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

Dated: 07.10.2022

Date of Zero Draft MoM sent to EAC:04.10.2022 Approval by Chairman: 07.10.2022 Uploading on PARIVESH: 07.10.2022.

APPROVED MINUTES OF THE 14th EXPERT APPRAISAL COMMITTEE (INDUSTRY-1 SECTOR) MEETING HELD ON SEPTEMBER 29-30, 2022

- 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

SEPTEMBER 29, 2022 [THURSDAY]

(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 'E' & 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 13th Meeting of the EAC (Industry-1 Sector) held during September 14-15, 2022 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 13th Meeting of the EAC (Industry-1 Sector) held during September 14-15, 2022 conducted through Video Conferencing (VC), and noted that one request has been received for modifications/factual correction by M/s Ratnamani Metals and Tube Limited in the minutes of the 13th EAC meeting for the

project/activities, and confirmed the same. The factual correction of the minutes of meeting w.r.t. M/s Ratnamani Metals and Tube Limited has been done and summarized in the Agenda no. 14.10.

Details of the proposals considered during the 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. 14.1

14.1 Expansion of Steel Plant – DRI Kiln (Sponge Iron from 1,15,000 TPA to 3,46,500 TPA), Induction Furnaces with matching LRF & CCM (MS Billets / Ingots from 30,000 TPA to 3,46,800 TPA), Rolling Mill with hot charging (Rolled Products 30,000 TPA to 2,90,000 TPA), New Rolling Mill with Conventional with LDO (Rolled Products 30,000 TPA), New Ferro Alloy Unit with 2x18 MVA Submerged Electric Furnaces (FeMn 90,000 TPA/SiMn 60,000 TPA / FeCr 60,000 TPA / FeSi 30,000 TPA/Pig Iron – 90,000 TPA / Cast iron – 90,000 TPA), WHRB based Power Plant from 12 MW to 34 MW, CFBC based Power Plant 4.9 MW to 29.9 MW & New Fly Ash brick manufacturing unit (38,000 Bricks/day) & Briquetting plant by M/s Sunil Ispat & Power Limited, located at Khasra Nos. 98/1, 103, 109, 110, 111/1, 111/2, 111/4, 112, 113, 114, 115, 118 & 134, At Chiraipani Village, Lakha Gram Panchayat, Raigarh Tehsil & District, Chhattisgarh – Consideration of Environmental Clearance.

[Proposal No. IA/CG/IND/288393/2004; File No. IA-J-11011/13/2021-IA-II(IND-I)] [Consultant: Pioneer Enviro Laboratories and Consultant Private; valid upto 16.12.2022]

- 14.1.1 M/s. Sunil Ispat & Power Limited has made an online application vide proposal no. IA/CG/IND/288393/2004, dated 8th September 2022 along with copy of EIA/EMP report, Form 2 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 and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at central level.
- 14.1.2 Name of the EIA consultant: M/s. Pioneer Enviro Laboratories And Consultants Pvt. Ltd. [S. No. 141, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/1922/SA0148 valid till 21.09.2022; Rev. 25, Sept 05, 2022. Further accreditation was extended upto 16.12.2022 vide QCI letter no. QCI/NABET/ENV/ACO/22/2528, dated 17.09.2022].

Details submitted by Project proponent

14.1.1 The details of the ToR are furnished as below:

| Date of | Consideration | Details | Date of | ToD Validity |
|-------------|---------------|---------|---------|--------------|
| Application | Consideration | Details | Accord | TOK valuty |

| 10 th December | 28 th meeting of EAC | Terms of Reference | 08 th | 07 th February |
|---------------------------|---------------------------------|--------------------|------------------|---------------------------|
| 2020 | held on 19/01/2021 | | February | 2025 |
| | | | 2021 | |

14.1.2 The project of M/s. Sunil Ispat & Power Limited located in Chiraipani Village, Lakha Gram Panchayat, Raigarh Tehsil & District, Chhattisgarh has proposed for expansion of Steel Plant – DRI Kiln (Sponge Iron from 1,15,000 TPA to 3,46,500 TPA), Induction Furnaces with matching LRF & CCM (MS Billets / Ingots from 30,000 TPA to 3,46,800 TPA), Rolling Mill with hot charging (Rolled Products 30,000 TPA to 2,90,000 TPA), New Rolling Mill with Conventional with LDO (Rolled Products 30,000 TPA), New Ferro Alloy Unit with 2x18 MVA Submerged Electric Furnaces (FeMn 90,000 TPA/SiMn 60,000 TPA / FeCr 60,000 TPA / FeSi 30,000 TPA/Pig Iron – 90,000 TPA /Cast iron – 90,000 TPA), WHRB based Power Plant from 12 MW to 34 MW, CFBC based Power Plant 4.9 MW to 29.9 MW & New Fly Ash brick manufacturing unit (38,000 Bricks/day) & Briquetting plant.

| ings: |
|-------|
| |

| S.No. | Particulars | | Details | | | | | |
|----------------|--|--------------------------------|---|-------------------|----------------|----------------|---|--|
| i. | Total land | 21.57 Ha. | (53.32 acres |) [Private Land | d] | | | |
| ii. | Land acquisition details as per MoEF&CC, O.M. dated 7/10/2014. | The entire registered | The entire land is Private land and same is acquired and registered | | | | | |
| iii. | Existence of habitation & involvement of | Project si Study Ar | i te: No habita rea | ation exists in t | the plant site | | Due to proximity to habitation: PP will develop | |
| | R&R, if any. | Habitat | ion | Distance | Direction |] | 30 m wide | |
| | | Kelo Colony | Priyotoma | 0.3 kms. | Е | | greenbelt with tall trees towards | |
| | | Chiraipani Village 0.35 Kms. S | | | | Kelo priyotoma | | |
| | | | | | | | colony in the Eastern direction and towards chiraipani village in the Southern direction inside the plant premises. | |
| iv. | Latitude and | S. No. | Point | Co | oordinates | | | |
| corners of the | | 1. | 1. Point # 1 21°59'16.80"N 83°21'55.92"E | | | | | |
| | project site | 2. | Point # 2 | 21°59'6.27 | "N 83°21'52. | 89"E | | |
| | | 3. | Point # 3 | 21°59'5.45 | 5"N 83°22'0.4 | 4"E | | |
| | | 4. | Point # 4 | 21°58'59.04 | 4"N 83°21'57 | .36"E | | |

| S.No. | Particulars | Details | | | Remarks by PP | | |
|-------|----------------------------|-----------------|---|--------------------------------------|-------------------|--|--|
| | | 5. | Point # 5 | 21°58'59.83"N 83°21'54.17"E | | | |
| | | 6. | Point # 6 | 21°58'54.18"N 83°21'54.30"E | | | |
| | | 7. | Point # 7 | 21°58'50.10"N 83°21'57.95"E | | | |
| | | 8. | Point # 8 | 21°59'0.65"N 83°21'59.73"E | | | |
| | | 9. | Point # 9 | 21°59'0.45"N 83°22'1.84"E | | | |
| | | 10. | Point # 10 | 21°58'54.62"N 83°22'1.05"E | | | |
| | | 11. | Point # 11 | 21°58'53.93"N 83°22'7.21"E | | | |
| | | 12. | Point # 12 | 21°58'57.70"N 83°22'7.46"E | | | |
| | | 13. | Point # 13 | 21°59'4.86"N 83°22'9.02"E | | | |
| | | 14. | Point # 14 | 21°59'5.89"N 83°22'3.39"E | | | |
| | | 15. | Point # 15 | 21°59'11.04"N 83°22'5.65"E | | | |
| | | 16. | Point # 16 | 21°59'9.32"N 83°22'13.03"E | | | |
| | | 17. | Point # 17 | 21°59'10.59"N 83°22'13.23"E | | | |
| | | 18. | Point #18 | 21°59'14.42"N 83°22'4.51"E | | | |
| v. | Elevation of the | 253 m to 2 | 253 m to 263 m | | | | |
| vi. | Involvement of | No involv | ement of For | rest Land | Certificate form | | |
| | Forest Land, if | | | | DFO Raigarh | | |
| | any | | | | obtained vide | | |
| | | | | | letter dated | | |
| vii. | Water body | Project S | ite: Nil | | | | |
| | (Rivers, Lakes, Rond, Nala | Study or | | | | | |
| | Natural | Kelo rive | r -1.5 Kms., 1 | Dilip Singh Judev Mega Pariyojana | | | |
| | Drianage, Canal | – 1.1 Km | ns., Kokritara | ai Pond near Kirodimal (5.6Kms.), | | | |
| | etc.,) exists | GerwaniN | lala (2.6 Km | s.) & few other seasonal are flowing | | | |
| | project site as | Few pond | s exist within | n 10 Km. Radius. | | | |
| | well as study | · · · F - · · · | | | | | |
| | area | T 1 | | NI_4: | <u>Company</u> | | |
| V111. | EXISTENCE OF | / Biosphe | plan is approved | | | | |
| | National Park / | Birds. Mc | Birds. Movement of Elephants is observed within 15 Kms. | | | | |
| | Wildlife | radius of | budgetary | | | | |
| | Sanctuary / | | | | allocation of Rs. | | |
| | Reserve / Tiger | Urdana R | F, Taraimal I | RF, Punjipathra PF, Barkachhar RF. | be spent over a | | |
| | Reserve / | Kharidun | gri PF, Dung | apani PF, Lamidarha PF, Rabo RF | period of 5 years | | |
| | Elephant | exists wit | hin the study | area. | | | |
| | keserve etc. if | | | | | | |

| S.No. | Particulars | Details | Remarks by PP |
|-------|----------------|---------|----------------------|
| | any within the | | |
| | study area | | |

14.1.4 The PP reported that the existing Project has obtained Consent from CECB for manufacturing Sponge Iron of 1,15,000 TPA vide No. 236/TS/CECB/2005 date 12/01/2005. CTE granted prior to EIA notification 2006. Capital investment of the project was Rs. 32 Crores. As per EIA notification 1994 also EC is not applicable for greenfield projects with investment of less than Rs. 100 Crores. Subsequently 1st Consent to Operate obtained from Chhattisgarh Environment Conservation Board vide consent order No. TS/CECB/2009 date 03/01/2009 and Consent to Operate is regularly being renewed from CECB and the latest CTO is obtained vide letter No. 1245/TS/CECB/ 2022 dated 24.05.2022 which is valid up to 31.01.2023. Sunil Ispat and Power Limited has obtained Consent to Establish from Chhattisgarh Environment Conservation Board for manufacturing of 30,000 TPA of MS Billets through Induction Furnace, 30,000 TPA of Rolled products through hot charge Rolling mill, Power generation of 12 MW by WHRB based and 4.9 MW by AFCB based in the existing plant premises vide consent order No.5592/TS/CECB/2020 Nava Raipur, Atal Nagar, Raipur, Date 28/09/2020. AFBC power plant <5 MW & Billets (Induction Furnace) with production capacity upto 30,000 TPA does not require Environmental Clearance as per the provisions of EIA notification 2006 & its subsequent amendments thereof.

| S. | Unit | Permission | Production | Permission | Date of | Remarks by the PP |
|----|---------------|-------------------|----------------|----------------|-----------------|----------------------------|
| No | | | in TPA | issuing | permission | |
| | | | | authority | | |
| 1 | Sponge | CTE | 1,15,000 | CECB | 12-01-2005 | EC not applicable as it is |
| | iron | | | | | prior to EIA notification |
| | (1x350 | | | | | 2006 EC not applicable |
| | TPD) | | | | | as investment is less |
| | | | | | | than Rs 100 Crores. |
| 2 | Sponge | СТО | 1,15,000 | CECB | 03-01-2009 | 1 st CTO |
| | iron | Valid till | | | | |
| | (1x350 | 02/04/2009 | | | | |
| | TPD) | | | | | |
| 3 | Sponge | | 1,15,000 | CECB | 29-03-2010 | Renewal of CTO |
| | iron | | | | | |
| | (1x350 | | | | | |
| | TPD) | | | | | |
| | Note: Plant | was shut down fro | om the year 20 | 10 to 2019 due | to poor financ | ial management plant has |
| | undergone | auction through N | CLT 2019 and | subsequently | the present man | nagement have purchased |
| | the plant the | rough Hon'ble NC | LT in 2019 | | | |
| 4 | Sponge | CTO renewal | 1,15,000 | CECB | 27-02-2020 | Renewal of CTO |
| | iron | Valid till | | | | |
| | (1x350 | 26-02-2022 | | | | |
| | TPD) | | | | | |

| S. | Unit | Permission | Production | Permission | Date of | Remarks by the PP |
|----|-----------|-------------|---------------|------------|------------|-----------------------|
| No | | | in TPA | issuing | permission | |
| | | | | authority | | |
| 5 | Sponge | CTO renewal | 1,15,000 | CECB | 24-05-2022 | Renewal of CTO |
| | iron | Valid till | | | | |
| | (1x350 | 31-01-2023 | | | | |
| | TPD) | | | | | |
| 6 | WHRB | CTE | WHRB-12 | CECB | 28-09-2020 | EC not applicable for |
| | power, | | MW | | | WHRB power, |
| | Induction | | IF (Billets)- | | | Billets upto 30,000 |
| | furnace | | 30,000 TPA | | | TPA & AFBC power |
| | unit, | | Rolling Mill | | | plant below 5 MW does |
| | Rolling | | (Rolled | | | not require EC. |
| | Mill unit | | products- | | | |
| | & | | 30,000 TPA | | | |
| | AFBC | | AFBC | | | |
| | power | | power-4.9 | | | |
| | plant | | MW | | | |
| 7 | WHRB | СТО | WHRB-12 | CECB | 13/07/2022 | EC not applicable for |
| | power | Valid till | MW | | | WHRB power plant |
| | plant | 31-01-2023 | | | | |

14.1.5 Implementation status of the existing CTE

| S.No. | Unit (Product) | CTE permitted capacities vide dated 12/01/2005 | CTE permitted capacities vide dated 28/09/2020 | Implementation Status |
|-------|-------------------|--|--|-----------------------|
| 1. | DRI Kiln | 1,15,000 TPA | | In operation |
| | (Sponge Iron) | | | |
| 2. | Induction Furnace | | 30,000 TPA | Under implementation |
| | (MS Billets) | | | |
| 3. | Rolling Mill | | 30,000 TPA | Yet to implement |
| | (Rolled products) | | | _ |
| 4. | Power Plant | | WHRB Power Plant – | WHRB Power – 12 MW : |
| | (Electricity) | | 12 MW | In Operation |
| | | | AFBC Power Plant - | AFBC Power Plant : |
| | | | 4.9 MW | Under implementation |

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

| S.No. | Units and pr | oduct | Units for which 1 st CTE | Units for which 2 nd CTE | Proposed expansion proposal | After Proposed |
|-------|--|----------------------|--|--|---|--|
| | | | accorded & status | accorded & status | | expansion proposal |
| 1. | 1. DRI Kilns (Sponge Iron) | | 1,15,000 TPA (1 x 350 TPD) (In Operation) | | Increase of production from 1,15,000 TPA To 1,32,000 TPA (by usage of Pellets & increase in number of Working Days from 300 to 330) & New Kiln of 1 x 650 TPD to produce 2,14,500 TPA | 3,46,500 TPA |
| 2. | 2. Induction Furnace (Hot Billets / MS Billets / MS Ingots) | | | 30,000 TPA** (2 x 6 T) (under implementation) | 3,16,800 TPA (4 x 30T) | 3,46,800 TPA |
| 3. | Rolling Mill with Hot Charging (Rolled Products) | | | 30,000 TPA (1 x 90 TPD) (Yet to be implemented) | 2,60,000 TPA (1 x 787 TPD) | 3,20,000 TPA |
| 4. | Reheating Furna (Rolled product LDO as fuel | ace s) with | | | 30,000 TPA (1 x 90 TPD) | |
| 5. | Ferro Alloys (FeMn / SiMn FeSi / Pig Iron Iron) | / FeCr / n / Cast | | | FeMn - 90,000 TPA / SiMn - 60,000 TPA / FeCr - 60,000 TPA / FeSi - 30,000 TPA/Pig iron - 90,000 TPA / Cast iron 90,000 TPA (2x18 MVA) | FeMn 90,000 TPA / SiMn 60,000 TPA / FeCr - 60,000 TPA / FeSi - 30,000 TPA/ Pig iron - 90,000 TPA / Cast iron 90,000 TPA (2x18 MVA) |
| 6. | Power Plant WHRB | | | 1 x 12 MW* (in operation) | 1 x 22 MW | 63.9 MW |
| | | ГDU | | MW(AFBC)** (Under implementation) | 1 X 23 WIW (CFBC) | |
| 7. | Fly Ash Bi manufacturin | rick g unit | | | 38,000 Bricks/day | 38,000 Bricks/day |
| 8. | Briquetting | plant | | | 300 Kg/Hr. | 300 Kg/Hr |
| Note: | * Obtained CTO * Construction o | for 12 M | W capacity WHR capacity FBC bas | B power plant vide sed power plant & | dated 13/07/2022. Induction Furnaces is be | ing carried out. |

| S.No. | Raw | Quantity required Tonnes per | | Source | Distance | Mode of | |
|-------|---------------|------------------------------|----------------|----------------|----------------------|---------|---|
| | material | c | annum | - | | from | Transportation |
| | | | | | | site | - |
| | | | | | | (Kms.) | |
| | | Existing | Expansion | Total | | | |
| Α | For DRI Kilns | s (Sponge] | Iron) – from | 1,15,000 to 1, | 32,000 TPA | | |
| 1 | Iron ore | 2,12,750 | | 2,12,750 | Odisha/ | 300 | By rail & road |
| | (100%) | , , | | | Chhattisgarh | | (through |
| | ` | | | | C | | covered trucks) |
| | | | | (OR |) | | , |
| | Pellets | | 1,91,400 | 1,91,400 | Odisha/ | 300 | By rail & road |
| | (100%) | | , , | , , | Chhattisgarh | | (through |
| | × , | | | | 0 | | covered trucks) |
| 2 | Indian coal | 1,49,500 | 22,100 | 1,71,600 | SECL | 200 | By rail & road |
| | | , , | , | , , | Chhattisgarh / | | (through |
| | | | | | MCL Odisha | | covered trucks) |
| | | | | (OR |) | | , |
| | Imported | 95,450 | 14,110 | 1.09.560 | Indonesia / South | 20 | Through sea |
| | coal | , | , | , , | Africa / Australia | | route, rail route |
| | | | | | | | & by road |
| 3 | Dolomite | 5,750 | 850 | 6,600 | Chhattisgarh | 100 | By road |
| | | , | | , | U | | (through |
| | | | | | | | covered trucks) |
| В | For DRI Kiln | s (Sponge] | Iron) – 2,14,5 | 00 TPA | I | | , |
| 1 | Iron ore | | 3,43,200 | 3,43,200 | Odisha/ | 300 | By rail & road |
| | (100%) | | | | Chhattisgarh | | (through |
| | Ň, | | | | C C | | covered trucks) |
| | | | | OR | | | |
| 2 | Pellets | | 3,11,025 | 3,11,025 | Odisha/ | 300 | By rail & road |
| | | | | | Chhattisgarh | | (through |
| | | | | | | | covered trucks) |
| 3 | Indian coal | | 2,78,850 | 2,78,850 | SECL | 200 | By rail & road |
| | | | | | Chhattisgarh / | | (through |
| | | | | | MCL Odisha | | covered trucks) |
| | | | | (OR |) | | |
| | Imported | | 1,78,464 | 1,78,464 | Indonesia / South | 20 | Through sea |
| | coal | | | | Africa / Australia | | route, rail route |
| | | | | | | | & by road |
| 4 | Dolomite | | 10,725 | 10,725 | Chhattisgarh | 100 | By road |
| | | | | | C C | | (through |
| | | | | | | | covered trucks) |
| С | For Steel Mel | ting Shop (| (MS Billets/ I | ngots/Hot Bi | llets) – 3,46,800 TP | 4 | , |
| 1 | Sponge Iron | 30,303 | 3,20,000 | 3,50,303 | Own generation/ | 100 | By road |
| | | | | | Chhattisgarh | | (through |
| | | | | | | | covered trucks) |
| 2 | MS Scrap / | 4,545 | 48,000 | 52,545 | Own generation/ | 100 | By road |
| | Pig Iron | | | | Chhattisgarh | | (through |
| | - | | | | | | covered trucks) |

14.1.7 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 | Quantity required Tonnes per | | Source | Distance | Mode of | |
|-------|----------------|------------------------------|--------------------|--------------------|----------------------|---------|-------------------|
| | material | - | annum | - | | from | Transportation |
| | | | | | | site | |
| | | | | I | | (Kms.) | |
| | | Existing | Expansion | Total | | | |
| 3 | Ferro alloys | 1,515 | 16,000 | 17,515 | Own generation | | |
| D | For Rolling M | lill throug | h Hot chargiı | ng (Rolled Pro | oducts) – 2,90,000 7 | ГРА | |
| 1 | Hot | 31,800 | 2,85,681 | 3,17,481 | Own generation | | |
| | Billets/Ingots | | | | | | |
| E | For Rolling N | lill (Rolled | Products) – | 30,000 TPA v | with LDO | 1 | |
| 1 | MS Billets | | 31,800 | 31,800 | Own generation | | |
| 2 | /Ingots | | 1505 | 1 505 | Enome oil done o | Linto | Drytonlyon |
| 2 | LDO | | 1595 VI / Annum | 1,393 VI (Annum | From on depos, | | Bytanker |
| | | | KL/AIIIuIII | KL/AIIIuIII | Taigain | 200 | |
| F | For Boiler [Po | wer Gene | ration 49M | W & 25 MW | /] | | |
| 1 | Indian Coal | 29 106 | 1 48 500 | 1 77 606 | SECL | Unto | By rail & road |
| 1 | (100%) | 27,100 | 1,10,500 | 1,77,000 | Chhattisgarh / | 200 | (through |
| | (100 /0) | | | | MCL Odisha | 200 | covered trucks) |
| | | | I | (OR |) | | |
| 1 | Imported | 19,600 | 1,00,000 | 1,19,600 | Indonesia / South | 20 | Through sea |
| | Coal (100 %) | , | , , | | Africa / Australia | | route, rail route |
| | | | | | | | & by road |
| | | | | (OR) |) | | |
| 1 | Dolochar | 23,000 | 69,300 | 92,300 | In plant | | through covered |
| | | | | | generation | | conveyors |
| 2 | Indian Coal | 17,606 | 1,13,850 | 1,31,456 | SECL | Upto | By rail & road |
| | | | | | Chhattisgarh / | 200 | (through |
| | | | | | MCL Odisha | | covered trucks) |
| | N 1 1 | 22 000 | <0. 2 00 | (OR) |) | | |
| 1 | Dolochar | 23,000 | 69,300 | 92,300 | In plant | | through covered |
| 2 | Tura a stard | 11.200 | 72.964 | 94.122 | generation | 20 | conveyors |
| 2 | Imported | 11,268 | 72,864 | 84,132 | A frice / Australia | 20 | I nrough sea |
| | Coal | | | | Anica / Australia | | s by road |
| G | For Ferro All | ovs (2 x 18 | MVA) | | | | a by foad |
| U | For Ferro Ma | nganese – | -90.000 TPA | | | | |
| 1 | Manganese | | 2,04.750 | 2,04.750 | Chhattisgarh | Up to | Bv road |
| | Ore | | 7 - 7 | y - y | /Odisha/ | 600 | (through |
| | | | | | Andhra Pradesh | | covered trucks) |
| 2 | LAM Coke | | 32,850 | 32,850 | Andhra Pradesh | Up to | By road |
| | | | | | | 600 | (through |
| | | | | | | | covered trucks) |
| 3 | Quartz | | 2,700 | 2,700 | Andhra Pradesh | Upto | By road |
| | | | | | | 600 | (through |
| | | | | | | | covered trucks) |
| 4 | Bag filter | | 14,400 | 14,400 | Inhouse | | Through |
| | dust | | | | Generation | | covered |
| | | | | | | | conveyers |
| | | | | (OR |) | | |

| S.No. | Raw | Quanti | ty required T | onnes per | Source | Distance | Mode of |
|-------|----------------|-------------|----------------------|-------------|-------------------|----------|-----------------|
| | material | - | annum | • | | from | Transportation |
| | | | | | | site | 1 |
| | | | | | | (Kms.) | |
| | | Existing | Expansion | Total | | | |
| | For Silico Ma | inganese – | 60,000 TPA | | | | · |
| 1 | Manganese | | 97,800 | 97,800 | MOIL / OMC | Upto | By Rail & Road |
| | Ore | | | | | 500 | (through |
| | | | | | | | covered trucks) |
| 2 | FeMn Slag | | 37,080 | 37,080 | Inhouse | | |
| | | | | | Generation | | |
| 3 | LAM Coke | | 23,100 | 23,100 | Andhra Pradesh | Up to | By road |
| | | | | | | 600 | (through |
| | | | | | | | covered trucks) |
| 4 | Quartz | | 12,000 | 12,000 | Andhra Pradesh | Up to | By road |
| | | | | | | 600 | (through |
| | | | | | | | covered trucks) |
| 5 | Bag filter | | 6,000 | 6,000 | Inhouse | | Through |
| | dust | | | | Generation | | covered |
| | | | | | \ | | conveyers |
| | | (0) | | (OR |) | | |
| 1 | For Ferro Ch | rome – 60, | 1 20 000 | 1 20 000 | | TT4 | D D-1 0 D 1 |
| 1 | Chrome Ore | | 1,20,000 | 1,20,000 | MOIL / OMC | Upto | By Rall & Road |
| | | | | | | 600 | (unrougn |
| 2 | LAM Colto | | 10.200 | 10.200 | Andhra Dradach | Linto | Dy road |
| Z | LAM Coke | | 19,800 | 19,800 | Andhra Pradesh | | By road |
| | | | | | | 000 | (unough |
| 3 | Quartz | | 1 200 | 1 200 | Chhattisgarh / | Unto | By road |
| 5 | Quartz | | 1,200 | 1,200 | Andhra Pradesh | 600 | (through |
| | | | | | Allulla I ladesli | 000 | covered trucks) |
| Δ | Lime | | 1 500 | 1 500 | Chhattisgarh / | Unto | By road |
| - | Line | | 1,500 | 1,500 | Andhra Pradesh | 600 | (through |
| | | | | | 7 manu 1 radesh | 000 | covered trucks) |
| 5 | Molasses | | 1 500 | 1 500 | Chhattisgarh / | Unto | By road |
| 5 | 110103505 | | 1,500 | 1,500 | Andhra Pradesh | 600 | (through |
| | | | | | | 000 | covered trucks) |
| 6 | Bag filter | | 2.100 | 2.100 | In house | | Through |
| - | dust | | _,_ 。 | _,_ ~ ~ | generation | | covered |
| | | | | | 0 | | conveyers |
| | | | 1 | (OR |) | | , |
| | For Ferro Sili | icon – 30,0 | 000 TPA | · · · · · · | | | |
| 1 | Quartz | | 91,200 | 91,200 | Chhattisgarh / | Upto | By road |
| | - | | | | Andhra Pradesh | 600 | (through |
| | | | | | | | covered trucks) |
| 2 | Mill Scale | | 45,600 | 45,600 | Inhouse | | |
| | | | | | Generation | | |
| 3 | M.S. Scrap | | 23,400 | 23,400 | Chhattisgarh / | Upto | By road |
| | | | | | Andhra Pradesh | 600 | (through |
| | | | | | | | covered trucks) |

| S.No. | Raw | Quanti | ty required T | onnes per | Source | Distance | Mode of |
|-------|----------------|-------------|-----------------|---------------|-------------------|---------------|---------------------|
| | material | | annum | | | from | Transportation |
| | | | | | | Site (Kms) | |
| | | Existing | Expansion | Total | | (11115.) | |
| 4 | LAM Coke | | 1.050 | 1.050 | Andhra Pradesh | Upto | By road |
| | | | | 9 | | 600 | (through |
| | | | | | | | covered trucks) |
| 5 | Bag filter | | 16,800 | 16,800 | Inhouse | | Through |
| | dust | | | | Generation | | covered |
| | | | | | | | conveyers |
| | | 0.0.0.0.0 | | (OR |) | | |
| 1 | For Pig iron - | - 90,000 Tł | PA | 1 64 005 | | TT (| |
| 1 | Iron Ore / | | 1,64,285 | 1,64,285 | Odisha/ | Upto | By road |
| | Sinter | | | | Chnattisgarn | 350 | (through |
| 2 | LAMCoke | | 76 785 | 76 785 | Andhra Pradesh | Unto | By road |
| 2 | LANCORE | | 70,785 | 70,785 | Allulla I laucsli | 600 | (through |
| | | | | | | 000 | covered trucks) |
| 3 | Limestone | | 10.714 | 10.714 | Chhattisgarh | Upto | By road |
| _ | | | , , | _ = ; ; ; = : | 8 | 200 | (through |
| | | | | | | | covered trucks) |
| 4 | Quartz | | 5,357 | 5,357 | Chhattisgarh / | upto600 | By road |
| | - | | | | Andhra Pradesh | - | (through |
| | | | | | | | covered trucks) |
| | | | | (OR |) | | |
| | For Cast iron | – 90,000 T | PA | | | | - · |
| 1 | Iron Ore / | | 1,64,285 | 1,64,285 | Odisha/ | Upto | By road |
| | Sinter | | | | Chhattisgarh | 350 | (through |
| 2 | LAMColza | | 76 795 | 76 795 | Andhra Dradach | Unto | Covered trucks) |
| 2 | LANCOKE | | 70,785 | 70,785 | Allullia Fladesli | 600 | by IOau (through |
| | | | | | | 000 | covered trucks) |
| 3 | Limestone | | 10.714 | 10.714 | Chhattisgarh | Unto | By road |
| 5 | | | 10,711 | 10,711 | Ciniartisguin | 200 | (through |
| | | | | | | | covered trucks) |
| 4 | Quartz | | 5,357 | 5,357 | Chhattisgarh / | upto600 | By road |
| | - | | | | Andhra Pradesh | - | (through |
| | | | | | | | covered trucks) |
| H | Brick Manufa | cturing ur | nit – 38,000 po | er day | I - · | 1 | Γ |
| 1 | Ash | | 26,600 | 26,600 | Own generation | | |
| 2 | Stone dust | | 5,700 | 5,700 | Chhattisgarh | Upto | By road |
| | | | | | | 200 | (through |
| 2 | Comort | | 2 800 | 2 800 | Chhattianath | Linta | covered trucks |
| 5 | Cement | | 3,800 | 3,800 | Unnattisgarn | | by road |
| | | | | | | 200 | covered trucks |
| 4 | Gynsum | | 1 900 | 1 900 | Chhattisgarh | Unto | By road |
| | Oypsuin | | 1,700 | 1,700 | Cimatiogain | 200 | (through |
| | | | | | | 200 | covered trucks |

- 14.1.8 The water requirement for the existing & proposed expansion project is estimated as 1613 KLD (Existing 267 KLD + Proposed Expansion 1346 KLD), and same will be sourced Kelo river. Letter issued by the Chief Engineer, Water Resources Department of Govt. of Chhattisgarh for drawl of water from Kelo river vide letter dated 24th February 2022. Air cooled condensers will be provided CFBC Power plant.
- 14.1.9 Power required for the existing plant sponge iron plant is 1.9 MW and is being sourced from State Grid and power required for IF, Rolling mill and power plant for which CTE obtained will be 5.3 MW. Power required for the proposed expansion project will be 81 MW. Total Power Requirement after proposed expansion will be 88.2 MW and same will be sourced from 63.9 MW Captive Power Plant & remaining 24.3 MW is from State Grid.

| Period | 1 st October 202 | 20 to 31 st Dece | mber 2020 | | | | |
|---------------------------|--|--|-------------------------|------------------|-------------------------|--|--|
| AAQ parameters at | • PM _{2.5} = | • $PM_{2.5} = 26.7 \text{ to } 47.2 \ \mu\text{g/m}^3$ | | | | | |
| 8 locations | • $PM_{10} =$ | • $PM_{10} = 44.5$ to 78.6 $\mu g/m^3$ | | | | | |
| | • $SO_2 =$ | 9.2 to 18.4 µg/1 | m ³ | | | | |
| | • NO ₂ = | 14.2 to 45.6 µg | g/m^3 | | | | |
| | • $CO = 6$ | 547 to 1547 µg | $/m^3$ | | | | |
| AAQ modelling | • $PM_{10} =$ | $= 1.10 \ \mu g/m^3$ (2) | 2900 m in SW) |) | | | |
| | • $SO_2 =$ | 5.67 µg/m ³ (42 | 00 m in SW) | | | | |
| | • NO ₂ = | $7.24 \ \mu g/m^3 (28)$ | 800 m in SW) | | | | |
| | • CO = | 2.69 µg/m ³ | | | | | |
| Ground water | • pH:7. | 2 to 7.8 | | | | | |
| quality at 8 | • TSS : (|).3 to 0.6 mg/l | | | | | |
| locations | • TDS : 1 | 330 to 448 mg/ | 1 | | | | |
| | • Total F | Hardness: 184 | to 299 mg/l | | | | |
| | Chloric | des : 162 to 214 | 4 mg/l | | | | |
| | Fluorid | le: 0.49 to 0.65 | 5 mg/l | | | | |
| | • Heavy | metals (Iron -F | Fe): 0.014 to 0.0 | 022 mg/l | | | |
| Surface water | pH: 7.4 to 8.1 | , DO (in mg/l) : | : 4.1 to 6.4, BO | D(in mg/I) : 2. | 0 to 3.8, COD | | |
| quality at 5 | (in mg/I) : 6.8 | to 13.6, TDS | (in mg/l) : 218 | to 467, Chlori | des (in mg/l) : | | |
| locations | 93 to 214; Sul | phates (in mg/l) |): 62 to 167 | | | | |
| Noise levels | The equivalent | t day-night nois | se levels in the | study zone are | e ranging from | | |
| | 46.57 dBA to 0 | 65.50 dBA. | 1 . 1 | | | | |
| Traffic assessment | Traffic study | has been cor | iducted at Sta | ate Highway # | [‡] I which is | | |
| study findings | approximately | 0.4 Km from t | he plant site. | had an du at mi | ll ha dama 100 | | |
| | 1 ransportation | i of raw materia | al, fuel α finis | ned product will | li be done 100 | | |
| | 70 UY 10au. Existing DCU is 15270 DCU/day on SH # 1 and existing Layel of Service | | | | | | |
| | Existing $I \subset U$ is 15270 $I \subset U/uay$ on SH # 1 and existing Level of Service (LOS) is \cdot | | | | | | |
| Road V (Volume C Proposed | | | | | LOS | | |
| in (Canacity V/C Ratio | | | | | 200 | | |
| | PCU/day) in | | | | | | |
| | | • | PCU/day) | | | | |
| | SH # 1 | 15,270 | 20,000 | 0.76 | D | | |
| | | | | | | | |

14.1.10 Baseline Environmental Studies:

| | PCU load after proposed project will be 15270 PCU/day +1097 PCU/day | | | | | | | |
|-----------------|--|---|---|---|--|--|--|--|
| | and Level of Service (LOS) will be | | | | | | | |
| | Road | V (Volume | C (Capa | acity | Proposed | LOS | | |
| | | in | in PCU/ | day) | V/C Ratio | | | |
| | | PCU/day) | | | | | | |
| | SH#1 | 16,367 | 20,00 | 0 | 0.81 | E | | |
| | Level of Servi | ice (LOS) of the | e Road as | per II | RC 73: 1980 | | | |
| | | V/C | LOS | Perfo | ormance | | | |
| | | 0.0 - 0.2 | Α | Exce | llent | | | |
| | | 0.2 - 0.4 | В | Very | Good | | | |
| | | 0.4 - 0.6 | С | Good | | | | |
| | | 0.6 - 0.8 | D Fair/ Average | | Average | | | |
| | | 0.8 - 1.0 | E | Poor | | | | |
| | | 1.0 & Above | F | Very | Poor | | | |
| | PP has report upgraded to Fo i.e. 0.55. Hence any adverse in submitted the b of SH. | ted that Ambik our lane road, S ce LOS will be ' npact on the tra Photographs sho | bikapur to Raigarh State Highway is being l, Subsequently the V/C will be 16,367/30,000 be 'C' (GOOD). Accordingly, there may not be traffic due to the proposed expansion. PP has showing confirming the progress of expansion | | | | | |
| Flora and fauna | In buffer zone Elephant (<i>Ele</i> movement wa prepared & it 83.5 Lakhs to | following schee phas maximus) s observed in th is approved by be spent over a | luled -I fa (as per ne study a PCCF, Ra period of 3 | una are the se rea). C aipur. 5 years | e present econdary sou onservation 1 and allotted | rce Elephant Plan has been budget of Rs. | | |

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

| S. | Waste / | Q | uantity (in TI | PA) | Method of Disposal |
|-----|-----------|----------|----------------|-----------|---|
| No. | By | Existing | Expansion | After | |
| | Products | Quantity | Quantity | Expansion | |
| 1 | Ash from | 20,790 | 38,610 | 59,400 | Presently given to nearby Brick |
| | DRI | | | | manufacturing units. After expansion it |
| | | | | | is proposed to be utilized in the Brick |
| | | | | | manufacturing unit proposed within the |
| | | | | | premises. |
| 2 | Dolochar | 23,000 | 46,300 | 69,300 | Presently given to nearby FBC based |
| | | | | , | Power plant. |
| | | | | | After expansion it is proposed to be |
| | | | | | utilized in the proposed FBC power |
| | | | | | plant as a fuel. |
| 3 | Kiln | 1,040 | 1,931 | 2,971 | Presently utilized in road construction & |
| | Accretion | | | , | given to brick manufacturers. |
| | Slag | | | | After expansion it is proposed to be |
| | | | | | utilized in the Brick manufacturing unit |
| | | | | | proposed in the present proposal. |

| S. | Waste / | Q | uantity (in TI | PA) | Method of Disposal |
|-----|---|----------|----------------|-----------|--|
| No. | By | Existing | Expansion | After | |
| | Products | Quantity | Quantity | Expansion | |
| 4 | Wet Scraper Sludge | 3,453 | 9,867 | 13,320 | Presently utilized in road construction & given to brick manufacturers. After expansion it is proposed to be utilized in the Brick manufacturing unit proposed in the present proposal. |
| 5 | SMS Slag | 3,000 | 31,680 | 34,680 | Slag will be crushed and after recovery of iron, will be given to Road contractor |
| 6 | Mill scales from Rolling Mill | 600 | 5,794 | 6,394 | Will be utilized in the proposed Ferro Alloys units. |
| 7 | End cutting from Rolling Mill | 900 | 8,694 | 9,594 | Will be used as Raw material in the proposed Induction Furnace |
| 8 | Dust from Bagfilters of SEAF and during tapping | | 1320 | 1,320 | Will be reused in Ferro alloys manufacturing process |
| 9 | Slag from SiMn | | 43,995 | 43,995 | Will be utilized in road construction |
| | | | | (OR) | |
| | Slag from FeMn | | 50,940 | 50,940 | Will be used in manufacture of Silico manganese as it contains high MnO ₂ |
| | | | | (OR) | - |
| | Slag from FeSi | | 8,865 | 8,865 | Will be given to cast iron foundries |
| | | | | (OR) | |
| | Slag from FeCr | | 29,731 | 29,731 | Will be processed in jigging plant for Chrome recovery. After Chrome recovery, the left-over slag will be analysed for Chrome content through TCLP test, if the Chrome content in the slag is within the permissible limits, then it will be utilised for Road laying /brick manufacturing. If Chrome content exceeds the permissible limits, it will be sent to nearest TSDF. |
| | Slag from | | (1 295 | (UK) | XXVIII has always to share have a start of |
| | Slag from Pig iron | | 61,285 | 61,285 | will be given to slag based cement manufacturing units. |
| | | | | (OK) | |

| S. | Waste / | Q | uantity (in Tl | PA) | Method of Disposal |
|-----|------------|----------|----------------|-----------|--|
| No. | By | Existing | Expansion | After | _ |
| | Products | Quantity | Quantity | Expansion | |
| | Slag from | | 61,285 | 61,285 | Will be given to slag based cement |
| | Cast iron | | | | manufacturing units. |
| 10 | Ash from | 13,370 | 66,825 | 80,195 | It is proposed to be utilized in the Brick |
| | Power | | | | manufacturing unit proposed within the |
| | Plant | | | | premises. |
| | (with 100 | | | | |
| | % Indian | | | | |
| | Coal) | | | | |
| | | | | (OR) | |
| | Ash from | 2400 | 12,000 | 14,400 | It is proposed to be utilized in the Brick |
| | Power | | | | manufacturing unit proposed within the |
| | Plant | | | | premises. |
| | (with100 | | | | |
| | % | | | | |
| | Imported | | | | |
| | Coal) | | | | |
| | | | | (OR) | |
| | Ash from | 18,562 | 92,813 | 1,11,375 | It is proposed to be utilized in the Brick |
| | Power | | | | manufacturing unit proposed within the |
| | Plant | | | | premises. |
| | (with | | | | |
| | Dolochar + | | | | |
| | Indian | | | | |
| | Coal) | | | | |
| | | | | (OR) | |
| | Ash from | 10,064 | 50,324 | 60,388 | It is proposed to be utilized in the Brick |
| | Power | | | | manufacturing unit proposed within the |
| | Plant | | | | premises. |
| | (with | | | | |
| | Dolochar + | | | | |
| | Imported | | | | |
| | Coal) | | | | |

Hazardous waste generation, storage & disposal:

1.Waste oil: 2.0 KL / Annum

This will be stored in covered HDPE drums in a designated area and will be given to CECB approved vendors.

2.Used Batteries

Used batteries will be given back to the supplier under buy back agreement with supplier.

