ | After obtaining Extension validity of E.C. dated 14-07-2017 |
| 7 | EC (expansion) Issued by MOE\&F | $\begin{array}{\|l\|} \hline \mathbf{3}^{\text {rd }} \& \mathbf{4}^{\text {th }} \text { DRI Kilns- } \\ 60,000 \text { TPA } \\ \text { (2x100 TPD) } \\ \text { CPP: } \\ \hline \end{array}$ | 27-01-2010 | $1^{\text {st }} \mathbf{C T O}$ <br> Hot Charging Rolling Mill 90,000 TPA (1x300 TPD) | 15.07.2022 | Which was implemente d aterExpity |


| S.No. | EC/CTE /EC <br> Extension Permissions | Units permitted | Date of permission | Units implemented (CTO) | Date of $1^{\text {st }}$ CTO obtained from SPCB | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Vide no. J- } \\ & \text { 11011/1040/2 } \\ & \text { 007/ IA II (I) } \end{aligned}$ | 54 MW CPP <br> (WHRB-_4x2.0 <br> MW + FBC - $\mathbf{4 6}$ <br> MW) <br> SMS: <br> 90,000 TPA <br> (3 x 10 T) <br> Induction Furnace <br> with CCM <br> Rolling Mill <br> 90,000 TPA <br> (1x300 TPD) <br> Ferro Alloys <br> 30,000 TPA <br> (3x9 MVA) <br> Coal Washery <br> 1.0 mtpa |  |  |  | $\begin{gathered} \text { of E.C. } \\ \text { extension. } \end{gathered}$ |
| 8 | ----do--- | ----do--- | ---do--- | Current CTO <br> DRI Kilns- 1,20,000 <br> TPA <br> (4x 100 TPD) <br> CPP: <br> 12 MW CPP (WHRB <br> $-4 \times 2.0 \mathrm{MW}+\mathrm{FBC}$ <br> - 4.0 MW) <br> SMS: <br> 90,000 TPA <br> (3x10 T) <br> Induction Furnace with CCM <br> Rolling Mill <br> 90,000 TPA <br> (1x300 TPD) | $\begin{aligned} & \hline 15-07-2022 \\ & \text { Valid upto 29- } \\ & 02-2024 \end{aligned}$ | ----- |

29.2.6 The unit configuration and capacity of existing and proposed project is given as below:

| S.No. | Units (Products) | $\begin{aligned} & \text { Capacities } \\ & \text { as per } \\ & \text { CTE } \\ & \text { \&E.C. dt } \\ & \text { 27/01/2010 } \end{aligned}$ | CTO <br> obtained <br> from CECB <br> vide dt <br> 15/07/2022 <br> (in TPA) <br> 1 | Proposed Expansion (in TPA) | Production <br> Capacity After Expansion (in TPA) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | DRI Kilns (Sponge Iron) | $\begin{gathered} 1,20,000 \\ (4 \times 100 \\ \text { TPD }) \end{gathered}$ | $\begin{gathered} 1,20,000 \\ (4 \times 100 \mathrm{TPD}) \end{gathered}$ | $\begin{gathered} 2,97,000 \\ (2 \times 350 \mathrm{TPD} \\ + \\ 1 \times 200 \mathrm{TPD}) \end{gathered}$ | $\begin{gathered} 4,17,000 \\ (4 \times 100 \mathrm{TPD} \\ +2 \times 350 \mathrm{TPD} \\ +1 \times 200 \\ \mathrm{TPD}) \end{gathered}$ |
| 2. | Induction Furnace (M.S. Billets/ Hot Billets) | $\begin{gathered} 90,000 \\ (3 \times 10 \mathrm{~T} \\ \mathrm{IF}) \\ \hline \end{gathered}$ | $\begin{gathered} 90,000 \\ (3 \times 10 \mathrm{~T} \text { IF }) \end{gathered}$ | $\begin{gathered} 1,48,500 \\ (3 \times 15 \mathrm{~T}) \end{gathered}$ | $\begin{gathered} 2,38,500 \\ (3 \times 10 \mathrm{~T}+ \\ 3 \times 15 \mathrm{~T}) \\ \hline \end{gathered}$ |


| S.No. | Units (Products) |  | Capacities <br> as per <br> CTE | CTO <br> obtained <br> from CECB <br> vide dt | Proposed <br> Expansion <br> (in TPA) | Production <br> Capacity <br> After <br> Expansion <br> (in TPA) |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |

## Note:

* PP has implemented $\mathbf{9 0 , 0 0 0}$ TPA of Rolling Mill after expiry of Environment Clearance (hence they are applying a Fresh Application for E.C. under Violation)
29.2.7 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

| S.No. | Raw <br> Material | Quantity <br> (TPA) | Source | Distance <br> (in Km) | Mode of Transport |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | Iron ore | $4,75,200$ | Barbil, Odisha | $\sim 500$ | By rail \& road <br> (through covered trucks) |
| 2 | Dolomite | 23,418 | Chhattisgarh | $\sim 500$ | By road <br> (through covered trucks) |


| S.No. | $\begin{gathered} \text { Raw } \\ \text { Material } \end{gathered}$ | Quantity (TPA) | Source | Distance (in Km) | Mode of Transport |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | LDO / LSHS | 800 KL/Annum | Nearby IOCL Depot | $\sim 100$ | By road (through Tankers) |
| 4 | MS Scrap / Pig Iron | 22,000 | Chhattisgarh | $\sim 100$ | By road (through covered trucks) |
| 5 | Indian Coal | 4,30,650 | MCL Odisha / SECL <br> Chhattisgarh | $\sim 500$ | By rail \& road (through covered trucks |
| 6 | Imported Coal | 2,75,616 | Indonesia / South Africa / Australia | $\sim 600 \mathrm{Kms}$. (from Vizag Port) | Through sea route, rail route \& by road <br> (through covered trucks) |
| 7 | Ferro alloys | 7,000 | Own generation | --- | By road (through covered trucks) |
| 8 | Quartz | 21,280 | Chhattisgarh / <br> Andhra Pradesh | $\sim 500$ | By road (through covered trucks) |
| 9 | Manganese Ore | 1,14,660 | Odisha/ Chhattisgarh | ~ 300 | By Rail \& Road (through covered trucks) |
| 10 | LAM Coke | 24,444 | Chhattisgarh / Bihar <br> Imported from Australia, China | $\sim 100 \mathrm{Kms}$. <br> $\sim 480 \mathrm{Kms}$. <br> (from Vizag <br> Port) | By Road (Covered trucks) From Vizag Port by Road (Covered Trucks) |
| 11 | Mill scales | 7,560 | Inhouse Generation | --- | By road (through covered trucks) |
| 12 | $\begin{array}{\|l\|} \hline \begin{array}{l} \text { Electrode } \\ \text { Paste } \end{array} \\ \hline \end{array}$ | 900 | Maharashtra / West Bengal | $\sim 300$ | By road (through covered trucks) |
| 13 | Chrome Ore | 60,000 | Sukinda, Odisha Import, South Africa | $\sim 500 \mathrm{Kms}$. <br> $\sim 600 \mathrm{Kms}$. <br> (from Vizag Port) | By road (through covered trucks) From Port By Road (through covered Trucks) |
| 14 | Magnetite / Bauxite | 5,070 | Chhattisgarh / Maharashtra | $\sim 500 \mathrm{Kms}$. | By road (through covered trucks) |
| 15 | Iron Ore / Sinter | 74,340 | Barbil, Odisha NMDC, Chhattisgarh | $\sim 500 \mathrm{Kms}$. | By Road (Covered trucks) |

29.2.8 The total water requirement for existing plant is 450 KLD and was sourced from Ground water river. The total water requirement for the expansion project is estimated as 1360 KLD , which will be sourced from the Kelo River. Water drawl permission for expansion proposal from Water Resource Department, Chhattisgarh will be obtained after receipt of TOR letter for proposed expansion project.
29.2.9 Total power consumption after expansion will be 52.1 MW, out of which 42 MW from Captive power plant \& remaining 10.1 MW will be sourced from state grid.
29.2.10 The capital cost of the project is Rs. 489 Crores. Employment generation from proposed project will be 250 nos. through direct employment and 500 nos. through indirect employment.