14.1.12 Public Consultation:

| г | | |
|---|-----------------------|--------------------------------|
| | Date of advertisement | 13 th November 2021 |
| | | |

| Name of newspapers | Local newspaper (Hindi) "NAVBHARAT" |
|------------------------------|---|
| | National newspaper (English) "THE PIONEER" |
| Date on which Public Hearing | 15 th December 2021 |
| conducted | |
| Venue | Near Banjari Temple, Village Taraimal, Tehsil Tamnar, |
| | District Raigarh, Chhattisgarh |
| Attended by | Additional District Magistrate |
| Issues are | • Dust pollution problem in the area |
| | • Developmental activities in the area |
| | Road accidents are increasing |
| | • Compensation to the farmers due to crop damage, if any |
| | Movement of Elephants in the study area |
| | Employment to Locals |
| | Air, water and Soil Pollution Control measures |
| | Health facilities |
| | • Relaying of Road |

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

| S.NO. | MAJOR ACT | TVITY HEADS | YEAR O | YEAR OF IMPLEMENTATION | | | | |
|---------|-------------------------|-----------------|-------------------|------------------------|-----------------|----------------|--|--|
| | | | 1st Year | 2nd Year | 3rd Year | EXPENDITURE | | |
| | | | (Rs. in Lakhs) | (Rs. in Lakhs) | (Rs. in Lakhs) | (Rs. in Lakhs) | | |
| A). Bas | ed on Need Based & | z SIA Study | | | | | | |
| 1 | Community & Inf | rastructure | | | | | | |
| | Development Prog | rammes | | | | | | |
| | i) Construction of | Physical Nos. & | 2 nos. in Gerwani | 2nos. in Pali (v) | 2 no. in | 35 | | |
| | public toilets | village | (v) & 2 nos. in | & | Shivpuri (v) & | | | |
| | | | Chiraipani (v) | 2 Nos. in | 4 Nos. in Lakha | | | |
| | | | | Chindhbhauna | (v) | | | |
| | | | | (v) | | | | |
| | | Budget in Lakhs | 10 | 10 | 15 | | | |
| | ii) Providing LED | Physical Nos. & | 20 nos. in | 15nos. in | 20 nos. in | 21 | | |
| | Street lighting | village | Chiraipani (v) & | Shivpuri (v) & | Lakha (v) | | | |
| | with solar panels | | 15 Nos. in | 15 Nos. in Pali | 20 nos. | | | |
| | | | Gerwani (v) | (v) | Taraimal (v) | | | |
| | | Budget in Lakhs | 7 | 6 | 8 | | | |
| | iii) Mineral water | Physical Nos. & | 4 nos. in Gerwani | 4 nos. in Pali | 2 no. in | 54 | | |
| | plants | village | (v) & 2 nos. in | (v) & | Shivpuri (v) & | | | |
| | | | Chiraipani (v) | 2 Nos. in | 4 Nos. in Lakha | | | |
| | | | | Chindhbhauna | (v) | | | |
| | | | | (V) | | | | |
| | | Budget in Lakhs | 18 | 18 | 18 | | | |
| | | | | | Total | 110 | | |
| 2 | Education | | | | | * | | |
| | i) Providing Sport | Physical Nos. & | 10 nos. in | 10 no. in | 10 nos. in Pali | 6 | | |
| | kits for schools | village | Chiraipani (v) & | Shivpuri (v) & | (v) & | | | |
| | | 0 | 10 Nos. in | 10 Nos. in | 10 Nos. in | | | |
| | | | Gerwani (v) | Lakha (v) | Chindhbhauna | | | |
| | | | | | (v) | | | |
| | | | | | | | | |
| | | Budget in Lakhs | 2 | 2 | 2 | | | |
| | ii) Construction | Physical Nos. & | 4 rooms in | 2 nos. in Lakha | 2 nos. in | 50 | | |
| | of class rooms in | village | Chiraipani (v) | (V) | Gerwani (V) | | | |
| | schools of size | | | 2 nos. in Pali | | | | |
| | 8m x 5m x3 m | | | (V) | | | | |
| 1 | 1 | | 1 | | | | | |

| S.NO. | MAJOR ACT | TIVITY HEADS | YEAR O | TOTAL | | |
|---------|---------------------|--------------------|--------------------|--------------------|--------------------|----------------|
| | | | 1st Year | 2nd Year | 3rd Year | EXPENDITURE |
| | | | (Rs. in Lakhs) | (Rs. in Lakhs) | (Rs. in Lakhs) | (Rs. in Lakhs) |
| | | Budget Rs in Lakhs | 20 | 20 | 10 | |
| | iii) Providing | Physical Nos. & | Chiraipani (v) -1 | Lakha(v) - 1 | Chindbhauna | 50 |
| | Model | village | No. | No. & | (v) -1 No. & | |
| | Anganwadi | 0 | | Shivpuri (v) – 1 | Pali $(v) - 1$ No. | |
| | Centre in | | | No. | | |
| | consultation with | | | | | |
| | State Women and | | | | | |
| | Child | | | | | |
| | Development | | | | | |
| | Department | | | | | |
| | | Budget Rs in Lakhs | 10 | 20 | 20 | |
| | iv) Providing | Physical Nos. & | Chiraipani (v) – 1 | Shivpuri (v)- | Lakha (v) – 1 | 30 |
| | furniture, | village | no | 1No | No & | |
| | computers, | | | | | |
| | library, sports | | | | | |
| | equipment etc. | | | | | |
| | for nearby local | | | | | |
| | schools of 5 | | | | | |
| | villages @Rs. | | | | | |
| | 10.0 Lakhs per | | | | | |
| | school | | | | | |
| | | Budget Rs in | 10 | 10 | 10 | |
| | | Lakhs | | | | |
| | | | | | Total | 136 |
| 3 | RWH pits in the | Physical Nos. & | 2 nos. in Govt | Increase of 1.0 | Increase of 1.0 | 20 |
| | surrounding | village | Primary School, | m depth in | m depth in | |
| | villages & De- | | Lakha Village | storage due to | storage due to | |
| | siltation of ponds | | 2 nos. in | De-siltation of | De-siltation of | |
| | _ | | Panchayat Office | pond in | pond in | |
| | | | 2 nos. in Govt. | Tipakhol | Kokritarai | |
| | | | Middle School, | Village | Village | |
| | | | Gerwani | (21°56'52.55"N, | (21°56'23.32"N, | |
| | | | | 83°20'59.49"E) | 83°19'21.99"E) | |
| | | | | | | |
| | | Budget in Lakhs | 4 | 8 | 8 | |
| | | | | | TOTAL (A) | 266 |
| B). Bas | ed on Public Consul | Itation/Hearing | | | | 200 |
| 1 | Impart training to | Physical Nos. & | One DISHA | centre at Chiraipa | ni Village | 200 |
| | the local villagers | village | | | | |
| | for skill | | | | | |
| | development. | | | | | |
| | a)DISHA Centre" | | | 1 | 1 | |
| | along with | Budget in Lakhs | | | | |
| | necessary | | | | | |
| | infrastructure for | | 50 | 80 | 70 | |
| | various vocational | | | | | |
| | training program | | | | | |
| | for employment | | | | | |
| | generation in | | | | | |
| | association with | | | | | |
| | INATIONAL SKILL | | | | | |
| | Development | | | | | |
| | IVIISSION | | | | | |
| | (Automobile | | | | | |
| | Kepair, Welding, | | | | | |
| | Electrical, | | | | | |
| | Computer | | | | | |
| | Hardware, Soft | 1 | | | | |

| S.NO. | MAJOR ACT | IVITY HEADS | YEAR (| TOTAL | | |
|--------|---------------------|-------------------------|------------------------|------------------------------------|------------------------|-------------------|
| | | | 1st Year | 2nd Year | 3rd Year | EXPENDITURE |
| | - | | (Rs. in Lakhs) | (Rs. in Lakhs) | (Rs. in Lakhs) | (Rs. in Lakhs) |
| | skills like | | | | | |
| | computer | | | | | |
| | programs etc.) | | | | | |
| 2 | Providing speed | Physical Nos. & | Gerwani (v) | Taraimal (v) | Urdana (v) | 6 |
| | Breakers, boards | village | | | | |
| | for speed | Budget in Lakhs | 2 | 2 | 2 | |
| | reduction, sign | | | | | |
| | boards about | | | | | |
| | speed breakers | | | 1100 | | 10 |
| 3 | Relaying of | Physical Nos. & | | 1100 m in | | 40 |
| | Garghoda Village | village | | Garghoda | | |
| | Road upto High | D 1 | | village | | |
| 4 | School | Budget in Lakns | | 40 | | 20 |
| 4 | Providing of | Physical Nos. & | | Gerwani (v) , | | 20 |
| | Boats & Fishing | village | | I araimai (V) , Dorbobl (V) | | |
| | nets | | | Darbaili (v) , | | |
| | - | Pudget in Lelthe | | Dargaon(V) | | |
| 5 | Drimary Haalth | Dudget III Lakiis | | 20 Chiroipani (y) | | 50 |
| 5 | Contro with | Nos kwillago | | Chinaipani (V) | | 30 |
| | Ambulance | Budget in Lakhs | | 50 | | |
| | Amoutanee | Dudget III Lakiis | | 50 | | |
| 6 | Plantation to be | | 20 | | | 20 |
| | developed on both | | | | | |
| | sides of approach | | | | | |
| | road to SH (400 | | | | | |
| | nos.), Ambikapur- | | | | | |
| | Raigarh SH (2000 | | | | | |
| | nos), Chiraipani | | | | | |
| | village (1000 | | | | | |
| | nos), Gerwani | | | | | |
| | village (1000 | | | | | |
| | nos.) along with | | | | | |
| | water spraying on | | | | | |
| | approach road | | | | Tatal (D) | 226 |
| | | TOTAT | 152 | 286 | 10tal (B) | 330 |
| | | IUIAL | 155 | 200 | IUJ rand Tatal(A+P) | 602 |
| Dooner | ing ovnonditures un | dar CSD as nor comp | onios A of 2014 | G | ranu rotal(A+B) | 002 |
| • | Health checkup will | be carried out periodic | cally in surrounding v | illages i.e. Chiraipa | ni, Shivpuri,Pali,La | khs villages @ Rs |

5.0 Lakhs every year

14.1.13 The capital cost of the expansion project is Rs.602.5 Crores and the capital cost for environmental protection measures is proposed as Rs.42.205 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs.2.32 Crores. The employment generation from the proposed expansion project is 250 direct & 500 Indirect. The details of cost for environmental protection measures is as follows:

| S.No. | Item | Capital Cost (Rs. in Crores) | | | Recurring Cost per Annum (Rs. in Crores) |
|-------|------------------------------|---------------------------------|---------|---------|--|
| | | 2022-24 | 2024-26 | 2026-28 | |
| 1. | Air Emission Management | | | | |
| | Electro Static Precipitators | 10.0 | | | 0.60 |

| S.No. | Item | | Capital Cos (Rs. in Crore | st es) | Recurring Cost per Annum (Rs. in Crores) |
|-------|---|---------|------------------------------|-----------|--|
| | | 2022-24 | 2024-26 | 2026-28 | |
| | Fume /Dust extraction systems with | 3.8 | 2.0 | 3.5 | 0.35 |
| | Bag filters | | | | |
| | Chimneys | 2.6 | 1.1 | 1.1 | 0.40 |
| | CAAQS (4 nos.) | 0.8 | 0.8 | | 0.10 |
| | CEMS (9 nos.) | 0.15 | 0.15 | 0.15 | 0.05 |
| | Water Sprinklers | 0.2 | 0.1 | 0.1 | 0.05 |
| | Mechanical dust sweepers (4 nos.) | 0.2 | | | 0.02 |
| | Environment Monitoring | | | | 0.15 |
| | Sub Total | 17.75 | 4.15 | 4.85 | 1.72 |
| 2. | Wastewater Management | | | | |
| | ETP | 0.6 | 0.3 | | 0.20 |
| | STP | 0.5 | | | |
| | Garland drains | 0.2 | 0.1 | 0.1 | 0.02 |
| | Sub Total | 1.3 | 0.4 | 0.1 | 0.22 |
| 3. | Solid waste Management | | | | |
| | Ash handling system | 2.0 | | | 0.25 |
| | Ash silos | 1.20 | | | |
| | Slag crushing & disposal | 0.3 | | | 0.04 |
| | Hazardous & Municipal solid waste storage | 0.2 | 0.1 | 0.1 | 0.01 |
| | Sub Total | 3.7 | 0.1 | 0.1 | 0.30 |
| 4. | Greenbelt development | 0.3 | 0.1 | 0.1 | 0.05 |
| 5. | Rainwater Harvesting | 0.2 | 0.2 | | |
| 6. | Fire safety & Occupational Health | 1.0 | 0.3 | 0.2 | 0.03 |
| 7 | Storm water Management | 0.5 | | | |
| 8 | Budget for conservation plan | 0.618 | 0.207 | 0.01 | |
| 9 | Social Infrastructure | 1 33 | 2.86 | 1.83 | |
|). | Development cost | 1.00 | 2 ,00 | 1.00 | |
| | Total | | 8.317 | 7.19 | 2.32 |

14.1.14 PP reported that 19.5 acres of Greenbelt will be developed within the plant premises. 18,500 nos. of plants are existing in the existing plant premises. Now it is proposed to maintain 1000 sapling per acre, hence PP will develop additional 1500 plants in the plant premises by December 2022 to further mitigate the emissions. Total number of plants by December 2022 will be 20,000 nos. 15 to 40 m wide greenbelt will be developed all around the plant. DFO will be consulted in developing the green belt. The tree species to be selected for the plantation are pollutant tolerant, fast growing, wind firm, deep rooted. A three-tier plantation is proposed comprising of an outer most belt of taller trees which will act as barrier, middle core acting as air cleaner and the innermost core which may be termed as absorptive layer consisting of trees which are known to be particularly tolerant to pollutants.

14.1.15 It is submitted that there is no violation under EIA notification 2006/no court cases/no show cause/no direction.

Certified Compliance report of CTO from Regional office of CECB

14.1.16 The status of the compliance report of conditions in earlier CTO was issued by Chhattisgarh Environment Conservation Board (CECB), Chhattisgarh vide letter No. 963/RO/CECB/2022 dt. 22.07.2022. The Regional Office, CECB has visited the Plant site on 24.04.2022. PP has submitted Action Taken Report (ATR) on the Noncompliance raised during the visit vide letter dated 18th August 2022. Following is the status of Noncompliance made during visit.

| Non Compliance reported | Corrective action taken | Present status | Remarks | |
|--|---|---|---|--|
| if any | | | | |
| Industry has recently done tree plantation of more than 2500 trees and a tree plantation of 1000 more trees is proposed. 16 acre land is reserved by the industry for tree plantation. Details are presented to the head office. | Total plant area – 21.57 Ha 33% of area as greenbelt – 7.11 Ha. No of plants existing – 18,500 nos. Additional plantation by Dec 2022 – 1500 nos. Width of greenbelt: 15m to 40m. Total greenbelt including existing: 7.8 Ha. (37% of greenbelt) | Complied 1000 nos. of plants have been planted in last week of August 2022 & 500 nos. in 1 st week of September 2022 | Total number of plants existing in the premises is 20,000 Covering 7.8 Ha. of greenbelt (37%) | |
| Main internal road of industry is well metalled. Other internal roads to be metalled by the industry | Work order has been to M/s. M.N. construction, Raipur for laying of remaining internal roads in the plant premises. All internal roads will be laid by June 2023. | Internal road work will commence by 15 th of October 2022 after completion of monsoon. | | |

Written representations:

14.1.3 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 30.09.2022 through email dated 30.09.2022 submitted the following information:

| S. | Information sought | Submission by Project proponent |
|-----|-----------------------------|---|
| No. | | |
| 1. | Digital display Board to be | PP assures that they will provide Digital display Board near the |
| | provided near the entrance | entrance to display Environment data by end of October 2022. |
| | for display of | |
| | Environment data | |
| 2. | Wheel washing facility at | PP do hereby confirm that wheel washing facility will be provided |
| | entry and exit points | near entry and Exit gates by end of December 2022. |
| 3. | Greenbelt development | As advised by the Expert Appraisal committee, PP will develop green |
| | towards village side on the | shelter belt comprising of 6 rows of plantation with 2 metres spacing |
| | eastern side of the plant | between the plant boundary and Priyotama colony (under Lakha |

| S. | Information sought | Submission by Project proponent | | | |
|-----|----------------------|---|--|--|--|
| No. | | | | | |
| | | Village Gram Panchayat) on Eastern Side. Tall trees with broad leaves will be planted with thick canopy to act as green barrier for air pollution & noise levels. | | | |
| | | • Total peripheral length along the Plant boundary towards Eastern side : 920 m | | | |
| | | • Spacing between plants : 2 m | | | |
| | | Total no. of plants per row along the Eastern boundary : 460 nos. Total no. of plants for 6 no. of rows : 460 x 6 - 2760 nos. | | | |
| | | Additional greenbelt area proposed on the eastern side to act as a barrier between the plant boundary and Priyotama colony (under Lakha Village Gram Panchayat) on Eastern Side will be 2.76 acres | | | |
| | | The width of the Greenbelt on the eastern side within the premises is ranging from 30 m to 38 m. | | | |
| | | • The width of the Greenbelt on the eastern side outside the premises is 12 m | | | |
| | | • The total width of the Greenbelt on the eastern side will be 42 m | | | |
| | | to 50 m. | | | |
| | | boundary and Privotama colony (under Lakha Village Gram | | | |
| | | Panchavat) on Eastern Side. | | | |
| | | Request letter dated 29.09.2022 has been submitted to Village | | | |
| | | Panchayat of Lakha for permission to develop green tree shelter. | | | |
| | | Letter issued by Gram Panchayat dated 29.09.2022 for considering | | | |
| | | the issue in panchayat meeting is submitted. | | | |
| | | The EAC deliberated the action plan and found in order. | | | |
| 4. | Mitigation measures | Measures to adopted for protection of Priyotama Colony (Lakha | | | |
| | proposed for village | Gram Panchayat) | | | |
| | situated at 300 m | • Priyotama colony (under Lakha Gram Panchayat) is in Eastern direction to the plant. | | | |
| | | • Predominant wind direction is towards SW direction. | | | |
| | | • All environmental protection measures such as ESPs (with high | | | |
| | | efficiency Rigid discharge electrodes with transformer), Bagfilters, covered conveyers, dust suppression systems, pucca internal roads, mechanical dust sweepers, mist cannon sprayers,etc will be provided and operated duly ensuring compliance with the norms. Water spraying will be done periodically in the village to control | | | |
| | | the dust. | | | |

| S. | Information sought | Submission by Project proponent | | | |
|-----|----------------------------|---|--|--|--|
| No. | | | | | |
| | | • Interlocking system will be provided to ESPs and whenever the | | | |
| | | ESP fails the raw material feed to the unit will stop. Consequently | | | |
| | | there will be no production in the unit till ESP is rectified. | | | |
| | | • Net resultant GLCs after expansion will be within the NAAQS. | | | |
| | | • FBC boilers are proposed in the expansion project. Lime dosing | | | |
| | | will be provided to bringdown the SOx emission to within 100 mg/Nm ³ . | | | |
| | | • Low NOx burners with 3-stage combustion, flue gas recirculation | | | |
| | | and auto combustion system will be provided to ensure NOx | | | |
| | | emission within 100 mg/Nm ³ . | | | |
| | | • All transport vehicles will be with PUC certification. | | | |
| | | • Greenbelt width towards the village side is ranging from 42 m to | | | |
| | | 50 m (including 6 rows of green tree shelter with tall trees and | | | |
| | | good canopy outside the premises). | | | |
| | | With all the aforementioned environment protection measures there | | | |
| | | will not be any adverse impact on Priyotama Colony (Lakha gram | | | |
| | | Panchayat) due to the proposed expansion project. | | | |
| | | The EAC deliberated the action plan and found in order. | | | |
| 5. | Adoption of 6 nos. of | PP hereby confirmed that PP will adopt the following 6 nos. of | | | |
| | omphasis on Privotama | i) Privoteme Colony | | | |
| | Colony and Chirainani | i) Phyotaina Colony ii) Chiraipani | | | |
| | | iii) Gerwani | | | |
| | | iv) Pali | | | |
| | | v) Lakha | | | |
| | | vi) Shivpuri | | | |
| | | PP committed that in the aforementioned 6 nos. of villages, special | | | |
| | | emphasis will be given to Priyotama Colony (Lakha Gram | | | |
| | | Panchayat) and Chiraipani, with respect to education, health, | | | |
| | | providing transportation facility to school children from village to | | | |
| | | the nearest school, providing LED street lights, solar power in the | | | |
| | | village, drainage facility, financial assistance to Women SHG, | | | |
| | | financial assistance to women during their marriage, primary health | | | |
| | | care center, solid waste collection & disposal facilities, creation of | | | |
| | | park, mineral water plants, extensive plantation in village etc. | | | |
| | | For other 4 villages to be adopted welfare activities will be carried | | | |
| | | out through district administration. | | | |
| 6. | Confirmation pertaining to | PP hereby confirm that, there are no nallahs / streams passing through | | | |
| | no nallah is passing | the plant site and same has been confirmed by EIA consultant also. | | | |
| | through the proposed | | | | |
| | project site | | | | |

| S. | Information sought | | Submission by Project proponent | | | | |
|-----|--------------------------|--|---------------------------------|----------------------|------------|-------------|--|
| No. | | | | | | | |
| 7. | Vehicular transportation | • Plant site is | well connected t | o State Highv | vay (Amb | ikapur to | |
| | and Traffic study | Raigarh) is | Raigarh) is 0.4 Kms | | | | |
| | | • Existing SH is a 2-lane road and following are details pertaining | | | | | |
| | | to the LOS | | | | | |
| | | | V | С | V/C | LOS | |
| | | | (Volume in PCU/day) | (Capacity | Ratio | | |
| | | | r CO/uay) | PCU/dav) | | | |
| | | Baseline | 15,270 | 20,000 | 0.76 | D | |
| | | During | (15,270 + | 20,000 | 0.81 | Е | |
| | | operation of | 1097) | | | | |
| | | the proposed | 16,367 | | | | |
| | | expansion project | | | | | |
| | | • PP submit th | at, the Ambikapu | r to Raigarh Sta | nte Highwa | av is being | |
| | | upgraded to | 4 lane road. Wo | rk is under pro | ogress. Ac | cordingly. | |
| | | PCU Capacity will be 30 000 PCU/day | | | | | |
| | | • Subsequently the V/C ratio will be $16.367/30.000$ i.e. 0.55 Hence | | | | | |
| | | LOS will be | 'C' (GOOD). | , , , | | | |
| | | | | | | | |
| | | Level of Servic | e (LOS) of the R | oad as per IR | <u>C</u> | | |
| | | V/C | LOS | Per | formance | | |
| | | 0.0 - 0.2 | А | E | xcellent | | |
| | | 0.2 - 0.4 | В | Ve | ery Good | | |
| | | 0.4 - 0.6 | С | | Good | | |
| | | 0.6-0.8 | D | Fair | :/Average | | |
| | | 0.8 - 1.0 | E | | Poor | | |
| | | 1.0 & above | F | Ve | ery Poor | | |
| | | | | | | | |
| | | Photographs sho | owing confirming | the progress of | expansior | n of SH are | |
| 0 | | submitted. | | | | C 11 | |
| 8. | Details of Environment | Environment N | Aanagement Cell | (EMC) com | prises of | following | |
| | Management Cell (EMC) | personal: | | | | | |
| | and laboratory | • Mr. Parmod Tola (Director) | | | | | |
| | | • Mr. Kohit Jalan (Plant Head) | | | | | |
| | | Mr. K.V. Ramana (Plant GM) | | | | | |
| | | • Mr. San | path (Process GN | /1) D···· | 1\ | | |
| | | • Mr. Aka | ish Verma (Power | Division Head | 1) | | |
| | | An Environme | nt Officer, with | Environment | subject ba | ackground | |
| | | qualification, w | ith 2 to 3 years e | xperience, will | be appoin | ted by the | |
| | | end of October | 2022. | | | | |

| S. | Information sought | Submission by Project proponent |
|-----|---|---|
| No. | | |
| | | Pertaining to laboratory, company has proposed to outsource Environmental Monitoring and analysis to external NABL accredited Laboratory. Accordingly, Sunil Ispat & Power Pvt. Ltd. has signed an MoU with M/s. Ultimate Environlytical Solutions (UES), Raipur for Environment Monitoring on regular basis. Copy of MoU signed with UES along with its NABL accreditation certificate is submitted by the PP. |
| 9. | Briquetting plant and its dust management | PP here by confirm that PP will be establishing 300 kg/hr. Briquetting plant Dust will be handled in enclosed condition and will be mixed with molasses and Bentonite. This will be compressed at 100 – 150 kg/cm2 pressure. This ensure solid briquettes will formed. As it will be carried out in the closed condition, there will not be any fugitive dust emission. Lime will be stored in Air tight condition, which will be kept away from contact with water. All requisite safety precautions will be taken for handling and storage of Lime. |
| 10. | Reason for not obtaining EC for existing plant & chronology of permissions (CTE/CTO) obtained till date | M/s Sunil Ispat and Power Limited has obtained CTE from Chhattisgarh Environment Conservation Board (CECB) for 1x350 TPD DRI Kiln vide Consent Order dated 12-01-2005 at Chiraipani Village, Lakha Gram Panchayat, Raigarh Tehsil & District, Chhattisgarh. CTE granted prior to EIA notification 2006. Capital investment of the project is Rs 32 Crores. As per EIA notification 1994 EC was not applicable for greenfield projects with investment of less than Rs 100 Crores. 1st CTO obtained from CECB vide consent order dated 03-01- 2009. Plant was shut down from the year 2010 to 2019 due to financial problems and subsequently come under NCLT. Subsequently we have purchased the plant through auction by Honorable NCLT 2019. Renewal of CTO obtained from CECB vide consent order dated 27-02-2020 for production of DRI of 1,15,000 TPA. 2nd CTE has been obtained from CECB for manufacturing of 30,000 TPA of MS Billets through IF, 30,000 TPA of Rolled products through Rolling mill with hot charging, WHRB power of 12 MW and AFBC based power of 4.9 MW in the existing plant premises vide consent order dated 28-09-2020.EC was not applicable for these units as EIA notifications 2006 & its amendments. |

| S. | Inform | nation sought | | Submission by Project proponent | | | |
|-----|-----------|---------------|-------------------------|---------------------------------|---------------|-----------------------------|--|
| No. | | | | | | | |
| | | | • Latest CT 01-2023. | O renewal for | 1x350 TPD I | ORI Kiln is valid up to 31- | |
| | | | CTO issue | ed to 12 MW | WHRB power | plant is valid upto 31-01- | |
| | | | 2023. | | | | |
| | | | • Same is sh | own in tabula | r form below: | | |
| S. | Unit | Permission | Production in | Permission | Date of | Remarks | |
| No | | | TPA | issuing | permission | | |
| | | | | authority | | | |
| 1 | Sponge | CTE | 1,15,000 | CECB | 12-01-2005 | EC not applicable as it is | |
| | iron | | | | | prior to EIA notification | |
| | (1x350 | | | | | 2006 EC not applicable | |
| | TPD) | | | | | as investment is less | |
| | | | | | | than RS 100 Crores. | |
| 2 | Sponge | СТО | 1,15,000 | CECB | 03-01-2009 | 1 st CTO | |
| | iron | Valid till | | | | | |
| | (1x350 | 02/04/2009 | | | | | |
| | TPD) | | | | | | |
| 3 | Sponge | | 1,15,000 | CECB | 29-03-2010 | Renewal of CTO | |
| | iron | | | | | | |
| | (1x350 | | | | | | |
| | TPD) | | | | | | |
| | Plant was | shut down fro | om the year 2010 t | o 2019 due to | poor financia | al management plant has | |
| | undergon | e auction th | rough honorabl | e NCLT 20 | 019 and sub | osequently the present | |
| | managem | ent have purc | hased the plant th | rough Hon'b | ole NCLT in 2 | 019 | |
| 4 | Sponge | СТО | 1,15,000 | CECB | 27-02-2020 | Renewal of CTO | |
| | iron | renewal | | | | | |
| | (1x350 | Valid till | | | | | |
| | TPD) | 26-02-2022 | | | | | |
| 5 | Sponge | СТО | 1,15,000 | CECB | 24-05-2022 | Renewal of CTO | |
| | iron | renewal | | | | | |
| | (1x350 | Valid till | | | | | |
| | TPD) | 31-01-2023 | | | | | |
| 6 | WHRB | CTE | WHRB – 12 | CECB | 28-09-2020 | EC not applicable for | |
| | power, | | MW | | | WHRB power, | |
| | Induction | | IF (Billets)- | | | Billets upto 30,000 TPA | |
| | furnace | | 30,000 TPA | | | & AFBC power plant | |
| | unit, | | Rolling Mill | | | below 5 MW does not | |
| | Rolling | | (Rolled | | | require EC. | |
| | Mill unit | | products-30,000 | | | | |
| | & | | TPA | | | | |
| | | | AFBC power- | | | | |
| | | | 4.9 MW | | | | |

| S. No. | Inform | nation sought | | Submissio | n by Project p | proponent |
|-----------|--------|---------------|------------|-----------|----------------|-----------------------|
| | AFBC | | | | | |
| | power | | | | | |
| | plant | | | | | |
| 7 | WHRB | СТО | WHRB-12 MW | CECB | 13/07/2022 | EC not applicable for |
| | power | Valid till | | | | WHRB power plant |
| | plant | 31-01-2023 | | | | |

Deliberations by the Committee

- 14.1.4 The Committee noted the following:
 - The instant proposal is for expansion of Steel Plant DRI Kiln (Sponge Iron from 1,15,000 TPA to 3,46,500 TPA), Induction Furnaces with matching LRF & CCM (MS Billets / Ingots from 30,000 TPA to 3,46,800 TPA), Rolling Mill with hot charging (Rolled Products 30,000 TPA to 2,90,000 TPA), New Rolling Mill with Conventional with LDO (Rolled Products 30,000 TPA), New Ferro Alloy Unit with 2x18 MVA Submerged Electric Furnaces (FeMn 90,000 TPA/SiMn 60,000 TPA / FeCr 60,000 TPA / FeSi 30,000 TPA/Pig Iron – 90,000 TPA /Cast iron – 90,000 TPA), WHRB based Power Plant from 12 MW to 34 MW, CFBC based Power Plant 4.9 MW to 29.9 MW & New Fly Ash brick manufacturing unit (38,000 Bricks/day) & Briquetting plant.
 - 2. 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.
 - 3. 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.
 - 4. 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.
 - 5. The existing Project has obtained Consent from CECB for manufacturing Sponge Iron of 15,000 TPA vide No. 236/TS/CECB/2005 date 12/01/2005. [CTE granted prior to EIA notification 2006. Capital investment of the project was Rs. 32 Crores. As per EIA notification 1994 also EC is not applicable for greenfield projects with investment of less than Rs. 100 Crores]. Sunil Ispat and Power Limited also obtained Consent to Establish

for manufacturing of 30,000 TPA of MS Billets through Induction Furnace, 30,000 TPA of Rolled products through hot charge Rolling mill, Power generation of 12 MW by WHRB based and 4.9 MW by AFCB based in the existing plant premises vide consent order No.5592/TS/CECB/2020 Nava Raipur, Atal Nagar, Raipur, Date 28/09/2020. AFBC power plant <5 MW & Billets (Induction Furnace) with production capacity upto 30,000 TPA does not require Environmental Clearance as per the provisions of EIA notification 2006 & its subsequent amendments thereof

- 6. The total project area is 21.57 ha. Land has already been acquired and under the possession of the company.
- 7. The nearest habitation to plant is Kelo priyotoma Colony which is at distance of 0.3 Kms. which is a rehabilitated village due to DilipSingh JudevMega Pariyojana (water Reservoir) and Chairaipani at a distance of 350 m from the boundary of the plant and 450 m from the unit in the southern direction. The EAC deliberated and advised for dense plantation towards the villages (shelter belt comprising of total of 6 rows of 2x2 m plantation) and socio-economic development of the villages. PP has committed to develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy to act as green barrier for air pollution & noise levels towards Kelo Priyotoma Colony (under Lakha Village Gram Panchayat) in the Eastern direction and towards Chiraipani village in the Southern direction inside the plant premises. PP has also submitted measures to be adopted for protection of Priyotama Colony (Lakha Gram Panchayat). The EAC deliberated the action plan and found in order.
- The water requirement for the existing & proposed expansion project is estimated as 1613 KLD (Existing 267 KLD + Proposed Expansion 1346 KLD), and same will be sourced Kelo river.
- 9. Kelo river -1.5 Kms., Dilip Singh Judev Mega Pariyojana 1.1 Kms., Kokritarai Pond near Kirodimal (5.6Kms.), GerwaniNala (2.6 Kms.) & few other seasonal are flowing within 10 Km. radius of the plant site. Few ponds exist within 10 Km radius. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.
- 10. Urdana RF, Taraimal RF, Punjipathra PF, Barkachhar RF, Kharidungri PF, Dungapani PF, Lamidarha PF, Rabo RF exists within the study area. DFO has confirmed that the plant area is not involving any forest land. Further he has confirmed that nearest forest from the plant is 600 m away.
- 11. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
- 12. The EAC deliberated on the traffic study conducted at State Highway # 1 which is approximately 0.4 Km from the plant site and observed that the existing Level of Service (LOS) is D (Fair/Average) and LOS after proposed project (Transportation of raw material, fuel & finished product) will be E (Poor). PP has reported that Ambikapur to Raigarh State Highway is being upgraded to Four lane road. Hence LOS will change to 'C' (Good). Accordingly there will not be any adverse impact on the traffic due to the proposed expansion.

- 13. Schedule-I species i.e. Elephant (Elephas maximus) as per the secondary source Elephant movement was observed in the study area. Conservation Plan has been prepared & it is approved by PCCF, Raipur and allotted budget of Rs.83.5 Lakhs to be spent over a period of 5 years. The EAC deliberated the conservation plan and found in order.
- 14. The EAC noted that 19.5 acres (36.6%) of Greenbelt will be developed within the plant premises. 18,500 nos. of plants are existing in the existing plant premises. Now it is proposed to maintain 1000 sapling per acre, hence PP will develop additional 1500 plants in the plant premises by December 2022 to further mitigate the emissions. Total number of plants by December 2022 will be 20,000 nos. The Committee deliberated on the action plan and budget allocation for green belt development and found it satisfactory.
- 15. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
- 16. Movement of Elephants is observed within 15 Kms. radius of the plant, as per the secondary source. Conservation plan is prepared and is approved by PCCF with a budgetary allocation of Rs. 83.45 Lakhs to be spent over a period of 5 years.
- 17. 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.
- 18. The EAC noted that the management has constituted an Environment Management Cell (EMC) and also submitted the details. Pertaining to laboratory, company has proposed to outsource Environmental Monitoring and analysis to external NABL accredited Laboratory. Accordingly, Sunil Ispat & Power Pvt. Ltd. has signed an MoU with M/s. Ultimate Environlytical Solutions (UES), Raipur for Environment Monitoring on regular basis. Copy of MoU signed with UES along with its NABL accreditation certificate is submitted.
- 19. The Committee deliberated upon the written submission of the Project Proponent and found it satisfactory.
- 20. 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.
- 21. 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:

14.1.5 In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance **subject to uploading the written submission on portal** 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. 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.
- ii. 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.
- iii. 1613 KLD of water requirement after the proposed expansion shall be met from Surface Water from Kelo River. No ground water abstraction is permitted.
- iv. Following additional arrangements to control fugitive dust shall be provided:
 - a. Fog / Mist Sprinklers at all conveyors point and 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.
- v. All internal road and connecting road from project site to main highway shall be developed and maintained with suitable Million Axle Standard (MSA) as per the traffic load due to existing and proposed project.
- vi. All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.
- vii. Performance test shall be conducted on all pollution control systems every year and report shall be submitted to Regional Office of the MoEF&CC.
- viii. Particulate matter emission from stacks shall be less than 30 mg/Nm³. Action plan submitted to limit the dust emission shall be strictly implemented.
- ix. CEMS shall be provided on all process stacks and the signal shall be received in plant control room for central control of APCDs installed in the plant
- x. 85-90 % of billets shall be rolled directly in hot stage. RHF shall operate using only Light Diesel Oil as a fuel.
- xi. Submerged Arc Furnace shall be of closed type/semi-closed type with 4th hole extraction system.
- xii. FeCr slag after jigging shall be subjected to TCLP test to ensure its utilization or disposal in TSDF.

- xiii. Ultralow NOx burner with three stage combustion, flue gas recirculation and auto combustion control system shall be used.
- xiv. Solid waste utilization
 - a. PP shall install a slag crusher to convert steel slag into aggregate for use in construction industry, fine sand for use as flux in steel plant, sand in brick making and as lime in cement making.
 - b. PP shall recycle/reuse 100 % solid waste generated in the plant.
 - c. Used refractories shall be recycled as far as possible.
- xv. Kelo river -1.5 Kms., Dilip Singh Judev Mega Pariyojana 1.1 Kms., Kokritarai Pond near Kirodimal (5.6Kms.), GerwaniNala (2.6 Kms.) & few other seasonal are flowing within 10 Km. radius of the plant site. Few ponds exist within 10 Km radius. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- xvi. 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. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.
- xvii. The company shall also undertake rain water harvesting measures as per the plan submitted in the EIA/EMP report and reduce water dependence from the outside source.
- xviii. Kelo Priyotoma (0.3 Km, E) and Chiraipani (0.35 Km, S) villages are in the vicinity of the project site. Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The company shall also include these locations in its environmental monitoring programme. Dense plantation towards the villages in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation and socio-economic development of the villages shall be included.
 - xix. As committed by the PP to adopt six villages namely Priyotama Colony, Gerwani, Chiraipani, Pali, Shivpuri and Lakha, project proponent shall prepare and implement a robust plan to develop them into model villages in next 10 years.
 - xx. Ensure installation of Digital display Board near the entrance to display Environment data by end of October 2022, as committed.
 - xxi. PP shall install wheel washing facility near entry and Exit gates by end of December 2022, as committed.
- xxii. PP shall undertake all requisite safety precautions for handling and storage of Lime as committed.
- xxiii. A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- xxiv. Three tier Green Belt shall be developed in at least 33% 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 develop greenbelt in the form of shelter belt comprising of total of 6 rows of 2x2 m plantation with tall trees & broad leaves with thick canopy to act as green barrier for air pollution & noise levels towards Kelo Priyotoma Colony (under Lakha Village Gram Panchayat) in the Eastern direction and towards Chiraipani village in the Southern

direction inside the plant premises, as per submitted action plan. Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC.

- xxv. Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- xxvi. Air Cooled condensers shall be used in the captive power plant.
- xxvii. During operational phase at Captive Power Plant, PP shall measure coal dust exposures and to maintain coal dust exposures within stipulated standards at coal handling areas. PP shall identify extreme hot areas through heat stress survey as well as noise monitoring within process plants to ensure that workers not exposed above 90 dBA levels as per Factories Act, 1948.
- xxviii. All the commitments made to the public during the Public Hearing/Public Consultation 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.
 - xxix. 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.
 - xxx. The PP while transportation and unloading the silica dust content has to evaluated at all locations in the occupational environment of all the process plants and to be compared with Permissible Exposure Limit of Indian Factories Act, 1948. Similarly, coke is also used in large quantities in all the process plants therefore coal dust is also to be evaluated in the occupational environment of all the process plants using personal and area sampling and to be compared with Permissible Exposure Limit of Indian Factories Act, 1948. Effect silica dust control techniques have to be installed to avoid exposures to workers in all the areas.
 - xxxi. 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.
- xxxii. The recommendations of the approved Site-Specific Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

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 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as two Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- 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.
- iii. 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.
- iv. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- v. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- 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 melting furnaces.
- viii. 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

- The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant

and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- v. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- vi. Tyre washing facilities shall be provided at the entrance/exit of the plant gates.

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

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. 14.2

14.2 Expansion of Integrated Steel Plant by M/s Shreeyam Power & Steel Industries Limited, located at Plot No. 332 GIDC, Phase II, Khasra No. 104, 116/1, 116/2 and 117/1, Mithirohar, Taluka Gandhidham, District Kutch, Gujarat– Consideration of Environmental Clearance.

[Proposal No. IA/GL/IND/269061/2007; File No. J-11011/250/2007-IA.II(I)] [Consultant: Kadam Environmental Consultants; valid upto: 19.05.2023]

14.2.1 M/s Shreeyam Power and Steel Industries Limited has made an online application vide proposal no. IA/GJ/IND/269061/2007 dated 19/09/2022 along with copy of EIA/EMP report, Form – 2 and Certified compliance report seeking Environment Clearance (EC) under the provision of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed

at schedule no. 3(a) Metallurgical Industries (ferrous & non-ferrous) and 1(d) Thermal power plant under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

14.2.2 Name of the EIA consultant: M/s. Kadam Environmental Consultants [Sl. No. 18, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/SA 0164; valid upto 19.03.2023, Rev. 25, Sept 05, 2022].

Details submitted by the project proponent

14.2.3 The detail of the ToR is furnished as below:

| Date of application | Consideration | Details | Date of accord | ToR Validity |
|---------------------------------------|---------------|-----------------------|-------------------|--------------|
| 10/11/2020Standard Terms of Reference | | Terms of Reference | 21/11/2020 | 20/11/2024 |

14.2.4 The project of M/s Shreeyam Power and Steel Industries Limited located in Mithirohar village, Gandhidham Tehsil, Kutch District, Gujarat is for enhancement of sponge iron production from 0.186 to 0.456 MTPA, Billets (MS/SS) production from 0.378 to 0.678 MTPA and Rolled production from 0.21 to 0.628 MTPA, Captive Power generation from 36 MW to 60 MW (excluding 12 MW DG Set) and setting up of facilities for Bar Epoxy Coating 0.048 MTPA, Steel Forging 0.036 MTPA, Aluminium Ingots 0.024 MTPA.

14.2.5 Environmental site settings

| S. No. | Particulars | |] | Details | | | Remarks |
|-----------|--------------------------|--|--|-----------|-----------|-------------------|-----------|
| 1. | Total land | 33.1 ha [Priv | ate Land |] | | | Land use: |
| | | | | | | | |
| 2. | Land acquisition details | Existing plan | Existing plant area is 2,62,272 sqm (26.22 Ha.). | | | | |
| | as per MoEF&CC O.M. | Additional 6 | 8,695 sqr | n. (6.87 | Ha.) la | nd is alread | dy |
| | dated 7/10/2014 | acquired for the proposed expansion and the same | | | | | me |
| | | is adjacent to | the exist | ting faci | lity. | | |
| 3. | Existence of habitation | Project site:] | No habita | tion exis | sts in th | e plant site | e so – |
| | & involvement of any | no R&R invo | lved. | | | - | |
| | R&R, if any. | | | | | | |
| | | Study Area | Study Area | | | | |
| | | Habitation | | Distan | ce | Direction | 1 |
| | | Mithirohar | | 1 km | | WNW | |
| 4. | Latitude and Longitude | Point | Latit | ude | Lo | ngitude | - |
| | of all corners of the | А | 23° 6' 9 | .63" N | 70° 10 |)' 59.00" E | |
| | project site. | В | 23° 6' 2 | 1.76" N | 70° 10 |)' 59.22"' E | |
| | | C | 23° 6' 22 | 2.03" N | 70° 1 | 1' 2.27" E | |
| | | D | 23° 6' 2' | 7.05" N | 70° 1 | 1' 7.76" E | |
| | | E | 23° 6' 32 | 2.06" N | 70° 1 | 1' 7.86" E | |
| | | F | 23° 6' 3. | 3.87" N | 70° 11 | ' 10.66" E | |
| | | G | 23° 6' 2 | 6.27" N | 70° 11 | <u>' 13.60" E</u> | |
| 1 | | — Ц | 1 220 67 20 | 0 16" N | 70° 11 | ' 10 07" F | |
| S. | Particulars | | Details | | Remarks | | | | |
|-----|-------------------------------|--------------------------|---|------------------|---------|--|--|--|--|
| No. | | | | | | | | | |
| | | I 23° | 6' 25.22'' N | 70° 11' 21.83" E | | | | | |
| | | J 23° | 6' 22.81" N | 70° 11' 23.21" E | | | | | |
| | | K 23° | 6' 22.75" N | 70° 11' 23.80" E | | | | | |
| | | L 23° | 6' 21.73" N | 70° 11' 24.41" E | | | | | |
| | | M 23° | | | | | | | |
| 5. | Elevation of the project site | 7 M above mean | sea level | | | | | | |
| 6. | Involvement of | No involvement | of Forest land | ł | - | | | | |
| | Forest land if any. | | | | | | | | |
| 7. | Water body (Rivers, | Project Site: Nil | Project Site: Nil | | | | | | |
| | Lakes, Pond, Nala, | | | | | | | | |
| | Natural Drainage, | <u>Study Area:</u> | tudy Area: | | | | | | |
| | Canal etc.) exists | Water Dody | Water Rody Distance Direction | | | | | | |
| | within the project | Water Body | Distance | Direction | | | | | |
| | site as well as | Mithironar pond | 1.6 | <u> </u> | | | | | |
| | study area | Chudwa river | 2.4 | N | | | | | |
| | | Chudwa river | 4.6 | NW | | | | | |
| | | Sang River | 3.2 | WSW | | | | | |
| | | Sang River | 7.0 | W | | | | | |
| | | Varsana Pond | 7.7 | NNE | | | | | |
| | | Padana Pond | 5.6 | N | | | | | |
| | | Aji River (Tributary) | 2.4 | SE | | | | | |
| | | | | | | | | | |
| 8. | Existence of ESZ/ | None within the s | tudy area | | | | | | |
| | ESA/ National Park/ | | | | | | | | |
| | Wildlife sanctuary/ | List of Reserved | List of Reserved and protected forests: | | | | | | |
| | Biosphere reserve/ | No Reserve Fore | No Reserve Forest is falling within 10 km. radius | | | | | | |
| | Tiger reserve/ Elephant | of the plant site. | of the plant site. Only few protected forests are | | | | | | |
| | reserve etc. if | present in buffer | zone of the p | roject site. | | | | | |
| | any within the study | - | 1 | - | | | | | |
| | area | | | | | | | | |

- 14.2.6 The plant was initially established by M/s. MID India Engineering Ltd. for production of 3,000 Tons per month of Sponge Iron, 12,500 Tons per month of MS Billets, 17,500 Tons per month of Rolled product and 3,333.3 Tons per month of Galvanized Corrugated sheets after obtaining Consent to Established from Gujrat Pollution Control Board on 07.03.2005. Environment Clearance, as per EIA Notification, 1994 was not required as the project cost was less than Rs. 100 Crores. The project was accorded Environmental Clearance vide Ir. no. J-11011/250/2007-IA II(I) dated 24/08/2007 in the name of M/s. MID India Engineering Ltd. EC transfer in the name of M/s Shreeyam Power and Steel Industries Limited was granted by MoEF&CC vide letter dated 16.10.2020. Latest Consent to Operate for the existing unit was accorded by Gujarat State Pollution Control Board vide Ir. no. AWH-114441 dated 31/08/2021. The validity of CTO is up to 02/08/2026.
- 14.2.7 Implementation status as per existing EC

| S. No. | Facilities | As per CTE dated 07.03.2005 | As per EC dated 24.08.2007 | Implementation Status as on date | Production as per CTO | | | | | |
|---|--|--------------------------------|---|--|--|--|--|--|--|--|
| 1. | Iron Ore Pellet Plant | - | 50,000 TPM | Not Implemented | - | | | | | |
| 2. | Sponge Iron Plant | 3000 MT/month | 2x100 TPD 1x350 TPD (Increased to 15,500 MT/month) | Implemented | 15,500 MT/month | | | | | |
| 3. | Steel Melting Shop Induction Furnace Billet Caster | 12500 MT/month | 4x20 Ton 2x4/7 m + 2x6/11 m (Increased to 25,000 MT/month) | Implemented | 25,000 MT/month | | | | | |
| 4. | Alloy Steel Product LRF AOD | - | 1x25 Ton 1x30 Ton (6500 MT/month) | Implemented | 6500 MT/month | | | | | |
| 5. | Rolled Products | 35 TPH (17,500 MT/month) | - | Implemented | 17,500 MT/month | | | | | |
| 6. | Galvanizing Plant | 3,333.3 MT/month | - | Implemented | 3333.33 MT/month | | | | | |
| 7. | Power Plant | DG Set – 12 MW | WHRB – 12 MW PFBC – 24 MW | Implemented | WHRB – 12 MW PFBC – 24 MW DG Set – 12 MW | | | | | |
| Note 12,5 per 1 Polli not 1 | Note: The plant was initially established for production of 3,000 Tons per month of Sponge Iron, 12,500 Tons per month of MS Billets, 17,500 Tons per month of Rolled product and 3,333.3 Tons per month of Galvanized Corrugated sheets after obtaining Consent to Established from Gujrat Pollution Control Board on 07.03.2005. Environment Clearance, as per EIA Notification, 1994 was not required as the project cost was less than Rs_100 Crores | | | | | | | | | |

14.2.8 The unit configuration and capacity of existing and proposed unit are given as below:

| Sl. | Plant | | | Existing facil | ities as pe | er EC dated 24 | .08.2007 | | | | | | | Remarks |
|-----------------------|---|---------------------------------|-----------------|---------------------------------|--------------------|----------------|-----------------------|---------------------------------|-----------------|--|------------------------------|--|----------------|---------|
| No. | Equip | Total (A | D) | Implement | od (A) | Un implomo | ntod (D) | Agnon | TO | Proposed U | J nits | Final (Exist | ting + d) | |
| | Facility | Total (A) Configuration | +D) Canacity | Configuration | eu (A) Canacity | Configuration | fileu (D) Canacity | As per C Configuration | /10 Canacity | Configuration | Canacity | Configuration | u) Canacity | |
| | 1 ucinty | Configuration | (TPA) | Configuration | (TPA) | Configuration | (TPA) | Configuration | (TPA) | Configuration | (TPA) | Configuration | (TPA) | |
| 1. | Iron Ore Pellet Plant | | 600,000 | | | | 600,000 | | | | | | | Dropped |
| 2. | Sponge Iron Plant | 2x100 TPD 1x350 TPD | 186,000 | 2x100 TPD 1x350 TPD | 186,000 | | | 2x100 TPD 1x350 TPD | 1,86,000 | 2x140 TPD 1x500 TPD (By modifying existing 2x100 TPD and 1x350 TPD Kilns) + 1x500 TPD (new) | 2,70,000 (addition al) | 2x140 TPD 2x500 TPD | 456,000 | |
| 2. Steel Melting Shop | | | | | | | | | | | | | | |
| 2a. | Induction Furnace | 4x20 Ton | | 4x20 Ton | | | | 4x20 Ton | | 2x22 Ton | | 4x20 Ton 2x22 Ton | | |
| 2b. | EAF (24 MVA) | | | | | | | | | 1x25 Ton EAF + LRF 1x30 Ton + 1x30 Ton VD | | 1x25 Ton EAF + LRF 1x30 Ton + 1x30 Ton VD | | |
| 2c. | ССМ | 2x4/7 m 2 x 6/11m | 300,000 | 2x4/7 m 2 x 6/11m | 300,000 | | | 2x4/7 m 2 x 6/11m | 300,000 | 1x6/11 m 2x9/16 m | 300,000 | 2x4/7 m 3x 6/11m 2x9/16 m | 600,000 | |
| 2d. | Alloy Steel | 1x25 Ton LRF 1x30 Ton AOD | 78,000 | 1x25 Ton LRF 1x30 Ton AOD | 78,000 | | | 1x25 Ton LRF 1x30 Ton AOD | 78,000 | - | - | 1x25 Ton LRF 1x30Ton AOD | 78,000 | |
| 3. | | | | | | |] | Rolling Mills | | | | | | |
| 3a | Rolling Mill#1 & 2 (MS TMT, WR, SEC., STR.) | 35 TPH | 210,000 | 35 TPH | 210,000 | | | 35 TPH | 2,10,000 | By modification of existing Rolling Mills to 1x50 TPH each | 3,40,000 (additional) | _ | 5,50,000 | |
| 3b | Rolling Mill #3 (AS/SS) | | | - | - | - | | | - | RM 1x15 TPH RH Furnace–15 TPH | 78,000 | RM 1x15 TPH RH Furnace–15 TPH | 78,000 | |
| 4 | Bar Epoxy Coating | | | - | - | | - | | - | 1 x 8 TPH | 48,000 | 1 x 8 TPH | 48,000 | |

| SI. | Plant | Existing facilities as per EC dated 24.08.2007 | | | | | | | | | | Remarks | | |
|-----|---------------------------|--|-------------------|---------------|-------------------|---------------|-------------------|----------------|-------------------|--|-------------------|---|-------------------|--|
| No. | Equip ment/ | Total (A- | + B) | Implement | ed (A) | Un- impleme | nted (B) | As per C | ТО | Proposed U | Jnits | Final (Exist Propose | ting + d) | |
| | Facility | Configuration | Capacity (TPA) | Configuration | Capacity (TPA) | Configuration | Capacity (TPA) | Configuration | Capacity (TPA) | Configuration | Capacity (TPA) | Configuration | Capacity (TPA) | |
| 5 | Steel Forging Plant | | | | | - | | | | Press 1x1600 Ton, 1x16 Ton Hammer 1x15 Ton RH Furnace, 1x15 ton HT Furnace | 36,000 | Press 1x1600 Ton, 1x16 Ton Hammer 1x15 Ton RH Furnace, 1x15 ton HT Furnace | 36,000 | |
| 6 | Aluminium Ingots | | | - | - | | | | | 2x5 Ton | 24,000 | 2x5 Ton | 24,000 | |
| 7 | Galvanizing Plant | | | - | 40,000 | | | | 40,000 | - | - | - | 40,000 | |
| 8 | | • | | | | Captive I | Power Pla | nt - 72 MW (At | fter Expar | ision) | | | | |
| 8a | WHRB - DRI | | 12 MW | | 12 MW | | | | 12 MW | | 12 MW | | 24 MW | |
| 8b | CFBC /AFBC | CFBC | 24 MW | CFBC | 24 MW | | | CFBC | 24 MW | AFBC | 12 MW | CFBC + AFBC | 36 MW | |
| 8c | DG Set | | 12 MW | | 12 MW | | | | 12 MW | - | | | 12 MW | |

14.2.9 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

| Sl. Raw | | Quantity | v required pe | er annum | Source | Distance | Mode of |
|---------|----------------------------|----------|---------------|-----------|---|--------------------|--------------------------------------|
| No. | Material | Existing | Expansion | Total | | from site (Kms) | Transportation |
| 1 | Iron Ore/Pellets | 330,900 | 5,40,000 | 870,900 | Domestic Mines / Imported | 650 km | Road |
| 2 | Non-Coking Coal | 456,720 | 5,61,288 | 10,18,008 | Imported / Indigenous | 20 km | Sea to Kandla Port & then by Road |
| 3 | Dolomite | 7,440 | 21,600 | 29,040 | From various Mines in India | 550 km | Road |
| 4 | Calcined Lime | | 3,900 | 3,900 | From various Mines in India | 650 km | Road |
| 5 | Calcined Dolomite | 1,920 | 6,324 | 8,244 | Open Market | 650 km | Road |
| 6 | Ferro-alloys | 3,900 | 15,320 | 19,220 | Local Market | 1500 km | Road |
| 7 | MS Scrap / Return Scrap | 141,000 | 2,07,504 | 348,504 | Local Market + In-house (Return scrap) | 20 km | Road |
| 8 | Aluminium Scrap | | 25,800 | 25,800 | Imported / Indigenous | 20 km | Sea |
| 9 | Galvanised Sheet | 40,000 | 0 | 40,000 | Open market | 20 km | Road |
| 10 | Epoxy Paint | | 1,920 | 1,920 | Local Market | 20 km | Road |
| 11 | Purchased Billet | | 22,000 | 22,000 | Local Market | 30 km | Road |

- 14.2.10 Existing Water requirement is 1200 m³/day. Water requirement is obtained from Gujarat Water Infrastructure Limited (GWIL) and permission for 1750 m³/day has been obtained vide letter no. GWIL/Kutch/270701/2536 dated 24/12/2007. The water requirement for the proposed project is estimated as 3494 m³/day, out of which 2813 m³/day of fresh water requirement will be obtained from the Gujarat Water Infrastructure Limited (GWIL) & Water Tankers and the remaining requirement of 681 m³/day will be met from recycled water. Applied for drawl of additional quantity of water required for the proposed expansion on 07.09.2020 vide letter SPSIL/P&A/2020/28 (Application ID No. 1000155270-1515971).
- 14.2.11 Existing power requirement of 36.0 MW is obtained from Captive power generation. Plant has permission for drawl of 6 MVA from the grid. The power requirement for the proposed project is estimated as 71.55 MW, out of which 60 MW will be obtained from the Captive Power Plant and remaining from grid.
- 14.2.12 Baseline Environmental Studies

| Period | Ν | /Iid October 202 | 20 to Mid Janua | ary 2021 | | | | | |
|--------------------|---|--|---|---|--|--|--|--|--|
| AAQ parameters | • $PM_{2.5} = 7$ | To 44 μ g/m ³ | | | | | | | |
| At eight | $PM_{10} = 17$ | To 94 $\mu g / m^3$ | | | | | | | |
| Locations (min and | $SO_2 = 3.8$ | to 18.4 $\mu g/m^3$ | | | | | | | |
| max) | NOx = 25 | .1 To 6 μ g/m ³ | | | | | | | |
| | CO = 0.85 | $50.54 \mu g/m^3$ | | | | | | | |
| Incremental GLC | • $PM_{10} = 12$ | $2.25 \ \mu g/m^3$ (Leve | el at 0.5 km in SH | E Direction) | | | | | |
| level | $SO_2 = 5.73$ | $5 \mu\text{g/m}^3$ (Level a | tt 0.5 km in NNE | Direction) | | | | | |
| | NOx = 2.0 |)6 μg/m ³ (Level | at 0.75 km in NN | NE Direction | _ | | | | |
| Ground water | pH: 6.5 to 7.45, | Total Hardness: | 31400 to 140 m | g/l, Chlorides: 2 | 9 to | | | | |
| quality at eight | 85534 mg/l, Flu | oride: 0.3 to 1.9 | 6 mg/l. Heavy m | etals < 0.01 to 0. | 13 | | | | |
| locations | | | | | | | | | |
| Surface water | pH: 8.0 to 9.5; I | DO: 3.6 to 6.6 m | g/I and BOD: 5 r | ng/I. COD from | 20 to <5 | | | | |
| quality at eight | mg/l. | | | | | | | | |
| locations | 54.0 4- (7.1. JD | | | | | | | | |
| Noise levels Leq | 54.8 to 6/.1 dBA for the day time and 44.7 to 63.6 dBA for the Night | | | | | | | | |
| (Day and Night) | time. | 1 1 | | | 11 / | | | | |
| atudu findinga | • I raffic study | has been co | nducted at NH | /SH/MDK Kar | Idala to | | | | |
| study midnigs | with with | men is approxit | natery 1.9 km (| instance) from t | ne plant | | | | |
| | Silc. | | | | | | | | |
| | • Transportation of Taw material, rule & ministed product will be done 90% by road | | | | | | | | |
| | 50% by 10au. | | | | | | | | |
| | • Existing FCU | of service (LOS |) is: | | DK) and | | | | |
| | Road | V |) 15. | Existing V/C | 1.05 | | | | |
| | Noau | (Volume in | C (Canacity in | Ratio | LUS | | | | |
| | | (volume m | (Capacity III | Natio | | | | | |
| | | PCU/hr) | PCU/hr) | | | | | | |
| | Mithirohar to | PCU/hr.) 207 | PCU/hr.) 900 | 0.23 | В | | | | |
| | Mithirohar to Kandala (both | PCU/hr.) 207 | PCU/hr.) 900 | 0.23 | В | | | | |
| | Mithirohar to Kandala (both ways) | PCU/hr.) 207 | PCU/hr.) 900 | 0.23 | В | | | | |
| | Mithirohar to Kandala (both ways) PCU load after t | PCU/hr.) 207 | PCU/hr.) 900 will be 105 (Ex. | 0.23 isting) + 3 (Add | B itional) | | | | |
| | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve | PCU/hr.) 207 proposed project el of service (LO | PCU/hr.) 900 will be 105 (Ex. S) will be: | 0.23 isting) + 3 (Add | B itional) | | | | |
| | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road | PCU/hr.) 207 proposed project el of service (LO V | PCU/hr.) 900 will be 105 (Ex S) will be: C | 0.23 isting) + 3 (Add Proposed V/C | B itional) | | | | |
| | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road | PCU/hr.) 207 proposed project el of service (LO V (Volume | PCU/hr.) 900 will be 105 (Ex. S) will be: C (Capacity | 0.23 isting) + 3 (Add Proposed V/C Ratio | B itional) LOS | | | | |
| | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road | PCU/hr.) 207 proposed project el of service (LO V (Volume in PCU/hr.) | PCU/hr.) 900 will be 105 (Ex S) will be: C (Capacity in PCU/hr.) | 0.23 isting) + 3 (Add Proposed V/C Ratio | B itional) LOS | | | | |
| | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road Mithirohar to | PCU/hr.) 207 proposed project el of service (LO V (Volume in PCU/hr.) 213 | PCU/hr.) 900 will be 105 (Ex. S) will be: C (Capacity in PCU/hr.) 900 | 0.23 isting) + 3 (Add Proposed V/C Ratio 0.237 | B itional) LOS B | | | | |
| | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road Mithirohar to Kandala (both | PCU/hr.) 207 proposed project el of service (LO V (Volume in PCU/hr.) 213 | PCU/hr.) 900 will be 105 (Ex: S) will be: C (Capacity in PCU/hr.) 900 | 0.23 isting) + 3 (Add Proposed V/C Ratio 0.237 | B itional) LOS B | | | | |
| | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road Mithirohar to Kandala (both ways) | PCU/hr.) 207 proposed project el of service (LO V (Volume in PCU/hr.) 213 | PCU/hr.) 900 will be 105 (Ex S) will be: C (Capacity in PCU/hr.) 900 | 0.23 isting) + 3 (Add Proposed V/C Ratio 0.237 | B itional) LOS B | | | | |
| | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road Mithirohar to Kandala (both ways) * Note: Capacity | PCU/hr.) 207 proposed project el of service (LC) V (Volume in PCU/hr.) 213 as per IRC 64: 1 | PCU/hr.) 900 will be 105 (Ex: S) will be: C (Capacity in PCU/hr.) 900 | 0.23 isting) + 3 (Add Proposed V/C Ratio 0.237 or capacity for re | B itional) LOS B Dads. | | | | |
| | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road Mithirohar to Kandala (both ways) * Note: Capacity (Conclusion : Th | PCU/hr.) 207 proposed project el of service (LO V (Volume in PCU/hr.) 213 as per IRC 64: 1 ne level of serv | PCU/hr.) 900 will be 105 (Ex S) will be: C (Capacity in PCU/hr.) 900 990 Guideline for vice will "Very | 0.23 isting) + 3 (Add Proposed V/C Ratio 0.237 or capacity for re Good" after in | B itional) LOS B Dads. ncluding | | | | |
| | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road Mithirohar to Kandala (both ways) * Note: Capacity Conclusion : Th additional traffic | PCU/hr.) 207 proposed project el of service (LO V (Volume in PCU/hr.) 213 as per IRC 64: 1 ne level of serve e due to propose | PCU/hr.) 900 900 will be 105 (Ex. S) will be: C (Capacity in PCU/hr.) 900 990 Guideline for vice will "Very d project. | 0.23 isting) + 3 (Add Proposed V/C Ratio 0.237 or capacity for re Good" after in | B itional) LOS B Dads. ncluding | | | | |
| Flora and fauna | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road Mithirohar to Kandala (both ways) * Note: Capacity Conclusion : Th additional traffic Buffer zone of the | PCU/hr.) 207 207 proposed project el of service (LO V (Volume in PCU/hr.) 213 as per IRC 64: 1 ne level of service due to propose he study area has | PCU/hr.) 900 900 will be 105 (Ex S) will be: C (Capacity in PCU/hr.) 900 990 Guideline for vice will "Very d project. s been reported a | 0.23 isting) + 3 (Add Proposed V/C Ratio 0.237 or capacity for re Good" after in a habitat of Sc | B itional) LOS B Dads. ncluding | | | | |
| Flora and fauna | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road Mithirohar to Kandala (both ways) * Note: Capacity Conclusion : Th additional traffic Buffer zone of th I species Pavo c | PCU/hr.) 207 207 proposed project el of service (LO V (Volume in PCU/hr.) 213 as per IRC 64: 1 ne level of service c due to propose he study area has pristatus commo | PCU/hr.) 900 900 will be 105 (Ex. S) will be: C (Capacity in PCU/hr.) 900 990 Guideline for vice will "Very d project. s been reported a nly known as In | 0.23 isting) + 3 (Add Proposed V/C Ratio 0.237 or capacity for re Good" after in as a habitat of Sc dian Peafowl. W | B itional) LOS B Dads. ncluding | | | | |
| Flora and fauna | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road Mithirohar to Kandala (both ways) * Note: Capacity Conclusion : Th additional traffic Buffer zone of th I species Pavo of Conservation Pl | PCU/hr.) 207 207 proposed project el of service (LO V (Volume in PCU/hr.) 213 as per IRC 64: 1 ne level of service due to propose he study area has cristatus commo an has been pre | PCU/hr.) 900 900 will be 105 (Ex: S) will be: C (Capacity in PCU/hr.) 900 990 Guideline for vice will "Very d project. s been reported a nly known as In- pared for Schedu | 0.23 isting) + 3 (Add Proposed V/C Ratio 0.237 or capacity for re Good" after in as a habitat of Sc dian Peafowl. W ule I species (co | B itional) LOS B Dads. ncluding | | | | |
| Flora and fauna | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road Mithirohar to Kandala (both ways) * Note: Capacity + Conclusion : Th additional traffic Buffer zone of th I species Pavo of Conservation PI peafowl). Capit | PCU/hr.) 207 207 207 207 207 207 207 207 207 207 | PCU/hr.) 900 900 will be 105 (Ex: S) will be: C (Capacity in PCU/hr.) 900 990 Guideline for vice will "Very d project. s been reported a nly known as Im- pared for Schedu R 3,00,000 and re | 0.23 isting) + 3 (Add Proposed V/C Ratio 0.237 or capacity for re Good" after in a habitat of Sc dian Peafowl. W ule I species (co ecurring budget | B itional) LOS B Dads. ncluding chedule Vildlife ommon of INR | | | | |
| Flora and fauna | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road Mithirohar to Kandala (both ways) * Note: Capacity Conclusion: Th additional traffic Buffer zone of th I species Pavo of Conservation Pl peafowl). Capit 50,000 per year | PCU/hr.) 207 207 207 207 207 207 207 207 207 207 | PCU/hr.) 900 900 will be 105 (Ex. S) will be: C (Capacity in PCU/hr.) 900 990 Guideline for vice will "Very d project. s been reported a nly known as In- pared for Scheder R 3,00,000 and ra ill be spent. The | 0.23 isting) + 3 (Add Proposed V/C Ratio 0.237 or capacity for re Good" after in as a habitat of Sc dian Peafowl. W ule I species (co ecurring budget e conservation | B itional) LOS B oads. ncluding chedule Vildlife ommon of INR plan is | | | | |
| Flora and fauna | Mithirohar to Kandala (both ways) PCU load after p PCU/hr and leve Road Mithirohar to Kandala (both ways) * Note: Capacity Conclusion : Th additional traffic Buffer zone of th I species Pavo of Conservation Pl peafowl). Capit 50,000 per year submitted to Sta | PCU/hr.) 207 207 proposed project el of service (LO V (Volume in PCU/hr.) 213 as per IRC 64: 1 ne level of service due to propose he study area has cristatus commo an has been pre al Budget of INI r for 5 years w ate Forest Depar | PCU/hr.) 900 900 will be 105 (Ex: S) will be: C (Capacity in PCU/hr.) 900 990 Guideline for vice will "Very d project. s been reported a nly known as In- pared for Schedra 3,00,000 and re ill be spent. The tment vide lette | 0.23 isting) + 3 (Add Proposed V/C Ratio 0.237 or capacity for re Good" after in as a habitat of Sc dian Peafowl. W ule I species (co ecurring budget e conservation r dated 21.05.20 | B itional) LOS B Dads. ncluding chedule Vildlife ommon of INR plan is D22 for | | | | |

| 14.2.13 | The details of solid and hazardous waste generation along with its mode of treatment/disposal is |
|---------|--|
| | furnished as below: |

| S. | Type of Waste | Source | Quantity | Mode of | Disposal | Remarks |
|-----|--------------------------------------|----------------------------|-----------|---|---|---------|
| No. | | | generated | Treatment | | |
| | | | (TPA) | | | |
| | 1 | | Soild V | Waste | I | T |
| 1. | Dolochar | DRI Kilns | 68,400 | | Will be used in AFBC/ PFBC | |
| | | | | | Boilers | |
| 2. | Wet Scrapper Sludge | DRI Kiln | 9,545 | | Will be stored at site for maximum period of 15 days and disposed-off in landfill | |
| 3. | Iron Ore Fines | Sponge Iron Plant | 23,000 | | Will be given to nearby Sinter Plant | |
| 4. | Induction Furnace Slag | Induction Furnace | 67,800 | Metal Recovery from Slag | Aftermetalrecovery(approx.10%),remainingslag shall be crushedand will be used asaggregates | |
| 5. | Induction Furnace Bag Filter Dust | Induction Furnace | 6,780 | | Will be sold to Sinter Plant | |
| 6. | AOD Slag | SMS- AOD Convertor | 4,000 | TCLP test to determine whether hazardous or non- hazardous | After TCLP test, shall be used in Cement making as a mixture of raw materials, replacing some amount of natural raw materials like limestone and clay or shall be crushed and given to Paving blocks / Paving Tiles Manufacturing units or will be used as aggregates/land filling | |
| 7. | CCM Scale | Continuous Casters | 4,520 | | Will be used in remelting in IF/EAF | |
| 8. | Mill Scale | Rolling Mill MS) | 10,800 | | Will be used in remelting in IF/EAF | |
| 9. | Mill Scale | (Rolling Mill SS/AS) | 800 | | Will be used in remelting IF/EAF | |
| 10. | Shot blasting iron | Epoxy | 240 | | Will be used in | |

| S. No. | Type of Waste | Source | Quantity generated (TPA) | Mode of Treatment | Disposal | Remarks | |
|-----------|--|---------------------------|--------------------------------|-------------------------------------|---|------------------------------------|--|
| | dust | Coating Plant | | | remelting IF/EAF | | |
| 11. | Rejects/boring scrap/ end cuts/ trimming | Steel Forging Plant | 720 | | Will be used in remelting IF/EAF | | |
| 12. | WHRB / Pollution Control Dust / Fly- ash | ESP with DRI Kilns | 13,680 | Dry fly-ash collection system | After use in own Fly-ash brick Plant remaining will be | MOU with Kamdhenu Enterprise | |
| 13. | PFBC / AFBC - Fly-ash | ESP with AFBC/ CFBC | 51,500 | | given to the Cement Plant & Brick Manufacturing Units | | |
| 14. | PFBC / AFBC – Bottom Ash | PFBC / AFBC Boilers | 23,760 | | Will be given to the nearby Brick Kilns, to be used as fuel | | |
| | | | Hazardou | ıs Waste | | | |
| 1. | Used Oil | From all plant Units | 30 | | Selling to registered recycler/ reprocessor | | |
| 2. | Oily Sludge | From all plant Units | 72 | | Collection, Storage, Transportation, and sent to TSDF. | MOU with Detox India Pvt. | |
| 3. | Discarded containers/Barrels/ Liners | From all plant Units | 0.6 | | Collection, Storage, Transportation, and and sent to TSDF. | Ltd. (common | |

14.2.14 Public Consultation:

| Details of advertisement | In Kutch Uday on date 14/12/2021 and in The Indian Express on | | | | | |
|-----------------------------|---|--|--|--|--|--|
| given | date 16/12/2022 | | | | | |
| Date of public consultation | 18/01/2022 | | | | | |
| Venue | At adjacent plot of M/s Shreeyam Powwer and Steel industries Limited, Plot No. 332, Phase-II, GIDC, Vill. Mithirohar, Ta.: Gandhidham, Dist.: Kutch (Gujarat) | | | | | |
| Presiding Officer | Deputy Collector & Sub Divisional Magistrate, Anjar-Kutch | | | | | |
| Major issues raised | Green area development in surrounding villages | | | | | |
| | Condition of roads in Mithirohar village | | | | | |
| | • Employment including employment for Women | | | | | |
| | • Education | | | | | |
| | • Pollution from plant particularly impact on Salt Pan, grassland due to fly-ash | | | | | |
| | • CSR activities, Cattle Shed etc. | | | | | |

| | Physical activity | and action plan | Year o | ation | Total | | | | | |
|-------|--|--|------------|--------------|------------|-------------|--|--|--|--|
| S. No | | | (B | udget in INF | R) | Expenditure | | | | |
| | Name of the | Physical Targets | 1st | 2nd | 3rd | (Rs. in | | | | |
| | Activity | | | | | Crores) | | | | |
| | L | Green belt E | Developmen | nt | | I | | | | |
| 1 | Tree Plantation drives in nearby villages (Name of village: Modavardar, Mithirohar, Chudva, Kharirohar) | Greenbelt development in nearby 4 village 1000 sapling per village (INR 200 per sapling) | 3,00,000 | 3,00,000 | 3,00,000 | 0.09 | | | | |
| | Roads and Infrastructure Development | | | | | | | | | |
| 1 | Paved internal road in villages (Name of village: Modavardar, Mithirohar, Chudva, Kharirohar) | Construction Paved Road of village internal kaccha road in nearby 4 village in the study area | 5,00,000 | 5,00,000 | 5,00,000 | 0.15 | | | | |
| 2 | Water storage facilities for cattle sheds (Name of village: Modavardar, Mithirohar, Chudva, Kharirohar) | Construction of cattle shed in nearby 4 village in the study area | 5,00,000 | 5,00,000 | 5,00,000 | 0.15 | | | | |
| | | Educ | ation | | | · | | | | |
| 1 | Higher education opportunities to the children in the nearby villages (Name of village: Modavardar, Mithirohar, Chudva, Kharirohar) | Educational funding for higher education in 4 schools located in the Study area | 15,00,000 | 15,00,000 | 15,00,000 | 0.45 | | | | |
| 2 | Distribution of books among school children (Name of village: Modavardar, Mithirohar, Chudva, Kharirohar) | Distribution of stationery in 4 schools located in the study area | 1,00,000 | 1,00,000 | 1,00,000 | 0.03 | | | | |
| 3 | Provision of necessary equipment and infrastructure for sports activities (Name of village: | Distribution of sport equipment in 4 schools located in study area | 1,00,000 | 1,00,000 | 1,00,000 | 0.03 | | | | |

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

| S. No | Physical activity | and action plan | Year o (B | Total Expenditure | | |
|---------|---|--|--------------|----------------------|-----|--------------------|
| | Name of the Activity | Physical Targets | 1st | 2nd | 3rd | (Rs. in Crores) |
| | Modavardar, Mithirohar, Chudva, Kharirohar) | | | | | |
| | | Environmen | tal Pollutio | n | | |
| 1 | Cleaning of village Pond (Name of village: Mithirohar) | Cleaning and deepening of Mithirohar village pond | 3,00,000 | - | - | 0.03 |
| Total (| Overall Budget | | • | | • | 0.93 |

14.2.15 Existing capital cost of project was 486 crores. The capital cost of the proposed project is Rs 200 Crores and the capital cost for environmental protection measures is proposed as Rs 9.72 Crores including budget for implementation of commitments made to address the issues raised during the public hearing. The annual recurring cost towards the environmental protection measures is proposed as Rs 0.6241 Crores. Existing manpower of the plant is 960. The estimated additional direct manpower required for the proposed expansion shall be 290. The details of cost for environmental protection measures is as follows:

| S.No. | Description of Item | Existing Crores/ | (Rs. In lakhs) | Propos la | ed (Rs. In khs) |
|--------|--|---------------------|-------------------|-----------------|--------------------|
| | | Capital Cost | Recurring Cost | Capital Cost | Recurring Cost |
| (i). | Air Pollution Control/ Noise Management | 200 | 20 | 751 | 25.5 |
| (ii). | Water Pollution Control | 30 | 5 | 15 | 1.5 |
| (iii). | Solid & Hazardous Waste Management | | 0.5 | 1.0 | 1.5 |
| (iv). | Environmental Monitoring and Management | 70.5 | 10.3 | 62 | 20.04 |
| (v). | Occupational Health & Safety | | 5.0 | 17.0 | 11.6 |
| (vi) | Green Belt Development | 50 | 2.5 | 33.25 | 2.27 |
| (vii) | Addressal of Public Consultation concerns | | | 93 | - |

14.2.16 Existing green belt has been developed in 8.65 ha area which is about 33% of the total project area of 26.23 ha with total sapling of 18,000 Trees. For the proposed expansion, additional 6.87 Ha. area has been acquired. Proposed greenbelt will be developed in 10.96 ha which is about 33% of the total project area. Thus, total of 10.96 ha area (33% of total project area) will be developed as greenbelt. A 7.5 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 9500 saplings will be planted and nurtured in 2.31 hectares in 5 years.

- 14.2.17 It is submitted that there is no violation under EIA notification 2006/no court cases/no show cause/no direction.
- 14.2.18 The Status of compliance of earlier EC was obtained from Regional Office, Gandhinagar vide letter no J-11/59-2022-IRO GNR, dated 05/09/2022 in the name of M/s. Shreeyam Power and Steel Industries Limited. The Action taken report regarding the partially/non-complied condition was submitted to Regional officer MoEF&CC via mail dated 07-09-2022 and 12.09.2022. The details of the observations made by RO in the report dated 05-09-2022 along with its reassessment / present status as furnished by the PP is given as below:

| SI | | | | | Condition no. | | | Re-assessment | |
|----|--|--|--|---|--|----------------|---------|---------------------------|--|
| No | Non-compliance details | | Observation of RO (abridged) | | EC date | Specific | General | by RO / response by PP | |
| 1 | Raw material will be stored in covered yards. Water sprinkling Complied. Arrangement should be made in the raw material stock yard to control fugitive, emissions. Materials will be transported in tippers, covered trucks, covered containers, covered rail wagons etc. | Partly Durin mater storag power plant. in spe syster gener emisss plant yard conve There area instal bound | Partly Complied During the visit it was observed that raw material is being stored in covered yard of storage shed area 2400 sq.m in thermal power plant and 3900 sq. m. is in sponge iron plant. Photographs for the same are provided in specific condition no. 3. Water sprinkling system is installed at potential dust generation areas to control fugitive emissions. Pucca floor/road is constructed in plant premises. Raw material from storage yard is being transferred through covered conveyor belt. There is a need to strengthen the coal storage area and sprinkling system should be installed inside the coal storage area in a time bound manner. | | | 24.08. 2007 | (5) | | Unit has provided covered storage yard for raw material, sprinkling system inside coal yard will be installed inside coal storage area |
| 2 | Total water requirement shall be limited to 650 m3/d and met from GWSSB Narmada Main Canal. Wastewater from DM Plant and cooling tower shall be used for cooling. Sprinkling as road and raw material storage yard. In CPP, water shall be used for steam generation. The domestic wastewater generation from colony shall be treated in the STP and treated wastewater shall be utilized for green belt for irrigation with due compliance to the SPCB norms for irrigation. | Partly Durin ETP I indus used and consu detail Sr 1. 2. 3. 4. 5. 6. | Complied g the visit it was has been installed trial effluent; tre for green belt d sprinkling. The mption and wa s is given below. Month October-2021 November- 2021 December- 2021 January-2022 February- 2022 March-2022 Total Avg.(KL/Mo ntb) | observed th l to treat dor eated water levelopment month wi ste water § Water Consum ption (KL) 31156 27669 27845 28703 26811 29339 171523 28587 | aat STP & nestic and is being , cooling, se water generation Waste water Gener ation (KL) 8380 8133 8432 8431 7587 8421 49384 8230.6 | 24.08. 2007 | (6) | | Unit has permission letter to obtain water from Narmada Main Canal for consumption. |

| SI | | | | Condition | Re-assessment | |
|----|---|---|----------------|-----------|---------------|---|
| No | Non-compliance details | Observation of RO (abridged) | EC date | Specific | General | by RO / response by PP |
| | | Avg.(KL/day)952.9274.3Above data infers that during compliance period water consumption varies between893.7 KL/Day – 1038.5 KL/Day while the average value found to be 952.9 KL/Day and wastewater generation varies between 252.9KL/Day – 281.1 KL/Day while the average value found to be 274.3 KL/Day which is well within consent limit allotted in CCA. The unit is directed to submit the permission | | | | |
| 3 | The slag 300 MTPM shall be disposed of by road making. The Leach ability test for the slag shall be conducted and shall be ensured that no toxic or heavy metals are leached. Report of Leachate test for SMS Slag shall be submitted to the Ministry's Regional Office. | Partly Complied During the visit it was informed that leachate test of slag was conducted on dated 24.09.2021. It is found that no toxic and heavy metals are leached. The unit is directed to submit the quantity of slag generation during compliance period and its handling and disposal details to this office. | 24.08. 2007 | (9) | | Detail of slag generation and disposal is submitted. |
| 4 | The implementation of the project vis-a-vis environmental action plans shall be monitored by the concerned Regional Office of the Ministry / SPCB / CPCB. A six- monthly compliance status report shall be submitted to monitoring agencies and shall be posted on the website of the Company. | Partly complied As per the records furnished during the site visit it was observed that the unit is regularly submitting six monthly compliance report to SPCB on regular basis. They have further agreed that they will submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned time to time. The unit is directed to submit the weblink of half-yearly compliance report posted on the website of the company. | 04.08. 2007 | | 10 | Details of weblink for half yearly EC compliance is mentioned for information <u>http://spsil.in/Inve</u> storRelations.aspx ?catid=643e5419- <u>5d15-452b-a01f-</u> <u>73ca20fd9425&n</u> ame=Miscellaneo <u>us</u> |
| 5. | The company shall harvest surface as well as rainwater from the rooftop of the buildings proposed in the expansion project and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water. | Complied During the visit it was observed that rain water is collected in a pit located within premises. The volume of pit is 11812 Sq.m. they have dedicated storm water management system. It is directed to make the water pond considering all the measures to protect it from contamination. The action plan should be submitted to this office. | 24.08. 2007 | (13) | | Unit has provided rain water collection pond within premises to protect it from contamination adequate measures i.e., pucca floor, pond fencing etc will be provided upto 31.01.2023. |

Deliberations by the Committee

14.2.19 The Committee noted the following:

- 1. The Ministry and EAC (Industry-I) members are in receipt of a representation through email dated 27.09.2022 raising objection for proposed expansion project of M/s. Shreeyam Power & Steel Industries Limited pertaining to construction activity undertaken by PP without Environment Clearance, continuous non-compliance of environmental safeguard conditions such as illegal dumping of fly ash and fugitive dust emission, illegal discharge of effluents from the company premises etc. PP is advised to submit the clarifications w.r.t. the points raised in support of objections for proposed expansion project in the representation. In this context, EAC is of the view that IRO, MoEFCC may be requested for the factual report in this regard.
- 2. IRO in EC compliance report dated 05/09/2022 has made observations with respect to the partial/non-compliance of some of the EC conditions. The EAC noted that the Action taken report (ATR) regarding the partially/non-complied condition was submitted to Regional officer MoEF&CC via mail dated 07.09.2022 and 12.09.2022. The EAC deliberated on the observations of IRO and ATR submitted by project proponent and is of the view that ATR shall be evaluated by the IRO and closure report of IRO on the observed partial/non-compliance shall be submitted.
- 3. The total water requirement is 3494 m³/day, out of which 2813 m³/day of fresh water requirement shall be obtained from the Gujarat Water Infrastructure Limited (GWIL) & Water Tankers and the remaining requirement of 681 m³/day shall be met from recycled water. Project proponent has submitted that permission from the Competent Authority shall be obtained. In this regard, PP shall submit the document pertaining to application made to the competent authority and its updated status.
- 4. The EAC noted that existing green belt has been developed in 8.65 ha area with total sapling of 18,000 Trees which is less than 2500 trees per hectare. The Committee is of the view that PP shall submit commitment with an action plan for gap filling in the existing plantation so as to achieve a density of 2500 trees per hectare.
- 5. The total project area is 33.1 ha (Existing 26.22 ha, Additional 6.97 ha). Land has already been acquired and under the possession of the company. The PP during the deliberation submitted that the nature of additional land acquired is agricultural. The EAC is of the opinion that PP shall submit the status of conversion of land to industrial land.
- 6. The EAC deliberated on water balance diagram and is of the view that industry shall revisit on water quantity demarcated to greenbelt development and other operations, and submit the revised water balance.
- 7. The PP shall submit for each unit, the total water supplied and the quantity of water lost in evaporation.
- 8. PP needs to submit the action plan to plant locally grown tree cover on the banks of at least 2 village ponds/lakes which is helpful to preserve to prevent soil erosion and increase soil fertility.
- 9. Schedule I species namely *Pavo cristatus* commonly known as Indian Peafowl is found in the buffer zone of the project site. Wildlife Conservation Plan has been prepared for with a Capital Budget of INR 3,00,000 and recurring budget of INR 50,000 per year for 5 years.

The conservation plan vide letter dated 21.05.2022 is submitted to State Forest Department for approval. PP shall submit the updated status on the approval of conservation plan.

- 10. The treatment of CO emitted from the AOD has not been addressed. In this context, PP shall submit the information on the following:(a) quantity of liquid steel treated (tonnes) per heat in AOD (b) Flow rate of oxygen through the AOD-through top lance and through bottom(c) flow rate of argon through the AOD(d) flow rate of nitrogen through the AOD(e) how is the CO emitted by the reactor treated? (f) temperature of liquid steel during refining (g) what are the measures for recovering heat from the exit gases of AOD?
- 11. As committed by the PP they shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, shall be prepared to develop them into model villages. PP shall submit details of the villages to be adopted. Action plan submitted to address the PH issues and socio-economic development of the nearby villages shall also be revised and submitted as per Ministry's OM dated 30.09.2020.
- 12. The nearest habitation to plant is Mithirohar Village which is at distance of 1 km in WNW direction. Project Proponent shall submit environmental safeguard measures that will be undertaken to minimise the impact on the habitation of the locals.
- 13. Mithirohar pond, Chudwa river, Sang River, Sang River, Varsana Pond, Padana Pond, Aji River (Tributary) are flowing within 10 Km. radius of the plant site. Few ponds exist within 10 Km radius. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be submitted.

Recommendations of the Committee:

14.2.20 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** due to certain deficiencies in the proposal and sought requisite information on the points referred at para no. 14.2.19 above. The proposal shall be considered after submission of requisite information in next EAC meeting.

Agenda No. 14.3

14.3 Proposed installation of 3x15T Induction Furnace with 1x2 stand of CCM for Manufacturing of M.S. Ingot/Billet (200000 TPA) and 1 x25 TPH Rolling Mill (200000 TPA) by M/s. Purbanchal Concast Private Limited located at Khoribari Ghoshpukur Road, Village Kashiram, P.S. Phansidewa, District Darjeeling, West Bengal -Consideration of Environmental Clearance.

[Proposal No. IA/WB/IND/214214/2021; File No. IA-J-11011/265/2021-IA-II(I)] [Consultant: ULTRA-TECH; valid upto 09.03.2023]

- 14.3.1 M/s Purbanchal Concast Pvt. Ltd. (PCPL) has made an online application vide proposal no. IA/WB/IND/214214/2021 dated 04/08/2021 along with copy of EIA/EMP report, Form – 2 and certified EC 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 "A" of the schedule of the EIA Notification, 2006 and attracts general condition due to existence of India-Bangladesh International boundary at a distance of 2.55 Km in SE direction from the project and appraised at Central Level.
- 14.3.2 Name of the EIA consultant: M/s. ULTRA-TECH [Sl. No. 89, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0194; valid upto 09.03.2023, Rev. 25, Sept 05, 2022].
- 14.3.3 The project of M/s. Purbanchal Concast Private Limited (PCPL) located in Kashiram Jote Village, Phansidewa Tehsil, Darjeeling District, West Bengal is for installation of 3x15T Induction Furnace with 1x2 stand of CCM for Manufacturing of M.S. Ingot/Billet (200000 TPA) and 1x25 TPH Rolling Mill within the existing Rolling mills area running on basis of CTE/ CTO from West Bengal Pollution Control Board.
- 14.3.4 The project proponent had applied on 04/08/2021 initially for expansion of existing Rolling Mill Products-Angles (Structure), Pipes, Profile and Strips from 77400 TPA to 200000 TPA) & New installations of 3x15T Induction Furnace with 1x2 stand of CCM for Manufacturing of M.S. Ingot/Billet (200000 TPA). Project proponent approached the Ministry to obtain EC for their existing unit in pursuance to the Order dated 12/02/2020 of Hon'ble NGT in Appeal No. 55 of 2019. PP stated that they could not approach the Ministry timely due to Covid-19 pandemic situation. The said proposal was considered in the 42nd meeting of the Re-constituted EAC (Industry-I) held on 12 – 13th August, 2021 wherein after detailed deliberation, the Committee recommended that MoEF&CC may take an appropriate view regarding processing this request as it has been received after the deadline i.e. after 11/02/2021. Subject to the decision by MoEF&CC regarding the late submission of application by the PP as mentioned above, the committee recommended the project proposal for prescribing ToR. Ministry vide letter dated 13/09/2021 requested PP to submit additional information w.r.t. reasons for delay in submission of proposal after the deadline (11/02/2021). Further, on 24/11/2021, the Ministry clarified that The Hon'ble NGT vide its Order dated 12/02/2020 in O.A No. 55 of 2019 held that the MoEF upon consideration of the expert opinion appears to have now clarified that Cold Rolled Stainless Steel manufacturing industries do require prior environmental clearance but, having regard to the fact that there were a large number of such mills operating on the strength of CTE and CTO, opportunity should be provided to such units to fall within the EC regime by granting a period of at least one year to operate for the purpose. The time frame for applying within the EC regime got expired on 11/02/2021 and application for ToR was submitted on 04/08/2021. The delayed submission of proposal by the proponent was examined by the Ministry. The PP vide letter dated 24/12/2021 made a request to Ministry to issue ToR letter only for installation of the Induction Furnaces instead of the entire proposal of expansion and modification (hot charging) of Rolling mill and installation of induction furnace for the sustainability of the project. PP assured that they will be abide by the order of MoEF&CC, SPCB and Hon'ble NGT to bring the existing

rolling mill in ambit of the Environment Clearance under the provisions of EIA, Notification, 2006. In view of the same PP revised the proposal and the same was considered during 2^{nd} meeting of the EAC for Industry-I sector held on $22^{nd} - 23^{rd}$ March, 2022 wherein the Committee recommended the project proposal for prescribing ToR. Accordingly, the TOR was granted on 11/04/2022 by the Ministry.