### 29.2.11 Violation Details:

The company has installed Rolling mill plant and obtained CTO from CECB vide no. 2736/TS/CECB/ 2022 dated 15/07/2022 which is after expiry of E.C.

## Present status of Rolling mill:

- Installation of Rolling mill has been completed.
- Production is yet to be started


## Deliberation by the Committee

29.2.12 The Committee noted the following:
i. The instant project is for expansion of Steel Plant-Sponge Iron from 1,20,000 TPA to $4,17,000$ TPA, MS Ingots/Hot Billets from 90,000 TPA to $2,38,500$ TPA, TMT bars/Rolled products from 90,000 TPA to 2,55,000 TPA (or) MS Strip Mill of 1,65,000 TPA (oR) MS Pipe Mill of 1,65,000 TPA, WHRB Power from 8.0 MW to 28 MW, FBC Power from 4 MW to 14MW,Ferro Alloys 2 x 9 MVA (FeSi-14,000 TPA/FeMn-50,400 TPA / SiMn-28,800 TPA/Fecr30,000 TPA/Pig Iron-50,400 TPA), New Briquetting Plant ( $200 \mathrm{Kg} / \mathrm{hr}$ ) \& Fly Ash Brick Making unit ( $55,000 \mathrm{~B}$ ).
ii. The existing project was initially accorded Consent to Establish (CTE) vide letter No. 442/TS/CECB/2005, dated 25.01 .2005 for installation of $2 \times 100$ TPD DRI Kilns for production of $60,000 \mathrm{TPA}$ of Sponge Iron. The company then obtained Environment Clearance from MoEF\&CC vide letter dated J-11011/1040/2007/IA.II.(I) dated 27.01.2010 for Expansion of Sponge Iron Plant ( $2 \mathrm{x}, 100 \mathrm{TPD}$ ) to Integrated Steel plant [Sponge Iron Plant (2x100 TPD), Steel Melting Shop (Billets, 300 TPD), Roiling Mill (TMT Bars, 300 TPD), Ferro Alloy Plant (100 TPD), Coal Washery ( 1.0 MTPA) and Captive Power Plant (WHRB, 8 MW; FBC, 46 MW ). Latest Consent to Operate has been granted vide letter No. 2736/TS/CECB/2022 dated 15.07.2022 for Sponge Iron Plant ( $4 \times 100$ TPD - 1,20,000 TPA), Induction Furnace ( 90000 TPA), WHRB -8 MW, APFB -4 MW and Hot Charging Rolling Mill -90000 TPA. The validity of CTO is upto 29.02.2024 except Hot Charging Rolling Mill which was up to 28.02.2023. The chronology of the permissions (EC/CTE) obtained along with status of implementation is detailed at para 29.2.5 above.
iii. The PP has also reported that the company has installed Rolling mill plant and obtained CTO from CECB vide no. 2736/TS/CECB/ 2022 dated 15/07/2022 which is after expiry of existing EC. Therefore, the proposal has been applied to be appraised under violation category as per the provisions contained in the MoEF\&CC Standard Operating Procedure dated 07.07.2021.
iv. The EAC noted that the company has been running its operations for a very long time and amidst having the understanding of the provisions of EIA Notification, still committed violation by installing Rolling Mill beyond the expiry of the validity of EC. Further, the justification provided by the project proponent do not justify. Also, it is observed that a lot of cases from Chhattisgarh State are coming up before the EAC (Industry-1) for appraisal under violation category. In view of the same, it is pertinent to undertake a site visit to understand the reasons for such violation committed by the project proponent. In
this regard, a sub-committee of EAC Industry-1 members along with the representative of SPCB shall visit the project site to understand the ground situation and the reasons for such violations.
v. As reported, Delari Village is at a distance of 0.3 km in SE direction of the project site and Banjarin Nallah at 0.2 km in South of project site. Also, on perusal of kml file, it appears that there is no. of ESAs nearby within the study area. Considering the Environmental Sensitivity to the habitation and ESAs in the area, the EAC opined that it is prudent to inspect the area for understanding the ground reality as the area appears to have rich habitation.
vi. The EAC also noted that Protected and Reserve Forest are adjacent to the project site. It is required to understand the measures undertaken by PP to minimise the impact of the project activities on these $\mathrm{PF} / \mathrm{RF}$.
vii. The existing water requirement of 450 KLD is being sourced from Ground water. The EAC deliberated on existing water withdrawal and is of the view that PP has not complied with the EC condition wherein it was desired that "efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water shall be met from other sources."
viii. The PP shall submit the compliance status of earlier commitments and its implementation status along with details of expenditures on the issues raised during the PH while granting the previous EC.
ix. On perusal of the kml file, it is observed that greenbelt is not developed properly along the project boundary. The Committee deliberated that existing project has been running for so long and still the greenbelt development is very poor. The GB width along plot boundary is too small. It must be around 40 m to incorporate 3 tier GB design.
x. Thus, in view of the above observations the EAC is of the opinion that it is pertinent to undertake site visit to understand the violation issues, ecological/environmental sensitivity of the area to the ESA's and local habitation, water withdrawal issues, greenbelt development at the project site etc.

## Recommendations of the Committee

29.2.13 In view of the foregoing and after deliberations, the Committee recommended to defer the proposed project and recommended for site visit of the proposed project area by a sub-committee of EAC Industry-1 members comprising of Dr. Dipankar Shome, Dr. Ranjit Prasad, Representative of MoEFCC and Representative of CECB to conduct the site visit and submit the Report. The proposal shall be appraised based on the findings of the sub-committee and deliberation of EAC.

## Modification in Terms of Reference

## Agenda No. 29.3

29.3 Proposed expansion in production capacity of Clinker from 1.0 MTPA to 2.50 MTPA cement from 1.5 MTPA to 3.80 MTPA and WHRB Power plant from 5.0 MW to 12.0 MW by M/s Rain Cements Limited, located at Village Ramapuram, Mandal Mellacheruvu, District Suryapet, Telangana- Consideration of Terms of Reference.
[Proposal No. IA/TG/IND/299498/2023; File No. IA-J-11011/152/2008-IA-II(IND-I)] [Consultant: JM EnviroNet Pvt. Ltd.; Valid upto: 07.08.2023]
29.3.1 M/s Rain Cements Limited has made an application online vide proposal no. IA/TG/IND/299498/2023 dated $19^{\text {th }}$ April, 2023 along with Form-3 and revised PFR and sought for amendment in Standard Terms of Reference accorded by the Ministry vide no. IA-J-11011/152/2008-IA.II (I) dated 11.03 .2022 w.r.t. change in the project area from 126.3 ha to 109.75 ha.