Deliberations by the Committee

- 14.3.5 The Committee noted the following:
 - 1. The project proponent had applied on 04/08/2021 initially for expansion of existing Rolling Mill Products-Angles (Structure), Pipes, Profile and Strips from 77400 TPA to 200000 TPA) & New installations of 3x15T Induction Furnace with 1x2 stand of CCM for Manufacturing of M.S. Ingot/Billet (200000 TPA). Project proponent approached the Ministry to obtain EC for their existing unit in pursuance to the Order dated 12/02/2020 of Hon'ble NGT in Appeal No. 55 of 2019. PP stated that they could not approach the Ministry timely due to Covid-19 pandemic situation. The said proposal was considered in the 42nd meeting of the Re-constituted EAC (Industry-I) held on 12 – 13th August, 2021 wherein after detailed deliberation, the Committee recommended that MoEF&CC may take an appropriate view regarding processing this request as it has been received after the deadline i.e. after 11/02/2021. Subject to the decision by MoEF&CC regarding the late submission of application by the PP as mentioned above, the committee recommended the project proposal for prescribing ToR. Ministry vide letter dated 13/09/2021 requested PP to submit additional information w.r.t. reasons for delay in submission of proposal after the deadline (11/02/2021). Further, on 24/11/2021, the Ministry clarified that The Hon'ble NGT vide its Order dated 12/02/2020 in O.A No. 55 of 2019 held that the MoEF upon consideration of the expert opinion appears to have now clarified that Cold Rolled Stainless Steel manufacturing industries do require prior environmental clearance but, having regard to the fact that there were a large number of such mills operating on the strength of CTE and CTO, opportunity should be provided to such units to fall within the EC regime by granting a period of at least one year to operate for the purpose. The time frame for applying within the EC regime got expired on 11/02/2021 and application for ToR was submitted on 04/08/2021. The delayed submission of proposal by the proponent was examined by the Ministry. The PP vide letter dated 24/12/2021 made a request to Ministry to issue ToR letter only for installation of the Induction Furnaces instead of the entire proposal of expansion and modification (hot charging) of Rolling mill and installation of induction furnace for the sustainability of the project. PP assured that they will be abide by the order of MoEF&CC, SPCB and Hon'ble NGT to bring the existing rolling mill in ambit of the Environment Clearance. In view of the same PP revised the proposal and the same was considered during 2nd meeting of the EAC for Industry-I sector held on 22nd – 23rd March, 2022 wherein the Committee recommended the project proposal for prescribing ToR. Accordingly, the TOR was granted on 11/04/2022 by the Ministry.
 - 2. The EAC further observed that the instant proposal is applied as a greenfield project involving setting up of a 3x15 T induction furnace with 1x2 strand CCM for production of 2,00,000 TPA M.S Billet/Ingot and 1x25 TPH Rolling Mill, <u>though the</u>

project is being proposed within the existing Rolling mills area which is running on basis of CTE/ CTO from West Bengal Pollution Control Board. The PP has not obtained/submitted SPCB certified compliance report of CTO conditions for the existing rolling mill which is a requisite for appraisal of the instant proposal.

- 3. The EAC also noted that the project proponent and consultant during the appraisal presented wrong EMP cost which are also factually incorrect in the uploaded presentation in the PARIVESH portal. This is a serious concern as the consultant are presenting wrong facts and are not serious about the project.
- 4. The EAC informed to the PP/Consultant that as the whole process of granting ECs are online on Parivesh Portal. The application uploaded on portal cannot be revised. In view of the above, the PP shall submit the revise application. PP has committed to revise the application and agreed his mistake.

Recommendations of the Committee:

14.3.6 In view of the foregoing and after detailed deliberations, the committee recommended to **return** the proposal in its present form due to the shortcomings given at para no 14.3.5 above. **The EAC** also warned the consultant to guide the project proponent properly with respect to the requisite information and documents required at the time of appraisal and also to present the correct facts during the appraisal of the project.

Agenda No. 14.4

14.4 Establishment of 1 x 9 MVA Ferro Alloys plant (Silicon Manganese–14400 TPA or Ferro Manganese–25200 TPA or Ferro Chrome–15000 TPA or Ferro Silicon–7000 TPA or Pig Iron –25200 TPA) in existing 7.5 MW Biomass based Power Plant premises (Forward Integration) in existing plant premises by M/s Real Power Private Limited, located at Khamhardih Village, Pathariya Tehsil, Mungeli District, Chhattisgarh –Consideration of Environmental Clearance.

[Proposal No. IA/CG/IND/142231/2017; File No. J-11011/347/2017-IA.II(I)] [Consultant: Pioneer Enviro Laboratories and Consultants Pvt. Ltd.; Valid upto 16.12.2022]

14.4.1 M/s. Real Power Private Limited has made online application vide proposal no. IA/CG/IND/142231/2017 dated 02/09/2020 along with copy of EIA/EMP report and Form 2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at Sl. No. 3(a) Metallurgical industries (ferrous & non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level. 14.4.2 Name of the EIA consultant: M/s. Pioneer Enviro Laboratories And Consultants Pvt. Ltd. [S. No. 141, List of ACOs with their Certificate / Extension Letter No: NABET/EIA/1922/SA0148 valid till 21.09.2022; Rev. 25, Sept 05, 2022. Further accreditation was extended upto 16.12.2022 vide QCI letter no. QCI/NABET/ENV/ACO/22/2528, dated 17.09.2022].

Details submitted by Project proponent

14.4.3 The details of the ToR are furnished as below:

| Date of | Consideration | Details | Date of | ToR Validity |
|-------------|----------------------------------|-----------|------------|--------------|
| application | | | accord | |
| 22/06/2017 | 20 th meeting held on | Terms of | 20/07/2017 | 19/07/2022 |
| | 10-12 th July, 2017 | Reference | | |

- 14.4.4 The proposed expansion of Steel Plant of M/s. Real Power Private Limited is located at Khamhardih Village, Pathariya Tehsil, Mungeli District, Chhattisgarh. Presently, the project proponent is operating 7.5 MW Biomass based power plant. It is proposed to establish 1 x 9 MVA Ferro Alloys plant (Silicon Manganese–14400 TPA or Ferro Manganese–25200 TPA or Ferro Chrome–15000 TPA or Ferro Silicon–7000 TPA or Pig Iron –25200 TPA) in existing 7.5 MW Biomass based Power Plant premises (Forward Integration) in existing plant premises.
- 14.4.5 Environmental Site Settings:

| S.N 0. | Particulars | | | Details | | | Remarks |
|-----------|---|----------------------|--|--------------------|-----------------------|---|----------------------------------|
| i. | Total land | 26.82 acr | 26.82 acres of land (10.85 ha) | | | | Land use: Industrial land; |
| ii. | Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 | The land | The land is in possession of the management. | | | | - |
| iii. | Existence of habitation & | Project s Study A | ite: No habi rea | tation exists in t | he plant site | | - |
| | involvement of R&R, if any. | Habitat Atarra V | t ion √illage | Distance0.65 kms. | Direction E | | |
| iv. | Latitude and | S.No. | Point | Coordinates | | | - |
| | corners of the | 1. | Point # 1 | 21°56'27.19"N | 81°59'13.16"H | Ξ | |
| | project site. | 2. | Point # 2 | 21°56'29.46"N | 81°59'22.92"H | Ξ | |
| | | 3. | Point # 3 | 21°56'22.91"N | 81°59'23.16"H | Ξ | |
| | | 4. | Point # 4 | 21°56'25.41"N | 81°59'28.16"H | Ξ | |
| | | 5. | Point # 5 | 21°56'22.79"N | 81°59'29.11"H | Ξ | |
| | | 6. | Point # 6 | 21°56'22.79"N | 81°59'31.37"H | Ξ | |
| | | 7. | Point # 7 | 21°56'25.41"N | 81°59'30.42"H | Ξ | |
| | | 8. | Point # 8 | 21°56'24.10"N | 81°59'33.63"H | Ξ | |

| S.N 0. | Particulars | | | Details | Remarks | |
|-----------|---------------------------------------|--|-----------------------------|--|-----------------|--|
| | | 9. | Point # 9 | 21°56'28.62"N 81°59'35.29"E | | |
| | | 10. | Point # 10 | 21°56'32.55"N 81°59'31.49"E | | |
| | | 11. | Point # 11 | 21°56'34.81"N 81°59'33.03"E | | |
| | | 12. | Point # 12 | 21°56'35.29"N 81°59'30.65"E | | |
| | | 13. | Point # 13 | 21°56'34.45"N 81°59'24.82"E | | |
| | | 14. | Point # 14 | 21°56'31.83"N 81°59'22.09"E | | |
| | | 15. | Point # 15 | 21°56'29.10"N 81°59'18.40"E | | |
| | | 16. | Point #16 | 21°56'28.03"N 81°59'12.93"E | | |
| v. | Elevation of the project site | 245 m al | oove mean so | ea level | - | |
| vi. | Involvement of Forest land if any. | No forest | land is invol | ved. | - | |
| vii. | Water body | Project s | ite: No | | | |
| | (Rivers, Lakes, Pond, Nala. | Study ar | ea : | | | |
| | Natural Drainage, | Maniyari | River -0.05 | 5 Kms., Agar River – 5.5 Kms., Sh | nivnath river – | |
| | within the project | 8.0 Kms. exists within 10 Km. radius of the plant site. | | | | |
| | site as well as | Copy of the letter issued by Executive Engineer, Maniyari Water | | | | |
| | study area | Resources Division, Mungeli district, Chhattisgarh vide dated 20 th | | | | |
| | | • Plant | site of M/s. | Real Power Pvt. Ltd. is not fallin | ng within the | |
| | | flood | plain of Ma | niyari River (In accordance with | O.M. issued | |
| | | • Map | showing spr | ead of 5 years, 10 years, 15 years, 2022). | 20 years duly | |
| | | depic | ting the high | est flood along with scale. | | |
| | | HFL data i | of Maniyari is 242.00 M. | river near to the plant based on | last 20 years | |
| | | • Eleva | ation of the p | lant site is 245 M. Hence there will | ll be no flood | |
| | | water Mitigat | r entering in | to the plant site of Real Power. | Pvt.Ltd. | |
| | | Com side | pound wall Photograph | of 1.5 m already exists on the M showing the same is submitted. | aniyari river | |
| | | • Ferro | Alloy plan | t is situated at a distance of 340 | m from the | |
| | | Maniyari river. | | | | |
| | | • Greenbeit of 30 m width will be developed towards Maniyari river side (Eastern direction). | | | | |
| viii. | Existence of ESZ/ | Nil | | | - | |
| | park/ | | | | | |
| | wildlife sanctuary/ | | | | | |
| | tiger reserve/ | | | | | |
| | elephant reserve | | | | | |

| S.N 0. | Particulars | Details | Remarks |
|-----------|-----------------------------------|---------|---------|
| | etc. if any within the study area | | |

- 14.4.6 It is reported that existing plant doesn't have Environment Clearance. CTE has been obtained from CECB for existing 7.5 MW Biomass based Power Plant vide order No. 4874/TS/CECB/2004 Raipur dated 27/11/2004. CTE has been obtained prior to EIA Notification dated 14th September, 2006. As per EIA notification, 1994 greenfield project does not require Environment Clearance if the capital investment is less than Rs. 100 Crores. Hence, EC was not applicable for the existing plant as per EIA Notifications 1994& 2006. It has been reported that the Existing plant is having CTO valid 30.11.2024.
- 14.4.7 Implementation status of the existing CTE

| S.No. | Unit (Produc | ct) | CTE permitted | Implementation Status |
|-------|--------------|-------|----------------------|-----------------------|
| 1. | Biomass | based | 7.5 MW | In operation |
| | Power Plant | | | |

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

| S. No. | Unit | Existing | Proposed expansion | After expansion |
|-----------|-----------------|-------------|---------------------------------|---------------------------|
| 1 | Biomass based | 7.5 MW | - | 7.5 MW |
| | Power Plant | | | |
| 2 | Ferro Alloys | | Silicon Manganese | Silicon Manganese |
| | Plant | | (SiMn) – 14400 TPA | (SiMn) – 14400 TPA |
| | (1 x 9 mVA) | | or | or |
| | | | Ferro Manganese | Ferro Manganese |
| | | | (FeMn) – 25200 TPA | (FeMn) – 25200 TPA |
| | | | or | or |
| | | | Ferro Chrome (FeCr) – | Ferro Chrome (FeCr) – |
| | | | 15000 TPA | 15000 TPA |
| | | | or | or |
| | | | Ferro Silicon (FeSi) –7000 | Ferro Silicon (FeSi) – |
| | | | TPA | 7000 TPA |
| | | | or | or |
| | | | Pig Iron – 25200 TPA | Pig Iron – 25200 TPA |
| Note: 100 | Kg/Hr. Capacity | Briquetting | plant will be established for e | ffective dust management. |

14.4.9 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 | QUANTITY | SOURCE | DISTANCE | MODE OF |
|--------|--------------|----------|----------------|----------------|--------------------------|
| | MATERIAL | (TPA) | | (w.r.t Plant) | TRANSPORT |
| For Fe | erro Silicon | | | | |
| 1 | Quartz | 8450 | Chhattisgarh / | 100 – 300 Kms. | By Road (Covered trucks) |
| | | | Andhra Pradesh | | |
| 2 | LAM coke | 2800 | Chhattisgarh / | ~ 100 Kms. | By Road (Covered trucks) |
| | | | Bihar | | |
| | | | | ~ 480 Kms. | From Vizag Port by Road |

| S.No. | RAW | QUANTITY | SOURCE | DISTANCE | MODE OF |
|--------|-----------------|----------|-------------------------|----------------------------|---------------------------------------|
| | MATERIAL | (TPA) | | (w.r.t Plant) | TRANSPORT |
| | | | Imported from | (from Vizag | (Covered Trucks) |
| | | | Australia, China | Port) | |
| 3 | MS Scrap | 175 | Raipur | ~ 100 Kms. | By Road (Covered trucks) |
| 4 | Electrode paste | 420 | Maharashtra / | 650 – 950 Kms. | By Road |
| | | | West Bengal | | (Covered trucks) |
| For Fe | rro Manganese | | | - - - - - - - - - - | |
| 1 | Manganese Ore | 46260 | Balaghat (M.P.) | ~ 500 Kms. | By Road (Covered |
| | | | Imported from | ~ 480 Kms. | Irucks) |
| | | | South Africa | (from Vizag | From Vizag Port by Road |
| 2 | TAM aslas | 26490 | Chlattin carly / | Port) | (Covered Trucks) |
| 2 | LAM COKE | 26480 | Chnattisgarn / | ~ 100 Kms. | By Road (Covered trucks) |
| | | | Dillar Imported from | . 180 Kms | From Vizag Port by Pood |
| | | | Australia China | ~ 400 Kms. | (Covered Trueks) |
| | | | Australia, Clilla | (IIOIII VIZag Port) | (Covered Hucks) |
| 3 | MS Scrap | 1790 | Raipur | ~ 100 Kms. | By Road (Covered trucks) |
| 4 | Electrode Paste | 5240 | Maharashtra / | 600 – 900 Kms. | By Road |
| | | | West Bengal | | (Covered trucks) |
| For Si | lico Manganese | | | | · · · · · · · · · · · · · · · · · · · |
| 1 | Manganese Ore | 15,850 | Balaghat (M.P.) | ~ 500 Kms. | By Road (Covered |
| | | | Imported from | ~ 480 Kms. | Trucks) |
| | | | South Africa | (from Vizag | From Vizag Port by Road |
| | | | | Port) | (Covered Trucks) |
| 2 | Mn. Slag | 9,000 | In house | | By Conveyers |
| | - | | generation | | |
| 3 | Quartz | 3,900 | Chhattisgarh / | 100 – 300 Kms. | By Road (Covered trucks) |
| 4 | | 1.600 | Andhra Pradesh | 100 17 | D. D. 1/(C. 1/ 1.) |
| 4 | LAM coke | 1,600 | Chhattisgarh / | ~ 100 Kms. | By Road (Covered trucks) |
| | | | Binar Imported from | 190 Kmg | From Vizoa Dort by Dood |
| | | | Australia China | ~ 460 KIIIS. | (Covered Truelta) |
| | | | Australia, Clilla | (ITOIII VIZag | (Covered Hucks) |
| For Fe | erro Chrome | | | 1010) | |
| 1 | Chrome ore | 40,000 | Sukinda | ~ 400 Kms | By Road (Covered |
| 1 | emonie ore | 10,000 | (Odisha) | $\sim 480 \text{ Kms}$ | Trucks) |
| | | | Import | (from Vizag | From Port by Road |
| | | | (Indonesia) | Port) | (Covered Trucks) |
| 2 | LAM coke | 15,750 | Chhattisgarh / | ~ 100 Kms. | By Road (Covered trucks) |
| | | , | Bihar | | |
| | | | Imported from | ~ 480 Kms. | From Vizag Port by Road |
| | | | Australia, China | (from Vizag | (Covered Trucks) |
| | | | | Port) | |
| For Pi | g Iron | | | | |
| 1 | Iron Ore / | 46,000 | Barbil, Odisha | ~ 500 Kms. | By Road (Covered trucks) |
| | Sinter | | NMDC, | | |
| | | | Chhattisgarh | | |
| 2 | LAM Coke | 21,500 | Chhattisgarh / | ~ 100 Kms. | By Road (Covered trucks) |
| | | | Bihar | | |

| S.No. | RAW | QUANTITY | SOURCE | DISTANCE | MODE OF |
|-------|-----------|----------|------------------|----------------|--------------------------|
| | MATERIAL | (TPA) | | (w.r.t Plant) | TRANSPORT |
| | | | Imported from | ~ 480 Kms. | From Vizag Port by Road |
| | | | Australia, China | (from Vizag | (Covered Trucks) |
| | | | | Port) | |
| 3 | Limestone | 3,000 | Chhattisgarh | ~ 300 Kms. | By Road (Covered trucks) |
| | | | | | |
| 4 | Quartz | 1,500 | Chhattisgarh / | 100 – 300 Kms. | By Road (Covered trucks) |
| | | | Andhra Pradesh | | |

- 14.4.10 Water required in the existing plant is 490 KLD and is being sourced from Khamhardih anicut of Maniyari river. Water required for the proposed expansion project will be 30 KLDand same will also be sourced from Khamhardih anicut of Maniyari river. Total water requirement after expansion will be 520 KLD. This includes Make-up water for Power Plant, Ferro Alloys plant and Domestic water. Existing plant has already obtained Water drawl permission to draw 0.182 MCM (551 KLD) of water from Khamhardih anicut of Maniyari River from Water Resource Department, Raipur, Chhattisgarh, vide letter no. 7070/354/ WR/TS/05/IWS/D-4, Raipur Dt. 13/09/2011.
- 14.4.11 Total power required for the existing unit & for the proposed expansion units will be 11.75 MW which will be partly met from the existing 7.5 MW biomass-based power (net 6.75 MW will be available from power plant after deducting Aux. consumption) Balance power of 5 MW will be sourced from Chhattisgarh State Power Generation Company Limited (CSPGCL).
- 14.4.12 Baseline Environmental Studies:

| Period | 1 st October 2017 to 31 st December 2017 |
|-------------------|--|
| AAQ parameters at | • $PM_{2.5} = 19.7$ to 37.4 $\mu g/m^3$ |
| 8 locations | • $PM_{10} = 32.9$ to $63.2 \ \mu g/m^3$ |
| | • $SO_2 = 8.3$ to 19.6 $\mu g/m^3$ |
| | • NOx = 9.5 to 28.3 $\mu g/m^3$ |
| | • $CO = 525 \text{ to } 1150 \ \mu\text{g/m}^3$ |
| AAQ modelling | • $PM_{10} = 0.84 \ \mu g/m^3 \ (1400 \ m \ in \ SW)$ |
| | • $SO_2 = Nil$ |
| | • $NO_2 = 6.7 \ \mu g/m^3 (1500 \ m \ in \ SW)$ |
| | • $CO = 2.17 \ \mu g/m^3$ |
| Ground water | • pH: 7.1 to 7.9 |
| quality at 8 | • TSS : 1.1 to 2.5 mg/l |
| locations | • TDS : 264 to 471 mg/l |
| | • Total Hardness: 187 to 356 mg/l |
| | • Chlorides: 118 to 210 mg/l |
| | • Fluoride: 0.25 to 0.42 mg/l |
| | • Heavy metals (Iron -Fe): 0.018 to 0.032 mg/l |
| Surface water | pH: 7.3 to 7.9, DO (in mg/l) : 4.2 to 5.5, BOD (in mg/l) : 1.5 to 2.9, COD |
| quality at 5 | (in mg/I) : 10 to 19, TDS (in mg/l) : 131 to 207, Chlorides (in mg/l) : 65 |
| locations | to 98; Sulphates (in mg/l) : 46 to 78 |
| Noise levels | The equivalent day-night noise levels in the study zone are ranging from |
| | 45.4 dBA to 59.6 dBA. |

| Traffic | assessment | Traffic study has been conducted at National Highway # 200 which is 3.6 | | | | | |
|----------|------------|--|---|--|---|---|------------------------------------|
| study | | Kms. (by road) from the plant site. | | | | | |
| findings | | Transportation of raw material, fuel & finished product will be done 100 | | | | | |
| | | % by road. | | | | | |
| | | Existing PCU is 15130 PCU/day on NH # 200 and existing Level of | | | | | |
| | | Service (LOS) is : | | | | | |
| | | Road | V (Volume | С | | Proposed | LOS |
| | | | in | (Capacit | ty | V/C Ratio | |
| | | | PCU/day) | in | | | |
| | | | | PCU/day | y) | | |
| | | NH # 200 | 15,130 | 20,000 | | 0.75 | D |
| | | | | | | | |
| | | PCU load after | r proposed proje | ect will be | 15,1 | 30 PCU/day + | 276 PCU/day |
| | | and Level of S | ervice (LOS) w | ill be | | | |
| | | Road | V(Volume | C(Capaci | ity | Proposed | LOS |
| | | | in | in | | V/C Ratio | |
| | | | PCU/dav) | PCU/day | v) | | |
| | | | r e e aug) | reeraa | ,, | | |
| | | NH # 200 | 15,406 | 20,000 | | 0.77 | D |
| | | NH # 200 | 15,406 | 20,000 | | 0.77 | D |
| | | NH # 200 Level of Servi | 15,406 | 20,000 e Road as | per | 0.77 IRC 73: 1980 | D |
| | | NH # 200 Level of Servi | 15,406 | 20,000 e Road as | per Per | 0.77 IRC 73: 1980 rformance | D |
| | | NH # 200 Level of Servi | $\frac{15,406}{15,406}$ | 20,000 e Road as | per Per Exc | 0.77 IRC 73: 1980 rformance cellent | D |
| | | NH # 200 Level of Servi | | 20,000 e Road as LOS A B | per Per Exc Ve | 0.77 IRC 73: 1980 rformance cellent ry Good | D |
| | | NH # 200 Level of Servi | | 20,000 e Road as LOS A B C | per Per Exe Ve | 0.77 IRC 73: 1980 rformance cellent ry Good od | D |
| | | NH # 200 Level of Servi | | 20,000 e Road as LOS A B C D | per Per Exc Ve: Go Fai | 0.77 IRC 73: 1980 rformance cellent ry Good od r/ Average | D |
| | | NH # 200 Level of Servi | $\begin{array}{c c} \mathbf{V} & \mathbf{U} & \mathbf{U} \\ \hline \mathbf{U} & \mathbf{U} \\ $ | 20,000 e Road as LOS A B C D E | per Per Exc Ve: Go Fai Poo | 0.77 IRC 73: 1980 rformance cellent ry Good od r/ Average or | D |
| | | NH # 200 Level of Servi | $ \begin{array}{r} \mathbf{V} = \mathbf{V} + \mathbf{A} \mathbf{U} \mathbf{U} \mathbf{U} \mathbf{U} \mathbf{U} \mathbf{U} \mathbf{U} U$ | 20,000 e Road as LOS A B C D E F | per Per Exc Ve: Go Fai Poo | 0.77 IRC 73: 1980 rformance cellent ry Good od r/ Average or ry Poor | D |
| | | NH # 200 Level of Servi | $\begin{array}{r} \mathbf{V} = \mathbf{V} + \mathbf{U} + \mathbf{U} + \mathbf{U} \\ \hline 15 + 406 \\ \hline 15 + 406 \\ \hline \mathbf{V} + \mathbf{U} \\ \hline 0.0 = 0.2 \\ \hline 0.0 = 0.2 \\ \hline 0.2 = 0.4 \\ \hline 0.4 = 0.6 \\ \hline 0.6 = 0.8 \\ \hline 0.8 = 1.0 \\ \hline 1.0 & \mathbf{X} \text{ Above} \end{array}$ | 20,000 e Road as LOS A B C D E F | per Per Exc Ve Go Fai Poo Ve | 0.77 IRC 73: 1980 rformance cellent ry Good od r/ Average or ry Poor | D |
| | | NH # 200 Level of Servi Note: The NH | $\begin{array}{c c} 1 & 0 & 0 & 0 & 0 \\ \hline 15,406 \\ \hline 15,406 \\ \hline 0.6 & 0.8 \\ \hline 0.2 & -0.4 \\ \hline 0.4 & -0.6 \\ \hline 0.6 & -0.8 \\ \hline 0.8 & -1.0 \\ \hline 1.0 & \text{Above} \\ \hline H \ \# \ 200 \ \text{has be} \end{array}$ | 20,000 e Road as LOS A B C D E F en expand | per Per Exc Ve: Go Fai Poo Ve | 0.77 IRC 73: 1980 rformance cellent ry Good od r/ Average or ry Poor to 4 lane road | D with divider, |
| | | NH # 200 Level of Servi Note: The NH accordingly th | $\frac{V/C}{0.0 - 0.2}$ 0.2 - 0.4 0.4 - 0.6 0.8 - 1.0 1.0 & Above H # 200 has be the capacity of N | 20,000 e Road as LOS A B C D E F en expand | per Per Exc Ver Go Fai Poo Ver led t | 0.77 IRC 73: 1980 rformance cellent ry Good od r/ Average or ry Poor to 4 lane road 000 PCU/day. | D with divider, Accordingly, |
| | | NH # 200 Level of Servi Note: The NH accordingly th V/C ratio will | $\begin{array}{c c} 15,406 \\ \hline 15,406 \\ \hline 15,406 \\ \hline 15,406 \\ \hline 0.0 - 0.2 \\ \hline 0.0 - 0.2 \\ \hline 0.2 - 0.4 \\ \hline 0.4 - 0.6 \\ \hline 0.6 - 0.8 \\ \hline 0.8 - 1.0 \\ \hline 1.0 \& \text{Above} \\ \hline 1.0 \& \text{Above} \\ \hline \text{H $# 200$ has be accepted of N be 15,406 / 30,0 \\ \hline \end{array}$ | e Road as 20,000 e Road as A B C D E F en expand NH will be 000 = 0.51 | per Per Exc Ve: Go Fai Poo Ve: led t | 0.77 IRC 73: 1980 rformance cellent ry Good od r/ Average or ry Poor to 4 lane road ,000 PCU/day. | D with divider, Accordingly, |
| | | NH # 200 Level of Servi Note: The NH accordingly th V/C ratio will LOC will be '0 | 15,406 ice (LOS) of the $0.0 - 0.2$ $0.2 - 0.4$ $0.4 - 0.6$ $0.6 - 0.8$ $0.8 - 1.0$ 1.0 & Above H # 200 has be ie capacity of N be 15,406 / 30,0 C', which implied | e Road as 20,000 e Road as A B C D E F en expand M will be 000 = 0.51 es GOOD. | per Per Exc Ve: Go Fai Poo Ve: led t 2 30, | 0.77 IRC 73: 1980 rformance cellent ry Good od r/ Average or ry Poor to 4 lane road ,000 PCU/day. | D with divider, Accordingly, |

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

| S.No. | Waste | Quantity (TPD) | | Method of disposal |
|-------|-------------------------|----------------|----------|--|
| | | Existing | Proposed | |
| 1 | Ash from Biomass | 44.0 | | Ash generated from the existing Biomass |
| | Power Plant | | | Power Plant is being utilized in the |
| | | | | existing Brick Manufacturing unit, given |
| | | | | to other brick manufacturing units and also |
| | | | | is being given to M/s. Laxman Cement |
| | | | | Pvt. Ltd. |
| 2 | Slag from Ferro | | 30.0 | will be reused in manufacture of SiMn as |
| | Manganese | | | it contains high SiO ₂ and Silicon. |
| | Manufacturing Process | | | |
| 3 | Slag from Ferro Silicon | | 0.8 | will be given to Cast iron foundries |
| | Manufacturing Process | | | |

| S.No. | Waste | Quanti | ty (TPD) | Method of disposal |
|-------|--|----------|----------|--|
| | | Existing | Proposed | |
| 4 | Slag from Silico Manganese Manufacturing Process | | 38.0 | will be given to M/s. Shreeji Infrastructure India Pvt. Ltd. for Road construction / will be given to M/s. Ambuja Cement for slag cement manufacturing. |
| 5 | Slag from Ferro Chrome Manufacturing Process | | 40.0 | Will be processed in Zigging plant for Chrome recovery. After Chrome recovery, the left-over slag will be analysed for Chrome content through TCLP test, if the Chrome content in the slag is within the permissible limits, then it will be utilised for Road laying /brick manufacturing. It will be given to M/s. Steel Trading Corporation. If Chrome content exceeds the permissible limits, it will be sent to nearest TSDF. |
| 6 | Slag from Pig Iron manufacturing process | | 52.0 | will be given to M/s. Ambuja Cement for slag cement manufacturing. |
| 7 | Dust from Bagfilters of SEAF and during tapping | | 0.05 | It will be used in Briquetting Plant (Proposed now) |

14.4.14 Public Consultation:

| Date of advertisement | 6 th October 2019 | | | | | |
|------------------------------|--|--|--|--|--|--|
| Name of newspapers | Local newspaper (Hindi) "NAVBHARAT" Bilaspur | | | | | |
| | National newspaper (English) "THE TIMES OF INDIA" | | | | | |
| | New Delhi | | | | | |
| Date on which Public Hearing | 8 th November 2019 | | | | | |
| conducted | | | | | | |
| Venue | Premises of Government Primary School, Khamhardih | | | | | |
| | Village, Pathariya Tehsil, Mungeli District, Chhattisgarh | | | | | |
| Attended by | Additional Collector | | | | | |
| Issues are | Construction of entrance gate and renovation of | | | | | |
| | Mahamaya Temple at Village Rambod | | | | | |
| | • RO plant for drinking water, | | | | | |
| | • Road widening & repairing, | | | | | |
| | • Employment | | | | | |
| | Pollution | | | | | |
| | Support will be given to sports activities | | | | | |

Action Plan as per Ministry's O.M. dated 30/09/2020

| S.NO. | MAJOR ACTIVITY HEADS | YEAR O | TOTAL | | |
|-------|--------------------------|----------|----------|----------|----------------|
| | | 1st Year | 2nd Year | 3rd Year | EXPENDITURE |
| | | (Rs. in | (Rs. in | (Rs. in | (Rs. in Lakhs) |
| | | Lakhs) | Lakhs) | Lakhs) | |
| Based | on Public Hearing issues | | | | |
| 1 | | | | | |

| i) Construction of | Physical | 1 no. in | | 12 |
|--------------------|-----------|------------|------------|---------|
| entrance gate and | No. & | Rambod | | |
| renovation of | village | | | |
| Mahamaya Temple | Budget in | 12.0 | | |
| | Lakhs | | | |
| ii) Mineral water | Physical | 2 nos. in | | 6.0 |
| plants | Nos. & | Rambod (v) | | |
| | village | | | |
| | Budget in | 6.0 | | |
| | Lakhs | | | |
| iii) Support for | Physical | | Rambod (v) | 1.0 |
| sports activities | Nos. & | | | |
| | village | | | |
| | Budget in | | 1.0 | |
| | Lakhs | | | |
| iv) Avenue | Physical | | Rambod (v) | 1.0 |
| plantation along | Nos. & | | | |
| both sides of | village | | | |
| approach road from | Budget in | | 1.0 | |
| Rambod village and | Lakhs | | | |
| Plant site | | | | |
| | | Total | | 20.0 |

14.4.15 The capital cost of the expansion project is Rs. 13.0 Crores and the capital cost for environmental protection measures is proposed as Rs. 2.0 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 0.316 Crores. The employment generation from the proposed expansion project is 40 direct & 135 Indirect. The details of cost for environmental protection measures is as follows:

| S.No. | Item | Capital Cost (Rs.in Lakhs) | Recurring Cost / Annum (Rs.in Lakhs) |
|-------|---|----------------------------------|---|
| 1 | Air Emission Management | | |
| | • 4 th hole Extraction systems with Bag filters | 65.0 | 10.0 |
| | • Chimney | 25.0 | |
| | Water Sprinklers | 5.0 | 0.1 |
| 2 | Wastewater ManagementETP (General) | 5.0 | 1.0 |
| 3 | Solid waste Management | | |
| | Slag Disposal | 10.0 | |
| | • Fe-Cr recovery & its disposal | 10.0 | 5.0 |
| | Municipal solid waste storage & disposal | | 2.0 |
| | Briquetting Plant | 20.0 | |
| 4 | Greenbelt development, RWH etc. | 5.0 | 2.5 |
| 5 | Environmental Monitoring | | |
| | • AAQMS | 40.0 | 6.0 |
| | • CEMS | 5.0 | |

| S.No. | Item | Capital Cost (Rs.in Lakhs) | Recurring Cost / Annum (Rs.in Lakhs) |
|-------|------------------------------|----------------------------------|---|
| 6 | Occupational Health & Safety | 10.0 | 5.0 |
| | TOTAL | 200.0 | 31.6 |

- 14.4.16 3.83 ha (9.46 acres) of Greenbelt is being maintained in existing plant premises which is about 33% of the total area. Till date total no. of plants planted are 9350 no. and with survival rate of 90%, 8490 nos. of plant exist in the plant premises. 2500 nos. of plant/hectare will be maintained in the existing plant premises, hence additionally 1500 nos. of plant will be planted within 1 year from the date of accord of EC. 10 to 20 m wide greenbelt will be developed all around the plant. Local DFO will be consulted in developing the green belt. The tree species to be selected for the plantation are pollutant tolerant, fast growing, wind firm, deep rooted. A three-tier plantation is proposed comprising of an outer most belt of taller trees which will act as barrier, middle core acting as air cleaner and the innermost core which may be termed as absorptive layer consisting of trees which are known to be particularly tolerant to pollutants.
- 14.4.17 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.

Certified Compliance report from SPCB

- 14.4.18 The status of the compliance report of conditions in earlier CTO was issued by Chhattisgarh Environment Conservation Board (CECB), Chhattisgarh vide letter No. 1804/RO/CECB/2019 dt. 11.09.2019. The Regional Office, CECB has visited the Plant site on 07.09.2019. As per the report all conditions have been complied.
- 14.4.19 The proposal was initially considered in the 23rd meeting of the Re-constituted EAC (Industry-I) held during 28-30th September, 2020 wherein the Committee deferred the proposal on account of technical shortcomings. The deliberations and recommendations of the EAC are as follows:

Deliberations by the Committee (EAC during 28-30th September, 2020)

- 14.4.20 The Committee noted the following:
 - 1. Unit is located only 50 meters away from Maniyari River bank. However, the impact on the riverine ecology and its mitigation measures has not been enumerated in the EIA report.
 - 2. Committee also noted the provisions of River flood plain zones and other related articles and was of considered view that in any circumstances flood plain of the river should not be allowed to be encroached upon.
 - 3. No information has been furnished with respect to the High Flood Line of Maniyari River.
 - 4. Pet-coke is proposed to be used in the furnace.
 - 5. Time bound action plan for green belt development in 3.83 ha with a density of 2500/ha has not been submitted.

Recommendations of the Committee (EAC during 28-30th September, 2020)

- 14.4.21 In view of the foregoing and after deliberations, the Committee deferred the consideration of the proposal cited above and sought the following additional information.
 - Impact of air pollution on riverine ecology shall be submitted.
 - Highest Flood, 5 year & 10 year flood discharge along with flood level of the river Maniyari and its impact on the unit along with its mitigation measures shall be submitted. Spread of 5 year, 10 year and highest flood may be depicted on a map of legible scale.
 - Undertaking shall be submitted stating that no pet coke shall be used in the furnace.
 - Time bound action plan for green belt development in 3.83 ha with a density of 2500/ha shall be submitted.
- 14.4.22 The proponent submitted the ADS reply vide letter dated 8th September 2022 uploaded on PARIVESH on 8th September 2022. Point-wise reply of ADS is given as below.

| S. No. | Information sought | Reply by PP |
|--------|-----------------------|---|
| i. | Impact of air | • Maniyari river is situated at a distance of 50 m from the |
| | pollution on riverine | existing plant boundary. |
| | ecology shall be | • Ferro Alloys plant will be located at 340 m from Maniyari |
| | submitted | river. |
| | | |
| | | PP will be adopting the following air emission control systems/ |
| | | measures in the proposed Ferro Alloy manufacturing unit: |
| | | • Dust suppression system will be provided at the unloading |
| | | areas. |
| | | • Conveyers will be covered. |
| | | • The emissions within the Submerged Electric Arc Furnace will |
| | | be extracted through 4 th hole fume extraction system and will |
| | | be treated in bagfilters to bring down the particulate emission |
| | | to within 30 mg/Nm ³ . |
| | | • The above flue gases after treatment in bagfilters will be |
| | | discharged into the atmosphere through a stack of 30m height. |
| | | • Pucca internal roads to prevent fly off due to vehicular |
| | | movement. |
| | | • Water sprinklers will be provided on both sides of the |
| | | internal road. |
| | | • Wheel washing facility will be provided at entry and exit |
| | | gates. |
| | | • The Ferro Alloy unit will be located at a distance of 340 |
| | | mfrom the Maniyari river. |
| | | • Width of the greenbelt on Maniyari river side (Eastern |
| | | direction) is 30 m. Plant layout showing the width of greenbelt |
| | | as 30 m towards Maniyari river is submitted. |
| | | • Interlocking system will be provided to APCS and whenever |
| | | emission exceeds the stipulated standard, raw material feed |
| | | to the unit will be stopped and there will be no production till |
| | | APCS is rectified. |
| ii. | Highest Flood, 5 year | Copy of the letter issued by Executive Engineer, Maniyari Water |

| S. No. | Information sought | Reply by PP |
|---------|--|---|
| 5. 140. | &10-year flood discharge along with flood level of the river Maniyari and its impact on the unit along with its mitigation measures shall be submitted. Spread of 5-year, 10 year and highest flood may be depicted on a map of legible scale. | Repty by PP Resources Division, Mungeli district, Chhattisgarh vide dated 20th June 2022 is submitted. The letter confirms the following: Plant site of M/s. Real Power Pvt. Ltd. is not falling within the flood plain of Maniyari River (In accordance with O.M. issued by MoEF&CC vide dated 14th February 2022). Map showing spread of 5 years, 10 years, 15 years, 20 years duly depicting the highest flood along with scale. HFL of Maniyari river near to the plant based on last 20 years data is 242.00 M. Elevation of the plant site is 245 M. Hence there will be no flood water entering into the plant site of Real Power Pvt. Ltd. Mitigation measures: Compound wall of 1.5 m already exists on the Maniyari river side. Photograph showing the same is submitted. Ferro Alloy plant is situated at a distance of 340 m from the Maniyari river. Greenbelt of 30 m width will be developed towards Maniyari river side (Eastern direction). |
| iii. | Undertaking shall be submitted stating that no pet coke shall be used in the furnace | PP confirms that they will not use Pet coke in Submerged Electric Arc Furnace to produce Ferro Alloys. |
| iv. | Time bound action plan for green belt development in 3.83 ha with a density of 2500/ha shall be submitted. | Total plant area is 10.86 Ha. (26.82 acres). 1/3rd of total area i.e. 3.83 Ha. (9.46 Acres) of Greenbelt will be maintained in the plant premises. 9.46 Acres of greenbelt is already been developed. 10 m wide greenbelt is being maintained all around the plant. In the existing plant 8500 nos. of plants are existing now. Additional 1500 nos. of plants will be planted within one year of implementation of expansion. Total plantation after expansion will be 10,000 nos. @ 2500 per Ha. |

14.4.23 Based on the above information, the proposal is considered in the 14th meeting of the EAC for Industry-I sector held on 29-30th September, 2022. The deliberations and recommendations made by the EAC are as follows:

Deliberations by the Committee

- 14.4.24 The Committee noted the following:
 - 1. M/s. Real Power Private Limited obtained ToR on 20.07.2017 and baseline data was collected during 1st October 2017 to 31st December 2017. The EAC noted that PP applied for EC on 02.09.2020. The proposal was initially considered in the EAC meeting held during 28-30th September, 2020 wherein the Committee deferred the proposal on account

of technical shortcomings. However, PP has submitted the ADS reply after almost two years i.e. on 8th September 2022. As per the Ministry's O.M. vide F. No. IA3-22/10/2022-IA.III [E 177258] dated 08.06.2022, para 6 (iii) states that the baseline data shall not be more than three years old at the time of submission of application for consideration of EC. Since, in this case though at the time of submission of EC application, the baseline data was valid, however, PP has consciously delayed the proposal by delayed submission of ADS reply by Two Years. **The EAC opined that baseline data is almost 5 years old at present, and during this period the baseline scenario at the project site might have changed. Thus, EAC is of the view that for validation of the old baseline data, fresh baseline data of 3 months shall be collected and compared with the old data and accordingly revise the Report.**

- 2. The project proponent informed during the meeting that due to change in management of the company there was a delay in submission of ADS reply. However, the project proponent did not report the same to the Ministry at the time when change in management of the company took place. In this context, PP shall upload/submit the documents in this regard.
- 3. The nearest habitation to plant is Atarra Village which is at distance of 0.65 km in East direction. Project Proponent shall submit environmental safeguard measures that will be undertaken to minimise the impact on the habitation on the inhabitants.
- 4. Maniyari River is very close to the project site at distance of 50 m. Also, Agar River 5.5 km and Shivnath river 8.0 km also exists within 10 km radius of the plant site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be prepared and submitted. PP is advised to plant locally grown tress along the banks of Maniyari river for 1-2 kms which is just 50 meters away from the plant side. This may be helpful to prevent soil erosion and increase soil fertility and also helps in flood control.
- 5. PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, shall be prepared to develop them into model villages. PP shall submit commitment alongwith name of the villages to be adopted. Action plan submitted to address the PH issues and socio-economic development of the nearby villages shall also be revised and submitted.

Recommendations of the Committee:

14.4.25 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** due to certain deficiencies in the proposal and sought requisite information on the points referred at para no. 14.4.24 above. The proposal shall be considered after submission of requisite information.

Agenda No. 14.5

14.5 Expansion of Integrated Steel Plan by M/s Shri Bajrang Power and Ispat Ltd., Located at Borjhara Village, Urla Guma Road, Urla Growth Center, Raipur District, Chhattisgarh-Amendment in TOR.

[Proposal No. IA/CG/IND/291775/2022; File No. J-11011/531/2007-IA.II (I)]

14.5.1 M/s Shri Bajrang Power and Ispat Ltd. has made an application online vide proposal no. IA/CG/IND/291775/2022 dated 15.09.2022 along with Form 3, revised Form-1 and revised PFR seeking amendment in Terms of Reference accorded by the Ministry vide letter no. J-11011/531/2007-IA.II (I) dated 20.10.2017 and subsequent amendment and validity extension of ToR dated 09.04.2020.

Details submitted by Project proponent

- 14.5.2 M/s Shri Bajrang Power and Ispat Ltd. had earlier applied for grant of ToR vide proposal no. IA/CG/IND/67789/2017 dated 31.08.2017 for expansion of Integrated Steel Plant (Sponge Iron 0.21 to 0.264 MTPA; Steel Melting 0.129 to 0.211 MTPA; Ferro Alloy- 0.0144 to 0.0198 MTPA; Rolling Mill- 0.15 to 0.21 MTPA; New Pellet plant 0.6 MTPA with coal gasifier from alternative fuel) located at village Borjhara, in Urla Industrial Complex, Raipur, Chhattisgarh. Accordingly, Terms of Reference was issued vide letter no. J-11011/531/2007-IA.II (I) dated 20.10.2017.
- 14.5.3 M/s. Shri Bajrang Power & Ispat Limited vide online proposal no. IA/CG/IND/142035/2020 dated 10/02/2020 applied for amendment in ToR dated 20/10/2017 w.r.t. change in configuration and the production capacities and other amendments alongwith validity extension of ToR for another one year. Accordingly, letter was issued by the Ministry vide letter no. J-11011/531/2007-IA.II (I) dated 09.04.2020 with validity of ToR extended upto 19.10.2021 with changes in configuration / production capacities involving expansion of Integrated Steel Plant (Sponge Iron 0.21 to 0.264 MTPA; Steel Melting 0.129 to 0.211 MTPA; Ferro Alloy- 0.0144 to 0.0198 MTPA; Rolling Mill- 0.15 to 0.21 MTPA; New Pellet plant 0.6 MTPA with coal gasifier from alternative fuel), 26 MW Captive Power Plant (WHRB 18 MW; Biomass 8 MW, Iron washery plant of 4,00,000 TPA, Titanium slag plant of 36,000 TPA and pig iron plant plant of 20,000 TPA.
- 14.5.4 Thereafter, M/s Shri Bajrang Power and Ispat Ltd. applied for Environment Clearance vide proposal no. IA/CG/IND/193265/2007 dated 09/04/2021 and the proposal was considered during 35th meeting of the Re-constituted EAC (Industry-I) held on 30th April, 2021 wherein the Committee recommended the proposal to be returned in its present form to address the technical shortcomings.

- 14.5.5 The instant proposal is for seeking modification in ToR dated 20.10.2017 and subsequent amendment dated 09.04.2020 for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07/07/2021 pertaining to consideration of violation cases as PP has reported that the company has installed Iron Ore Washery Plant and had run the plant for 1 month. The raw materials has arrived at site and its quality was degrading day by day, so PP has run the plan on trial basis for one month just to utilize that material. The PP has now stopped the operation activity. PP is ready to comply all the points of TOR for Violation Project and follow SOP dated 07.07.2021 for identification & handling of Violation cases under EIA notification 2006.
- 14.5.6 PP has further submitted that they are ready to pay 1% of the capital investment for establishment of iron ore washery plant till now, 0.25% of the turn over for processing of about 6,000 T in one month and damage analysis cost towards the Remediation of violation done as per the Damage Analysis Study.
- 14.5.7 PP has further reported that there is no changes in configuration & capacity of units in granted ToR.
- 14.5.8 **Reason for seeking amendment in ToR:** The company has installed Iron Ore Washery Plant and had run the plant for 1 month, so the proposal has been applied for modification in ToR for appraisal of proposal under violation category. The raw materials has arrived at site and its quality was degrading day by day, so PP has run the plan on trial basis for one month just to utilize that material. The PP has now stopped the operation activity. PP is ready to comply all the points of TOR for Violation Project and follow SOP dated 07.07.2021 for identification & handling of Violation cases under EIA notification 2006.
- 14.5.9 PP has reported that there is no violation under EIA, 2006/court case/show cause/direction related to the project under consideration.

Deliberation by the Committee

- 14.5.10 The Committee noted the following:
 - i. M/s Shri Bajrang Power and Ispat Ltd. was granted ToR vide vide letter no. J-11011/531/2007-IA.II (I) dated 20.10.2017 for expansion of Integrated Steel Plant.
 - ii. TOR amendment was granted vide letter no. J-11011/531/2007-IA.II (I) dated 09.04.2020 w.r.t. change in configuration and the production capacities and other amendments alongwith validity extension of ToR upto 19.10.2021.
 - iii. Thereafter, M/s Shri Bajrang Power and Ispat Ltd. applied for Environment Clearance vide proposal no. IA/CG/IND/193265/2007 dated 09/04/2021 and the Committee recommended the proposal to be returned in its present form to address the technical shortcomings.
 - iv. The instant proposal is for seeking modification in ToR dated 20.10.2017 and subsequent amendment dated 09.04.2020 for appraisal of proposal under violation category as per the

provisions contained in the MoEF&CC Standard Operating Procedures dated 07/07/2021 pertaining to consideration of violation cases as PP has reported that the company has installed Iron Ore Washery Plant and had run the plant for 1 month. The raw materials has arrived at site and its quality was degrading day by day, so PP has run the plan on trial basis for one month just to utilize that material. The PP has now stopped the operation activity.

- v. PP decided to come before the committee for this case under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07/07/2021 pertaining to consideration of violation cases. PP is ready to comply all the points of TOR for Violation Project and follow SOP dated 07.07.2021 for identification & handling of Violation cases under EIA notification 2006. PP is ready to pay 1% of the capital investment for establishment of iron ore washery plant till now, 0.25% of the turn over for processing of about 6,000 T in one month and damage analysis cost towards the Remediation of violation done as per the Damage Analysis Study.
- vi. The EAC noted that it is a violation case and to be apprised based on the provisions of the SOP dated 07.07.2021 [Violation].
- vii. The EAC further noted that there is no change in the configuration & capacity of units in granted ToR.

Recommendations of the Committee

- 14.5.11 After deliberations, the Committee **recommended** for modification in ToR dated 20.10.2017 and subsequent amendment dated 09.04.2020 w.r.t. appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07/07/2021 pertaining to consideration of violation cases. All the terms and conditions stipulated in ToR letter no. J-11011/531/2007-IA.II (I) dated 20.10.2017 and subsequent amendment dated 09.04.2020 shall remain the same with stipulation of the following specific conditions:
 - i. The State Government/SPCB shall take action against the project proponent under the provisions of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC.
 - ii. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR).
 - iii. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
 - iv. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter (13) in the EIA report by the accredited consultants.

- v. Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.
- vi. The project proponent shall require to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority.
- vii. Project proponent shall implement penalty provisions i.e., 1% of project cost attributable to the expansion, incurred up to the date of filing of application along with the EIA/EMP report as contained in the paragraph 12 of the Standard Operating Procedure dated 7/07/2021 shall be complied with.

SEPTEMBER 30, 2022 [FRIDAY]

Consideration of Environmental Clearance Proposals

Agenda No. 14.6

14.6 Expansion of Steel Plant Sponge Iron (175 TPD to 375 TPD), Rolling Mill (72,000TPA) and Captive Power Generation 12 MW (WHRB 6 MW, AFBC 6 MW) located at Village Chikkabaganal, Post Kerikihalli and District Koppal, Karnataka by M/s Baba Akhila Sai Jyothi Industries Pvt. Ltd., located at Village Chikkabaganal, Post Kerikihalli and District Koppal, Karnataka– Consideration of Environmental Clearance.

[Proposal No. IA/KA/IND/290414/2012; File No. IA-J-11011/163/2010-IA.II(I)] [Consultant: Shree Green Consultants; valid upto 24.02.2024]

- 14.6.1 M/s. Baba Akhila Sai Jyothi Industries Pvt. Ltd has made an online application vide proposal no. IA/KA/IND/290414/2012 dated 18th September 2022 along with copy of EIA/EMP report and Form 2 and certified compliance report seeking Environment Clearance (EC) under the provision of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(a) Metallurgical Industries (ferrous & non-ferrous) and 1(d) Thermal Power Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.
- 14.6.2 Name of the EIA consultant: M/s. Shree Green Consultants [Sl. No. 30, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2124/IA0072; valid upto 24.02.2024, Rev. 25, Sept 05, 2022].

Details submitted by the project proponent

14.6.3 The detail of the ToR is furnished as below:

| Date of application | Consideration | Details | Date of accord | ToR Validity |
|---------------------|--|--------------------|----------------|-----------------|
| 11/03/2019 | 6 th meeting of EAC held on 29-30 th April 2019 | Terms of Reference | 13/06/2019 | 12/06/2023 |

- 14.6.4 The project of M/s. Baba Akhila Sai Jyothi Industries Pvt. Ltd. located in Chikkabaganal Village, Post Kerikihalli and District Koppal Karnataka State is for expansion of Steel Plant - Sponge Iron (175 TPD to 375 TPD), Rolling Mill (72,000 TPA) and Captive Power Generation 12 MW (WHRB 6 MW, AFBC 6 MW).
- 14.6.5 Environmental site settings

| Sr. No. | Particulars | Details | Remarks |
|------------|-------------|---------------------------------|-----------|
| 1. | Total land | 16.7944 ha ≈ 16.79 ha (Private) | Land use: |

| Sr. No. | Particulars | Details | Remarks |
|------------|---|---|-----------------------------------|
| | | | Industrial |
| 2. | Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 | It is a Private Land owned by M/s. Baba Akhila Sai Jyothi Industries Pvt. Ltd | - |
| 3. | Existenceofhabitation&involvementofR&R, if any. | Project site: - NilStudy Area: -HabitationDistanceDirectionChikkabaganal0.56 kmEast | There is no R&R activity involved |
| 4. | Latitude and Longitude of all corners of the project site. | PointLatitudeLongitudeA15°16'42.06"N76°13'54.04"EB15°16'42.19"N76°14'10.74"EC15°16'43.73"N76°14'10.68"ED15°16'44.17"N76°14'16.00"EE15°16'35.46"N76°14'15.68"EF15°16'35.19"N76°13'53.83"E | - |
| 5. | Elevation of the project site | 1697 Feet MSL | - |
| 6. | Involvement of Forest land if any. | No forest land is involved | - |
| 7. | Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area | Project site: There is no water body presentwithin project site.Study area:Water bodyDistanceDirectionTungabhadra1.28 KmEastreservoirImage: Colspan="2">Image: Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2"Colspan="2"Colspan="2"Colspan="2"Colspan="2"Colspan="2"Colspan="2">Colspan="2"Colspan="2"Colspan="2"Colspan="2"Colspan="2"Colspan="2"Colspan="2"Colspan="2"Colspan="2">Colspan="2"Cols | - |
| 8. | Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area | Nil | - |

14.6.6 The chronology of the project activities and obtained permissions are as follows:

| Date | Permission | | | | | |
|------------|---|--|--|--|--|--|
| 30.07.2005 | Consent for Establish (CFE) from KSPCB vide letter no.: | | | | | |
| | CFE/CELL/BASJIPL/NE-1058/2005-06/73 dated 30 th July 2005 for 30000 | | | | | |
| | MTPA capacity Sponge Iron manufacturing unit which was valid for a period | | | | | |
| | of two years. | | | | | |
| 01.07.2008 | Environmental Clearance was obtained from Department of Forest | | | | | |
| | Ecology & Environment, Govt. of Karnataka vide file ref. no. FEE 317 ECO | | | | | |
| | 2005 dated 1 st July, 2008 for establishing 30,000 MTPA capacity Sponge Iron | | | | | |
| | manufacturing unit which was valid for a period of five years. | | | | | |

| 12.08.2010 | Terms of Reference were issued from Ministry of Environment & Forests | | | | | |
|------------|--|--|--|--|--|--|
| | vide file ref. no. J-11011/163/2010-IA-II (I) dated 12 th August 2010 for | | | | | |
| | expansion of Sponge Iron Plant from 100 TPD to Integrated Mini Steel Plant. | | | | | |
| | Due to the market condition and ban on iron ore mining in three Districts of | | | | | |
| | Karnataka including Bellary vide MoEF&CC OM dated 05.10.2011. Proponent | | | | | |
| | could not take-up the proposal. | | | | | |
| 22.03.2011 | Environmental Clearance was obtained from SEIAA, Karnataka Govt. of | | | | | |
| | India vide file ref. no. SEIAA 19 IND 2009 dated 22 nd March 2011 for the | | | | | |
| | expansion of Sponge Iron Plant from 100 TPD to 175 TPD capacity. | | | | | |
| 07.07.2011 | Consent for Establish (CFE) from KSPCB vide letter no.: | | | | | |
| | 23/KSPCB/SEO/MINES/CFE/2011-12/231 dated 07 th July 2011 was obtained | | | | | |
| | for installation of Rotary Kiln-II-75 TPD in addition to the existing Rotary | | | | | |
| | Kiln- I -100 TPD and started construction activities. | | | | | |
| 17.03.2012 | Consent for operate (CFO) was obtained from Karnataka State Pollution | | | | | |
| | Control Board (KSPCB) vide letter no.: 205/PCB/MIN/CFO/2011-12/1022 | | | | | |
| | dated 17 th March 2012 and started its operation. | | | | | |
| 01.10.2013 | Environmental Clearance was obtained from SEIAA, Karnataka, Govt. of | | | | | |
| | India vide letter no. SEIAA 32 IND 2012 dated 1 st October 2013 for expansion | | | | | |
| | of the project within the existing area by adding 1x20 T Induction Furnace and | | | | | |
| | 12 MW Captive Power Plant. | | | | | |
| 30.05.2014 | Consent for Establish (CFE) from KSPCB vide letter no.: | | | | | |
| | CFE/PCB/EXP/LR/2014-15/216 dated 30th May, 2014 was obtained for | | | | | |
| | installation of 1x20 T Induction Furnace and 12 MW Captive Power Plant | | | | | |
| | (WHRB – 4 MW & AFBC – 8 MW) but could not implement due to Financial | | | | | |
| | Problem. | | | | | |
| 29.07.2022 | The latest Consent to Operate accorded by State Pollution Control Board | | | | | |
| | vide letter. no. 52580 dated 29/07/2022 for 50 TPH Iron Ore crushing & | | | | | |
| | screening plant and sponge iron production (1x100 TPD a& 1x75 TPD). The | | | | | |
| | validity of CTO is up to 30/06/2027. | | | | | |

14.6.7 Implementation status of the existing EC:

| S. No. | Facilities | Units | As per EC dated 1 st October, 2013 | Implementation Status as on September 2022 | Production as per CTO |
|-----------|---------------------------|---|--|--|-----------------------------|
| 1 | Sponge Iron Plant | 1 X 100 TPD | Vide letter no. SEIAA: 32 IND: 2012 | Operational | 1 X 100 TPD |
| | | 1 x 75 TPD | | Operational | 1 x 75 TPD |
| 3 | Induction Furnace | 1 X 20 T | | PP didn't Install | - |
| 4 | Captive Power Plant | 12 MW (WHRB – 4 MW & AFBC – 8 MW) | October 2013 | PP didn't Install | - |

14.6.8 The unit configuration and capacity of existing and proposed unit are given as below:
| Sl. | Plant | | Exis | ting facili | ties as per H | EC dated1 | st October, 2 | 2013 | | Propo | sed Units | Final | | Remarks |
|-----|--------------|---------|--------------|-------------|---------------|-----------|--------------------------|---------|----------|---------|------------|---------------|----------|-----------|
| No. | Equipment/ | T | otal | Imple | emented | Un-imp | lemented | As pe | er CTO | | | (Existing + P | roposed) | |
| | Facility | (A | + B) | (| (A) | (| B) | | | | | | | |
| | | Config | Capacity | Config | Capacity | Config | Capacity | Config | Capacity | Config | Capacity | Configuration | Capacity | |
| | | uration | | uration | | uration | | uration | | uration | | | | |
| 1 | Sponge Iron | 1 | 100 TPD | 1 | 100 TPD | - | - | 1 | 100 TPD | | Additional | 1 | 125 TPD | - |
| | Plant | | | | | | | | | | 25 TPD | | | |
| 2 | | 1 | 75 TPD | 1 | 75 TPD | - | - | 1 | 75 TPD | | Additional | 1 | 125 TPD | - |
| | | | | | | | | | | | 50 TPD | | | |
| 3 | | - | - | - | - | - | - | - | - | 1 | 125 TPD | 1 | 125 TPD | - |
| 4 | Induction | 1 | 20 T | - | - | 1 | 20 T | - | - | - | - | 1 | 20 T | PP didn't |
| | Furnace | | | | | | | | | | | | | Install |
| | | | | | | | | | | | | | | earlier |
| 5 | Captive | WHRB | 12MW | - | - | WHRB | 12 MW | - | - | - | - | WHRB-6 | 12 MW | PP didn't |
| | Power Plant | 8 MW | | | | - 8 | | | | | | MW & | | Install |
| | | & | | | | MW & | | | | | | AFBC – 6 | | earlier |
| | | AFBC | | | | AFBC | | | | | | MW | | |
| | | -4 | | | | -4 | | | | | | | | |
| | | MW | | | | MW | | | | | | | | |
| 6 | Rolling Mill | - | - | - | - | - | - | - | - | 1 | 72000 | 1 | 72000 | - |
| | | | | | | | | | | | TPA | | TPA | |

14.6.9 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

| S | Pow | Quantit | y required per | annum | | Distance | Mode of | |
|----|-------------|----------|----------------|--------|----------------------------|--------------------|----------------|--|
| No | Material | Existing | Expansion | Total | Source | from site (Kms) | Transportation | |
| 1 | Pellet | 80850 | 92400 | 173250 | MSPL Limited, Koppal | 10 | Road | |
| 2 | Coal | 51975 | 59400 | 111375 | Domestic / Imported | 320 | Road, Others | |
| 3 | Dolomite | 2310 | 2640 | 4950 | Domestic | 50 | Road | |
| 4 | DRI | - | 72000 | 72000 | In house | 0 | Road | |
| 5 | Steel Scrap | - | 12000 | 12000 | Domestic/Im ported | 320 | Road, Others | |
| 6 | Hot Metal | - | 79200 | 79200 | In house | 0 | Road | |

- 14.6.10 Existing Water requirement is 1130.00 m³/day, water requirement is obtained from Ground Water by Borewell. The water requirement after proposed expansion is estimated as 1500 m³ /day, out of which 1190 m³ /day of fresh water requirement will be obtained from the Ground Water by Borewell and the remaining requirement of 310 m³ /day will be reuse. The permission for drawl of groundwater / surface water is obtained from District Ground Water Office, Koppal vides letter no No: SG/DGO/GD/KOPPAL/ENDORSEMENT/2017-18 dated 13/02/2018.
- 14.6.11 Existing power requirement of 2.2 MW is obtained from State Electricity Board. The power requirement for the proposed project is estimated as 13.5 MW, out of which 12 MW will be obtained from Power generated from CPP.
- 14.6.12 Baseline Environmental Studies

| Period | 1 st October 2019 to 31 st December 2019 |
|-----------------|---|
| AAQ | • $PM_{2.5} = 13 - 32 \ \mu g/m^3$ |
| parameters at 8 | • $PM_{10} = 41 - 71 \ \mu g/m^3$ |
| Locations | • $SO_2 = 18 - 30 \ \mu g/m^3$ |
| | • NOx = $13 - 30 \ \mu g \ /m^3$ |
| | • $CO = 0.2 - 2.15 \text{ mg/m}^3$, |
| Incremental | • PM ₁₀ =9.5µg/m ³ (Level at 1.0 km in North-east Direction) |
| GLC level | • SO ₂ =16.6 μg/m ³ (Level at 1.0 km in North-east Direction) |
| | • NOx=5.95µg/m ³ (Level at 1.0 km in North-east Direction) |
| | • $CO = 1.27 \ \mu g/m^3$ (Level at 1.0 km in North-east Direction) |
| Ground water | • pH: 7.07 – 8.1, |
| quality at 8 | • Total Hardness: 110–189.9 mg/L, |
| locations | • Chlorides: 21.8–155.13 mg/l, |
| | • Fluoride: <0.1 mg/l, |
| | • Heavy metal [Iron: <0.1 mg/l] |
| Surface water | • pH: 7.11-7.79, |
| quality at 8 | • DO: $5.3 - 6.0 \text{ mg/l}$ and |
| locations | • BOD: 11.2 – 27.6 mg/l. |
| | • COD: 43.9 – 73.1 mg/l |

| Period | | 1 st October 2019 to 31 st December 2019 | | | | | | |
|-----------------|--|--|-------------------------------------|---------------------|--------------|--|--|--|
| Noise levels | 66.1 to 76.1 | 66.1 to 76.17 for the day time and 53.5 to 61.67 for the Night time | | | | | | |
| Leq (Day and | | | | | | | | |
| Night) | | | | | | | | |
| Traffic | • Traf | fic study has been | conducted at NH | 67 which is app | proximately | | | |
| assessment | 7.69 | km (distance) from | m the plant site. | | | | | |
| study findings | • Tran 30% | sportation of raw by road. | material, fuel & fii | nished product w | vill be done | | | |
| | • Exis | ting PCU is 912 P | CU/hr on NH 67 | and existing leve | lof | | | |
| | servi | ice (LOS) is: | | | | | | |
| | Road | V (Volume | C (Capacity | Existing | LOS | | | |
| | | In PCU/hr.) | in PCU/hr.) | V/C Ratio | | | | |
| | NH 67 | 912 | 1500 | 0.6 | Good | | | |
| | PCU load a PCU/hr and | fter proposed pro level of service (L | ject will be 912(E LOS) will be: | Existing) $+ 40$ (A | Additional) | | | |
| | Road | V (Volume | C (Capacity | Proposed | LOS | | | |
| | | In PCU/hr.) | in PCU/hr.) | V/C Ratio | | | | |
| | NH 67 952 1500 0.63 Fa | | | | | | | |
| | Conclusion due to propo | Conclusion: The level of service will be D after including additional traffic lue to proposed project. | | | | | | |
| Flora and fauna | No schedule | e I fauna and enda | ngered Flora found | within the study | area. | | | |

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

| Sr. No. | Type of Waste | Source | Quantity generated (TPA) | Mode of Treatment Disposal |
|------------|-----------------------|---------------------------|--------------------------------|---|
| Solid | Waste | | | |
| 1 | Coal char | Sponge Iron (DRI Kiln) | 30000 | Utilizing for captive power generation in 12 MW Power plant as Raw material. |
| 2 | Mill Scale | Rolling Mill | 8000 | Sold to Pellet manufacturing industries or Recycle within the plant premises |
| 3 | Fly Ash | Captive Power Plant | 15000 | Shall be sold to brick making. |
| Haza | rdous Waste | | | |
| 1 | Generator/ Lubricants | Used oil | 1.10 | Shall be sold to the KSPCB approved recycler. |
| 2 | WWTP | ETP Sludge | 9900 | Shall be sent to the nearest TSDF site. |
| 3 | Sponge Iron Klin | Dolochar | 30000 | It will be used in AFBC Boiler for Power Generation or Will be sent to brick manufacturer |

14.6.14 Public Consultation

| Details of | Public Hearing Notice was published in Newspapers "Indian Express" | | | | |
|---------------------|--|--|--|--|--|
| advertisement given | & "Prajavani" dated 17/07/2021, in Local language in "Nagaika" dated | | | | |
| | 16/07/2021. | | | | |
| Date of public | 17/08/2021 | | | | |
| consultation | | | | | |
| Venue | Survey No. 79 & 84 Chikkabagnal Village and 90/5, 90/7, 90/8, 90/9 | | | | |
| | and 91/6 of Kunikeri Village, Koppal Taluk District, Karnataka. | | | | |
| Presiding Officer | Deputy Commissioner and District Magistrate Koppal. | | | | |
| Major issues raised | Environment Pollution, Employment, Health, Agriculture and Animal | | | | |
| | Husbandry. | | | | |

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

| Sn | | Village | r | Fotals in I | Rs. Lakhs | |
|-----------|-------------------------------------|----------------|----------------------|--------------------|-----------------|-------|
| Sr. No | Item | Name | 1 st Year | 2 nd | 3 rd | Total |
| 190. | | | | Year | Year | |
| Ι | Village Infrastructure | | | | | |
| | Development | | | | | |
| 1 | Construction of Roads, speed | | 10.0 | 6.5 | 5.0 | 21.5 |
| | breakers and sign boards in the | | | | | |
| | villages | | | | | |
| 2 | Construction of community toilet | | 10.0 | 5.0 | 4.5 | 19.5 |
| 3 | Rain water harvesting structure | | 10.5 | 10.0 | 6.5 | 27.0 |
| 4 | Construction of toilet in schools | | 10.0 | 5.5 | 3.5 | 19.0 |
| 5 | Construction of playground | | 10.0 | 5.5 | 3.5 | 19.0 |
| | facilities in schools | | | | | |
| 6 | Construction of drain | | 12.5 | 10.0 | 5.5 | 28.0 |
| 7 | Construction of Community Hall | | 10.0 | 6.5 | 5.0 | 21.5 |
| 8 | Drinking water Facilities | | 12.5 | 10.0 | 7.5 | 30.0 |
| 9 | Irrigation Facilities | | 12.5 | 10.0 | 7.5 | 30.0 |
| | Sub Total (I) | Chikkabagnal, | 98.0 | 69.0 | 48.5 | 215.5 |
| Π | Sustainable Livelihood / Skill | Kunikeri, | | | | |
| | Development Programs | Hireboganhal, | | | | |
| 1 | Skill Development Workshops | Kanakpur, | 5.0 | 4.5 | 3.5 | 13.0 |
| | Sub Total (II) | Bahaddurbandi, | 5.0 | 4.5 | 3.5 | 13.0 |
| III | Health Facilities | Mellikeri | | | | |
| 1 | Ambulance facility and equipment | Chikkabagnal | 10.75 | 7.5 | 7.0 | 25.25 |
| | for medical Centre | | | | | |
| 2 | Construction Primary Health Care | | 7.0 | 6.5 | 5.0 | 18.5 |
| | Facilities | | | | | |
| 3 | Acilities for veterinary and animal | | 2.5 | 2.5 | 1.5 | 6.5 |
| | husbandry | | | | | |
| | Sub Total (III) | | 20.25 | 16.5 | 13.5 | 50.25 |
| IV | Plantation Programs | | | | | |
| 1 | Development of nursery for | | 10.0 | 10.0 | 10.0 | 30.0 |
| | plantation of in villages and | | | | | |
| | distribution beyond the immediate | | | | | |
| | villages | | | | | |
| | Sub Total (IV) | | 10.0 | 10.0 | 10.0 | 30.0 |

| C - | | Village | , | Totals in F | Rs. Lakhs | |
|------------|-------------|---------|----------------------|--------------------|-----------------|--------|
| No | Item | Name | 1 st Year | 2 nd | 3 rd | Total |
| 190. | | | | Year | Year | |
| | Grand Total | | 133.25 | 100.0 | 75.5 | 308.75 |

14.6.15 The existing capital cost of project was 324 crores. The capital cost of the proposed project is Rs 145 crores and the capital cost for environmental protection measures is proposed as Rs. 680 lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 65.71 lakhs. The employment generation from the proposed expansion is 485(Temporary 310 + Permanent 175) The details of cost for environmental protection measures is as follows:

| Sr. | Particulars | Existing (1 | Rs. In Lakhs) | After Proposed Expansion | | |
|---------------------------|--------------------------------|-------------|---------------|--------------------------|-----------|--|
| No. | | | | | n Lakhs) | |
| | | Capital | Recurring | Capital | Recurring | |
| | | Cost | Cost | Cost | Cost | |
| 1 | Air Pollution Control System | 144 | 1.75 | 300.00 | 3.65 | |
| 2 | Noise Control System | 27 | 0.8 | 60.00 | 1.50 | |
| 3 | Green Belt Development | 12 | 11 | 30.0 | 28.0 | |
| 4 | Environment Monitoring | 42 | 2.5 | 80.00 | 7 20 | |
| | Program | 42 | 5.5 | 80.00 | 7.20 | |
| 5 | Solid and Hazardous Waste | 33.8 | 2 | 75.00 | 5 30 | |
| | Management | 55.0 | 2 | 75.00 | 5.50 | |
| 6 | Water Pollution Control System | 41.2 | 5.25 | 80.00 | 12.00 | |
| 7 | Occupational Health & Safety | 4 | 0.65 | 10.00 | 1.36 | |
| 8 | Rain Water Harvesting System | 11 | 0.6 | 25.00 | 1.70 | |
| 9 Fire Safety & Equipment | | 9 | 2.7 | 20.00 | 5.00 | |
| | Total | 324 | 28.25 | 680 | 65.71 | |

- 14.6.16 The existing green belt has been developed in 3.8624 ha area which is about 23 % of the total project area of 16.79 ha with total sapling of 9960 Trees. Proposed greenbelt will be developed in 1.6795 ha which is about 10 % of the total project area and approximately 8 acre outside of premises which is about 19.27%. Thus, total of 5.5422 ha area (33% of total project area) will be developed as greenbelt. A 9 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB/MoEF&CC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 22253(E 9960 nos.+ P 12293 nos.) saplings will be planted and nurtured in 4.9168 hectares in 5 years.
- 14.6.17 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.

Certified Compliance report from Regional office

14.6.18 The Status of compliance of earlier EC was obtained from Regional Office, Bangalore, vide letter no. F.No. EP/12.1/2010-11/127/SEIAA/KAR dated 03.06.2022 in the name of M/s. Baba Akhila Sai Jyothi Industries Pvt. Ltd. The Action taken report regarding the partially/noncomplied condition was submitted to Regional officer MoEF&CC, vide letter no. BASJIPL/2022-2023/MOEF/11 Dated 08/09/2022.

| S. | Non- | Observation of RO | C | ondition n | 10. | Re-assessment by |
|-----|---------------------------|-------------------------------|-----------------|-------------------|---------|------------------------|
| No. | compliances | (abridged) | EC | Specific | General | RO / Response by |
| | details | | date | - | | PP |
| 1 | Partially | To control the emission, PA | 1 st | 1 | - | Unit has already |
| | Complied | has installed ESP. | October, | | | installed continuous |
| | condition | Regarding Online | 2013 | | | stack monitoring |
| | | Monitoring system, PA has | | | | facilities for all the |
| | | installed Continuous Stack | | | | stacks and also |
| | | Emission Monitoring | | | | connected with |
| | | System and connected to | | | | Karnataka State |
| | | the PCB servers and not | | | | Pollution Control |
| | | provided Continuous | | | | Board (KSPCB) and |
| | | Ambient | | | | Central Pollution |
| | | Air Quality Monitoring | | | | Control Board |
| | | System. PA has informed | | | | (CPCB). Unit will |
| | | that considering many | | | | install Online |
| | | similar kinds of industries | | | | ambient air quality |
| | | operating within the | | | | monitoring facilities |
| | | vicinity, avoiding | | | | within two months. |
| | | individual online system | | | | |
| | | and the huge cost thereon, | | | | |
| | | the KSPCB has been | | | | |
| | | requested to install online | | | | |
| | | air monitoring station in | | | | |
| | | this industrial area. The | | | | |
| | | copy of the letter was | | | | |
| | | submitted. The CAAQMS | | | | |
| | | needs to be installed | | | | |
| | | immediately in consultation | | | | |
| | | with KSPCB. | | | | |
| 2. | Partially | The 5 % of total cost comes | 1 st | 18 | - | Unit regularly carry |
| | Complied | around Rs 39.2 lakhs. | October, | | | out community |
| | condition | According to the records | 2013 | | | welfare activities in |
| | | produced, PA has spent Rs. | | | | the nearby project |
| | | 2.46 Crores since 2013 and | | | | area for overall |
| | Rs. 6.25 lakhs during the | | | | | improvement of the |
| | | last year on CSR activities | | | | environment. |
| | | on including improvement | | | | |
| | | of agricultural productivity. | | | | |

Deliberations by the Committee

- 14.6.19 The Committee noted the following:
 - 1. The Committee deliberated upon the certified compliance report of IRO MoEF&CC as well as action taken report submitted by PP with respect to the observations reported by IRO. The EAC noted that IRO in its report dated 03.06.2022 has stated that the site was inspected by IRO on 10.11.2021 and ATR has been submitted by PP on the partial/non-

compliance observed. Further <u>it is noted that PP has complied with all the EC conditions</u> <u>except Specific condition no. 1 of EC dated 22.03.2011 w.r.t installation of continuous</u> <u>Ambient Air Quality Monitoring System</u>. PP also requested the KSPCB to install an online air monitoring station in this industrial area considering many similar kinds of industries Operating within the vicinity, thereby, avoiding individual online system and the huge cost thereon. PP submitted an undertaking that they will contribute their share for the installation of the CAAQMS. Further, PP also stated that they will install CAAQMs at their plant in case the KSPCB fails to install CAAQMS or the SEIAA insists for installation of individual System. **In view of the same, the EAC is of the opinion that since EC was granted long back in 2011, PP should have complied with all the EC conditions by now. Therefore, PP shall first comply with all the EC conditions and process for installation of CAAQMs either in individual capacity or in consortium and submit the requisite documents for further appraisal of the proposal.**

- 2. The EAC noted that existing green belt has been developed in 3.8624 ha area which is about 23% of the total project area of 16.79 ha with total sapling of 9960 Trees. The Committee is of the view that PP has obtained EC during 2013 and has not covered 33% greenbelt till now. Project proponent shall submit commitment with an action plan to achieve 33% greenbelt in the project site within a year at a density of 2500 plants per hectare.
- 3. The nearest habitation to plant is Chikkabaganal which is at distance of 0.56 Kms from the project site boundary. Project Proponent shall submit appropriate environmental safeguard measures to minimise the impact on the habitation of the people.
- 4. 1500 m³ of water requirement after the proposed expansion is proposed to be met from the Ground Water by Borewell (1190 m³/day) and 310 m³/day will be reuse. The EAC advised that project proponent shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.
- 5. PP shall undertake village adoption and formulate Village Adoption program consisting of need-based community development activities, shall be prepared to develop them into model villages. PP shall submit commitment alongwith name of the villages to be adopted. Action plan submitted to address the PH issues and socio-economic development of the nearby villages shall also be revised and submitted.
- 6. Tungabhadra reservoir (1.28 Kms, E) exists within the study area. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be submitted.

Recommendations of the Committee:

14.6.20 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** due to certain deficiencies in the proposal and sought requisite information on the points referred at para no. 14.6.19 above. The proposal shall be considered after submission of requisite information in next EAC meeting.

Agenda No. 14.7

14.7 Proposed Expansion of Integrated Cement Plant - Clinker (4.8 to 8.1 MTPA), Cement (3.5 to 6.5 MTPA) and WHRS (18 to 43 MW) by installation of new line -III by at M/s. Ambuja Cements Limited, located at Village: Rawan, Tehsil: Bhatapara, District: Balodabazar-Bhatapara, Chhattisgarh – Consideration of Environmental Clearance.

[Proposal No.; IA/CG/IND/48966/2007; File No. J-11011/355/2005-IA.II(I)] [Consultant: J.M. EnviroNet Pvt. Ltd.; valid upto 07.02.2023]

- 14.7.1 M/s. Ambuja Cements Limited (Unit: Bhatapara) has made an online application *vide* proposal no. IA/CG/IND/48966/2007 dated 18th September, 2022 along with copy of EIA/EMP report, Form 2 and certified EC 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 schedule no. 3(b) Cement Plants under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.
- 14.7.2 Name of the EIA consultant: M/s J.M. EnviroNet Pvt. Ltd. [Sl. No. 41, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0186; valid upto 07.02.2023, Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

14.7.3 The details of the ToR are furnished as below:

| Date of Application | Consideration | Details | Date of accord | ToR Validity |
|------------------------|----------------------|--------------------|-------------------|-----------------|
| 27.02.2021 | Standard TOR Granted | Terms of Reference | 04.03.2021 | 03.03.2025 |

- 14.7.4 The project of M/s. Ambuja Cements Limited (Unit: Bhatapara) located in Village: Rawan, Tehsil: Balodabazar, District: Balodabazar-Bhatapara (Chhattisgarh) is for expansion of Integrated Cement Plant Clinker (4.8 to 8.1 MTPA), Cement (3.5 to 6.5 MTPA) and WHRS (18 to 43 MW).
- 14.7.5 Environmental Site Settings:

| S. No. | Particulars | Details | Remarks |
|--------|--------------------------|---|--------------------|
| i. | Total land | 238.97 ha (including plant and colony); | Land use of the |
| | | Proposed expansion will be done within the | existing land area |
| | | existing plant premises. | is already |
| | | | industrial. |
| | Land acquisition details | | - |
| ii. | as per MoEF&CC O.M. | I otal land area is under the possession of the | |
| | dated 7/10/2014 | company. | |
| | Existence of habitation | Plant Site: No habitation exists within the | - |
| iii. | & involvement of R&R, | plant site and R&R is not applicable. | |
| | if any. | Study Area: | |

| S. No. | Particulars | | | Details | | | | Remarks |
|--------|------------------------|-----------|--|---|--------------|------------|----|---------|
| | | Habi | tation | Distan | ce | Direction | | |
| | | Dhadaa | | (km) | | CW | _ | |
| | | Bhadra | polı | ~ 0.2 | | SW | | |
| | | Rawan | | ~ 0.2 | | North | | |
| | | Khairta | 1 | ~ 0.2 | | West | | |
| | | Pausari | | ~ 1.0 | | NE | | |
| | | Arjuni | | ~ 1.0 | | NW | | |
| | | Murhip | ar | ~ 1.0 | | SW | | |
| | | Bharsel | i | ~ 2.0 | | East | | |
| | | Magarv | vai | ~ 2.0 | | NE | | |
| | | Kukard | ih | ~ 2.0 | | SE | | |
| | | Karmac | lih | ~ 2.5 | | SW | | |
| | | Maldi | | ~ 3.0 | | WSW | | |
| | | Gaitara | | ~ 3.0 | | NE | | |
| | | There or | annroy | 68 village | os in 1 | 0 km radiu | | |
| | | study are | e approx | . Uo viitago | | | 15 | |
| | Latitude and Longitude | Point | Lat | itude | Lo | ngitude | | _ |
| iv. | of all corners of the | 1. | 21°41 | '4.57" N | 82°4 | '45.55" E | | |
| | project site | 2. | 21°40' | 58.65" N | 82°4 | '47.08" E | | |
| | project site | 3. | 21°40' | 55.85" N | 82°4 | '48.32" E | | |
| | | 4. | 21°40'. | 55.58" N | 82°4 | '48.60" E | | |
| | | 5. | 21°40' | 55.52" N | 82°4 | '49.94" E | | |
| | | 6. | 21°40' | 55.15" N | 82°4 | '50.31" E | | |
| | | 7. | 21°40' | 54.17" N | 82°4 | '50.28" E | | |
| | | 8. | 21°40' | 45.03 [°] N | 82°4 | 59.23" E | | |
| | | 9. | $21^{\circ}40^{\circ}$ | 44.81″ N | 82°: | 5'3.45" E | | |
| | | 10. | $21^{\circ}40^{\circ}$ | 44.72 IN 43.02" N | 82°. | 5 4.15 E | | |
| | | 11. | 21 40 21 21 21 21 21 21 21 21 21 21 21 21 21 | 42 21" N | 82° | 5'5 80" E | | |
| | | 12. | 21°40' | 42.48" N | 82° | 5'6.80" E | | |
| | | 14. | 21°40' | 41.75" N | 82°. | 5'9.97"E | | |
| | | 15. | 21°40' | 41.97" N | 82°5 | 5'10.37" E | | |
| | | 16. | 21°40' | 40.61" N | 82°5 | 5'13.30" E | | |
| | | 17. | 21°40'. | 39.85" N | 82°5 | 5°15.30" E | | |
| | | 18. | 21°40' | 40.07" N | 82°5 | 5'17.61" E | | |
| | | 19. | 21°40' | 43.98" N | 82°5 | "17.21"Е | | |
| | | 20. | 21°40' | 44.53" N | 82°5 | 5'17.87"E | | |
| | | 21. | $21^{\circ}40^{\circ}$ | 44.89" N | 82°5 | 218.44" E | | |
| | | 22. | $21^{\circ}40^{\circ}$ | $\frac{43.27^{\circ}}{14.72^{\circ}}$ N | 82°3 | 18.94° E | | |
| | | 23. | 21 40° 21°/0' | 44.75 IN 45.52" N | 02-3 82°5 | 20.03 E | | |
| | | 24. | 21 40 4 | 45 21" N | 8205 | '20.00 E | | |
| | | 26. | 21°40' | 44.78" N | 82°5 | 5'21.55" E | | |
| | | 27. | 21°40' | 45.05" N | 82°5 | 5'22.62" E | | |
| | | 28. | 21°40' | 45.50" N | 82°5 | 5'22.72" E | 1 | |
| | | 29. | 21°40' | 45.22" N | 82°5 | 5'23.88" E | 1 | |

| S. No. | Particulars | Details | Remarks |
|--------|-----------------------------|--|---------|
| | | 30. 21°40'45.56" N 82°5'30.02" E | |
| | | 31. 21°40'45.12" N 82°5'33.74" E | |
| | | 32. 21°40'46.38" N 82°5'35.18" E | |
| | | 33. 21°40'45.43" N 82°5'36.84" E | |
| | | 34. 21°40'46.77" N 82°5'38.19" E | |
| | | 35. 21°40'38.95" N 82°5'46.18" E | |
| | | 36. 21°39'59.51"N 82°5'13.49"E | |
| | | 37. 21°39'58.43" N 82°5'12.41" E | |
| | | 38. 21°39'57.64" N 82°5'10.19" E | |
| | | 39. 21°39'57.01" N 82°5'8.13" E | |
| | | 40. 21°39'57.04" N 82°5'6.89" E | |
| | | 41. 21°40'3.31" N 82°4'52.91" E | |
| | | 42. 21°40'3.69" N 82°4'51.00" E | |
| | | 43. 21°40'1.98" N 82°4'42.91" E | |
| | | 44. 21°40'16.55" N 82°4'35.81" E | |
| | | 45. 21°40'18.66" N 82°4'36.39" E | |
| | | 46. 21°40'17.08" N 82°4'42.31" E | |
| | | 47. 21°40'23.89" N 82°4'44.72" E | |
| | | 48. 21°40'28.08" N 82°4'41.32" E | |
| | | 49. 21°40'32.21" N 82°4'44.67" E | |
| | | 50. 21°40'32.77" N 82°4'43.83" E | |
| | | 51. 21°40'35.84" N 82°4'43.64" E | |
| | | 52. 21°40'36.16" N 82°4'38.76" E | |
| | | 53. 21°40'39.80" N 82°4'39.51" E | |
| | | 54. 21°40'40.95" N 82°4'39.99" E | |
| | | 55. 21°40'41.38" N 82°4'38.65" E | |
| | | 56. 21°40'41.73" N 82°4'38.67" E | |
| | | 57. 21°40'43.01" N 82°4'34.08" E | |
| | | 58. 21°40'43.53" N 82°4'34.51" E | |
| | | 59. 21°40'44.43" N 82°4'31.99" E | |
| | | 60. 21°40'43.50" N 82°4'31.88" E | |
| | | 61. 21°40'43.87" N 82°4'28.85" E | |
| | | 62. 21°40'44.65" N 82°4'22.35" E | |
| | | 63. 21°41'3.97" N 82°4'21.83" E | |
| | | 64. 21°41'5.18" N 82°4'23.01" E | |
| | | 65. 21°41'5.20" N 82°4'32.24" E | |
| v. | Elevation of the project | 257 m to 280 m above mean sea level. | - |
| | site | | |
| | Involvement of Forest | No Forest Land is involved in the plant site. | - |
| vi. | land if any. | | |
| | Water body exists within | Plant site: No water body exists within the | |
| vii. | the project site as well as | plant site except artificial Rainwater | • |
| | study area | Harvesting ponds/reservoir developed by the | |
| | | company. | |
| | | Study area: Following water bodies fall within | |
| | | 10 km radius: | |

| S. No. | Particulars | | Details | | Remarks |
|--------|---|---------------------|------------------|---------------|---------|
| | | Water body | Distance (km) | Direction | |
| | | Mahanadi Canal | Adjacent | SE | |
| | | Kukurdih Talav | ~1.5 | SE | |
| | | Kukridih - | ~4.0 | SE | |
| | | Dharsharma | | | |
| | | Canal | | | _ |
| | | Banjari Nala | ~5.0 | WNW | |
| | | Jamuniya Nadi | ~6.5 | NW | |
| | | Khorsi Nala | ~8.5 | SE | |
| | | Chitawar Nala | ~8.5 | South | |
| | | Water Bodies such | n as ponds/ lal | kes comprises | - |
| | | of 1.75% of the tot | al buffer area. | | |
| viii. | Existence of ESZ/ ESA/ | Nil | | | - |
| | national park/ wildlife | | | | |
| | sanctuary/ biosphere | List of Reserve for | rests in the st | udy area: | |
| | reserve/ tiger reserve/ elephant reserve etc. if | Forests | Distance (km) | Direction | |
| | any within the study | Dhadabih RF | ~4.0 | SSE | |
| | area. | Latwa RF | ~5.5 | ENE | |
| | | Sonbarsa RF | ~6.5 | NE | |
| | | Mohtara RF | ~9.0 | NE | |

14.7.6 The summary of the existing project along with the permissions obtained are as follows:

| S. | Unit | E | xisting | Environmenta | l Clearance | Consents for Existing |
|-----|---------|-----|----------|---------------------------------|---------------------------|------------------------------------|
| No. | | Ca | apacity | for Existing Ca | apacity (by | Capacity |
| | | | | MoEFC | CC) | |
| | | | | Vide letter | no. J- | CTO Vide letter no. |
| 1. | Clinker | 4.8 | MTPA | 11011/355/2005 | - IA- II (I), | 8635/TS/CECB/2019 valid up |
| | | | | dated 25th Jan., 20 | 016 amended | 31st March, 2024. |
| | | | | via letter dated | 6 th January, | |
| | | | | 2017. | | |
| | | | | Vide letter | no. J- | CTO Vide Letter no. |
| 2. | Cement | 3.5 | MTPA | 11011/72/2009 - | IA- II (I), | 3678/TS/CECB/2021 dated |
| | | | | dated 15th M | May, 2009; | 26th Aug., 2021 and valid up to |
| | | | | amended via lette | er dated 13 th | 31st Aug., 2024. |
| | | | | November, 2011. | | |
| | | | {1 x 15 | Vide letter | no. J- | CTO Vide letter no. |
| | | | MW | 11011/355/2005 - | - IA - II (I), | 9647/TS/CECB/2021,06 th |
| 3. | | | & 1 x 33 | dated 13 th April, 2 | 2007. | Feb., 2020 and valid up 31st |
| | | 63 | MW} | | | Jan., 2024. |
| | CPP | MW | {1 x 15 | Vide letter | no. J- | CTO Vide letter no. |
| | | | MW} | 11011/355/2005 | - IA- II (I), | 105/TS/CECB/2018, 03 rd |
| 5. | | | | dated 6 th January | , 2006 . | April, 2018 valid up 30th April, |

| S. No. | Unit | Existing Capacity | Environmental Clearance for Existing Capacity (by MoEFCC)Consents for Exist Capacity | | | |
|-----------|----------|----------------------|--|---|--|--|
| | | | | 2023. | | |
| 6. | WHRS | 18 MW* | - | CTE Vide letter no. 7254/TS/CECB/2020, dated 11th Nov., 2020. | | |
| 7. | D.G. Set | 4 MW | Vide letter no. J- 11015/132/2008 - IA II (I), dated 2 nd January, 2009 - | - | | |

Note:

• Status of compliance of the conditions stipulated in existing EC letters has been certified by Integrated Regional Officer, Raipur *vide* File no. 5-6/2007(ENV)/317 dated 18th October, 2021.