## Details submitted by Project proponent

29.3.2 M/s Rain Cements Limited had earlier applied for Terms of Reference vide proposal no. IA/TG/IND/256055/2022, dated 09.03.2022 for Proposed expansion of Production Capacity of Clinker from 1.0 MTPA to 2.50 MTPA , Cement from 1.5 MTPA to $3.80 \mathrm{MTPA} \& ~ W H R B$ Power Plant from 5.0 MW to 12.0 MW located at Ramapuram Village, Mellachervu Mandal, Suryapet District, Telangana. Accordingly, ToR was granted by the Ministry vide no. IA-J-11011/152/2008-IA.II (I) dated 11.03.2022.
29.3.3 The instant proposal is for seeking amendment in ToR dated 11.03 .2021 w.r.t. change in the project area from 126.3 ha to 109.75 ha as detailed below.

| S. <br> No. | Particulars <br> of ToR <br> Issued by <br> MoEFCC | Details as per <br> ToR/ToR <br> application | Amendment <br> Proposed | Justification |
| ---: | :---: | :---: | :---: | :--- |
| 1. | Total area <br> of Plant | 126.3 ha. | 109.75 ha | As per the latest, DGPS survey <br> conducted in 2023, the total area of the <br> land is coming to be 109.75 ha only, for <br> which land possession certificate from <br> MRO, Suryapet has been obtained. <br> The difference was owing to old survey <br> conducted before 2008 and latest <br> DGPS Survey. The plant area has been <br> reduced from 126.3 ha to 109.75 ha. |

29.3.4 It is reported that there is no change in the configuration and capacity of the proposed project.

### 29.3.5 Reason for Amendment:

As per the latest, DGPS survey conducted in 2023, the total area of the land is coming to be 109.75 ha only, for which land possession certificate from MRO, Suryapet has been obtained. The difference was owing to old survey conducted before 2008 and latest DGPS Survey. The plant area has been reduced from 126.3 ha to 109.75 ha.
29.3.6 It has been reported by PP that, there is no violation under EIA Notification, 2006/court case/show cause/direction related to the project under consideration.

## Deliberation by the Committee

29.3.7 The Committee noted the following:
i. M/s Rain Cements Limited had earlier applied for Terms of Reference vide proposal no. IA/TG/IND/256055/2022, dated 09.03.2022 for Proposed expansion of Production Capacity of Clinker from 1.0 MTPA to 2.50 MTPA, Cement from 1.5 MTPA to 3.80 MTPA \& WHRB Power Plant from 5.0 MW to 12.0 MW located at Ramapuram Village, Mellachervu Mandal, Suryapet District, Telangana. Accordingly, ToR was granted by the Ministry vide no. IA-J-11011/152/2008-IA.II (I) dated 11.03.2022.
ii. The instant proposal is for seeking amendment in ToR dated 11.03.2021 w.r.t. change in the project area from 126.3 ha to 109.75 ha.
iii. PP has reported that as per the latest, DGPS survey conducted in 2023, the total area of the land is coming to be 109.75 ha only, for which land possession certificate from MRO, Suryapet has been obtained. The difference was owing to old survey conducted before 2008 and latest DGPS Survey. The plant area has been reduced from 126.3 ha to 109.75 ha.

## Recommendations of the Committee

29.3.8 After deliberations, the Committee recommended the proposal for amendment in ToR granted vide no. IA-J-11011/152/2008-IA.II (I) dated 11.03 .2022 w.r.t. change in the project area from 126.3 ha to 109.75 ha as detailed in para 29.3.3 above. The other terms and conditions of ToR dated 11.03.2022 shall remain the same.

## Consideration of TOR (Correction in Minutes)

Agenda No. 29.4
29.4 Integrated Steel Plant with Pelletization Plant ( $\mathbf{x}$ x 0.6 MTPA), DRI Plant ( $3 \times 1,10,000$ TPA), MS Billets production of $4,00,000$ TPA with IF of $2 \times 8$ Tonnes and $1 \times 15$ Tonnes and EAF ( $2 \times 25$ tonnes), Rolling Mill (2,00,000 TPA) Coal Washery ( 0.576 MTPA) with 78 MW CPP (24 MW \#WHRB and 54MW \#AFBC) at Village- Lahandabud, P.O.- H. Kantapali, Tehsil \& District-Jharsuguda, Odisha by M/s Thakur Prasad Sao and Sons Pvt. Ltd. - Consideration of TOR (correction in Minutes).
[Proposal No. IA/OR/IND1/414111/2023; File No. IA-J-11011/13/2023-IA-II(IND-I)]
29.4.1 The aforementioned proposal was considered and recommended by EAC in its $23^{\text {rd }}$ meeting held on $14-15^{\text {th }}$ February, 2023. During processing of the file by the Ministry, it was observed that there is a typographical mistake as detailed below:

| MoM ref point no. | Details given in MoM of $\mathbf{2 3}^{\text {rd }}$ meeting held on $14-15^{\text {th }}$ <br> February, 2023 <br> (Agenda No. 23.4) | Changes Requested/Suggested | Remarks/ Justification |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} \hline \text { Page No. } 52 \\ \text { Para } \\ 23.4 .16 \end{gathered}$ <br> Deliberation by the EAC (Point vi) | vi. In view of above, the EAC is of the opinion that the instant proposal complies with Ministry's O.M. IA3-22/10/2022-IA.III[E177258] dated 11.04.2022 pertaining to Guidelines for granting EC under para 7(ii)(a) of EIA Notification, 2006, for expansion upto $50 \%$ and accordingly, Public Hearing may be exempted in the instant case. | vi. In view of above, the EAC is of the opinion that the instant proposal complies with provisions of Notification of MoEF\&CC vide S.O 1247(E) dated 18th March 2021 and clause 7(i) (x) of EIA Notification 2006 as amended and accordingly, Public Hearing may be exempted in the instant case. | The provisions of Notification of MoEF\&CC vider $1247(\mathrm{E})$ dated March, $18^{\text {th }}$ Mar applicable to the said proposal. Accordingly, the corrections in the minutes of meeting are required. |

Deliberations by the EAC:
29.4.2 The Committee deliberated on the findings of Ministry w.r.t. modifications in the MoM of $23^{\text {rd }}$ meeting of the EAC for Industry-I sector held on $14-15^{\text {th }}$ February, 2023 pertaining to proposal agenda no. 23.4 as referred above.

## Recommendation of EAC:

29.4.3 The EAC deliberated and noted that corrections suggested by the Ministry may be accepted and recommended for the incorporation of the above-mentioned corrections/modifications in the minutes of the meeting. Accordingly, aforementioned para 23.4.16 (Point vi) stands modified in the minutes of $23^{\text {rd }}$ EAC (Industry-1) meeting as detailed in table above.
29.5 Greenfield Project for Installation of Production Facilities for Pelletization Plant (0.60 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.25 MTPA), Captive Power Plant of 85 MW (WHRB\#32 MW \& Coal \& Dolochar based\#53 MW), Rolling Mill (0.20 MTPA), Mini Blast Furnace (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), PGP ( $3 x 8000 \mathrm{Nm} 3 / \mathrm{hr}$ ) \& Coal Washery Unit ( 0.98 MTPA)" by M/s Swadesh Metallics Pvt Ltd., located at Village-Kesda, Tehsil-Simga, District-Balodabazar-Bhatapara, Chhattisgarh Consideration of TOR (correction in Minutes).

[Proposal No. IA/CG/IND/298639/2023; File No. F. No. IA-J-11011/46/2021-IA-II(I)]

29.5.1 The aforementioned proposal was considered and recommended by EAC in its $26^{\text {th }}$ meeting held on $12^{\text {th }}, 13^{\text {th }}$ and $17^{\text {th }}$ April, 2023. During processing of the file by the Ministry, it was observed that there is a typographical mistake as detailed below:

| MoM ref point no. | Details given in MoM of $\mathbf{2 6}^{\text {th }}$ meeting held on $12^{\text {th }}, 13^{\text {th }}$ and $17^{\text {th }}$ April, 2023 <br> (Agenda No. 26.6) | Changes Requested/Suggested | $\begin{gathered} \text { Remarks/ } \\ \text { Justification } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Page No. 77 <br> Para 26.6.2 <br> Details submitted by Project Proponent | M/s. Indoves Industrial Pvt. Ltd. had earlier applied for Terms of Reference vide <br> proposal <br> no. IA/CG/IND/227899/2023, dated 06.09.2021 for Greenfield project for Installation of Iron Ore Pellet Plant ( 0.6 MTPA), DRI Plant ( 0.42 MTPA), SMS with Caster ( 0.6 MTPA), Rolling Mill (0.20 MTPA), RHF unit (0.36 MTPA), Blast Furnace ( 0.26 MTPA), Sinter Plant ( 0.40 MTPA ), DIP Plant ( 0.24 MTPA), Coal Washery Unit (0.98 MTPA) with Captive Power Plant (97 MW)" for producing TMT bar, wire rods, steel bar coils and de-coiled bars and Ductile Iron Pipes located at Village Kesda, Tehsil-Simga, District-Balodabazar-Bhatapara, Chhattisgarh. Accordingly, ToR was granted by the Ministry vide no. IA-J-11011/ 46/2021-IA-II(I) dated 13.10.2021 | M/s Swadesh Metallics Pvt Ltd. had earlier applied for Terms of Reference vide proposal no. IA/CG/IND/227899/2023, dated 06.09.2021 for Greenfield project for Installation of Iron Ore Pellet Plant (0.6 MTPA), DRI Plant (0.42 MTPA), SMS with Caster (0.6 MTPA), Rolling Mill ( 0.20 MTPA ), RHF unit ( 0.36 MTPA), Blast Furnace ( 0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), Coal Washery Unit (0.98 MTPA) with Captive Power Plant ( 97 MW)" for producing TMT bar, wire rods, steel bar coils and decoiled bars and Ductile Iron Pipes located at Village Kesda, TehsilSimga, District-BalodabazarBhatapara, Chhattisgarh. Accordingly, ToR was granted by the Ministry vide no. IA-J-11011/ 46/2021-IA-II(I) dated 13.10.2021 | The name of $\mathrm{M} / \mathrm{s}$. Indoves Industrial Pvt. Ltd. was inadvertently mentioned in place of $\mathrm{M} / \mathrm{s}$ Swadesh Metallics Pvt Ltd. <br> Accordingly, the corrections in the minutes of meeting are required. |
| Page No. 79 <br> Para 26.6.8 <br> Deliberation by the Commitee (Point i) | M/s. Indoves Industrial Pvt. Ltd. had earlier applied for Terms of Reference vide <br> proposal <br> no. IA/CG/IND/227899/2023, dated 06.09.2021 for Greenfield project for Installation of Iron Ore Pellet Plant ( 0.6 MTPA), DRI Plant (0.42 MTPA), SMS | M/s Swadesh Metallics Pvt Ltd. had earlier applied for Terms of Reference vide proposal no. IA/CG/IND/227899/2023, dated 06.09.2021 for Greenfield project for Installation of Iron Ore Pellet Plant (0.6 MTPA), DRI Plant (0.42 | The name of $\mathrm{M} / \mathrm{s}$. Indoves Industrial Pvt. Ltd. was inadvertently mentioned in place of M/s |


| MoM ref point no. | Details given in MoM of $\mathbf{2 6}^{\text {th }}$ meeting held on $12^{\text {th }}, 13^{\text {th }}$ and $17^{\text {th }}$ April, 2023 <br> (Agenda No. 26.6) | Changes Requested/Suggested | Remarks/ Justification |
| :---: | :---: | :---: | :---: |
|  | with Caster (0.6 MTPA), Rolling Mill (0.20 MTPA), RHF unit (0.36 MTPA), Blast Furnace ( 0.26 MTPA), Sinter Plant ( 0.40 MTPA ), DIP Plant ( 0.24 MTPA), Coal Washery Unit (0.98 MTPA) with Captive Power Plant (97 MW)" for producing TMT bar, wire rods, steel bar coils and de-coiled bars and Ductile Iron Pipes located at Village Kesda, Tehsil-Simga, District-Balodabazar-Bhatapara, Chhattisgarh. Accordingly, ToR was granted by the Ministry vide no. IA-J-11011/ 46/2021-IA-II(I) dated 13.10.2021 | MTPA), SMS with Caster (0.6 MTPA), Rolling Mill (0.20 MTPA), RHF unit ( 0.36 MTPA), Blast Furnace (0.26 MTPA), Sinter Plant (0.40 MTPA), DIP Plant (0.24 MTPA), Coal Washery Unit (0.98 MTPA) with Captive Power Plant ( 97 MW)" for producing TMT bar, wire rods, steel bar coils and decoiled bars and Ductile Iron Pipes located at Village Kesda, TehsilSimga, District-BalodabazarBhatapara, Chhattisgarh. Accordingly, ToR was granted by the Ministry vide no. IA-J-11011/ 46/2021-IA-II(I) dated 13.10.2021 | Swadesh <br> Metallics Pvt Ltd. <br> Accordingly, the corrections in the minutes of meeting are required. |

## Deliberations by the EAC:

29.5.2 The Committee deliberated on the findings of Ministry w.r.t. modifications in the MoM of $26^{\text {th }}$ meeting of the EAC for Industry-I sector held on $12^{\text {th }}, 13^{\text {th }}$ and $17^{\text {th }}$ April, 2023 pertaining to proposal agenda no. 26.6 as referred above.

## Recommendation of EAC:

29.5.3 The EAC deliberated and noted that the request of the PP may be accepted and recommended for the incorporation of the above-mentioned corrections/modifications in the minutes of the meeting. Accordingly, aforementioned para 26.6.2 and 26.6.8 (Point i) stands modified in the minutes of $26^{\text {th }}$ EAC (Industry-1) meeting as detailed in table above.

The meeting ended with thanks to the Chair.

## ANNEXURE - 1

## Standard ToR in line with Appendix III of the EIA, 2006. applicable to Proposals Under Industry-1 Sector

## Preliminary requirements:

i. EIA/EMP report cover page shall consists of project title with location, applicable schedule of the EIA Notification, 2006, ToR letter No. with date, study period along with EIA consultant \& laboratory details with QCI/NABET/NABL accreditation certificate detail.
ii. Besides, following points shall be compiled as per QCI/NABET norms:
a. Disclaimer by the EIA consultant.
b. Declaration by the Functional Area Experts contributed to the EIA study and declaration by the head of the accredited consultant organization/authorized person.
c. Undertaking by the project proponent owning the contents (information and data) of the EIA/EMP report.
d. Undertaking by the EIA consultant regarding compliance of ToR issued by MoEF\&CC.
e. Consultant shall submit the Plagiarism Certificate for the EIA/EMP Report.

## Structure of EIA/EMP report

## Executive Summary

i. Table of Contents of the EIA report including list of tables/figures/annexures/abbreviations/symbols/notations.
ii. Point wise compliance to the ToR issued by MoEF\&CC.
iii. Executive Summary
I. Introduction
i. Name of the project along with applicable schedule and category as per EIA, 2006.
ii. Location and accessibility
II. Project description
i. Resource requirements (Land; water; fuel; manpower)
ii. Operational activity
iii. Key pollution concerns
III. Baseline Environment Studies
i. Ambient air quality
ii. Ambient Noise quality
iii. Traffic study
iv. Surface water quality
v. Ground water quality
vi. Soil quality
vii. Biological Environment
viii. Land use
ix. Socio-economic environment
IV. Anticipated impacts
i. Impact on ambient air quality
ii. Impact on ambient noise quality
iii. Impact on road and traffic
iv. Impact on surface water resource and quality
v. Impact on ground water resource and quality
vi. Impact on terrestrial and aquatic habitat
vii. Impact on socio-economic environment
V. Alternative analysis
VI. Environmental Monitoring program
i. Ambient air, noise, water and soil quality
ii. Emission and discharge from the plant
iii. Green belt
iv. Social parameters
VII. Additional studies
i. Risk assessment
ii. Public consultation
iii. Action plan to address the issues raised during public consultation as per MoEF\&CC O.M. dated 30/09/2020
VIII. Project benefits
IX. Environment management plan
i. Air quality management plan
ii. Noise quality management plan
iii. Solid and hazardous waste management plan
iv. Effluent management plan
v. Storm water management plan
vi. Occupational health and safety management plan
vii. Green belt development plan
viii. Socio-economic management plan
ix. Project cost and EMP implementation budget.

## EIA/EMP Report

## 1. Introduction

i. Background about the project
ii. Need of the project
iii. Purpose of the EIA study
iv. Scope of the EIA study

## 2. Project description

## A. Site Details

i. Location of the project site covering village, Taluka/Tehsil, District and State.
ii. Site accessibility
iii. A digital toposheet in pdf or shape file compatible to google earth of the study area of radius of 10 km and site location preferably on 1:50,000 scale. (including all ecosensitive areas and environmentally sensitive places).
iv. Latest High-resolution satellite image data having $1 \mathrm{~m}-5 \mathrm{~m}$ spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc., along with delineation of plant boundary co-ordinates. Area must include at least 100 m all around the project location.
v. Environment settings of the site and its surrounding along with map.
vi. A list of major industries with name, products and distance from plant site within study area ( 10 km radius) and the location of the industries shall be depicted in the study area map.
vii. In case if the project site is in vicinity of the water body, 50 meters from the edge of the water body towards the site shall be treated as no development/construction zone. If it's near the wetland, Guidelines for implementing Wetlands (Conservation and Management) Rules, 2017 may be followed.
viii. In case if the project site is in vicinity of the river, the industry shall not be located within the river flood plain corresponding to one in 25 years flood, as certified by concerned District Magistrate/Executive Engineer from State Water Resources Department (or) any other officer authorized by the State Government for this purpose as per the provisions contained in the MoEF\&CC Office Memorandum dated 14/02/2022.
ix. In case of canal/ nala/ seasonal drain and any other water body passing through project site, the PP shall submit the suitable steps /conservation plan/mitigation measures along with contouring, Run -off calculations, disposal etc. A robust and full proof Drainage Conservation scheme to protect the natural drainage/water bodies and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be provided in the report.
x. Type of land, land use of the project site needs to be submitted.
xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process as per the MoEF\&CC O.M. dated 7/10/2014 shall be furnished.
xii. Project proponent shall prepare Engineering layout plan showing all internal roads minimum 6 m width and 9 m turning radius for smooth traffic flow inside including fire tender as per NBC. Road network shall connect all service areas in layout. This drawing shall include area statement showing plot area, area under roads, parking, green belt with calculations and $\%$ with respect to plot area of project site and proper indexing. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
xiii. Project proponent shall submit contour map of project site along with drainage disposal system with calculations and drawings supported with proper indexing including Rain Water Harvesting details with calculations mentioning about GW recharge along with relevant drawing.
xiv. A detailed report covering all aspects of Fire Safety Management and Fire Emergency Plan shall be submitted.
xv . Details of drone survey for the site, needs to be included in report and presented before the EAC during appraisal of the project.

## B. Forest and wildlife related issues (if applicable):

i. Status of Forest Clearance for the use of forest land shall be submitted.
ii. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife if the project site located within notified Eco-Sensitive Zone, 10 km radius of national park/sanctuary wherein final ESZ notification is not in place as per MoEF\&CC Office Memorandum dated 8/8/2019.
iii. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, Eco-sensitive Zone and Eco-sensitive areas, the project proponent shall submit the map duly authenticated by Divisional Forest Officer showing the distance between the project site and the said areas.
iv. Wildlife Conservation Plan duly authenticated by the Competent Authority of the State Government for conservation of Schedule I fauna along with budget and action plan, if any exists in the study area.

## C. Salient features of the project

i. Products with capacities in Tons per Annum for the proposed project.
ii. If expansion project, status of implementation of existing project, details of existing/proposed products with production capacities in Tons per Annum.
iii. Site preparatory activities.
iv. List of raw materials required and their source along with mode of transportation.
v. Other than raw materials, other chemicals and materials required with quantities and storage capacities.
vi. Manufacturing process details along with process flow diagram of proposed units.
vii. Consolidated materials and energy balance for the project.
viii. Total requirement of surface/ ground water and power with their respective sources, status of approval.
ix. Water balance diagram
x. Details of Emission, effluents, hazardous waste generation and mode of disposal during construction as well as operation phase.
xi. Man-power requirement.
xii. Cost of project and scheduled time of completion.
xiii. In case of expansion projects, project proponent shall submit structural stability certificate showing whether existing structure withstand for proposed expansion activity.
xiv. Brief on present status of compliance (Expansion/modernization proposals)
a. Cumulative Environment Impact Assessment for the existing as well as the proposed expansion/modernization shall be carried out.
b. In case of ground water drawl for the existing unit, action plan for phasing out of ground water abstraction in next two years except for domestic purposes and shall switch over to $100 \%$ use of surface water from nearby source.
c. Copy of all the Environment Clearance(s) including Amendments/validity of extension/transfer of EC, there to obtained for the project from MoEF\&CC/SEIAA shall be attached as Annexures. A Certified Compliance Report (CCR) of the Integrated Regional Office of the Ministry of Environment, Forest and Climate Change/ or concerned authority as per OM

No. IA3-22/10/2022-IA.III [E 1772581], dated $8^{\text {th }}$ June, 2022 on the status of compliance of conditions stipulated in all the existing environment clearances including amendments shall be provided. A Certified Compliance Report (CCR) issued by the concerned Authority shall be valid for a period of one year from the date of inspection.
d. In case the existing project has not obtained Environment Clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. A proper justification needs to be submitted along with documentary proof. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 1994 or 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of CTO from the Regional Office of the SPCB shall be submitted, as per OM No. IA3-22/10/2022-IA.III [E 1772581], dated $8^{\text {th }}$ June, 2022. CCR on CTO conditions issued by the concerned SPCBs/PCCs shall be valid for a period of one year from the date of inspection of the project.

## 3. Description of the Environment

i. Study period
ii. Approach and methodology for data collection as furnished below.

| Attributes | Sampling |  | Remarks |
| :---: | :---: | :---: | :---: |
|  | Network | Frequency |  |
| A. Air Environment |  |  |  |
| Micro-Meteorological <br> - Wind speed (Hourly) <br> - Wind direction <br> - Dry bulb temperature <br> - Wet bulb temperature <br> - Relative humidity <br> - Rainfall <br> - Solar radiation <br> - Cloud cover <br> - Environmental Lapse Rate | Minimum 1 site in the project impact area | 1 hourly continuous | - IS 5182 Part 1-20 <br> - Site specific primary data is essential <br> - Secondary data from IMD, New Delhi <br> - CPCB guidelines to be considered. |
| Pollutants <br> - $\mathrm{PM}_{2.5}$ | At least 8-12 locations | As per <br> National <br> Ambient Air <br> Quality <br> Standards, <br> CPCB <br> Notification. | - Sampling as per CPCB guidelines <br> - Collection of AAQ data (except in monsoon season) <br> - Locations of various stations for different |
| - $\mathrm{PM}_{10}$ |  |  |  |
| - $\mathrm{SO}_{2}$ |  |  |  |
| - NOx |  |  |  |
| - CO |  |  |  |
| - HC |  |  |  |


| Attributes | Sampling |  | Remark |
| :---: | :---: | :---: | :---: |
|  | Network | Frequency |  |
| - Other parameters relevant to the project and topography of the area |  |  | parameters should be related to the characteristic properties of the parameters. <br> - The monitoring stations shall be based on the NAAQM standards as per GSR 826(E) dated 16/11/2009 and take into account the predominant wind direction, population zone and sensitive receptors including reserved forests, <br> - Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAAQM Notification of 16/11/2009 along with min., max., average and $98 \%$ values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report. |
| B. Noise |  |  |  |
| - Hourly equivalent noise levels | At least 8-12 locations | As per CPCB norms | - |