• Also, action taken report on partially complied condition was submitted to RO, MoEF&CC and closure of the same has been obtained on 21st June, 2022.

• Compliance of the conditions stipulated in the CTO for existing capacity of the plant is being submitted to CECB along with CTO renewal application.

| S. No. | Facilities | Units | As per EC dated 25 th Jan., 2016 & 15 th May, 2009 | Implementation Status as on date | Production as per CTO |
|--------|------------|-------------|--|-------------------------------------|-----------------------|
| 1. | Clinker | Million TPA | 4.8 (Line I: 1.7 & Line II: 3.1) | Implemented | 4.8* |
| 2. | Cement | Million TPA | 3.5 | Implemented | 3.5 |
| 3. | СРР | MW | 63 (2 x 15 & 1 x 33) | Implemented | 63 |
| 4. | WHRS | MW | 18** | Under Implemented | - |

14.7.7 Implementation status of the existing EC

Note: *Surplus Clinker is being / will be sent to split grinding units **Consent to Establish for Waste Heat Recovery (18 MW) has been obtained from CECB vide letter no. 7254/TS/CECB/2020, dated 11th November, 2020 which is under installation.

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

| S. | | | Existing Facilities as per EC dated 25 th January, 2016 & 15 th May, 2009. | | | | | | | | | | Final (Eviating | |
|-----|----------------------------------|--|--|---|-------------|-------------------------|----------|--|-------------|----------------------|-------------|---|-----------------|--|
| No. | Plant Equipment / Facility | Total (A | + B) | Implemented (A) | | Un - implemented (B) | | As per CTO | | Proposed Unit | | Proposed) | | |
| | / Facility | Configuration | Capacity | Configuration | Capacity | Configuration | Capacity | Configuration | Capacity | Configuration | Capacity | Configuration | Capacity | |
| 1. | Clinker | Kiln: 5100 TPD + 9400 TPD | 4.8 MTPA | Kiln: 5100 TPD + 9400 TPD | 4.8 MTPA | Nil | Nil | Kiln: 5100 TPD + 9400 TPD | 4.8 MTPA | Kiln: 10,000 TPD | 3.3 MTPA | Kiln: 5100 TPD + 9400 TPD + 10,000 TPD | 8.1 MTPA | |
| 2. | Cement | Mill: 2 x 125 1 x 135 TPH | 3.5 MTPA | Mill: 2 x 125 1 x 135 TPH | 3.5 MTPA | Nil | Nil | Mill: 2 x 125 1 x 135 TPH | 3.5 MTPA | Mill: 3 x 125 TPH | 3.0 MTPA | Mill: 2 x 125 1 x 135, 3 x 125 TPH | 6.5 MTPA | |
| 3. | СРР | Boiler capacity 2 x 15 TPH 1 x 33 TPH | 63 MW | Boiler capacity 2x 15 TPH 1 x 33 TPH | 63 MW | Nil | Nil | Boiler capacity 2 x 15 TPH 1 x 33 TPH | 63 MW | Nil | Nil | Boiler capacity 2 x 15 TPH 1x33 TPH | 63 MW | |
| 4. | WHRS | 18 MW Turbine | 18 MW | - | - | 18 MW Turbine | 18 MW | - | - | 25 MW Turbine | 25 MW | 18 MW + 25 MW Turbine | 43 MW | |

| c | Name of | Quantity (Million TPA) | | | | | Mode of |
|-----------|-----------------|------------------------|------------|-------|-------------------------|------------|----------------|
| S. No. | Raw Material | Existing | Additional | Total | Source | Distance | Transportation |
| 1. | Limestone | 6.5 | 4.7 | 11.2 | Captive Limestone | 1.5 to 4 | Belt Conveyer |
| | | | | | mines | km | & road |
| 2. | Bed ash | 0.014 | 0.010 | 0.024 | Captive Power Plant | Within the | - |
| | | | | | | plant | |
| 3. | Iron ore | 0.066 | 0.048 | 0.114 | Local supplier | 50 km | Road |
| 4. | Gypsum | 0.21 | 0.149 | 0.359 | Chemical Gypsum: | 600 to 660 | From Port to |
| | | | | | Paradeep, Phosphate, | km | Plant by Rail |
| | | | | | Coromandal | | |
| | | | | | Fertilisers through | | |
| | | | | | Paradeep Port | | |
| | | | | | Mineral Gypsum: | | |
| | | | | | Thailand, Oman, | | |
| | | | | | Local through Vizag | | |
| | | | | | Port | | |
| 5. | Fly Ash | 1.22 | 0.875 | 2.095 | BALCO Korba, | 75 km to | Road |
| | | | | | NTPC Korba, Sipat, | 175 km | |
| | | | | | & Bhilai, KSK | | |
| | | | | | Bilaspur, GMR | | |
| | | | | | Kharora | | |
| 6. | Slag | 0.84 | 0.72 | 1.56 | Bhilai Steel plant | 85 to 132 | Rail |
| | | | | | and Jayaswal Neco | km | |
| | | | | | Industries Ltd Raipur | | |

14.7.9 The details of the raw material requirement for the proposed project along with its source and mode of transportation is given as below:

- 14.7.10 The existing water requirement is 6044 KLD (including Captive Power Plant) which is being sourced from Groundwater & Mine Pits and company has obtained NOC from CGWA for withdrawal of 5366 KLD of Groundwater *vide* letter no. 21- 4(117)/NCCR/CGWA/2011-1739, dated 06th Nov., 2015 and renewal of the same has been obtained *vide* letter no. 21 4(117)/NCCR/CGWA/2011 762 dated 05th Sept., 2019 which is valid up to 25th July, 2024. Additional 1500 KLD water will be required for proposed expansion project which will be Ground Water and Mine Pits for the expansion project of cement plant, Thus, the total water requirement after expansion will be 7544 KLD.
- 14.7.11 Existing power requirement is 60 MW is obtained from Captive Power Plant, Chhattisgarh State Electricity Board (CSEB), WHRS & DG set (For back up). The Power requirement for the proposed expansion project is estimated as 43 MW; out of which 25 MW will be obtained from WHRS, 15 MW will be obtained from CPP and 3 MW will be sourced from CSEB.

| 14.7.12 | Baseline | Environmental | Studies: |
|---------|----------|---------------|----------|
|---------|----------|---------------|----------|

| Period | Summer Season (March to May, 2021) |
|-----------------|---|
| AAQ parameters | • $PM_{2.5}$ - 27.0 to 56.4 µg/m ³ |
| at 14 locations | • PM_{10} - 54.2 to 93.1 $\mu g/m^3$ |
| | • SO ₂ - 5.97 to 13.02 μ g/m ³ |
| | • NO _x - 12.88 to 30.65 μ g/m ³ |

| Period | | Summer | Season (March | to May, 2021) | | | | |
|--------------------|-----------------------------------|---|--|---------------------------------------|-------------------------------|--|--|--|
| | • CO - | BDL to 0.93 mg/m ^{3} | | - | | | | |
| Incremental GLC | • PM ₁₀ | ₀ - 2.22 μg/m ³ (1.5 Kn | n in East direction |) | | | | |
| level | • SO ₂ - | $-0.95 \ \mu g/m^3 \ (1.8 \ Km)$ | in East direction) | | | | | |
| | • NO _x | - 3.98 μg/m ³ (2.0 Km | in East direction) | | | | | |
| | • CO - | $0.755 \ \mu g/m^3$ (within | plant boundary) | | | | | |
| Ground Water | • pH - | 6.67 to 7.52 | | | | | | |
| Quality at 13 | • Total | l Hardness – 153.00 to | o 877.20 mg/l | | | | | |
| locations | • Chloride - 14.14 to 330.04 mg/l | | | | | | | |
| | • Fluor | ride - 0.23 to 0.70 mg | /1 | | | | | |
| | • Heav | y metals - Iron as (Fe | () - 0.09 to 0.40 m | g/l | | | | |
| Surface Water | • pH - | 7.14 to 7.65 | | | | | | |
| Quality at 02 | • DO - | - 5.50 to 6.45 mg/l | | | | | | |
| location | • BOD | 0 - 5.10 to 7.40 mg/l | | | | | | |
| | • COD | 0 – 18.0 to 29.0 mg/l | | | | | | |
| Noise Levels Leq | During Day | Time - 51.3 to 63.4 L | eq dB (A) | | | | | |
| (Day and Night) | During Nigh | t Time - 41.9 to 51.8 | Leq dB (A) | | | | | |
| Traffic assessment | ✓ Traffic s | study has been conduc | cted at SH- 10 (Ac | ljacent in North di | irection) from | | | |
| study findings | the Plan | t site. | 1 0 6 | | | | | |
| | • I ranspo dotails a | Transportation of raw material & finished product is being / will be done as per dataila given below. | | | | | | |
| | | nestone - 100% via (| Covered Conveyo | r belt from Capti | ve Limestone | | | |
| | Mi | nestone - 10070 via v | covered conveyo | i ben nom capti | ve Ennestone | | | |
| | ■ Flv | y ash - 60% by road an | nd 40 % by rail | | | | | |
| | • Gy | psum - 100 % by rail | j i | | | | | |
| | Iron | n Ore - 100% by road | | | | | | |
| | ■ Coa | al - 80 % by rail and 2 | 20 % by road | | | | | |
| | Pet | coke (100 % by rail) | | | | | | |
| | • Cer | ment - 35% by road & | c 65 % by rail | | | | | |
| | ✓ Existing | PCU is 199.5 PCU/h | r. on SH - 10 and | existing Level of S | Service (LOS) | | | |
| | 15: | X 7 | C | | 1 | | | |
| | Dead | V (Valuura in | C (Conceitre in | Existing V/C | LOS | | | |
| | Koad | (volume in PCU/br) | (Capacity in PCU/br) | Ratio | LUS | | | |
| | SH - 10 | <u>199 5</u> | 625 | 0.31 | B | | | |
| | \checkmark PCU los | ad after proposed exi | pansion project w | vill be 199.5 (Exi | $\frac{1}{100}$ sting) + 19.5 | | | |
| | (Additio | onal) PCU/hr. on SH - | 10 and existing L | evel of Service (L | OS) is: | | | |
| | Ì | V | | Existing | | | | |
| | Road | (Volume in | C (Capacity 1 | n V/C | LOS | | | |
| | | PCU/hr.) | PCU/IIF.) | Ratio | | | | |
| | SH - 10 | 199.5 + 19.5 = 219 | 625 | 0.35 | В | | | |
| | *Note: Capa | icity as per IRC - 64- | 1990 Guideline fo | r capacity for roa | ds | | | |
| | | | | | o · · · · · | | | |
| | Conclusion: | The level of service | e will remain B i. | e. "Very Good" a | after including | | | |
| Elono 9- Estat | additional tra | arric due to proposed | expansion project. | · · · · · · · · · · · · · · · · · · · | a) and De-th- | | | |
| FIOTA & Fauna | 1 WO Schedu | ure - 1 species i.e., Mo | onnor nzara (<i>Val</i> n the study area | anus bengalensi | s) and Python | | | |
| | Wildlife Con | nservation Plan for the | e two Schedule - 1 | species has been | authenticated | | | |
| | by Principle | Chief Conservator of | Forest (Wildlife & | Biodiversity Con | servation) and | | | |
| | Co - Chief V | Vildlife Warden on 04 | th July, 2022. | | ser , acroin) and | | | |

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

14.7.14 Public Consultation:

| Details of | Public Hearing Notice published in Newspapers "Nai Duniya" and "Amrit |
|--------------------------------|---|
| Advertisement Given | India" on 27 th Feb., 2022. |
| Date of Public Consultation | 31 st March, 2022 |
| Venue | At Khasra No. 64, 65, Rawan Bhadrapali Marg, Gram Bhadrapali, Tehsil - Balodabazar, District - Balodabazar - Bhatapara (Chhattisgarh). |
| Presiding Officer | Shri Rajendra Gupta (District Magistrate, District: Bhatapara) |

| | • Shri Manish Kashyap (Regional Officer, Chhattisgarh Environment | | | | | |
|---------------------|---|--|--|--|--|--|
| | Conservation Board, Balodabazar) | | | | | |
| | Employment, Environment & Pollution, Plantation, Socio-Economic | | | | | |
| Major Issues Raised | Development, Health, Infrastructure development, Skill Development, | | | | | |
| | Water Related, Land Related and others. | | | | | |

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

| G | | Unit of Measurement | | | Tentative |
|----------|--|---------------------|-----------------|-----------------|-----------------|
| S. No | Physical activity to be done | 1 st | 2 nd | 3 rd | Budget |
| 110. | | Year | Year | Year | (Rs. in Crores) |
| 1 | Construction of Road in the villages | | | | 2.85 |
| (i) | Construction of Road in Rawan Village (500 Meters) | \checkmark | - | - | 0.3 |
| (ii) | Construction of Road in Arjuni Village (340 Meters) | \checkmark | - | - | 0.2 |
| (iii) | Construction of Road in Khairtal Village (167 Meters) | \checkmark | - | - | 0.1 |
| (iv) | Construction of Road in Maldi Village (167 Meters) | \checkmark | - | - | 0.1 |
| (v) | Construction of Road in Devrani Village (250 Meters) | \checkmark | - | - | 0.3 |
| (vi) | Construction of Road in Mopar Village (340 Meters) | \checkmark | - | - | 0.2 |
| (vii) | Construction of Road in Sarkipar Village (167 Meters) | \checkmark | - | - | 0.1 |
| (viii) | Construction of Road in Karmandih Village (50 Meters) | \checkmark | - | - | 0.05 |
| (ix) | Construction of Road in Bhadrapali Village (1200 Meters) | \checkmark | - | - | 0.7 |
| (x) | Construction of Road in Mudhipar Village (340 Meters) | \checkmark | - | - | 0.2 |
| (xi) | Construction of Road in kukurdih Village (340 Meters) | \checkmark | - | - | 0.2 |
| (xii) | Construction of Road in Bharseli Village (340 Meters) | \checkmark | - | - | 0.2 |
| (xiii) | Construction of Road in Pousari Village (340 Meters) | \checkmark | - | - | 0.2 |
| | *Rs. 28.50 Lacs will be allocated for further ma | aintenance | of roads | | |
| 2 | Construction of water harvesting structures / g | ground wa | ter rechar | ge / pond | 1.45 |
| (i) | Village Rawan (2 Ponds) | \checkmark | - | - | 0.2 |
| (ii) | Village Arjuni (1 Pond) | \checkmark | - | - | 0.1 |

| C | | Unit of Measurement | | | Tentative |
|----------|---|---------------------|-----------------|-----------------|-----------------|
| S. No | Physical activity to be done | 1 st | 2 nd | 3 rd | Budget |
| 110. | | Year | Year | Year | (Rs. in Crores) |
| (iii) | Village Khairthal (2 Ponds) | | - | - | 0.2 |
| (iv) | Village Devrani (1 Pond) | | - | - | 0.1 |
| (v) | Village Mopar (1 Pond) | | - | - | 0.1 |
| (vi) | Village Sarkipar (1 Pond) | | - | - | 0.1 |
| (vii) | Village Bhadrapali ((2 Pond) | | - | - | 0.2 |
| (viii) | Village Kukurdih (1 Pond) | | - | - | 0.1 |
| (ix) | Village Bharseli (1 Pond) | | - | - | 0.15 |
| (x) | Village Pousari (2 Ponds) | | - | - | 0.2 |
| 3 | Construction of playground / playground level | lling / play | ground | | |
| 5 | development | | | | 0.25 |
| (i) | Playground in Village Rawan | \checkmark | - | - | 0.05 |
| (ii) | Playground in Village Khairtal | | - | - | 0.05 |
| (iii) | Playground in Village Devrani | | - | - | 0.05 |
| (iv) | Playground and leveling in Village Kukurdih | | - | - | 0.1 |
| 4 | Village sanitation / drain construction | | | | 0.3 |
| (i) | Drain construction on Village Rawan (100 Meters) | \checkmark | - | - | 0.05 |
| (ii) | Drain construction on Village Bhadrapali (200 Meters) | \checkmark | - | - | 0.1 |
| (iii) | Drain construction on Village kukurdih (100 Meters) | \checkmark | - | - | 0.05 |
| (iv) | Drain construction on Village Pousari (200 Meters) | \checkmark | - | - | 0.1 |
| 5 | Gothan development / village livelihood | | | | 0.3 |
| (i) | Village Mopar | | - | - | 0.1 |
| (ii) | Village Karmandih | | - | - | 0.1 |
| (iii) | Village Mudhipur | | - | - | 0.1 |
| | Education - | | | | |
| 6 | Development of smart classrooms with Wi- | Fi facilitie | es, Girl's | toilets in | |
| U | Schools, drinking water, improving sanitation f | acilities, sp | ports equip | ment and | |
| | facilities, laboratory equipment, boundary walls | s, etc. | I | | 0.3 |
| (i) | Village Bhadrapali | | - | - | 0.15 |
| (ii) | Village Maldi | \checkmark | - | - | 0.15 |
| 7 | Health - Infrastructure development in hos | pitals and | providing | medical | 0.5- |
| | equipment's | 1 | | | 0.35 |
| (i) | Village Rawan | N | - | - | 0.15 |

| G | | Unit of Measurement | | | Tentative | |
|----------|--|--|--------------|--------|-----------------|--|
| S. No | Physical activity to be done | ivity to be done 1 st 2 nd 3 rd | | Budget | | |
| 110. | | Year | Year | Year | (Rs. in Crores) | |
| (ii) | Village Bhadrapali | \checkmark | - | - | 0.1 | |
| (iii) | Village Maldi | \checkmark | - | - | 0.1 | |
| 8 | Agriculture land development / farm fencing | | | | 0.34 | |
| (i) | Village Arjuni (3000 Meters) | | - | - | 0.12 | |
| (ii) | Village Devrani (1250 Meters) | \checkmark | - | - | 0.05 | |
| (iii) | Village Bhadrapali (500 Meters) | \checkmark | - | - | 0.02 | |
| (iv) | Village Pousari (3750 Meters) | \checkmark | - | - | 0.15 | |
| 9 | Bridge / culvert construction | | | | 0.2 | |
| (i) | Culvert construction in Village Mopar | | - | - | 0.2 | |
| 10 | Other village infra cremation shed, village ligh | nting, scho | ol buildin | g etc. | 0.78 | |
| (i) | Construction of Muktidham (1 No.) in Village Rawan | \checkmark | - | - | 0.06 | |
| (ii) | Construction of Muktidham (1 No.) and installation of 2 Solar Light in Arjuni Village | \checkmark | - | - | 0.1 | |
| (iii) | Construction of Muktidham (1 No.) and installation of 2 Solar Light in Khairtal Village | \checkmark | | - | 0.08 | |
| (iv) | Construction of Muktidham (1 No.) in Village Maldi | - | \checkmark | - | 0.05 | |
| (v) | Installation of 2 Solar Light in Devrani Village | \checkmark | - | - | 0.03 | |
| (vi) | Primary School building construction in Village Sarkipar | | | - | 0.15 | |
| (vii) | Construction of Muktidham (1 No.) and 1 No health clinic in Village Karmandih | \checkmark | - | - | 0.15 | |
| (viii) | Installation of 2 Nos. of Solar Lights in Village Mudhipar | \checkmark | - | - | 0.03 | |
| (ix) | Construction of Rangmanch (1 No.) and construction of Aanganwari boundary wall in Village Bharseli | | - | - | 0.1 | |
| (x) | Installation of Solar Lights (2 Nos.) in Village Pousari | \checkmark | - | - | 0.03 | |
| 11 | 11 Conveyers belt issues (Maintenance of Conveyers belt to avoid Noise problem) | | | | | |
| 12 | Strengthen of Strom water Management in the | e plant cor | nstruction | | 3 | |
| | Total Capital Cost | | | | 15.12 | |
| | Total Recurring Cost for maint | enance | | | Rs. 0.50 Crores | |

VILLAGE ADOPTION PLAN FOR MODEL VILLAGE DEVELOPMENT

The objective of Model Village Development Plan is to develop the following identified villages in an integrated manner. This would include economic development, infrastructure development and other aspects of human development i.e., education, health, drinking water supply, etc., besides access to credit facilities. ACL is proposing to adopt the following villages as a part of model village development plan:

| S Proposed Expenditure (In Rs. La | | | | | |) |
|-----------------------------------|--------------------------------------|---------|---------|----------|---------|---------|
| S. No | Activities (year 2022 – 2024) | Village | Village | Village | Village | Village |
| 110. | | Rawan | Pousari | Bharseli | Maldi | Mopar |
| 1 | Water Resource Development | | | | | |
| | Development of irrigation structure | 10 | - | - | 30 | 10 |
| | Water Harvesting Structure | 40 | 25 | 20 | 20 | 40 |
| | Ponds Deepening | 5 | 5 | 5 | 5 | 5 |
| | Roof rain water harvesting structure | 3 | 3 | 2 | 2 | 3 |
| | Drinking water arrangement | 1 | 1 | 5 | 1 | 1 |
| | Water Quality | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | Total (In Rs. Lacs) | 59.5 | 34.5 | 32.5 | 58.5 | 59.5 |
| 2 | Education Development | | | | | |
| | School infrastructure (building | 7 | 7 | 7 | 7 | 7 |
| | renovation, painting etc.) | 7 | 7 | / | / | 1 |
| | Water and sanitation | 5 | 5 | 5 | 5 | 5 |
| | Sports development | 3 | 3 | 3 | 3 | 3 |
| | Library development | 3 | 3 | 3 | 3 | 3 |
| | Teachers Training on Sports and | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 |
| | Reading | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 |
| | Khel Mela | | 0.35 | 0.35 | 0.35 | 0.35 |
| | Total (In Rs. Lacs) | 18.59 | 18.59 | 18.59 | 18.59 | 18.59 |
| 3 | Rural Infrastructure Development | | | | | |
| | Development of road/pathway | 30 | 20 | 20 | 30 | 30 |
| | Village lighting | 10 | 5 | 5 | 5 | 10 |
| | Village sanitation | 10 | 10 | 5 | 5 | 10 |
| | Gothan Development / village | 15 | 15 | 10 | 15 | 15 |
| | livelihood | 15 | 15 | 10 | 15 | 15 |
| | Playground development | 10 | - | - | | - |
| | Cremation shed | 5 | 5 | - | 8 | - |
| | Community centre | - | - | 10 | - | - |
| | Farm fencing | - | - | | 10 | - |
| | Bridge / Culvert | | | | | 40 |
| | Total (In Rs. Lacs) | 80 | 55 | 50 | 73 | 105 |
| 4 | Health and Sanitation | | | | | |
| | MCH (Maternal and child health) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| | APEKSHA | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | NCD (Non communicable disease) | 1 | 1 | 1 | 1 | 1 |
| | CD (Communicable disease) | 1 | 1 | 1 | 1 | 1 |
| | Curative health | 2.98 | 2.98 | 2.98 | 2.98 | 2.98 |
| | Nutrition | 1 | 1 | 1 | 1 | 1 |
| | | 10.98 | 10.98 | 10.98 | 10.98 | 10.98 |
| 5 | Vocational Training | | | | | |

| S | | Proposed Expenditure (In Rs. Lacs) | | | | | |
|-----------------|--|------------------------------------|---------|----------|---------|---------|--|
| S. No | Activities (year 2022 – 2024) | Village | Village | Village | Village | Village | |
| 110. | | Rawan | Pousari | Bharseli | Maldi | Mopar | |
| | Training Cost | 14.6 | 14.6 | 14.6 | 14.6 | 14.6 | |
| | Mobilization/Village Camp | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | |
| | Exposure/Visit | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | |
| | Branding and Publicity/Saman Samharo | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | |
| | Total (In Rs. Lacs) | 20 | 20 | 20 | 20 | 20 | |
| 6 | Agriculture Development | | | | | | |
| | Crop Improvement program | 6 | 3 | 7 | 4.5 | 8 | |
| | Farm tools implements program | 5 | 2.5 | 3 | 2.5 | 3 | |
| | Goat based livelihoods program | 5 | 1 | 3.5 | 4 | 2.5 | |
| | Water Use Efficiency | 3 | 3 | 4 | 4 | 4 | |
| | Soil Health | 1 | 1 | 1 | 1 | 1 | |
| | Capacity Building | 2.5 | 3 | 3 | 3 | 3 | |
| | Total (In Rs. Lacs) | 22.5 | 13.5 | 21.5 | 19 | 21.5 | |
| 7 | Women Empowerment | | | | | | |
| | Training of SHG on Gender | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | |
| | Six Module Training of SHGs | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | |
| | SHG Audit | 1 | 1 | 1 | 1 | 1 | |
| | Credit Plan and Bank linkage | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | |
| | Turmeric Cultivation | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | |
| | IGA and Micro Enterprise Development | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| | Branding and Marketing of SHG Products | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | |
| | Village Organization Strengthening, Meeting | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | |
| | Record Printing | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | |
| | Women's Day Celebration | 0.45 | 0.3 | 0.3 | 0.45 | 0.45 | |
| | Total (In Rs. Lacs) | 374.24 | 8.95 | 8.95 | 9.1 | 9.1 | |
| Total Develo | expenditure for Model Village | Rs. 989.45 Lacs = Rs. 9.89 Crores | | | | | |

14.7.15 The existing capital cost of the project was Rs. 1507.77 Crores. The capital cost for the proposed expansion project is Rs. 2000 Crores and the capital cost for environmental protection measures is proposed as Rs. 172 Crores. The annual recurring cost towards the environmental protection measures for proposed expansion is Rs. 7.4 Crores/ annum. The employment generation from the proposed expansion project is 200 people (30 regular & 170 contractual). The details of cost for environment protection measures are as follows:

| S. | Description of Itom | Existi C | ng (Rs. In rores) | Proposed (Rs. In Crores) | | |
|-----|---|-----------------|----------------------|-----------------------------|-------------------|--|
| No. | Description of item | Capital Cost | Recurring Cost | Capital Cost | Recurring Cost | |
| i. | Air Pollution Control & House Keeping measures | 55.2 | 4.4 | 140.2 | 6.2 | |

| S. | Decovintion of Itom | Existi C | ng (Rs. In rores) | Proposed (Rs. In Crores) | | |
|------|---|-----------------|----------------------|-----------------------------|-------------------|--|
| No. | Description of item | Capital Cost | Recurring Cost | Capital Cost | Recurring Cost | |
| ii. | Water Pollution Control and Rain Water Harvesting Measures | 7.4 | 0.8 | 1.2 | 0.6 | |
| iii. | Noise Pollution Control | 2.5 | 0.2 | 28 | 0.1 | |
| iv. | Environment monitoring and management | 3.3 | 0.5 | 2.2 | 0.4 | |
| v. | Greenbelt Development | 0.39 | 0.1 | 0.4 | 0.1 | |
| | Total | 68.79 | 6 | 172 | 7.4 | |

- 14.7.16 Existing greenbelt has been developed in 83.1 ha area which is about 34.7% of the total project area of 238.97 ha with total saplings of 201484 tress. Further, the greenbelt/plantation will be enhanced by gap filling to meet the requirement of 2500 plants/ ha with 6000 Plants. A 8m wide greenbelt, consisting of at least 3 tiers around plant boundary is being / will be developed as greenbelt and green cover as per CPCB / MoEF&CC, New Delhi guidelines. Local and native species has been / will be planted with a density of 2500 trees per hectare.
- 14.7.17 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.

Certified compliance report from Regional Office

14.7.18 The status of compliance of earlier EC was obtained from Integrated Regional Officer, Raipur vide File no. 5- 6/2007(ENV)/317 dated 18th October, 2021 in the name of M/s. Ambuja Cement Ltd. The Action taken report regarding the partially complied condition was submitted to Regional Officer, MoEF&CC for closure vide letter no. ACL/BYT/ENV/2022-23/39, dated 11.06.2022. MoEF&CC (IRO), evaluated the same and has issued letter dated 21st June, 2022. The details of the observations made by IRO in the report dated 14th June, 2022 along with its re-assessment / present status as furnished by the PP is given as below:

| S. | Non - Compliance details | Observation of IRO | C | ondition no |). | Re-assessment by RO / |
|-----|--|---|---------|-------------|---------|--|
| No. | | (abridged) | EC date | Specific | General | Response by PP |
| 1. | In reference to this office letter <i>vide</i> letter No. 5-6/2007 (ENV)/183 dated 20.07.2021, PA has submitted the reply with vide letter No ACL/BYT/ENV/2021-22/01 dated 06.8.2021 received in this office on 09.08.2021. In reply the PA has concealed the information related to Show-Cause notices. However, this office has clarified the same with CECB, Chhattisgarh and they provided the details of Show | • In view of above, this office has observed that Project Authorities are hiding the important information to the Ministry. Company will submit the progress report of installation of shed work regularly on quarterly basis to your office. | - | - | - | PP informed that they didn't hide information regarding show cause issued by CECB. It was mistakenly not reported. However, show cause details has been submitted by PP to this office |

| S. | Non - Compliance details | Observation of IRO | C | Condition no. | | Re-assessment by RO / |
|-----|--|---|----------------------|---------------|---------|--|
| No. | | (abridged) | EC date | Specific | General | Response by PP |
| | M/s. Ambuja Cement Plant for the period 01.04.2019 to 01.07.2021 with vide letter dated 01/09/2021 | | | | | |
| 2. | View of Main gate (LED Display not Present as discussed in the visit) ii. View of Improper dumping of Fly ash iii. View of Improper dumping of Coal iv. Coal dust deposited on the roads. v. View of Under construction of WHRB (no limitation of the project as discussed in the visit) | It has been observed on the day of monitoring that display board has been installed by PP at plant gate showing all the parameters. It has also been observed that fly ash and coal is temporary covered with tarpaulin. It was also informed that the process of constructing permanent covered sheds for storage of fly ash and coal is under process. PP assured to submit the compliance of the same on quarterly basis to this office. It is also observed that PP has purchased dust sweeping machines for road cleaning. On the day of monitoring, it was also observed that the internal roads were cleaned. It was observed on the day of monitoring that WHRS for Line 1 & 2 is under construction. It was informed by PP that approval is exempted from MoEFCC as per notification vide No. F. No. 22-24/2018 IA.III dated 23 January 2019. | | | | It has been observed on the day of monitoring that display board has been installed by PP at plant gate showing all the parameters. It has also been observed that fly ash and coal is temporary covered with tarpaulin. It was also informed that the process of constructing permanent covered sheds for storage of fly ash and coal is under process. PP assured to submit the compliance of the same on quarterly basis to this office. It is also observed that PP has purchased dust sweeping machines for road cleaning. On the day of monitoring, it was also observed that the internal roads were cleaned. It was observed on the day of monitoring that WHRS for Line 1 & 2 is under construction. It was informed by PP that approval is exempted from MoEFCC as per notification vide No. F. No. 22-24/2018 IA.III |
| 3 | The company shall install | • Plant cleaning in Mill | 06 th Ian | | (jij) | On the day of monitoring $On the day of monitoring$ |
| | adequate dust collection and extraction system to control fugitive dust emissions at various transfer points. Glass bag house in raw mill and kiln, ESP in cooler and cement mill and bag filter at all the transfer points shall be installed. Coal and clinker storage will be in the form of stockpile. The dust collected from the pollution control equipment shall be recycled back into the process. | section has been done and same will be maintained. The bags of bag house has been replaced costing Rs.3.0 Crore. Leakage has been arrested by maintenance team regularly. All bag filter inspection done on periodically basis. Clinker silo sheeting work completed. The material lying in the open has been covered | 2006 | | | it was also observed that mill section and other areas of the plant are found with good housekeeping. It was also informed that bag filters has been replaced and bag filters maintenance is done periodically. It was also observed that all the raw material lying on the open areas were covered with tarpaulin. In addition to that two dust sweeping |

| S. | Non - Compliance details | Observation of IRO | Condition no. | | Re-assessment by RO / | |
|-----|--|---|-----------------------|----------|-----------------------|----------------------------|
| No. | | (abridged) | EC date | Specific | General | Response by PP |
| | be in closed roof sheds. | • Road sweeping machine | | | | procured by PP for road |
| | Water sprinkling | has been deployed for | | | | cleaning and to control |
| | arrangement shall be made in | road cleaning regularly. | | | | fugitive emission. On the |
| | the raw material stock yard | • Water tankers has been | | | | day of monitoring, it was |
| | and cement bag loading | deployed regularly. | | | | observed that fugitive |
| | areas. | • Two new sweeping | | | | dust emissions were |
| | Partially Complied with: | machines procured at a | | | | under control. PP has |
| | • Fugitive emission was | cost of Rs 70 Lakh for | | | | submitted fugitive dust |
| | observed from the ball | road cleaning and control | | | | emission monitoring |
| | mill and cement mill | of Fugitive emissions in | | | | report to this office. The |
| | section causing air | the plant. | | | | same has been analyzed |
| | pollution in the premises. | • Two Mobile dust | | | | and found within |
| | • Deposition of heavy dust | suppression systems | | | | prescribed limits. |
| | was observed in the | already procured & same | | | | F |
| | clinker silo section. | is in operation in coal | | | | |
| | cement mill hooper area. | vard, lime stone piling | | | | |
| | fly ash changing point | area and other areas for | | | | |
| | causing air pollution | fugitive dust control. The | | | | |
| | problem in the plant | Photographs of same is | | | | |
| | premises and | attached as Annexure 5 | | | | |
| | surrounding. | • Line 1 Raw mill Bag | | | | |
| | • Huge amount of coal and | house Filter maintenance | | | | |
| | fly ash inappropriately | done and all the new bags | | | | |
| | dumped in the open area | installed. | | | | |
| | of premises. | • Repair and cleaning of | | | | |
| | • The solid wastes | roads done for proper | | | | |
| | management system of | movement of sweeping | | | | |
| | the industry was not | machines | | | | |
| | found adequate. | • The fly ash generated | | | | |
| | Housekeeping was not | from CPP is being fully | | | | |
| | found satisfactory | utilized for manufacturing | | | | |
| | | of cement | | | | |
| | | • We have done various | | | | |
| | | good practices like walk | | | | |
| | | by inspection on routine | | | | |
| | | basis resulting our | | | | |
| | | housekeeping has been | | | | |
| | | improved | | | | |
| 4. | All the recommendations of | Corporate Responsibility | 06 th Jan. | - | (iv) | PP has submitted the |
| | the Corporate Responsibility | for Environmental | 2006 | | (17) | compliance report of |
| | or Environmental Protection | protection (CRFP) | 2000 | | | CRFP to this office |
| | (CRFP) shall be followed | Guidelines compliance is | | | | CILLI to uns office. |
| | and existing FSP in cement | being done / being | | | | |
| | mill I and II and hag filters in | submitted Complied | | | | |
| | raw mill kiln and crusher | submitted. Complied | | | | |
| | area shall be modified to | | | | | |
| | achieve 99.95% efficiency | | | | | |
| | and particulate emission | | | | | |
| | levels less than 50 mg/Nm ³ | | | | | |
| | Being Complied with | | | | | |
| | It was informed that CRED | | | | | |
| | quidelines are being | | | | | |
| | followed However no | | | | | |
| | documental evidence was | | | | | |
| | submitted | | | | | |
| 5 | The company must harvest | • Roof Dain water | 06 th Ion | | (11) | It has been observed that |
| 5. | the rainwater from the reaf | horvesting structure will | 2006 Jan., | - | (VI) | R hadrannali nond inside |
| | tops and storm water drains | ha vesuing structure will be granted at five (5) | 2000 | | | the plant is presently |
| | to recharge the ground water | locations in plant area | | | | boing used as horresting |
| | to recharge the ground water. | nocations in plant area | | | | being used as narvesting |

| S. | Non - Compliance details | Observation of IRO | Condition no. | | Re-assessment by RO / | |
|----------|---------------------------------|-----------------------------|------------------------|----------|-----------------------|-----------------------------|
| No. | | (abridged) | EC date | Specific | General | Response by PP |
| | The company must also | with recharge bore well | | | | pit. All the storm water |
| | collect rain water in the | structure. Purchase order | | | | from the plant is being |
| | mined out pits of captive lime | has been issued. The | | | | channelized to |
| | stone mine and use the same | Party has mobilized at site | | | | Bhadrappali pond. In |
| | water for the various | for construction of roof | | | | addition to that PP |
| | activities of | rain water harvesting | | | | informed that 5 rain water |
| | Partially Complied with: | structure This work will | | | | harvesting structures will |
| | It was observed that no rain | be completed before 31 | | | | be constructed in the plant |
| | water harvesting system has | July 2022 PP will submit | | | | area PO of the same has |
| | been constructed inside the | the progress report to | | | | been submitted by PP to |
| | plant howayar: rain water | vour kind office on | | | | this office PO assured to |
| | homesting system has been | your kind once on | | | | appropriate the work before |
| | narvesting system has been | The sterm meter from the | | | | 21 st July 2022 The |
| | constructed in colony. It was | • The storm water from the | | | | Sist July 2022. The |
| | informed that Roof top rain | plant area is being | | | | progress of the same shall |
| | water and storm water drains | channelized to Bhadrapali | | | | be submitted to this office |
| | are used to recharge the | pond | | | | on completion of work. |
| | ground water and rain water | • (Surface area Size 4247 | | | | |
| | that gets collected in the | sq.m.) for recharge. Also | | | | |
| | mined-out pit is used for | rain water harvesting pit | | | | |
| | various activities after proper | has been made for rain | | | | |
| | settling and treatment. | water harvesting in rawan | | | | |
| | | Mine South pit Size | | | | |
| | | 558600 sq.m. and North | | | | |
| | | Pit Size 335156 sq.m | | | | |
| | | • For usages of only mining | | | | |
| | | water in the plant we have | | | | |
| | | already proposed the | | | | |
| | | Capex for water treatment | | | | |
| | | plant in plant capacity | | | | |
| | | 500 KLD and colony 600 | | | | |
| | | KLD Almost the Water | | | | |
| | | Treatment Plant (WTP) in | | | | |
| | | the ordering stage and | | | | |
| | | nurchase order will be | | | | |
| | | issued before 20th June | | | | |
| | | 2022 The installation of | | | | |
| | | WTD will be completed | | | | |
| | | wiff will be completed | | | | |
| | | 2022 DD will submit the | | | | |
| | | 2022. PP will submit the | | | | |
| | | progress report of this | | | | |
| | | wir to your office on | | | | |
| | | quarterly basis. | | | | |
| | | • PP will ensure that total | | | | |
| | | water requirement shall | | | | |
| | | be met from the mine pits | | | | |
| | | only after installation of | | | | |
| | | water treatment plant in | | | | |
| <u> </u> | | plant and colony. | | | | |
| 6. | Green belt shall be developed | • Green Belt certification | 06 th Jan., | - | (vii) | Ample plantation has |
| | in 33% of the plant area. | from local DFO has been | 2006 | | | been observed inside the |
| | Central Pollution Control | done. | | | | plant premises and PP has |
| | Board guidelines must be | • The required details for | | | | also submitted green belt |
| | followed in planning and | plantation and Green Belt | | | | certification from local |
| | developing green belt and | certification from local | | | | DFO. After analyzing the |
| | selection of species etc. | DFO has been obtained. | | | | report it has been |
| | Partially Complied with: | • Further, company have | | | | observed that 33% of the |
| | It was observed that | made action plan for | | | | area has been covered |
| | plantation was carried out by | planting around 7500 | | | | under green belt. |
| | the PA in the parts of the | sapling in coming three | | | | |