| Attributes | Sampling |  | Remarks |
| :---: | :---: | :---: | :---: |
|  | Network | Frequency |  |
| Parameters for water quality <br> - pH , temp, turbidity, magnesium hardness, total alkalinity, chloride, sulphate, nitrate, fluoride, sodium, potassium, salinity <br> - Total nitrogen, total phosphorus, DO, BOD, COD, Phenol <br> - Heavy metals <br> - Total coliforms, faecal coliforms <br> - Phyto-plankton <br> - Zoo-plankton <br> - Microalgae/microalgal bloom | Samples for water quality should be collected and analyzed as per: <br> - IS: 2488 (Part 1-5) methods for sampling and testing of Industrial effluents <br> - Standard methods for examination of water and wastewater analysis published by American Public Health Association. |  |  |
| For River Bodies <br> - Total Carbon <br> - pH <br> - Dissolved Oxygen <br> - Biological Oxygen Demand <br> - Free NH4 <br> - Boron <br> - Sodium Absorption Ratio <br> - Electrical Conductivity <br> - TDS | - Surface water quality of the nearest River (60m upstream and downstream) and other surface water bodies | - Yield of measured <br> - Standard collection standards | sources to be ritical season odology for face water (BIS |
| For Ground Water | - Ground water monitoring data should be collected at minimum of 8 locations (from existing wells /tube wells/existing current records) from the study area and shall be included. |  |  |
| D. Traffic Study |  |  |  |
| - Type of vehicles <br> - Frequency of vehicles for transportation of materials | - |  |  |


| Attributes | Sampling |  | Remarks |
| :---: | :---: | :---: | :---: |
|  | Network | Frequency |  |
| - Additional traffic due to proposed project <br> - Parking arrangement |  |  |  |
| E. Land Environment |  |  |  |
| Soil <br> - Particle size distribution <br> - Texture <br> - pH <br> - Electrical conductivity <br> - Cation exchange capacity <br> - Alkali metals <br> - Sodium Absorption Ratio (SAR) <br> - Permeability <br> - Water holding capacity <br> - Porosity | Soil samples be collected as per BIS specifications |  |  |
| Land use/Landscape <br> - Location code <br> - Total project area <br> - Topography <br> - Drainage (natural) <br> - Cultivated, forest, plantations, water bodies, roads and settlements | - |  |  |
| E. Biological Environment |  |  |  |
| Aquatic <br> - Primary productivity <br> - Aquatic weeds <br> - Enumeration of phyto plankton, zoo plankton and benthos <br> - Fisheries <br> - Diversity indices <br> - Trophic levels <br> - Rare and endangered species <br> - Marine Parks/ Sanctuaries/ closed | - Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. Indicator species which indicate ecological and environment degradation should be identified and included to clearly state whether the proposed project would result in to any adverse effect on any species. <br> - Samples to collect from upstream and downstream of discharge point, nearby tributaries at downstream, and also from dug wells close to activity site. <br> - For forest studies, direction of wind should be considered while selecting forests. |  |  |


| Attributes | Sampling |  | Remarks |
| :---: | :---: | :---: | :---: |
|  | Network | Frequency |  |
| areas /coastal <br> regulation zone (CRZ) <br> Terrestrial <br> Vegetation-species list, economic importance, forest produce, medicinal value <br> - Importance value index (IVI) of trees <br> - Fauna <br> - Avi fauna <br> - Rare and endangered species <br> - Sanctuaries / National park / Biosphere reserve <br> - Migratory routes | - Secondary data to collect from Government offices, NGOs, published literature. |  |  |
| F. Socio-economic |  |  |  |
| - Demographic structure <br> - Infrastructure resource base <br> - Economic resource base <br> - Health status: Morbidity pattern <br> - Cultural and aesthetic attributes <br> - Education | - Socio-economic survey is based on proportionate, stratified and random sampling method. <br> - Primary data collection through questionnaire <br> - Secondary data from census records, statistical hard books, topo sheets, health records and relevant official records available with Govt. agencies |  |  |

iii. Interpretation of each environment attribute shall be enumerated and summarized as given below:

- Ambient air quality
- Ambient Noise quality
- Surface water quality
- Ground water quality
- Soil quality
- Biological Environment
- Land use
- Socio-economic environment


## 4. Anticipated Environment Impacts and mitigation measures (In case of expansion, cumulative impact assessment shall be carried out)

i. Identification of potential impacts in the form of a matrix for the construction and operation phase for all the environment components

| Activity | Environment | Ecological | Socio-economic |
| :--- | :--- | :--- | :--- |
| Construction phase |  |  |  |
| Operation phase |  |  |  |

ii. Impact on ambient air quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
a. Construction phase
b. Operation phase

- Details of stack emissions from the existing as well as proposed activity.
- Assessment of ground level concentration of pollutants from the stack emission based on AQIP Modelling The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any along with wind rose map for respective period
- Impact on ground level concentration, under normal, abnormal and emergency conditions. Measures to handle emergency situations in the event of uncontrolled release of emissions.
iii. Impact on ambient noise quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
a. Construction phase
b. Operation phase
iv. Impact on traffic (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
a. Construction phase
b. Operation phase
v. Impact on soil quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
a. Construction phase
b. Operation phase
vi. Impact on land use (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
a. Construction phase
b. Operation phase
vii. Impact on surface water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
a. Construction phase
b. Operation phase
viii.Impact on ground water resource and quality (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
a. Construction phase
b. Operation phase
ix. Impact on terrestrial and aquatic habitat (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
a. Construction phase
b. Operation phase
x. Impact on socio-economic environment (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
a. Construction phase
b. Operation phase
xi. Impact on occupational health and safety (Sources; Embedded control measures; Assessment; Mitigation measures; Residual impact)
a. Construction phase
b. Operation phase


## 5. Analysis of Alternatives (Technology \& Site)

i. No project scenario
ii. Site alternative
iii. Technical and social concerns
iv. Conclusion

## 6. Environmental Monitoring Program

i. Details of the Environment Management Cell
ii. Performance monitoring schedule for all pollution control devices shall be furnished.
iii. Corporate Environment Policy
a. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
b. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environment or forest norms / conditions? If so, it may be detailed in the EIA.
c. What is the hierarchical system or Administrative order of the company to deal with the environment issues and for ensuring compliance with the environment clearance conditions? Details of this system may be given.
d. Does the company have system of reporting of non compliances / violations of environment norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report
iv. Action plan for post-project environment monitoring matrix:

| Activity | Aspect | Monitoring <br> Parameter | Location | Frequency | Responsibility |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
| Construction phase |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## 7. Additional Studies

i. 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 capture, use and storage after 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.
ii. Details of adoption/ implementation status/plan to achieve the goal of Glasgow COP26 Climate Submit with regard to enhance the non-fossil energy, use of renewable energy, minimization of net carbon emission and carbon intensity with long-term target of "net Zero" emission.
iii. Implementation status/measures adopted for avoiding the generation of single used plastic waste.
iv. In cases the project is located in Critically and Severely Polluted Areas, additional mitigation measures adopted and detailed action plan to be submitted in the EIA/EMP Report as per MoEF\&CC O.M. No. 22-23/2028-IA.III dated 31/10/2019 and MoEF\&CC O.M. No. 22-23/2028-IA.III dated 5/07/2022 has to be submitted.
v. Public consultation details (Entire proceedings as separate annexure along with authenticated English Translation of Public Consultation proceedings).
vi. As part of Corporate Environment Responsibility (CER) activity, company shall adopt nearby villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration. In this regard, time bound action plan as per the MoEF\&CC Office Memorandum dated 30/09/2020 shall be submitted.
vii. Summary of issues raised during public consultation along with action plan to address the same as per MoEF\&CC O.M. dated 30/09/2020

| $\mathbf{S}$ | Physical activity and action plan |  | Year of implementation <br> (Budget in INR) |  |  | Total <br> $\mathbf{N}$ <br> $\mathbf{N}$ <br> $\mathbf{0}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name of the <br> Nanditure <br> (Rs. in <br> Crtivity | Physical Targets | $\mathbf{1}^{\text {st }}$ | $\mathbf{2}^{\text {nd }}$ | $\mathbf{3}^{\text {rd }}$ | Crores) |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

viii.Risk assessment

- Methodology
- Hazard identification
- Frequency analysis
- Consequence analysis
- Risk assessment outcome
ix. Emergency response and preparedness plan


## 8. Project Benefits

i. Environment benefits
ii. Social infrastructure
iii. Employment and business opportunity
iv. Other tangible benefits

## 9. Environment Cost Benefit Analysis

i. Net present value
ii. Internal rate of return
iii. Benefit cost ratio
iv. Cost effectiveness analysis

## 10. Environment Management Plan (Construction and Operation phase)

i. Air quality management plan
ii. Noise quality management plan
iii. Action plan for hazardous waste management
iv. Action plan for solid waste management
v. Action plan for e-waste management.
vi. Action plan for plastic waste management.
vii. Action plan for construction and demolition waste management.
viii. Effluent management plan
ix. Storm water management plan
x. Rain water harvesting plan
xi. Plan for maximum usage of waste water/treated water in the Unit
xii. Occupational health and safety management plan
xiii.Green belt development plan: An action plan for Green Belt development consisting of 3 tiers of plantations of native species all along the periphery of the project of adequate width shall be raised in $33 \%$ of total area with a tree density shall not less than 2500 per ha within a time frame of one year shall be submitted. Survival rate of green belt shall be monitored on periodic basis to ensure that survival rate not be less than $80 \%$.
xiv. Socio-economic management plan
xv . Wildlife conservation plan (In case of presence of schedule I species)
xvi. Total capital cost and recurring cost/annum for environment pollution control measures shall be included.

## 11. Conclusion of the EIA study

12. In addition to the above, any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

## Standard ToRs FOR CEMENT INDUSTRY [3(b)]

1. Limestone and coal linkage documents along with the status of environment clearance of limestone and coal mines.
2. Quantum of production of coal and limestone from coal \& limestone mines and the projects they cater to;
3. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having $1 \mathrm{~m}-5 \mathrm{~m}$ spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/landcover mapping of the area.
4. If the raw materials used have trace elements, an environment management plan shall also be included.
5. Plan for the implementation of the recommendations made for the cement plants in the Corporate Responsibility for Environmental Protection (CREP) guidelines shall be prepared.
6. Energy consumption per ton of clinker and cement grinding
7. Provision of waste heat recovery boiler
8. Arrangement for co-processing of hazardous waste in cement plant.
9. Provision of Alternate fuels.
10. Details of Implementation of Fly Ash Management Rules
11. Emission/Effluent norms as per GSR 496 (E) dated 9/5/2016 [EPA Rules 1986].
12. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
13. Action plan to limit the particulate matter emission from all the stacks below $30 \mathrm{mg} / \mathrm{Nm} 3$ shall be furnished.
14. PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.
15. Action plan for $100 \%$ solid waste utilization shall be submitted.
16. $\mathrm{PM}\left(\mathrm{PM}_{10}\right.$ and $\left.\mathrm{P}_{2.5}\right)$ present in the ambient air must be analysed for source analysis - natural dust/RSPM generated from plant operations (trace elements) of $\mathrm{PM}_{10}$ to be carried over.

## Standard ToRs FOR INTEGRATED STEEL PLANT [3(a)]

1. Iron ore/coal linkage documents along with the status of environment clearance of iron ore and coal mines.
2. Quantum of production of coal and iron ore from coal \& iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact.
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having $1 \mathrm{~m}-5 \mathrm{~m}$ spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
5. $\mathrm{PM}\left(\mathrm{PM}_{10}\right.$ and $\left.\mathrm{PM}_{2.5}\right)$ present in the ambient air must be analysed for source analysis natural dust/RSPM generated from plant operations (trace elements) of $\mathrm{PM}_{10}$ to be carried over.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.
11. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
12. Trace metals in waste material specially in slag.
13. Trace metals in water
14. Details of proposed layout clearly demarcating various units within the plant.
15. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs and outputs (material and energy balance).
16. Details on design and manufacturing process for all the units.
17. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
18. Details on requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
19. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
20. Details on toxic content (TCLP), composition and end use of slag.
21. Fourth Hole fume extraction system shall be provided for submerged Arc Furnace (SAF). Waste heat recovery (WHR) system shall be installed to recover the sensible heat from flue gases of electric arc furnace (EAF).
22. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019 [EPA Rules 1986].
23. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
24. Action plan to limit the particulate matter emission from all the stacks below $30 \mathrm{mg} / \mathrm{Nm} 3$ shall be furnished.
25. Action plan for $100 \%$ solid waste utilization shall be submitted.
26. PP shall explore the possibility of plastic waste utilization in the Plant/Unit process.

## Standard ToRs FOR METALLURGICAL INDUSTRY (Ferrous and Non-ferrous)[3(a)]

1. A 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
2. Plan for the implementation of the recommendations made for the proposed Unit in the Corporate Responsibility for Environmental Protection (CREP) guidelines.
3. Plan for solid wastes utilization.
4. Plan for utilization of energy in off gases (coke oven, blast furnace)
5. System of coke quenching adopted with full justification.
6. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
7. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
8. Details on toxic content using Toxicity Characteristic Leaching Procedure (TCLP), composition and end use of slag.
9. $100 \%$ dolo char generated in the plant shall be used to generate power.
10. Fourth Hole fume extraction system shall be provided for SAF.WHR system shall be installed to recover sensible heat from flue gases of EAF. Provision for installation of jigging and briquetting plant to utilise the fines generated in the process.
11. No tailing pond is permitted for Iron ore slimes. Dewatering and filtration system shall be provided.
12. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019 [EPA Rules 1986].
13. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
14. Action plan for developing connecting and internal road in terms of MSA as per IRC guidelines shall be submitted.
15. Action plan to limit the particulate matter emission from all the stacks below $30 \mathrm{mg} / \mathrm{Nm} 3$ shall be furnished.
16. Action plan for $100 \%$ solid waste utilization shall be submitted.
17. $\mathrm{PM}\left(\mathrm{PM}_{10}\right.$ and $\left.\mathrm{P}_{2.5}\right)$ present in the ambient air must be analysed for source analysis - natural dust/RSPM generated from plant operations (trace elements) of $\mathrm{PM}_{10}$ to be carried over.

## Standard ToRs FOR PULP AND PAPER INDUSTRY [5(i)]

1. A note on pulp washing system capable of handling wood pulp shall be included.
2. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping \& Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln
3. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for Eucalyptus/Casuarina to produce low kappa (bleachable) grade of pulp.
4. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.
5. A commitment that no extra chlorine base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.
6. Undertaking to comply with the norms stipulated in the S.O. 3187 (E) dated 7/10/2016 for the projects located in Ganga basin.
7. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.
8. Action plan to limit the particulate matter emission from all the stacks below $30 \mathrm{mg} / \mathrm{Nm} 3$ shall be furnished.
9. Action plan for $100 \%$ waste utilization shall be submitted.

## Standard ToRs FOR LEATHER/SKIN/HIDE PROCESSING INDUSTRY [4(f)]

1. Justification for engaging a particular type of process (raw hide/skin into semi finishing or finished leather, semi-finished leather to finished leather, dry finishing operations, chrome/vegetable tanning, etc.).
2. Details regarding complete leather/ skin/ hide processing including the usage of sulphides, nitrogen compounds, chromium or other tanning agents, post-tanning chemicals, biocides, etc., along with the material balance shall be provided.
3. In case of chrome tanning, details of the chrome recovery plant, management of shavings/solid waste including safe disposal.
4. Details on reuse of soak liquor / saline stream from membrane system, if applicable, to the extent possible in pickling activity after required treatment. Also, mention the salt recovery measures.
5. Action plan to limit the particulate matter emission from all the stacks below $30 \mathrm{mg} / \mathrm{Nm} 3$ shall be furnished.
6. Action plan for $100 \%$ waste utilization shall be submitted.