| S. | Non - Compliance details | Observation of IRO | Condition no. | | Re-assessment by RO / | |
|-----|--|---|--------------------------------|----------|-----------------------|---|
| No. | _ | (abridged) | EC date | Specific | General | Response by PP |
| No. | premises of the plant. PA has been submitted the third- party Consultation certificate for the plantation done inside the plant for the year 2016. PA has been ashed to submit the comprehensive details of plantation carried out inside the plant i.e., Plant lay out in which plantations has been carried out showing area covered, number of saplings have been done after 2016, to | (abridged) years for strengthening the green belt dense. The progress report will be submitted to your office regularly. | EC date | Specific | General | Response by PP |
| 7. | nave been done after 2010, to present, details of saplings and its survival rate etc. to this office. Solid waste generated in the form of fly ash and slag shall be 100% recycled in the process itself. Not Complied with: PA didn't submit the details of fly ash generated and its utilization to this office. The PA has been asked to submit the Fly Ash Utilization Certificate for the last 3 FY | • Three years fly ash generation data from CPP and utilization certificate in cement manufacturing process is attached herewith, as Annexure 10. | 06 th Jan., 2006 | - | (viii) | PP has submitted copy of fly ash utilization report which was submitted to CECB for the past 3 financial years to this office. |
| 8. | to this office. No further expansion or modifications of the plant should be carried out without prior approval of this Ministry. It has been observed that one WHRB unit was found under construction for Line - I | WHRS for Line I & II is under construction and same approval is exempted from MoEF&CC as per their notification Vide No F. No. 22-24 / 2018 - IA.III dated 23 January 2019 and accordingly we have taken CTE From CECB vide No 7254 / TS / CECB / 2020 dated 11/1 1/2020. CTO application has been submitted and after getting the approval shortly PP will commission the WHRB. After operation of this unit PP will reduce our carbon foot prints. | 06 th Jan., 2006 | (ii) | - | It was observed on the day of monitoring that WHRS for Line 1 & 2 is under construction. It was informed by PP that approval is exempted from MoEF& CC as per notification Vide No F. No. 22-24 / 2018 IA.III dated 23 rd January 2019. |
| 9. | Proper housekeeping and adequate occupational health programme must be taken up. Occupational Health Surveillance programme should be done on a regular basis and records maintained. The programme must include lung function and sputum analysis tests once in six months. Partially Complied with: | Housekeeping of the plant has been improved by regularly improving maintenance practices. Additional (2 Nos) new Sweeping machines have been procured and same has been deployed for road dust suppression system. The Occupational Health Surveillance programme has been done. | 06 th Jan., 2006 | (iv) | _ | On the day of monitoring, it has been observed that PP has purchased two sweeping machines for road cleaning and on the day of monitoring housekeeping was found satisfactory. |

| S. | Non - Compliance details | Observation of IRO | Condition no. | | Re-assessment by RO / | |
|-----|---|---|------------------------------------|----------|-----------------------|---|
| No. | | (abridged) | EC date | Specific | General | Response by PP |
| | Housekeeping was not found satisfactory. | | | | | |
| 10. | A separate environmental management cell with full- fledged laboratory-facilities to carry out various management and monitoring functions should be set up under the control of Senior Executive. Partially Complied with It was informed that Environmental Management Cell has been established under supervision of Environmental Head with laboratory facilities. However, the comprehensive details of EMC were not provided. It was also informed that Head of Environment is directly reporting to the Unit Head. | Environmental Management Cell has been established under supervision of Environmental Head with laboratory facilities. Environmental monitoring is being carried out through MoEF& CC& NABL accredited laboratories. Head of Environment is directly reporting to the Unit Head. The hierarchy chart and function of has been shown. | 06 th Jan., 2006 | (viii) | - | EMC cell has been observed on the day of monitoring and it was informed that EMC cell has been established under supervision of head of environment. The copy of EMC cell details have been submitted to this office. |
| 11. | Asphalting/concreting of roads and water spray all around the coal stockpiles shall be carried out to control fugitive emissions. <u>Partially Complied with:</u> At CHP and where coal being handled units inside the plant the pucca roads were not observed and cold dust deposits were observed on the surfaces in these areas on the day monitoring. | Coal Handling plant approaching road is regularly cleaned with sweeping machines and mobile dust suppression is deputed. All the raw materials are covered with tarpaulin till further provision of Covered shed. Dust suppression system is operational at coal dump hoppers and other required area. Water tanker has been deputed for control of fugitive dust control on the road. Mobile water fog dust suppression system has been deployed at coal yard area. | 13 th April, 2007 | | (iv) | It has been observed on the day of monitoring that PP has installed mobile water fog dust suppression system at coal yard area, all the raw materials were found covered with tarpaulin and it was also observed that dust suppression system is also found operational at coal dump hoopers. In addition to that PP deployed 2 dust sweeping machines in the coal yard area to clean the approach roads at CHP area. It was informed that the construction work of covered sheds and concreting of roads was under process and PP assured that the progress of the work shall be submitted to this office on quarterly basis. |
| 12. | Total water requirement shall be met from the mine pits only and no surface/ground water shall be used. No process wastewater shall be discharged due to use of all the treated wastewater for ash conditioning, dust suppression, green belt | For usages of only mining water in the plant we have already proposed the Capex for water treatment plant in plant capacity 500 KLD and colony 600 KLD. Almost the Water Treatment Plant (WTP) in the ordering stage and | 13 th April, 2007 | _ | (vi) | It was informed by PP that the installation of WTP will be completed by 30.11.2022 and PP assured to submit the progress report of this WTP on quarterly basis. It was also ensured that total water requirements |

| S. | Non - Compliance details | Observation of IRO | Condition no. | | Re-assessment by RO / | |
|-----|--|---|------------------------------------|----------|-----------------------|---|
| No. | _ | (abridged) | EC date | Specific | General | Response by PP |
| | development and other plant related activities etc. No effluent shall be discharged outside the factory premises and 'zero' discharge shall be adopted. Domestic effluent shall be used after treatment in Sewage Treatment Plant (STP) for green belt development within the plant and colony area. Partially Complied with: PA has submitted that 6044 KLD water has been used for the existing units sourcing from existing bore wells and Mine Pits. | purchase order will be issued before 20th June 2022. The installation of WTP will be completed before 30 November 2022. PP will submit the progress report of this WTP to your office on quarterly basis. PP will ensure that total water requirement shall be met from the mine pits only after installation of water treatment plant in plant and colony | | | | shall be met from mine pits only after installation of WTP plant in plant and colony |
| 13. | The entire water requirement shall be met from the artificial reservoir made in the mine pit only and no water from surface and ground water sources shall be used for any purpose. Partially Complied with: PA has submitted that 6044 KLD water has been used for the existing units sourcing from existing bore well and Mine Pits. | For usages of only mining water in the plant we have already proposed the Capex for water treatment plant in plant capacity 500 KLD and colony 600 KLD. Almost the Water Treatment Plant (WTP) in the ordering stage and purchase order will be issued before 20th June 2022. The installation of WTP will be completed before 30 November 2022. PP will submit the progress report of this WTP to your office on quarterly basis | 13 th April, 2007 | - | (vi) | It was informed by PP that the installation of WTP will be completed by 30.11.2022 and PP assured to submit the progress report of this WTP on quarterly basis. It was also ensured that total water requirements shall be met from mine pits only after installation of WTP plant in plant and colony. |
| 14. | Efforts shall be made to make use of high calorific hazardous waste as fuel in kiln. Accordingly, provision shall be made in the kiln and inform to the ministry. Partially Complied with: It was informed that High calorific hazardous waste is being used as alternative fuel in kiln. However, no other details on usage of high calorific hazardous waste as fuel in kiln which is presently used has not submitted. | High calorific hazardous waste is being pre - processed and co - processed in kiln for which authorization has been taken from CECB. No fuel having high calorific values used in the kiln in last three years. | - | - | - | It was informed that no fuel having High calorific values is used in the kiln in the last three years. It was also informed that high calorific hazardous waste is being pre- processed and co- processed in kiln for which authorization has been taken from CECB. |

Written representations:

14.7.19 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 30.09.2022 through email dated 30.09.2022 submitted the following information:

| S. No. | Point Reply | | | | |
|-------------------------------|--|---|--|--|--|
| 1. | Mitigation measures for high noise levels | The following measures have been proposed to mitigate the high noise levels generated due to the conveyor belt passing near the Village Murhipar: Six-row shelter belt of trees (~500 m) to be planted near the Village Murhipar. The trees selected for the above plantation would be noise-absorbing species Replacement of conveyor idlers with low noise idlers Single-row shelter belt of trees will be planted all along the conveyor belt starting from the limestone crusher to plant boundary. | | | |
| 2. | Details of the 05 villages to be adopted for development of Model Villages | The company has revised the budget for village adoption for model village development and allocated Rs. 9.89 Crores. The revised action plan for village adoption is submitted and incorporated at para 14.7.14 above. | | | |
| 3. | Revised CER Plan | The company has revised the budget for Socio-economic development activities prepared based on the issues raised during the public hearing and allocated Rs. 15.12 Crores. The revised action plan for Socio-economic development is submitted and incorporated at para 14.7.14 above. Thus, the total budget for Socio-economic developmental activities and village adoption will be ~ Rs. 25 Crores. | | | |
| 4. | Conservation of the 15 ponds falling in the 10 km study area | The company has proposed deepening and regular maintenance of ponds in the nearby villages and has allocated Rs. 25 Lacs for the same. | | | |
| 5. | Undertaking regarding "No Litigation pending against the project" | The undertaking regarding "No Litigation pending against the project" is submitted vide letter dated 30.09.2022. | | | |
| 6. | Details of Decarbonization Study | The Action Plan for the Panch-tatva (05 commitments) including fossil fuel reduction road map and net-zero carbon emissions is submitted in the table below: | | | |
| 7. | Action Plan for the Panch-tatva including fossil fuel reduction road map | | | | |
| Commitments or Amrit Tatva | | Action Plan of ACL | | | |

| S. No. | Point | Reply | | | |
|---------------------------|----------------------|---|--|--|--|
| Comn | nitment - 1 | ACL is aggressively pursuing various options to migrate to non-fossil | | | |
| By 2 | 2030, India wil | fuel energy and to achieve energy security: | | | |
| increa | se its non - fossi | Enhanced utilization of Alternative fuels: During the year 2021 | | | |
| capaci | ty to 500 gigawatts. | ACL has consumed 2.8 Lakn+ tons of waste materials as | | | |
| | | Alternative Fuels III our Klinis. We have full-fiedged Geocycle | | | |
| | | Pabrivawas During the year 2021 we have consumed 8.6 million | | | |
| | | ton of waste derived alternate raw material like Fly Ash. Slag and | | | |
| | | Phospho-gyspum etc | | | |
| | | ✓ Waste Heat Recovery systems: ACL currently having 6.5 MW of | | | |
| | | WHRS system at Rabrivawas Raiasthan in operation Additional | | | |
| | | 18 MW WHRS will be made operation in Bhatapara (Chhattisgarh) | | | |
| | | in the year December 2022 WHRS 11.5 MW at Darlaghat | | | |
| | | Himachal will be operational October, 2022. | | | |
| | | ACL Commitment: PP is aspiring to meet 1/3 rd of its energy | | | |
| | | requirement through Alternative Fuels & Renewable energy by | | | |
| | | 2025. | | | |
| Comn | nitment – 2 | Wind Energy & Bio Mass Based Captive power plant: | | | |
| By 20 | 30, India will fulf | ACL is having 7.5 MW captive Wind power generation in Kutch Gujarat and same is operational. – Also, we have set up Coal and Bio- | | | |
| 50 pe | rcent of its energ | | | | |
| requirements with renewal | | Mass based CPP (30 MW) in Ropar, Punjab the same is operational. | | | |
| energy | /. | ✓ <u>Solar Energy</u> : ACL is having 11 MW Offsite Solar Group Power | | | |
| | | Plant at Raipur will be operation in November, 2022. 330 KV Solar | | | |
| | | power station set up at Bhatapara. ACL has also setup 55.14 KWP | | | |
| | | roottop solar PV Project at Gurgaon Office. ACL has set up Solar | | | |
| | | 5.1 MW at Rabriyawas (Rajasthan) & the same is operational. | | | |
| | | • <u>Reflewable Energy used:</u> During the year 2021, we have consumed 1.00. Crore units of renewable energy through wind and color | | | |
| | | energy Total Penewable Energy used 225174 MWH | | | |
| | | ✓ WHRS: WHRS at Bhatapara 18 will be operational in December | | | |
| | | 2022 and Further 25 MW WHRS will be commissioned in year | | | |
| | | 2022. and Future 25 Mith will be commissioned in year 2024 after expansion of Line - III. | | | |
| | | ACL Commitment: PP is aspiring to meet our 1/3 rd of its energy | | | |
| | | requirement through Alternative Fuels & Renewable energy by | | | |
| | | 2025 | | | |
| Comn | nitment – 3 | ✓ ACL is committed to the GCCA Low Carbon Technology Road | | | |
| India | will reduce on | e Map 2050. | | | |
| billion | tonnes of the tota | $1 \checkmark ACL's carbon footprint reduction targets have been validated by the$ | | | |
| projec | ted carbon emission | Science-Based Targets initiative (SBTi). | | | |
| betwee | en now and 2030. | $\checkmark \text{ Reduce its CO}_2 \text{ intensity in cement operations from 608 kg in 2018}$ | | | |
| Comn | nitment – 4 | to 488 kg CO_2 per ton of cementitious material (including emissions | | | |
| | | from CPP) by 2030 | | | |

| S. No. | Point | | Reply |
|----------------------------|--|-----|--|
| By 203 its e intensi | 30, India will reduce conomy's carbon ty to less than 45%. | y ✓ | Reduce Scope - 1 GHG emissions by 20% per ton of cementitious and Scope - 2 GHG emissions 43% per ton of cementitious material by 2030, from a 2020 base year. |
| Comm | nitment – 5 | ✓ | ACL is committed to the GCCA Low Carbon Technology Road |
| India targets | will achieve the of net zero emission | | Map 2050. ACL became the Second Indian cement company to have signed the |
| by 207 | '0. | | Net Zero Pledge with intermediate science-based targets |

Deliberations by the Committee

- 14.7.20 The Committee noted the following:
 - 1. The instant proposal is for expansion of Integrated Cement Plant Clinker (4.8 to 8.1 MTPA), Cement (3.5 to 6.5 MTPA) and WHRS (18 to 43 MW).
 - 2. 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.
 - 3. 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.
 - 4. 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.
 - 5. The existing project was accorded Environmental Clearance from MoEF&CC, New Delhi for Clinker 4.8 MTPA *vide* letter no. J-11011/355/2005 IA- II (I), dated 25th Jan., 2016 amended via letter dated 06th Jan., 2017 and for Cement (3.5 MTPA) *vide* letter no. J-11011/72/2009 IA- II (I), dated 15th May, 2009; amended via letter dated 13th Nov., 2011. Consent to Established for Waste Head Recovery (18 MW) has been obtained from CECB *vide* letter no. 7254/TS/CECB/2020, dated 11th Nov., 2020. Consent to Establish for Waste Heat Recovery (18 MW) has been obtained from CECB vide letter no. 7254/TS/CECB/2020, dated 11th November, 2020 which is under installation.
 - 6. Mahanadi Canal, Kukurdih Talav, Kukridih Dharsharma Canal, Banjari Nala, Jamuniya Nadi, Khorsi Nala and Chitawar Nala exists within the study area of the project site. The

EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.

- 7. 7544 m³/day water will be required for the existing and proposed expansion; which will be obtained from Ground Water and Mine Pits. The EAC advised that project proponent shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.
- 8. Two Schedule I species i.e., Monitor lizard (*Varanus bengalensis*) and Python (*Python molurus*) are found in the sturdy area of the project area. Wildlife Conservation Plan for the two Schedule I species has been authenticated by Principle Chief Conservator of Forest (Wildlife & Biodiversity Conservation) and Co Chief Wildlife Warden on 04th July, 2022. The EAC deliberated the conservation plan and found in order.
- 9. Existing greenbelt has been developed in 83.1 ha area which is about 34.7% of the total project area of 238.97 ha with total saplings of 201484 tress. Further, the greenbelt/plantation will be enhanced by gap filling to meet the requirement of 2500 plants/ ha with 6000 Plants. The Committee deliberated on the action plan and budget allocation for green belt development and noted that as committed by the PP the green belt development shall be completed in a year.
- 10. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
- 11. There are approx. 68 villages in 10 km radius study area of the project site. The EAC advised that Project Proponent shall take appropriate environmental safeguard measures to minimise the impact on the habitation of the locals. The PP shall also include some of these locations in its environmental monitoring programme.
- 12. Project proponent has submitted that Village Rawan, Pausari, Bharseli, Maldi & Mopad will be adopted. PP has submitted an action plan to develop these villages into model villages.
- 13. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
- 14. 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.
- 15. The Committee deliberated upon the certified compliance report of IRO MoEFCC as well as action taken report submitted by PP with respect to the observations reported by IRO along with the review report of IRO and found it satisfactory.
- 16. The Committee deliberated upon the written submission of the Project Proponent and found it satisfactory.
- 17. 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.

18. 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:

14.7.21 In view of the foregoing and after detailed deliberations, the committee recommended the instant proposal for grant of Environment Clearance subject to uploading the written submission on portal under the provisions of EIA Notification, 2006 subject to 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 conditions:

- (i) The PP 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.
- (ii) 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.
- (iii) Mahanadi Canal, Kukurdih Talav, Kukridih Dharsharma Canal, Banjari Nala, Jamuniya Nadi, Khorsi Nala and Chitawar Nala exists within the study area of the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- (iv) As committed, PP shall adopt Rawan, Pausari, Bharseli, Maldi & Mopad villages and develop them into model villages. PP shall implement the action plan submitted for the development of the villages.
 - (v) 7544 m³/day water will be required for the existing and proposed expansion; which will be obtained from Ground Water and Mine Pits. Necessary permission shall be obtained from the Competent Authority in this regard. PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.
 - (vi) Three tier Green Belt shall be developed in a time frame of one year covering at least 33% of the total project area 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. Gap filling shall be undertaken for the existing greenbelt to achieve target of plantation of 2500 saplings per ha.

- (vii) Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- (viii) Mitigation measures to minimise the impact of high noise levels generated due to the conveyor belt passing near the Village Murhipar shall be strictly implemented as committed which shall specifically include six row shelter belt of trees (~500 m) to be planted near the Village Murhipar (particularly noise-absorbing species) and other technological measures.
 - (ix) The Action Plan for the Panch-tatva (5 commitments) including fossil fuel reduction road map and net-zero carbon emissions shall be strictly implemented.
 - (x) 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. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.
 - (xi) The company shall also undertake rain water harvesting measures as per the plan submitted in the EIA/EMP report and reduce water dependence from the outside source.
- (xii) All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.
- (xiii) Slip roads shall be provided at the gates and along crossings on main roads.
- (xiv) All internal and connecting road to the Highway shall be black topped/ concreted with suitable load in term of Million Standard Axle (MSA) as per IRC guidelines.
- (xv) Performance monitoring of pollution control equipment shall be taken up yearly and compliance status in this regard shall be reported to the concerned Regional Office of the MoEF&CC.
- (xvi) Dioxin and furans shall be monitored twice a year during co-processing of hazardous waste and report shall be submitted to the Regional Office of the MoEF&CC.
- (xvii) Particulate matter emissions from all the stacks shall be less than 30 mg/Nm³.
- (xviii) DeSOx system shall be provided dry type. NOx level shall be maintained below 600 mg/Nm³ by using best available technology.
 - (xix) Petcoke dosing shall be controlled automatically to control SO₂ emission from chimney within the prescribed limits.
 - (xx) PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
 - (xxi) A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- (xxii) All the recommendations made in the risk assessment report shall be implemented and compliance status in this regard shall be furnished to the Regional Office of the MoEF&CC along with the six monthly compliance report.
- (xxiii) All the commitments made to the public during the Public Hearing/Public Consultation 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.

- (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.
- (xxvi) The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

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 24x7 continuous emission monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement); as amended from time to time; and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system carryout to 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 SO2 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°each), covering upwind and downwind directions.

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- ix. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
- x. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
- xi. Provide Low NOX burners as primary measures and SCR /NSCR technologies as secondary measure to control NOX emissions.
- xii. Have separate truck parking area and monitor vehicular emissions at regular interval.
- xiii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport
- xiv. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement) as amended from time to time; and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall regularly monitor 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.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off
- v. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- vi. The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

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.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. Waste heat recovery system shall be provided for kiln and cooler.
- The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- iv. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

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

VII. Green Belt

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.
- Project proponent shall submit a study report within six months on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.

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.
- 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 villages based on the socio-economic 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 shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

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.

Re-consideration of Environmental Clearance Proposal

Agenda No. 14.8

14.8 Proposed Standalone Grinding Unit with Cement Production Capacity of 3.0 Million TPA and D.G Set of 250 KVA along with Railway Siding at Salai Banwa, Villages: Panari and Kota, Tehsil: Obra, District: Sonbhadra, Uttar Pradesh by Ms ACC Limited-Consideration of Environmental Clearance.

[Proposal No. IA/UP/IND/228969/2021; File No. J-11011/361/2021-IA.II(I)] [Consultant: J.M. EnviroNet Pvt. Ltd.; Valid upto 07.02.2023]

14.8.1 M/s. ACC Limited has made an online application *vide* proposal no. IA/UP/IND/228969/2021 dated 11th July, 2022 along with copy of EIA/EMP Report, Form - 2 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(b) Cement plant under Category "B" of the schedule of the EIA Notification, 2006 and attracts general condition due to presence of Eco-Sensitive Zone of Kaimoor Wildlife at a distance of ~4.5 km from the proposed project site and therefore, the project will be treated as Category "A" project and appraised at central level.

14.8.2 Name of the EIA consultant: M/s J.M. EnviroNet Pvt. Ltd. [Sl. No. 41, List of ACOs with their Certificate / Extension Letter no. NABET/EIA/2023/RA 0186; valid upto 07.02.2023, Rev. 25, Sept 05, 2022].

Details submitted by Project proponent

14.8.3 The details of the ToR are furnished as below:

| Date of application | Consideration | Details | Date of accord | Validity of ToR |
|---------------------|---|-----------------------|-------------------|--------------------|
| 13/09/2021 | 45 th Meeting of REAC held on 28 th September, 2021 | Terms of Reference | 18/10/2021 | 17/10/2025 |

- 14.8.4 The project of M/s. ACC Limited located at Salai Banwa, Panari and Kota Villages, Obra Tehsil, Sonbhadra District, Uttar Pradesh State is for setting up of a new Standalone Grinding Unit with Cement Production Capacity of 3.0 Million TPA and D.G. Set of 250 KVA along with Railway Siding.
 - 14.8.5 Environmental Site Settings:

| S. No. | Particulars | D | etails | | Rem | arks |
|--------|--------------------------|------------------------|-------------------|---------------|--------|---------|
| 1. | Total land | Total Project area is | Land | use: | | |
| | | ha is Government lan | d and remaining | , 29.17 ha is | Govern | iment |
| | | Private non -irrigated | d & non-fertile | land which | and | Private |
| | | will be changed to in | dustrial after es | tablishment | Land | |
| | | of Grinding Unit. | | | | |
| 2. | Land acquisition details | Total land has been a | cquired by the c | company. | | - |
| | as per MoEF&CC O.M. | | | | | |
| | dated 7/10/2014 | | | | | |
| 3. | Existence of habitation | Project Site: No ha | abitation exists | within the | | |
| | & involvement of R&R, | project site and R & I | R is not applicat | ole. | | |
| | if any. | | | | | |
| | | Study Area: | | | | |
| | | Unitation | Distance | Directio | | |
| | | Παυιτατιοπ | (km) | n | | |
| | | Panari | ~1.8 | West | | |
| | | Kota ~2.5 SE | | | | |
| | | Billi ~2.5 North | | | | |
| | | Raksahwa | ~ 2.5 | NE | | |
| | | Bagbaisa | ~3.0 | SW | | |

| S. No. | Particulars | | Remarks | | |
|--------|-------------------------------|-----------|-----------------------|---------------|---|
| | | Telgurw | Telgurwa ~3.0 East | | |
| | | There are | e approx. 25 villages | | |
| | | study are | a. | | |
| 4. | Latitude and Longitude | Point | Latitude | Longitude | - |
| | of all corners of the | 1. | 24°25'53.05"N | 83° 0'36.00"E | |
| | project site | 2. | 24°25'50.88"N | 83° 0'35.80"E | |
| | | 3. | 24°25'50.40"N | 83° 0'37.17"E | |
| | | 4. | 24°25'55.33"N | 83° 0'39.59"E | |
| | | 5. | 24°25'56.03"N | 83° 0'40.35"E | |
| | | 6. | 24°25'59.86"N | 83° 0'50.11"E | |
| | | 7. | 24°26'0.42"N | 83° 0'51.03"E | |
| | | 8. | 24°26'2.30"N | 83° 0'52.98"E | |
| | | 9. | 24°26'3.22"N | 83° 0'49.86"E | |
| | | 10. | 24°26'4.01"N | 83° 0'50.07"E | |
| | | 11. | 24°26'4.46"N | 83° 0'49.30"E | |
| | | 12. | 24°26'5.47"N | 83° 0'51.44"E | |
| | | 13. | 24°26'6.80"N | 83° 0'52.88"E | |
| | | 14. | 24°26'7.05"N | 83° 0'53.70"E | |
| | | 15. | 24°26'7.24"N | 83° 0'53.06"E | |
| | | 16. | 24°26'12.30"N | 83° 0'56.14"E | |
| | | 17. | 24°26'9.26"N | 83° 0'54.70"E | |
| | | 18. | 24°26'13.24"N | 83° 0'53.54"E | |
| | | 19. | 24°26'14.12"N | 83° 0'53.37"E | |
| | | 20. | 24°26'14.99"N | 83° 0'55.44"E | |
| | | 21. | 24°26'17.27"N | 83° 0'56.81"E | |
| | | 22. | 24°26'18.11"N | 83° 0'55.91"E | |
| | | 23. | 24°26'19.60"N | 83° 0'52.27"E | |
| | | 24. | 24°26'20.14"N | 83° 0'52.35"E | |
| | | 25. | 24°26'20.44"N | 83° 0'51.17"E | |
| | | 26. | 24°26'18.86"N | 83° 0'50.73"E | |
| | | 27. | 24°26'20.19"N | 83° 0'46.63"E | |
| | | 28. | 24°26'20.37"N | 83° 0'45.51"E | |
| | | 29. | 24°26'21.47"N | 83° 0'45.79"E | |
| | | 30. | 24°26'21.24"N | 83° 0'46.63"E | |
| | | 31. | 24°26'22.18"N | 83° 0'47.42"E | |
| | | 32. | 24°26'24.89"N | 83° 0'48.32"E | |
| | | 33. | 24°26'25.48"N | 83° 0'48.24"E | |
| | | 34. | 24°26'27.05"N | 83° 0'42.19"E | |
| | | 35. | 24°26'13.06"N | 83° 0'39.09"E | |
| | | 36. | 24°26'12.85"N | 83°0'39.54"E | |
| 5. | Elevation of the project site | 213 m to | 233 m above mean s | sea level. | |

| S. No. | Particulars | Details | | | Remarks | | |
|--------|--|--|---|---|---|--|--|
| 6 | Involvement of Forest | No Forest Land is inv | No Forest Land is involved in the project site. | | | | |
| 0. | land if any. | | | | | | |
| 7. | Water body (Rivers, | Project site: There | Project site: There are 02 seasonal nalas | | | | |
| | Lakes, Pond, Nala, | crossing the project s | ite. | | | | |
| | Natural Drainage, Canal | | | | | | |
| | etc.) exists | Study area: Followi | ng water bodie | es falls within | | | |
| | within the project site as | 10 km radius: | | | | | |
| | well as study area. | Water body | Water bodyDistance (km)Direction | | | | |
| | | Rihand River | ~3.5 | SSW | | | |
| | | Son River | ~5.5 | NE | | | |
| | | Obra Dam | ~4.5 | West | | | |
| | | Naula Nala | ~1.0 | South | | | |
| | | Kairahat Nala | ~4.5 | NE | | | |
| | | Chhotaghagh Nala | ~5.5 | South | | | |
| | | Datasi Nadi | ~8.0 | SSW | | | |
| | | Bandijhariya Nadi | ~8.5 | SSW | | | |
| | | Parewal Nala | ~8.5 | NNW | | | |
| | | Jatiya Nala | ~9.5 | ENE | | | |
| 8. | Existence of ESZ / ESA/ national park / wildlife sanctuary / biosphere reserve / tiger reserve / elephant reserve etc. if any within the study area. | Project Site: Nil Study Area Name of the ESA: ✓ Kaimoor Wildlindistance of ~5.5 project boundary Name of the ESZ: ✓ The extent of its the boundary Sanctuary. There site is located Zone i.e., at a di Status of the Notire garding declaration Kaimoor Wildlife S MoEFCC vide noti 20th March, 2017. Authenticated ministrance of ESZ showing 10 km rad with distance of project and the sanctuary. | fe Sanctuary is km in NE direct y. s ESZ is up to of the Kaim- efore, the projoutside the stance of appro- fication: Fina- on of Eco-sens anctuary has b ification S.O. ap of ESZ from project ius of the projoutsite from state ESZ h | s located at a ction from the 1.0 km from oor Wildlife posed project Eco-sensitive ox. 4.5 km. I Notification itive Zone of een issued by 891(E) dated projecting t site: Map ect site along om Kaimoor | Detailed mitigation measures to minimise the impact on Kaimoor Wildlife Sanctuary have been submitted on PARIVESH. | | |

| S. No. | Particulars | Details | Remarks |
|--------|-------------|--|---------|
| | | authenticated by DFO, Obra Forest Division, | |
| | | Obra-Sonebhadra dated 21 st Dec., 2021. | |
| | | • Status of NBWL approval: Not Applicable | |
| | | • List of Reserved and protected forests: | |
| | | Tapu Reserve Forest (8.0 km in NNW | |
| | | direction) | |

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

| S. No. | Plant Equipment / | Proposed Unit | | | |
|--------|-------------------|-----------------------|-----------------|--|--|
| | Facility | Configuration | Capacity | | |
| 1. | Cement | Cement Mill - 350 TPH | 3.0 Million TPA | | |
| 2. | D.G. Set | - | 250 KVA | | |

14.8.7 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 Material | Quantity Required (Million TPA) | Source | Distance from Site (Kms) | Mode of Transportation |
|-----------|------------------|--|---|--------------------------------|---------------------------|
| 1. | Clinker | 1.7841 | ACC Kymore or ACC Amehta or other sources from the Open market also, if required | 358 km | By Rail / Road |
| 2. | Gypsum | 0.165 | Rajasthan or Open market | 850-1200 km | By Rail / Road |
| 3. | Fly ash | 1.05 | Obra Thermal Power Plant / Others if necessitated | 9.5 km | By Road |
| 4. | Grinding Aid* | 0.0009 | Open Market | ~1000 km | By Road |

Note: * Grinding aid consumption will be very negligible. Trial will be conducted and actual figure would be arrived at. However, it may vary from 0.01 - 0.05% (Avg 0.03%). Further, above ratios of raw materials may change as per quality of cement, required to be maintained as per BIS norms

- 14.8.8 The water requirement for the proposed project is estimated as 319 KLD which will be sourced from Ground Water and Rainwater harvesting. NOC for sinking of well (330 KLD) has been obtained from Ground Water Department, Ministry of Jal Shakti Govt. of Uttar Pradesh dated 23rd March, 2022.
- 14.8.9 The Power Requirement for the proposed project is estimated as 18 MW which will be sourced from Poorvanchal Vidyut Vitaran Nigam Ltd. of UPPCL (GoUP) / Grid and D.G. Set for backup.

| Period |] | Post-Monsoon Seas | on (October to Dec | ember, 2020 |) | | |
|-----------------------|--|---|---|----------------|------------|--|--|
| AAQ parameters at | • $PM_{2.5}$ - 28.6 to 92.8 $\mu g/m^3$ | | | | | | |
| 09 locations | • PM_{10} - 61.7 to 153.6 $\mu g/m^3$ | | | | | | |
| | • SO ₂ - 5.9 to 32.4 μ g/m ³ | | | | | | |
| | • N | • NO _x - 14.3 to 47.8 μ g/m ³ | | | | | |
| | • C | • CO -BDL to 3.12 mg/m^3 | | | | | |
| Incremental GLC | • Pl | M - 1.39 μg/m ³ (~ 50 | 0 m in East Directio | n) | | | |
| level | | | | | | | |
| Ground water quality | • pI | H -7.56 to 7.87 | | | | | |
| at 08 locations | • T | otal Hardness - 216.9 | 97 to 389.87 mg/l | | | | |
| | • C | hlorides – 82.35 to 1 | 13.24 mg/l | | | | |
| | • Fl | uoride - 0.97 to 1.36 | 6 mg/l | | | | |
| | • H | eavy Metals - Iron as | s Fe: 0.27 to 0.47 m | g/l | | | |
| Surface water quality | • pl | H - 7.62 to 7.87 | | | | | |
| at 03 locations | • D | O - 6.4 to 7.0 mg/l | | | | | |
| | • B | OD – 5.6 to 9.2 mg/l | | | | | |
| | • C | OD – 17.8 to 24.8 m | g/l | | | | |
| Noise levels at 08 | Noise Le | vel During Day Time | e - 52.2 to 60.3 Lec | l dB (A) | | | |
| locations | Noise Le | vel During Night Tir | me - 40.8 to 51.3 Le | eq dB (A) | | | |
| Traffic assessment | ✓ Traff | ic study has been cor | nducted at $SH - 5A$ | which is appro | oximately | | |
| study findings | 3.0 k | m in ENE direction f | from the proposed p | project site. | | | |
| | ✓ Trans | sportation of raw ma | aterial & finished p | roduct will b | e done as | | |
| | per d | etails given below: | | | | | |
| | • Cl | inker - 100% by r | ail; road transport | ation only ir | a case of | | |
| | en | nergency | •1 1 . | | C | | |
| | • 6 | ypsum - 100 % by | rail; road transpor | tation only i | n case of | | |
| | | nergency | 4 | | | | |
| | | y asii - 100% Uy 10a rinding Aid - 100% k | u, av road | | | | |
| | ■ Ce | ment - 75% by road | & 25% by rail | | | | |
| | ✓ Exis | ting PCU is 152 PC | $\frac{23}{100}$ by ran. $\frac{100}{100}$ July ran. | and existing | v level of | | |
| | servi | ce (LOS) is B | | i una omoting | | | |
| | | V | С | | | | |
| | Road | (Volume in | (Capacity in | Existing | LOS | | |
| | | PCU/hr.) | PCU/hr.) | V/C Ratio | | | |
| | SH – | 150 | 675* | 0.24 | D | | |
| | 5A | 132 | 023 | 0.24 | D | | |
| | * Ca | pacity as per IRC- 6 | 4-1990 Guidelines. | | | | |
| | 🖌 PCU | load after proposed | d project will be 1: | 52 (Existing) | + 70.625 | | |
| | (Add | litional) PCU/hr. a | nd level of servi | ce (LOS) w | ill be B | | |
| | (Cor | sidering 100% Tran | sportation by road). | | | | |

14.8.10 Baseline Environmental Studies:

| | Road | V (Volume in PCU/hr.) | C (Capacity in PCU/hr.) | Existing V/C Ratio | LOS |
|-----------------|--|---|--|--|---|
| | SH – 5A | 152 + 70.625 = 222.625 | 625 | 0.35 | В |
| | ✓ PCU | load after propos | ed project (after | installation of | Railway |
| | Sidi | ng) will be 152 (Exi | sting) + 38.625 (| Additional) PC | U/hr. and |
| | Leve | el of Service (LOS) | will be B. | | |
| | | V | С | Fristing | |
| | Road | (Volume in | (Capacity in | V/C Ratio | LOS |
| | | PCU/hr.) | PCU/hr.) | V/C Katio | |
| | SH – | 152 + 38.625 = | 625 | 0.30 | В |
| | 5A | 190.625 | 020 | 0.20 | 2 |
| | * Ca | pacity as per IRC- 6 | 4-1990 Guideline | <i>S</i> . | |
| Flora and fauna | <i>Conclusi</i> and Light Good" fo proposed transporte be transport appropria resulting Total 13 S <i>lupus</i> (In <i>chiquera</i> <i>gazelle</i> (C Bear), <i>Pa</i> <i>Pavo</i> cra <i>bengalen</i> per (IWP Plan for a Deputy C on 12 th A Warden recomme Conserva Crores to of 5 year Deputy C on 19 th Se | on: Due to the propo t motor vehicles in the r (SH - 5A). The rail grinding unit (part of ed 100% by Rail whe orted outwards 25% the measures to minin in low level of dust, Schedule-I species vit dian Wolf), Crocod (Red Necked Merlin Chinkara), Gyps beng anthera pardus (Co istatus (Peafowl), sis (Indian Monitor A) Indian Wildlife P all the Schedule - I s Conservator of Fores April, 2022. The san & PCCF, Lucknown dation of EAC, M tion Plan w.r.t to cos Rs. 12.15 Crores) an s). Updated Wildlife Conservator of Fores ept., 2022. | sed project, there is ne existing traffic. (way siding will be of project) and Clin ereas the finished by Rail. Besides the mize traffic flow the noise and gaseous z. Antilope cerviced dylus palustris (Non), Gavialis gange galensis (Vulture), mmon Leopard), Python molurus Lizard) were reco rotection Act, 197 pecies has been put, Obra Forest Div ne has been forw w for authentica M/s. ACC Limite st (which has been the dimplementation e Conservation Pla t, Obra Forest Div | will be addition The LOS value e installed alon hker and Gypsu product i.e., Cen his, company w to the best possi g emissions. <i>apra</i> (Black Buy Marsh Crocodil <i>ticus</i> (Ghariyal <i>Arsh</i> Crocodil <i>ticus</i> (Ghariyal <i>Aleursus ursin</i> <i>Panthera tigri</i> (Python) and rded in the stud 2. Wildlife Con repared and sul vision, Obra, So varded to Chief tion. However ed revised the a increased from a period (10 yea an has been sul vision, Obra, So | of Heavy e is "Very g with the um will be ement will ill take all ble extent ck), <i>Canis</i> le), <i>Falco</i>), <i>Gezella</i> <i>nus</i> (Sloth <i>s</i> (Tiger), <i>Varanus</i> dy area as nservation omitted to onebhadra f Wildlife r, as per Wildlife n Rs. 0.75 urs instead omitted to onebhadra |

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

| S. No. | Type of Waste | Waste | Source | Quantity Generated | Mode of Treatment / Disposal | |
|-----------|------------------|---|----------------------|---|---|--|
| 1. | SW | Dust | Grinding Unit | - | Dust collected from various APCEs will be totally recycled back into the process. | |
| 2. | SW | STP Sludge | STP | ~ 200 kg/annum | Used as manure for greenbelt development / plantation | |
| 3. | HW | Used / Spent Oil (5.1) and Waste Residue containing oil (5.2) Empty Barrels | Plant maintenance | ~ 500 KL / Annum ~ 200 Tonnes/ Annum 40 Nos./ annum | Will be Sold to the CPCB / SPCB authorized recyclers | |
| 4. | | Bottles, paper, cans, textile, etc. | | ~1000 kg/annum | Will be sold to authorized recyclers | |
| 5. | MSW | Kitchen and canteen/ Green waste | Plant Canteen | ~< 50 TPA | Will be disposed after segregating into bio- degradable and non- degradable waste. | |

14.8.12 Public Consultation:

| Details of advertisement given | Public Hearing Notice published in Newspapers "Hindustan" and "The Pioneer" on 06 th Jan., 2022 |
|--------------------------------|--|
| Date of Public Consultation | 11 th Feb, 2022 at 11:00 AM |
| Venue | Primary School at Village: Kota, Tehsil: Obra, District: Sonbhadra |
| Presiding Officer | Additional District Magistrate, District Sonbhadra (Uttar Pradesh) |
| Major issues raised | Employment, Environment, Socio Economic Development, Plantation, etc. |

Action plan as per MoEF&CC O.M. F.No. 22-65/2017-IA.III dated 30/09/2020

As per OM dated 30th September, 2020 and 20th October, 2020, company has prepared physical targets of the socio-economic developmental activities and allocated Rs. 4.65 Crores for implementation of the commitments made during Public Hearing. Detailed activity wise action plan has been given below

| | Concerns | | | | Tentative | | |
|-----|--|--|---|----------|---|----------|---------|
| S. | raised during | Physical activity to be | 1 st Yea | r | 2 nd Yea | ar | Budget |
| No. | the Public | done | Location / | Budget | Location / | Budget | (Rs. in |
| | Hearing | | Area | in Lakhs | Area | in Lakhs | lacs) |
| 1 | Skill Development | Establishment of Skill Development Centre for providing short duration programs for unemployed youth in the field of domestic electrician, plumber, motor mechanic etc. | 01 Centre (Village Salai banwa Kota) | 100 | 01 Centre (Village Obra Panari) | 50 | 150 |
| | | Construction of Community Centers | 02 No. (Village Salaibanwa Kota & Kota Khas) | 30 | 02 No. (Village Obra Panari &Tilgudwa Kota) | 20 | 50 |
| 2 | Rural Infrastructure Development | Repair / Restoring the Village Pathways | 02 No. (Village Salai banwa Kota& Kota Khas) | 20 | 02 No. (Village Obra Panari& Tilgudwa Kota) | 5 | 25 |
| | | Restoration of community play grounds | 02 Nos (Village Kota & Panari) | 10 | 01 No. (Village Dala) | 5 | 15 |
| | | Repair and maintenance of hand pumps with soak pits | 02 No. (Village Salaibanwa Kota & Kota Khas) | 10 | 02 No. (Village Obra Panari &Tilgudwa Kota) | 5 | 15 |
| | | Construction of overhead tanks along with pipe line supply | 01 No. (Village Kota) | 5.0 | 01 No. (Village Panari) | 2.5 | 7.5 |
| | Ground Water Conservation | Restoration of Water ponds / percolation tanks by deslilting, clearing the water paths, strengthening the banks etc., | 01 No. (Village Salaibanwa Kota) | 20 | 02 Nos (Obra Panari & Tilgiudwa) | 20 | 40 |
| 3 | | Renovation and maintainence of the existing check dams | 02 Nos (Obra Panari & Tilgiudwa) | 20 | 01 No. (Village Salaibanwa Kota) | 5 | 25 |
| | | Rain water harvesting on Govt. School Building | 01 No. (Village Salaibanwa Kota) | 7.5 | 02 Nos (Obra Panari& Tilgiudwa) | 5 | 12.5 |
| 4 | Safe Drinking Water | Installation of RO/UV Plants to provide safe drinking water at community places | 01 No. (Village SalaiBanwa Kota) | 10 | 01 No. (Village Obra Panari) | 10 | 20 |
| | | Installation of Smart classes in the Government schools to promote Digital education | 02 Nos (Village Salai banwa Kota & Ninga Panari) | 12 | - | - | 12 |
| 5 | Education | Development & modification of Playground and construction of Cultural Programme Stage | 01 Nos (Tilgidwa) - | 2.5 | 02 Nos (Village Salai banwa Kota &Ninga Panari) | 5 | 7.5 |

| | Concerns | | | Unit of Mea | asurement | | Tentative |
|-----|-----------------------|--|--|--------------------|--|--------------------|------------------|
| S. | raised during | Physical activity to be | 1 st Yea | r | 2 nd Year | | Budget |
| No. | the Public Hearing | done | Location / Area | Budget in Lakhs | Location / Area | Budget in Lakhs | (Rs. in lacs) |
| | Health | Provide Medical Mobile Van (medicine &checkup) for Villages Kota, Panari, Salai Banwa, Obra &Dala | 1 no. All 8 Villages | 45 | - | - | 45 |
| 6 | | Renovation of Primary Health Center / Sub Health Centre | 01 Nos (Salai Banawa Kota | 5 | 02 Nos (Village Kota Khaus & Ninga Panari) | 10 | 20 |
| | | Provide medical investigating equipment and need based support Material set | 01 No (Village Bagbaisa) | 2.5 | 02 Nos (Village Kota Khaus & NingaPanari) | 5 | 7.5 |
| | | Construction of community toilet blocks | 01 No. (Village Obra Panari) | 6 | 01 No. (Village Bagbaisa) | 2 | 8 |
| 7 | Afforestation | Community Block Plantation | 7500 nos. saplings (1250 saplings each at SalaibanwaKota and Ninga Panari) | 3 | 7500 nos. saplings (1250 saplings each at Obra Panari & Tilgudwa Villages) | 2 | 5 |
| | • | r | Fotal | | - | - | 465 |

In addition to above (i.e. Rs. 4.65 Crores), PP is also proposing to adopt the following Gram Panchayats as a part of model village development plan and has earmarked Rs. 6.01 Crores for the same:

- (a) Obra Panari
- (b) Ninga Panari
- (c) Bagbaisa Panari
- (d) Salaibanwa Kota
- (e) Tilgudwa Kota
- (f) Kota Khaus

Detailed action plan for modal village development is given as below:

| | | | Year-wise Targets | | | | | | Tomtotino |
|-----------|---------------------------|--|---|--------------------|---|--------------------|---|--------------------|-------------|
| S. No. | Development Area | ent Physical activity to | 1st Year | | 2nd Year | | 3rd Year | | Budget (Rs. |
| 1.00 | | | Location / Area | Budget in Lakhs | Location / Area | Budget in Lakhs | Location / Area | Budget in Lakhs | in lacs) |
| 1 | Sustainable Livelihood | Job oriented skills development training to unemployed youth on innovative courses | 90 trainees/Co vering all 6 villages | 10 | 90 trainees/Co vering all 6 villages | 10 | 90 trainees/Cov ering all 6 villages | 10 | 30 |
| | | Climate resilience agriculture | 100 farmers/co vering all 6 villages | 5 | 100 farmers/cov ering all 6 villages | 5 | 100 farmers/cove ring all 6 villages | 5 | 15 |

| | | | Year-wise Targets | | | | | | Transfer d'ann |
|----------|---|---|---|--------------------|--|--------------------|---|--------------------|----------------|
| S. No | Development Area | Physical activity to be done | 1st Y | ear | 2nd Ye | ear | 3rd Y | ear | Budget (Rs. |
| 110. | - II Cu | be done | Location / Area | Budget in Lakhs | Location / Area | Budget in Lakhs | Location / Area | Budget in Lakhs | in lacs) |
| | | Capacity Building and livelihood | 100 women/all | 8 | 100 women/all | 10 | 100 women/all 6 | 12 | 30 |
| | | Multipurpose Community Hall | 1/Ninga Panari | 20 | 1/Obra Panari | 22 | 1/ Salai Banwa Kota | 25 | 67 |
| | | Solar Street Lights | 10/All 6 villages | 5 | 10/All 6 villages | 6 | 10/All 6 villages | 7 | 18 |
| 2 | Rural Infrastructure | Repairing of Rural Pathways | 2/Obra Panari& Ninga Panari | 6 | 2/Tilgudwa Kota & Bagbaisa Panari | 6 | 2/ Salai Banwa Kota & Kota Khaus | 6 | 18 |
| | | Creating Model Anganwadi | 2/Tilgudw a Kota & Bagbaisa Panari | 5 | 2/Obra Panari& Ninga Panari | 5 | 2/ Salai Banwa Kota & Kota Khaus | 5 | 15 |
| 3 | Innovative Sanitation & Hygiene | Innovative biodigester in schools/communit y centres/halls | 2/Obra Panari& Ninga Panari | 17 | 2/Tilgudwa Kota & Bagbaisa Panari | 15 | 2/ Salai Banwa Kota & Kota Khaus | 15 | 47 |
| | | Innovative Rain Water Harvesting Structures/measur es | 2/Obra Panari& Ninga Panari | 10 | 2/Tilgudwa Kota & Bagbaisa Panari | 12 | 2/ Salai Banwa Kota & Kota Khaus | 15 | 37 |
| 4 | Ground Water Conservation | Rooftop Rainwater harvesting System in schools/communit y centres/halls | 2/Obra Panari& Ninga Panari | 10 | 2/Tilgudwa Kota & Bagbaisa Panari | 10 | 2/ Salai Banwa Kota & Kota Khaus | 10 | 30 |
| 5 | Safe Drinking Water | Drinking water facility with soak pits | 20/Coverin g all 6 villages | 8 | 20/Coverin g all 6 villages | 8 | 20/Covering all 6 villages | 8 | 24 |
| 6 | Quality Education for competing professional cources like medical/engg/e tc | Strengthening of school infrastructure to create model school (Digital education, Library, STEM laboratory, teacher training etc.l | 2 | 30 | 2 | 30 | 2 | 20 | 80 |
| | | Health Camps | 6/Covering all 6 villages | 3 | 6/Covering all 6 villages | 3 | 6/Covering all 6 villages | 3 | 9 |
| 7 | Health | Preventive health programme for women & Children | 6/Covering all 6 villages | 4 | 6/Covering all 6 villages | 3 | 6/Covering all 6 villages | 3 | 10 |
| | in ann | Strengthening of PHC/CHC/sub centres in terms of infra and quality | 2/Obra Panari& Ninga Panari | 20 | 2/Tilgudwa Kota & Bagbaisa Panari | 15 | 2/ Salai Banwa Kota & Kota Khaus | 15 | 50 |

| | | | Year-wise Targets | | | | | | |
|-----------|--|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------|
| S. No. | Development Area | Physical activity to be done | 1st Year | | 2nd Year | | 3rd Year | | Budget (Rs. |
| 1.00 | | | Location / Area | Budget in Lakhs | Location / Area | Budget in Lakhs | Location / Area | Budget in Lakhs | in lacs) |
| 8 | Plantation | Plantation in schools/college/c ommon public places etc. | 2000 | 2 | 2000 | 2 | 2000 | 2 | 6 |
| 9 | Innovative Integrated Watershed Development | Innovative Climate Smart agriculture/village s development through watershed approach (all 6 villages to be covered0 | All 6 villages | 45 | All 6 villages | 35 | All 6 villages | 35 | 115 |
| | | TOTAL | | 208 | | 197 | | 196 | 601 |

Note: Remarks Integrated climate resilience and smart villages to be developed through innovative project interventions. Above mentioned budget to be utilized among villages based on their population and requirements. Villages can be interchanged as per situation demand and activities may also be changed as per situation and requirement.