## Standard ToRs FOR COKE OVEN PLANT [4(b)]

1. Justification for selecting recovery/non-recovery (beehive) type batteries with the proposed unit size.
2. Details of proposed layout clearly demarcating various facilities such as coal storages, coke making, by-product recovery area, etc within the plant.
3. Details of coke oven plant (recovery/non-recovery type) including coal handling, coke oven battery operations, coke handling and preparation.
4. Scheme for coal changing, charging emission centre, Coke quenching technology, pushing emission control.
5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.
6. Emission/effluent norms as per G.S.R 894 (E) dated 4/12/2019. Provision of CDQ in case of coke oven plant of 0.8 MTPA and above.
7. Action plan to limit the particulate matter emission from all the stacks below $30 \mathrm{mg} / \mathrm{Nm} 3$ shall be furnished.
8. Action plan for $100 \%$ solid waste utilization shall be submitted.
9. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

## Standard ToRs FOR ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS[4( c)]

1. Type of fibres used (Asbestos and others) and preference of selection from technoenvironment angle should be furnished
2. As asbestos is used in several products and as the level of precautions differ from milling to usage in cement products, friction products gasketing, textiles and also differ with the process used, it is necessary to give process description and reasons for the choice for selection of process
3. Technology adopted, flow chart, process description and layout marking areas of potential environment impacts
4. National standards and codes of practice in the use of asbestos particular to the industry should be furnished
5. In case of newly introduced technology, it should include the consequences of any failure of equipment/ technology and the product on environment status.
6. In case of expansion project asbestos fibre to be measured at stack emission and work zone area, besides base line air quality.
7. In case of green field project asbestos fibre to be measured in the ambient air.
8. Action plan to limit the particulate matter emission from all the stacks below $30 \mathrm{mg} / \mathrm{Nm} 3$ shall be furnished.
9. Action plan for $100 \%$ solid waste utilization shall be submitted.
10. PM (PM10 and P2.5) present in the ambient air must be analysed for source analysis natural dust/RSPM generated from plant operations in case of expansion projects (trace elements /asbestos fibre) of PM10 to be carried over.
11. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

## Standard ToRs FOR IRON ORE BENEFICIATION PLANT [2 (b)]

1. Details regarding pollution control measures to be adopted in the mineral handling area, loading and unloading areas including all transfer points shall be submitted.
2. The Project proponent shall submit action plan for conditioning of the ore with water to mitigate fugitive dust emission, without affecting flow of ore in the ore processing and handling areas.
3. Treatment details regarding effluent generated from the ore beneficiation plant and the mode of transportation of tailing slurry shall be submitted.
4. Separate chapter on slime management shall be submitted.
5. Action plan for regular monitoring of ground water level and quality in and around the project area of beneficiation plant and tailing/slime pond shall be submitted by establishing a network of existing wells and constructing new piezometers.
6. Details regarding lining of the tailing/slime pond to be provided shall be submitted in order to ensure that there is no leaching from the tailing/slime pond.
7. Details regarding establishment of garland drain around the tailing/slime pond and the quantity of decanted water to be re-circulated from the tailing/slime pond shall be submitted along with complete water balance.
8. Technology to be adopted for maximum recovery of ore in order to reduce slurry discharge and to increase the life of the tailing/slime pond shall be submitted.
9. Action plan for $100 \%$ solid waste utilization shall be submitted.
10. Action plan for the stock piles with impervious floor, provision of garland drains and catch pits to trap run off material shall be submitted.

## Executive Summary

## Executive summary of the report in about $\mathbf{8 / 1 0}$ pages incorporating the following:

i. Project name and location (Village, Dist, State, Industrial Estate (if applicable)
ii. Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier EC.
iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes. Materials balance shall be presented.
v. Measures for mitigating the impact on the environment and mode of discharge or disposal.
vi. Capital cost of the project, estimated time of completion
vii. Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt/private land, status of is acquisition, nearby (in $2 / 3 \mathrm{~km}$.) water body, population, with in 10 km other industries, forest, eco/sensitive zones, accessibility, (note - in case of industrial estate this information may not be necessary)
viii. Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fauna, socio/economic condition of the nearby population
ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
x. Likely impact of the project on air, water, land, flora/fauna and nearby population
xi. Emergency preparedness plan in case of natural or in plant emergencies
xii. Issues raised during public hearing (if applicable) and response given
xiii. CSR plan with proposed expenditure.
xiv. Occupational Health Measures
xv. Post project monitoring plan

## ANNEXURE-3

List of the Expert Appraisal Committee (Industry-1) members participated during VC meeting

| $\begin{array}{\|c} \hline \text { S. } \\ \text { No. } \end{array}$ | Name | Position | 29.04.2023 |
| :---: | :---: | :---: | :---: |
| 1. | Shri Rajive Kumar | Chairman | Present |
| 2. | Dr. Dipankar Shome | Vice Chairman | Present |
| 3. | Dr. S. Ranganathan | Member | Present |
| 4. | Dr. Ranjit Prasad | Member | Present |
| 5. | Dr. S. K. Singh | Member | Present |
| 6. | Dr. Tejaswini Ananthkumar | Member | Present |
| 7. | Dr. Hemant Sahasrabuddhe | Member | Present |
| 8. | Dr. Jai Krishna Pandey | Member | Present |
| 9. | Dr. E V R Raju | Member | Present |
| 10. | Dr. S K Chaturvedi, Actg. DG, (Representatives of NCCBM) | Member | Present |
| 11. | Shri Nazimuddin, Scientist ' F ' (Representative of CPCB) | Member | Present |
| 12. | Dr. S. Raghavan, Scientist 'D' (Representative of National Institute of Occupational Health (NIOH) | Member | Absent |
| 13. | Dr. Sanjay Bist, Scientist 'E'  <br> (Representative of Indian <br> Meteorological Department)  | Member | Present |
| 14. | Dr. R.B. Lal, Scientist F, MoEFCC | Member Secretary | Present |
| MoEFCC |  |  |  |
| 15. | Dr R P Rastogi | Scientist C | Present |
| 16. | Dr Sandeepan BS | Scientist B | Present |

## Approval of EAC Chairman

## Re: Compiled Draft minutes of the 29th EAC Meeting held on 1st May, 2023 for approval of the Chairman-Regarding

## From : chairman eac ind 1

Fri, May 05, 2023 10:05 AM [chairman.eac.ind.1@gmail.com](mailto:chairman.eac.ind.1@gmail.com)
Subject : Re: Compiled Draft minutes of the 29th EAC Meeting held on 1st May, 2023 for approval of the Chairman-Regarding
To : Director MoEFCC Dr R B LAL [rb.lal@nic.in](mailto:rb.lal@nic.in)
Cc : rajivekumar1983@gmail.com, ranganathan metals
[ranganathan.metals@gmail.com](mailto:ranganathan.metals@gmail.com), ranjitnitj@gmail.com, rajuevr60@gmail.com, sksinghdce@gmail.com, dshome61@gmail.com, tejaswini acf [tejaswini.acf@gmail.com](mailto:tejaswini.acf@gmail.com), sshemant 801 [sshemant_801@rediffmail.com](mailto:sshemant_801@rediffmail.com), dg@ncbindia.com, Nazimuddin [nazim.cpcb@nic.in](mailto:nazim.cpcb@nic.in), Raghavan S [raghuharihar@gov.in](mailto:raghuharihar@gov.in), raghuharihar@yahoo.co.in, Sanjay Bist [sanjay.bist@imd.gov.in](mailto:sanjay.bist@imd.gov.in), drjkpandey eac industry1
[drjkpandey.eac.industry1@gmail.com](mailto:drjkpandey.eac.industry1@gmail.com)
Dear Dr.Lal,
The minutes are approved.
Kindly do the needful.

## Regards

Rajive Kumar
Chairman-EAC-Industry-1