14.8.13 The capital cost of the project is Rs. 600.80 Crores and the capital cost for Environmental Protection Measures is proposed as Rs. 25 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 3.0 Crores/annum. The employment generation from the proposed project is about 2000 persons during construction phase and about 250 persons during operational phase. The details of cost for environmental protection measures are as follows:

| S. No. | Description of Item | Cost (Rs. in | Crores) |
|--------|---|--------------|-----------|
| | | Capital Cost | Recurring |
| | | | Cost |
| i. | Air Pollution Control | 14.0 | 2.0 |
| ii. | Water Pollution Control and Water Management | 4.0 | 0.2 |
| iii. | Environment monitoring and Environment Cell | 2.0 | 0.1 |
| iv. | Occupational Health (Initial & Periodical Medical | 2.0 | 0.1 |
| | Check-ups) | 2.0 | 0.1 |
| v. | Greenbelt and Plantation | 0.15 | 0.5 |
| vi. | Others (Housekeeping and Vacuum Sweeping | 2.85 | 0.1 |
| | Machine, Environmental Awareness Program) | 2.00 | 0.1 |
| vii. | Sub Total | 25.0 | 3.0 |

14.8.14 Greenbelt will be developed in 13.04 ha which is about 40 % of the total project area. A 5 - 10 m wide greenbelt around then plant boundary will be developed as greenbelt and green cover as per CPCB/MoEFCC, New Delhi guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 32,600 saplings will be planted and nurtured in 13.04 ha in 03 years. Additionally, two natural nallahs passing through the project site shall be landscaped on both embankments with greenbelt covering 10 m land on both sides of nallahs

having an area of 0.676 ha. Thus, total of 13.716 ha area (40% of total project area) will be developed as greenbelt.

- 14.8.15 It is submitted that there is no violation under EIA notification 2006/no court cases/no show cause/no direction.
- 14.8.16 The proposal was initially considered in the 10th meeting of the EAC for Industry-I sector held on 1st-3rd August, 2022 wherein the Committee deferred the proposal on account of technical shortcomings. The deliberations and recommendations of the EAC are as follows:

Deliberations by the Committee (EAC during 1st - 3rd August 2022)

- 14.8.17 The Committee noted the following:
 - 1. The EAC noted that the water requirement for the proposed project is estimated as 319 KLD which will be sourced from Ground Water for which NOC for sinking of well (330 KLD) has been obtained. However, the Committee noted that condition was stipulated in ToR which reads as "*There are two Rivers present near the project site, PP shall explore the feasibility of water withdrawal from any surface source. No ground water withdrawal shall be permitted for proposed the project except upto 50 KLD of water only for domestic purposes.*" Project proponent shall submit justification in compliance of the said ToR condition.
 - 2. The EAC is of the view that water balance diagram is not appropriate, only 16% water is being recycled. There is no provision for water requirement for greenbelt. Therefore, PP shall submit revised water balance diagram. EAC advised the Consultant to advise the PP for more recycling of waste water and same to be included in the water balance and water auditing.
 - 3. The EAC deliberated on the PP's proposal for D.G Set of 250 KVA and sought justification for need of the same, as the project is located in CPA area.
 - 4. There are 02 seasonal nalas crossing the project site. PP shall submit a robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures.
 - 5. Rihand River, Son River, Obra Dam, Naula Nala, Kajrahat Nala, Chhotaghagh Nala, Datasi Nadi, Bandijhariya Nadi, Parewal Nala and Jatiya Nala exists within the study area of 10 km from the project site. The water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and submitted.
 - 6. As the Unit is located in CPA, specific action Plan/mitigation measures as prescribed for the projects falling in CPA, shall be submitted as per OM 2019 and 5th July 2022.
 - 7. The traffic study submitted is not justified by the project proponent. PP shall submit the revised traffic study analysis.
 - 8. The EAC deliberated on the Wildlife conservation plan which has been forwarded to Chief Wildlife Warden & PCCF, Lucknow for authentication. The EAC opined that Wildlife

Conservation Plan shall be improved for effective implementation of the conservation measures.

- 9. There are approx. 25 villages in 10 km radius study area. Project proponent has submitted that Village Obra Panari, Ninga Panari, Bagbaisa Panari, Salai Banwa Kota, Tilgudwa Kota & Kota Khaus will be adopted. PP shall be developed a robust action plan to develop these villages into model villages.
- 10. Since the two nallahas are passing through the project area. The same need to be well protected in all sense. A contour map shall be prepared of required interval and water conservation plan shall be made to conserve the two nallaha. Further it shall be ensured that no waste shall be letting into the said nallaha from the industry.
- 11. Baseline values for Air Quality parameters specifically PM are recorded way high beyond the standards. Project proponent shall submit a mitigation plan to minimise the emission and impact on the ambient air quality.
- 12. Incremental GLC is reported for PM by the project proponent. PP shall submit the incremental GLC for SO₂, NOx and CO shall also be submitted.
- 13. The EAC noted that total project area is 32.6 ha; out of which, 3.43 ha is Government land and remaining 29.17 ha is Private non -irrigated & non-fertile land which will be changed to industrial after establishment of Grinding Unit. Project Proponent shall submit the conversion status of the land.
- 14. The status of approvals obtained for Railway Siding shall be submitted by the project proponent.

Recommendations of the Committee (EAC during 1st -3rd August 2022)

- 14.8.18 In view of the foregoing and after detailed deliberations, the committee recommended to **defer the proposal** and sought requisite information on the points referred at para no. 10.9.16 above. The proposal shall be considered after submission of requisite information in next EAC meeting.
- 14.8.19 The proponent submitted the ADS reply *vide* letter dated 19th September, 2022 uploaded on PARIVESH on 19th September, 2022. Point-wise reply of ADS is given as below.

| S. No. | Additional Details Sought | Reply submitted by the PP |
|-----------|--|---|
| 1. | The EAC noted that the water requirement for the proposed project is estimated as 319 KLD which will be sourced from Ground Water for which NOC for sinking of well (330 KLD) has been obtained. However, the Committee noted that condition was stipulated in ToR which reads as "There are two Rivers present near the project site, PP shall explore the feasibility of water | M/s. ACC Ltd. have explored the possibility of withdrawing water from the following two surface water bodies present nearby: <u>Water from Rihand River / Obra Dam</u>: As per Chief Engineer, Uttar Pradesh Jal Vidyut Nigam Limited, it is not possible to give permission for withdrawal of water from Rihand River / Obra Dam. The letter was issued in this regard <i>vide</i> letter no. 55/Superintending Engineer (Commercial)/ACC Ltd. dated 08th April, 2022. |

| S. No. | Additional Details Sought | Reply submitted by the PP |
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| | withdrawal from any surface source. No ground water withdrawal shall be permitted for proposed the project except upto 50 KLD of water only for domestic purposes." Project proponent shall submit justification in compliance of the said ToR condition. | Water from Son River: As per Chief Engineer, Water Resource, it is not possible to give permission for withdrawal of water from Son River. A letter was issued in this regard having <i>vide</i> letter no. 422/ANAMI-8/Uo-6/A-4 NOC, dated 24th June, 2022. Both the river authorities expressed their inability to provide river water. With respect to the ground water withdrawal for the project, ACC Limited have obtained NoC for sinking of well (330 KLD) from Ground Water Department, Ministry of Jal Shakti Govt. of Uttar Pradesh dated 23rd March, 2022. Also, the proposed project site falls under Chopan Block which is Safe Zone, as per the CGWA. Therefore, the company now humbly request the Hon'ble EAC members to allow to abstract ground water. |
| 2. | The EAC is of the view that water balance diagram is not appropriate, only 16% water is being recycled. There is no provision for water requirement for greenbelt. Therefore, PP shall submit revised water balance diagram. EAC advised the Consultant to advise the PP for more recycling of waste water and same to be included in the water balance and water auditing. | As advised by EAC, ACC Limited have reviewed the water requirement and revised the Water balance diagram accordingly. The total water requirement i.e., 319 KLD will now be fulfilled from Groundwater and Rainwater harvesting. The company has made attempts to reduce the freshwater requirement by increasing the rainwater harvesting potential by proposing 02 ponds and 10 recharge pits. Also, with regard to water balance, company would like to submit that as this is Stand-alone Grinding Unit, where water will be used only for mill spray and process cooling; and the cooling water is continuously recycled in closed loop circuit after cooling in cooling tower. Thus, the possibility of recovering and recycling the entire water from STP and water stored in the Rainwater harvesting ponds will be used for greenbelt development / plantation. |
| 3. | The EAC deliberated on the PP's proposal for D.G Set of 250 KVA and sought justification for need of the same, as the project is located in CPA area. | • The DG power during plant operation is used occasionally, in case of grid power failure or other emergency situation, for meeting the requirement of lighting, UPS and mandatory AC requirement. |

| S. No. | Additional Details Sought | Reply submitted by the PP |
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| | | The total load during these situations works out to be 220 KVA. Thus, the company have selected the next standard rating D.G. set of 250 KVA only for emergency back-up. Also, this small capacity D.G. Set is not capable for running any cement plant equipment during power failure. |
| 4. | There are 02 seasonal nalas crossing the project site. PP shall submit a robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures. | Two seasonal nallas passing through the project site will not be disturbed in any way and will be retained as it is. ACC Limited is proposing following measures for conservation of the two seasonal nalas passing through the project site: An overpass will be made over these nalas for the movement of men and machinery. 10-meter-wide greenbelt will be developed on each side of the banks of nallas. The bund height will be increased to prevent the entry of catchment rain water into the nallah. Contour farming (where required) & Slope protection will be done by grass turfing. Periodical de-silting will be done to maintain these nalas as per the current condition. Nala Conservation Scheme in detail is submitted with ADS Reply. |
| 5. | Rihand River, Son River, Obra Dam, Naula Nala, Kajrahat Nala, Chhotaghagh Nala, Datasi Nadi, Bandijhariya Nadi, Parewal Nala and Jatiya Nala exists within the study area of 10 km from the project site. The water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be prepared and submitted. | The proposed project is a Standalone Grinding Unit in strict compliance with Zero Liquid Discharge. Since, it is based on dry process technology, thus, no process waste water will be discharged outside the plant premises. Storm water management is in place along with recharge pits. Similarly, company will also provide roof top rain water harvesting at the respective buildings, so that the water will be harvested without adding to the surface runoff. This will help in ensuring that the rain water flowing in the nallahs during the rainy season. Thus, proposed plant operations will not lead to disturbance of any of the water bodies which exists within the study area of 10 km from the project site |

| S. No. | Additional Details Sought | Reply submitted by the PP |
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| 6. | As the Unit is located in CPA, specific action Plan/mitigation measures as prescribed for the projects falling in CPA, shall be submitted as per OM 2019 and 5 th July 2022. | The detailed action plan of the CEPI recommendations in compliance with the Ministry OM submitted with ADS Reply uploaded on PARIVESH portal. |
| 7. | The traffic study submitted is not justified by the project proponent. PP shall submit the revised traffic study analysis. | Due to the proposed project, there will be addition of Heavy and Light motor vehicles in the existing traffic. The LOS value is "Very Good" for (SH - 5A). The railway siding will be installed along with the proposed grinding unit (part of project) and Clinker and Gypsum will be transported 100% by Rail whereas the finished product i.e., Cement will be transported outwards 25% by Rail. Besides this, company will take all appropriate measures to minimize traffic flow to the best possible extent resulting in low level of dust, noise and gaseous emissions. |
| 8. | The EAC deliberated on the Wildlife conservation plan which has been forwarded to Chief Wildlife Warden & PCCF, Lucknow for authentication. The EAC opined that Wildlife Conservation Plan shall be improved for effective implementation of the conservation measures. | M/s. ACC Limited have revised the Wildlife Conservation Plan w.r.t to cost (which has been increased from Rs. 0.75 Crores to Rs. 12.15 Crores) and implementation period (10 years instead of 5 years). Updated Wildlife Conservation Plan has been submitted to Deputy Conservator of Forest, Obra Forest Division, Obra, Sonebhadra on 19 th Sept., 2022. |
| 9. | There are approx. 25 villages in 10 km radius study area. Project proponent has submitted that Village - Obra Panari, Ninga Panari, Bagbaisa Panari, Salai Banwa Kota, Tilgudwa Kota & Kota Khaus will be adopted. PP shall be developed a robust action plan to develop these villages into model villages in next 10 years. | Company has proposed to develop the villages i.e. Obra Panari, Ninga Panari, Bagbaisa Panari, Salai Banwa Kota, Tilgudwa Kota & Kota Khaus as a model villages and proposed Rs. 3.98 Crores for the same. The developmental activities like <i>Skill Development, Rural Infrastructure</i> <i>Development, Ground Water Conservation, Safe Drinking</i> <i>Water, Education, Health and Afforestation will be done.</i> |
| 10. | Since the two nallahs are passing through the project area. The same need to be well protected in all sense. A contour map shall be prepared of required interval and water conservation plan shall be made to conserve the two nallah. Further it shall be ensured that no waste shall be letting into the said nallah from the industry. | Two seasonal nallas passing through the project site will not be disturbed in any way and will be retained as it is. ACC Limited is proposing following measures for conservation of the two seasonal nalas passing through the project site: An overpass will be made over these nalas for the movement of men and machinery 10-meter-wide greenbelt will be developed on each side of the banks of nallas |

| S. No. | Additional Details Sought | Reply submitted by the PP |
|-----------|--|---|
| S. No. | Additional Details Sought Baseline values for Air Quality parameters specifically PM are recorded way high beyond the standards. Project proponent shall submit a mitigation plan to minimise the emission and impact on the ambient air quality. | Reply submitted by the PP The bund height will be increased to prevent the entry of catchment rain water into the nallah Contour farming (where required) & Slope protection will be done by grass turfing. Periodical de-silting will be done to maintain these nalas as per the current condition. Mitigation measures to be adopted by ACC Limited to minimize the emission and impact on the ambient air quality are given as follows: ACC Limited proposes to achieve stack emissions of <=25 mg/Nm³ against the stipulated stack emission norms of <=30 mg/Nm³. To achieve the <=25 mg/Nm³ stack emissions, company will install high efficiency i.e., 99.99% Pulse Jet Bag Houses / Bag filters. The company will install CEMS on Cement Mill stack, which is the main source of dust emissions; and the same will be connected to CPCB / SPCB server to report the real time emissions. |
| | | Fugitive emissions control measures: ✓ Installation of bag filters at all material transfer points |
| | | Unloading of materials by using Wagon Tippler with high efficiency bag filter |
| | | Transfer of Fly ash into Fly Ash silo through pneumatic conveying system |
| | | Transportation of materials through covered conveying systems |
| | | Providing covered storage for various materials Road sweeping machines (02 Nos) and manual sweeping machines (10 Nos) will be used. |
| | | Use of water sprinkler (100 Nos) on the haul road to control fugitive emissions in the surrounding environment. |
| | | Greenbelt development in 13.04 ha area (i.e., 40% of the total project area) @2500 saplings / ha. Additional plantation will be done on both the sides of the nallahs covering area of 0.67 ha considering 10 m land on both side of two nallahs @1500 saplings / ha |
| 12. | Incremental GLC is reported for PM by the project proponent. PP shall | The proposed project is Stand-alone Grinding Unit, in which only source of emission is PM; therefore, |
| | submit the incremental GLC for | incremental GLC for SO ₂ , NOx and CO is not applicable. |

| S. No. | Additional Details Sought | Reply submitted by the PP |
|-----------|--|---|
| | SO ₂ , NOx and CO shall also be submitted. | |
| 13. | The EAC noted that total project area is 32.6 ha; out of which, 3.43 ha is Government land and remaining 29.17 ha is Private non -irrigated & non-fertile land which will be changed to industrial after establishment of Grinding Unit. Project Proponent shall submit the conversion status of the land. | Out of the total project area i.e., 32.6 ha; 27.31 ha area is Private land in which 3.34 ha land already converted to non-agriculture and for the balance 23.97 ha land (Village Panari - 10.47 Ha & Village Kota - 13.5 Ha), NA conversion is approved by Revenue Inspector, Obra & the same has been forwarded to Tehsildar for final approval. Besides the above, 3.43 ha land is allotted by the Government for Industrial purpose and the other Govt. Land Parcel of 1.86 ha (Khasra No. 81 & Khasra No. 229) has already been allotted to ACC Ltd. |
| 14. | The status of approvals obtained for Railway Siding shall be submitted by the project proponent. | Various necessary approval process activities are completed like: ✓ Engagement of Railway Consultants, ✓ Submission of Feasibility Report to Railways, ✓ Railway Acceptance of Submitted FSR, ✓ Submission of 1% Railway Fee, ✓ Obtaining In-Principle Approval from Railways, ✓ Finalization of DPR-ESP & Submission to Railways, ✓ Scrutiny of DPR by Railways & Receipt of Comments, ✓ Submission of Revised DPR-ESP to Railways & Approval of DPR-ESP by Railways Further action to be taken is given as below: ✓ Project commissioning will be done by December, 2023. |

14.8.20 Based on the above information, the proposal is considered in the 14th meeting of the EAC for Industry-I sector held on 29-30th September, 2022. The deliberations and recommendations made by the EAC are as follows:

Written representations:

- 14.8.21 During the meeting, based on the deliberations made by the EAC, the project proponent vide letter dated 30.09.2022 through email dated 30.09.2022 submitted the following information:
 - The PP has submitted the revised action plan as per OM dated 30th September, 2020 and 20th October, 2020. The company has prepared physical targets of the socio-economic developmental activities and allocated Rs. 4.65 Crores for implementation of the commitments made during Public Hearing. Detailed activity wise action plan has been updated at para 14.8.12 above.
 - In addition to above (i.e. Rs. 4.65 Crores), company is also proposing to adopt Obra Panari, Ninga Panari, Bagbaisa Panari, Salaibanwa Kota, Tilgudwa Kota and Kota Khaus Gram

Panchayats as a part of model village development plan and has earmarked Rs. 6.01 Crores for the same. Detailed action plan for modal village development has been incorporated at para 14.8.12 above.

Deliberations by the Committee

- 14.8.22 The Committee noted the following:
 - 1. The instant proposal is for setting up of a new Standalone Grinding Unit with Cement Production Capacity of 3.0 Million TPA and D.G. Set of 250 KVA along with Railway Siding.
 - 2. 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.
 - 3. 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.
 - 4. 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.
 - 5. The EAC noted that the instant project falls within the boundary limits of Sonebhadra District Severely Polluted Area having CEPI score of 62.59. PP has submitted the specific action Plan/mitigation measures as prescribed for the projects falling in SPA/CPA, as per OM dated dated 31st October, 2019 & 30th December, 2019 and 5th July 2022.
 - 6. Kaimoor Wildlife Sanctuary is located at a distance of ~5.5 km in NE direction from the project boundary. As per the submission of PP, the EAC recorded that the extent of its ESZ is up to 1.0 km from the boundary of the Kaimoor Wildlife Sanctuary. Therefore, the proposed project site is located outside the Eco-sensitive Zone. Map showing 10 km radius of the project site along with distance of project site from Kaimoor Wildlife Sanctuary & its ESZ has been duly authenticated by DFO, Obra Forest Division, Obra-Sonebhadra dated 21st December, 2021.

It was also appraised to the EAC during the meeting that the Ministry issued an OM vide No. 11/20/2018-ESZ dated 29th June, 2022 regarding the compliance of judgement dated 03.06.2022 of the Hon'ble Supreme Court in IA No. 1000 of 2003 in W.P. (C) No. 202 of 1995: T.N Godavarman vs. Union of India & Ores. Hon'ble Supreme Court, in its order dated 3rd June 2022, inter-alia, directed that each Protected Forest i.e., National park

or Wild life sanctuary must have an ESZ of minimum 1 km measured from the demarcated boundary of such protected forest in which the activities prescribed. Further, mining within national parks and wildlife sanctuaries shall not be permitted and no new permanent structure shall be permitted to come up for whatsoever purpose within ESZ and power has been vested in Central Empowered Committee to decide any ESZ where the above norms cannot be made applicable. Since this order will have an adverse impact on the existing mechanism of approving ESZ, the Ministry is planning to file an appeal/review in this regard. Thus, the Committee also deliberated the proposal taking into account the Ministry's OM dated 29th June, 2022 in pursuance to judgment of Hon'ble Supreme Court dated 3rd June, 2022. EAC is of the view that the said Unit is located outside the ESZ.

- 7. There are 02 seasonal nalas crossing the project site. PP has submitted Nala Conservation Scheme for conservation of the two seasonal nalas passing through the project site. The EAC deliberated on the same and found it satisfactory.
- 8. Rihand River, Son River, Obra Dam, Naula Nala, Kajrahat Nala, Chhotaghagh Nala, Datasi Nadi, Bandijhariya Nadi, Parewal Nala and Jatiya Nala exists within the study area of 10 km from the project site. The EAC is of the opinion that water bodies shall not be disturbed. Mitigation measures w.r.t. safeguarding the water bodies shall be implemented.
- 9. The EAC noted that the water requirement for the proposed project is estimated as 319 KLD which will be sourced from Ground Water for which NOC for sinking of well (330 KLD) has been obtained. However, the Committee noted that condition was stipulated in ToR which reads as "There are two Rivers present near the project site, PP shall explore the feasibility of water withdrawal from any surface source. No ground water withdrawal shall be permitted for proposed the project except upto 50 KLD of water only for domestic purposes." M/s. ACC Ltd. submitted that they have explored the possibility of withdrawing water from the two surface water bodies present nearby. Both the river authorities expressed their inability to provide river water vide letter dated 08.04.2022 and 24.06.2022. PP has further submitted that the proposed project site falls under Chopan Block which is Safe Zone, as per the CGWA and requested EAC to allow to abstract ground water.
- 13 Schedule-I species viz. Antilope cervicapra (Black Buck), Canis lupus (Indian Wolf), Crocodylus palustris (Marsh Crocodile), Falco chiquera (Red Necked Merlin), Gavialis gangeticus (Ghariyal), Gezella gazelle (Chinkara), Gyps bengalensis (Vulture), Melursus ursinus (Sloth Bear), Panthera pardus (Common Leopard), Panthera tigris (Tiger), Pavo cristatus (Peafowl), Python molurus (Python) and Varanus bengalensis (Indian Monitor Lizard) were recorded in the study area as per (IWPA) Indian Wildlife Protection Act, 1972. Wildlife Conservation Plan for all the Schedule - I species has been prepared and submitted to Deputy Conservator of Forest, Obra Forest Division, Obra, Sonebhadra on 12th April, 2022. The same was forwarded to Chief Wildlife Warden & PCCF, Lucknow for authentication. However, as per recommendation of EAC, M/s. ACC Limited revised the Wildlife Conservation Plan w.r.t to cost (which has been increased from Rs. 0.75 Crores to Rs. 12.15 Crores) and implementation period (10 years instead of 5 years). Updated Wildlife Conservation Plan has been submitted to Deputy Conservator of Forest, Obra Forest Division, Obra, Sonebhadra on 19th September, 2022.

- 11. Greenbelt will be developed in 13.04 ha which is about 40 % of the total project area. Total no. of 32,600 saplings will be planted and nurtured in 13.04 ha in 03 years. Additionally, two natural nallahs passing through the project site will be landscaped on both embankments with greenbelt covering 10 m land on both sides of nallahs having an area of 0.676 ha. Thus, total of 13.716 ha area (40% of total project area) will be developed as greenbelt.
- 12. The Committee has found that the baseline data and incremental GLC due to the proposed project within NAAQ standards.
- 13. There are approx. 25 villages in 10 km radius study area. Project proponent has submitted that Village Obra Panari, Ninga Panari, Bagbaisa Panari, Salaibanwa Kota, Tilgudwa Kota and Kota Khaus will be adopted. PP has submitted an action plan to develop these villages into model villages in next 10 years.
- 14. The committee deliberated details of carbon foot prints and carbon sequestration study w.r.t. proposed project and found them to be satisfactory.
- 15. 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.
- 16. The Committee deliberated upon the written submission of the Project Proponent and found it satisfactory.
- 17. 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.
- 18. 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

14.8.23 In view of the foregoing and after detailed deliberations, the committee recommended the instant proposal for grant of Environment Clearance subject to uploading the written submission on portal under the provisions of EIA Notification, 2006 subject to 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 conditions:

- (i) Project proponent shall comply with the direction of Hon'ble Supreme Court in IA No. 1000 of 2003 in W.P. (C) No. 202 of 1995: T.N Godavarman vs. Union of India & Ors judgment dated 3rd June, 2022.
- (ii) The PP 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 19th August, 2019, the compliance of all the conditions applicable to CEPI shall be implemented as committed. Greenbelt shall be developed in at least 40% of the total project area.
- (v) Nallah Conservation Scheme for conservation of the two seasonal nalas passing through the project site shall be strictly implemented.
- (vi) Rihand River, Son River, Obra Dam, Naula Nala, Kajrahat Nala, Chhotaghagh Nala, Datasi Nadi, Bandijhariya Nadi, Parewal Nala and Jatiya Nala exists within the study area of 10 km from the project site. A robust and full proof Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.
- (vii) As committed, company shall take all appropriate measures to minimize traffic flow to the best possible extent resulting in low level of dust, noise and gaseous emissions.
- (viii) As committed, PP shall adopt Obra Panari, Ninga Panari, Bagbaisa Panari, Salaibanwa Kota, Tilgudwa Kota and Kota Khaus villages and develop them into model villages. PP shall implement the action plan submitted for the development of the villages.
 - (ix) 319 KLD which will be sourced from Ground Water for which NOC for sinking of well (330 KLD) has been obtained. Necessary permission shall be obtained from the Competent Authority in this regard. PP shall explore the possibility of shifting to alternate source of water to reduce dependency on groundwater.
 - (x) Three tier Green Belt shall be developed in a time frame of one year covering at least 40% of the total project area 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. Additionally, two natural nallahs passing through the project site shall be landscaped on both embankments with greenbelt covering 10 m land on both sides of nallahs having an area of 0.676 ha.
 - (xi) Greening and Paving shall be implemented in the plant area to arrest soil erosion and dust pollution from exposed soil surface.
- (xii) 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. MSW waste shall be treated in digester and recovered gas shall be used in the canteen.

- (xiii) The PP shall also undertake rain water harvesting measures as per the plan submitted in the EIA/EMP report and reduce water dependence from the outside source.
- (xiv) All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the run off material.
- (xv) Slip roads shall be provided at the gates and along crossings on main roads.
- (xvi) All internal and connecting road to the Highway shall be black topped/ concreted with suitable load in term of Million Standard Axle (MSA) as per IRC guidelines.
- (xvii) Performance monitoring of pollution control equipment shall be taken up yearly and compliance status in this regard shall be reported to the concerned Regional Office of the MoEF&CC.
- (xviii) Dioxin and furans shall be monitored twice a year during co-processing of hazardous waste and report shall be submitted to the Regional Office of the MoEF&CC.
 - (xix) Particulate matter emissions from all the stacks shall be less than 30 mg/Nm³.
 - (xx) DeSOx system shall be provided dry type. NOx level shall be maintained below 600 mg/Nm³ by using best available technology.
 - (xxi) Petcoke dosing shall be controlled automatically to control SO2 emission from chimney within the prescribed limits.
- (xxii) PP shall identify the Source of fluoride emissions and action plan to mitigate the same shall be implemented.
- (xxiii) A proper action plan must be implemented to dispose of the electronic waste generated in the industry.
- (xxiv) All the recommendations made in the risk assessment report shall be implemented and compliance status in this regard shall be furnished to the Regional Office of the MoEF&CC along with the six monthly compliance report.
- (xxv) All the commitments made to the public during the Public Hearing/Public Consultation 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.
- (xxvi) 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.
- (xxvii) 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.

(xxviii) The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.

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 24x7 continuous emission monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement); as amended from time to time; and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system carryout to 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 SO2 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°each), covering upwind and downwind directions.
- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.

- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
 - ix. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
 - x. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
 - xi. Provide Low NOX burners as primary measures and SCR /NSCR technologies as secondary measure to control NOX emissions.
- xii. Have separate truck parking area and monitor vehicular emissions at regular interval.
- xiii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport
- xiv. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement) as amended from time to time; and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall regularly monitor 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.
- iii. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- iv. Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off
- v. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- vi. The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

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.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

i. Waste heat recovery system shall be provided for kiln and cooler.

- ii. The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- iv. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

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

VII. Green Belt

- i. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.
- Project proponent shall submit a study report within six months on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.

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.
- 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 villages based on the socio-economic 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 checks and balances and to bring into focus to have proper any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders

/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

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.

Modification of TOR Proposal

Agenda No. 14.9

14.9 Proposed for Amendment in TOR (in violation category) of Manufacturing of production of either or Combination of High Carbon Ferro Manganese (24000 TPA) OR Ferro Silicon (7750 TPA) OR Silico Manganese (15000 TPA) OR Pig Iron (24000 TPA) with installation of 2 x 6 MVA Capacity Submerged Arc Furnace by M/s Vinay Alloys, located at Plot No. D – 17, Umred MIDC, Nagpur District, Maharashtra– Consideration of TOR.

[Proposal No. IA/MH/IND/291820/2022; File No. IA-J-11011/14/2021-IA-II(IND-I)]

14.9.1 M/s Vinay Alloys has made an application online *vide* proposal no. IA/MH/IND/291820/2022 dated 16.09.2022 along with Form 3, revised Form-1 and revised PFR seeking amendment in Terms of Reference accorded by the Ministry vide letter no. J-11011/14/2021-IA.II(I) dated 09.01.2021.

Details submitted by Project Proponent

- 14.9.2 M/s Vinay Alloys had earlier applied for grant of ToR vide proposal no. IA/MH/IND/191425/2021 dated 05.01.2021 for Manufacturing of either or Combination of High Carbon Ferro Manganese (24000 TPA) OR Ferro Silicon (7750 TPA)OR Silico Manganese (15500 TPA) OR Pig Iron (24000 TPA) with installation of 2 X 6 MVA Capacity Submerged Arc Furnace located at Plot No. D -17, Umred, MIDC, District Nagpur, Maharashtra. Accordingly, Standard Terms of Reference was issued vide letter no. J-11011/14/2021-IA.II(I) dated 09.01.2021.
- 14.9.3 The instant proposal is for seeking modification in ToR dated 09.01.2021 for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07/07/2021 pertaining to consideration of violation cases as PP has

reported that the company had started the construction of the proposed project on the basis of Consent to Establish inadvertently. Now, the construction work has been stopped. The company is ready to comply all the points of TOR for Violation Project and will follow SOP dated 07.07.2021 for identification & handling of Violation cases under EIA notification 2006.

- 14.9.4 PP has further submitted that the company is ready to pay penalty 1% of total amount invested (Rs. 1.75 Cr) and damage analysis cost towards the Remediation of violation done as per the Damage Analysis Study.
- 14.9.5 Project Proponent reported that there is no change in configuration and capacity of the proposed project.
- 14.9.6 **Reason for seeking amendment in ToR:** The company had started the construction of the proposed project on the basis of Consent to Establish inadvertently. Now, the construction work has been stopped. The company is ready to comply all the points of TOR for Violation Project and will follow SOP dated 07.07.2021 for identification & handling of Violation cases under EIA notification 2006.
- 14.9.7 PP has reported that there is no violation under EIA, 2006/court case/show cause/direction related to the project under consideration.

Deliberation by the Committee

- 14.9.8 The Committee noted the following:
 - M/s Vinay Alloys was granted ToR vide letter no. J-11011/14/2021-IA.II(I) dated 09.01.2021 for Manufacturing of either or Combination of High Carbon Ferro Manganese (24000 TPA) OR Ferro Silicon (7750 TPA)OR Silico Manganese (15500 TPA) OR Pig Iron (24000 TPA) with installation of 2 X 6 MVA Capacity Submerged Arc Furnace.
 - ii. The instant proposal is for seeking modification in ToR dated 09.01.2021 for appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07/07/2021 pertaining to consideration of violation cases as PP has reported that the company had started the construction of the proposed project on the basis of Consent to Establish inadvertently. Now, the construction work has been stopped.
 - iii. PP decided to come before the committee for this case under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07/07/2021 pertaining to consideration of violation cases. The company is ready to comply all the points of TOR for Violation Project and will follow SOP dated 07.07.2021 for identification & handling of Violation cases under EIA notification 2006. PP is ready to pay penalty 1% of total amount invested (Rs. 1.75 Cr) and damage analysis cost towards the Remediation of violation done as per the Damage Analysis Study.
 - iv. The EAC further noted that there is no change in the configuration & capacity of units in granted ToR.

Recommendations of the Committee

- 14.9.9 After deliberations, the Committee **recommended** for modification in ToR dated dated 09.01.2021 w.r.t. appraisal of proposal under violation category as per the provisions contained in the MoEF&CC Standard Operating Procedures dated 07/07/2021 pertaining to consideration of violation cases. All the terms and conditions stipulated in ToR letter no. J-11011/14/2021-IA.II(I) dated 09.01.2021 shall remain the same with stipulation of the following specific conditions:
 - i. The State Government/SPCB shall take action against the project proponent under the provisions of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC.
 - ii. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR).
 - iii. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
 - iv. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter (13) in the EIA report by the accredited consultants.
 - v. Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.
 - vi. The project proponent shall require to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority.
 - vii. Project proponent shall calculate penalty provisions i.e., 1% of project cost attributable to the expansion, incurred up to the date of filing of application along with the EIA/EMP report as contained in the paragraph 12 of the Standard Operating Procedure dated 7/07/2021 shall be complied with.

Any other item with permission of the Chair

Agenda No. 14.10:

Factual Corrections in the Minutes of Agenda No. 13.14 of the EAC Meeting held on September 14-15, 2022

Expert opinion/clarification regarding coverage of Activities under Secondary Metallurgy as per the EIA Notification-2006 and amended thereof by M/s Ratnamani Metals and Tube Limited having registered office at 17, Rajmugat Society, Naranpura Cross Road, Naranpura Gujarat, Pin- 380013, Gujarat- regarding.

[File No: IA-Z-11013/27/2022-IA-II(IND-I), M/s Ratnamani Metals and Tube Limited]

The instant proposal was earlier placed in the EAC Meeting held on September 14-15, 2022. Further based on the request of PP, EAC noted that there is factual typing error in the earlier Minutes of the EAC Meeting and accordingly revised the minutes of the EAC and may be read as below:

M/s Ratnamani Metals and Tube Limited vide letter dated 14.03.2022 has requested for Expert opinion/clarification regarding coverage of their project activities under Secondary Metallurgy as per the EIA Notification-2006 and amended thereof.

The project of M/s Ratnamani Metals and Tube Limited having registered office at 17, Rajmugat Society, Naranpura Cross Road, Naranpura Gujarat, Pin- 380013 involves manufacturing and export of Carbon steel, Stainless-Steel Pipes & Tubes having three manufacturing units situated in District Mehsana (2 Units) & another in Kutch Gujarat, India.

Details submitted by Project Proponent

M/s Ratnamani Metals and Tube Limited had filed application with GPCB for CTO. The GPCB interpreted that for making of Pipe/tubes, it is mandatory to seek prior Environment Clearance, taking a view that such activity falling under metallurgical process under Notification S. O 1533 dated 14th September, 2006 issued by MoEF&CC under Schedule- Projects of Activates in Para 3 (a) Metallurgical Industries (ferrous & non-ferrous).

The project proponent has requested for expert opinion / clarification on the following:

- 1. To considering the process flow of the industry and clarify it does not fall under the definition of secondary Metallurgy
- 2. To define the same in the proposed amendments in EIA notification.
- 3. Requesting to advice concerned authority(GPCB) to issue CTE/CTO amendments.

M/s Ratnamani Metals and Tube Limited has further submitted the following points.

- Main Raw material used are only Round bar/Coils/Plates/seamless and welded tube/pipes/ Mother Hollows. They don't use ore reduction process, scarp, salvage and ingots as Raw material as mentioned in Para 31 of IL&ES.
- b. The secondary metallurgy as per cat (3(a)) includes process of iron making, rerolling, and conventional casting in foundries as an integrated process. PP is not carrying out any kind of melting, iron making, re-rolling, forging, and conventional casting.
- c. Under Customs Traffic Act various products are harmonised as per internationally accepted product categories which is understood as Harmonised System Nomenclature (HSN) Accordingly, the Pipes and tubes are classified under Chapter 73 as 'Article of Iron Steel'. Whereas all Steel making activities that have their final product as Round bar, SS HR/CR Coils Plates and Carbon Steel HR/Cils Plates are classified as'lron & Steel' in Chapter 72 of the Tariff.
- d. Consider the aforesaid clause c., PP can infer that all steel making activities/process/products are considered separate than the products used as the 'end products'. Considering the same inference, PP feel 'Pipes and Tubes' should not be considered at par with steel making process but as 'Article of Iron & Steel'. Therefore, their operations should not be subjected to be treated as Secondary Metallurgical process. The segment wise process chart is submitted.
- e. The manufacturing process does not involve any induction and electrical arc furnace, submerged arc furnace, and cupola furnace as mentioned in EIA notification -2006.
- f. PP has got SS Pipe and Tube plant audited by Schedule-I Auditor (Duly approved by GPCB) and the Auditor have also concluded and certified that our unit do not fall under the applicability of ElA Notification 2006. The said Report is submitted.

The proposal was initially considered in 9th EAC meeting of Re-constituted EAC (Industry -1) held on 14-15th July, 2022. The deliberations and recommendation is given as below:

Deliberation and Recommendation of the Committee (during 14-15th July, 2022)

After detailed deliberations, the Committee advised the project proponent to engage any reputed government / government undertaking institution to examine the process of their industry and give a report whether process adopted in the said industry falls under the purview of Primary / Secondary Metallurgy process or not as per provision of the EIA Notification, 2006 and Technical Guidelines issued under thereon. Based on the submission of the report, the EAC may give its opinion whether the process requires prior EC under EIA Notification, 2006 and amendments thereof.

Submission made by PP

Based on the above deliberation, the project proponent has submitted the reply vide letter dated 09.09.2022. As per the reply PP approached the National Institute of Secondary Steel Technology (Estd. The Ministry of Steel, Govt. of India) and the Director NISST and with other team members visited plants on 08.08.2022 & 09.08.2022 and NISST Director given two report reference No. NISST/Dir/22/7932 dated 08.09.2022, for M/s Ratnamani Metals and Tube

Limited at village Bhimsar, Taluka Anjar, District -Katch Gujarat and M/s Ratnamani Metals and Tube Limited at village Indrad, , Taluka Kadi, District-Mehsana, Gujarat .

The details of the NISST report is given below

Details for Kutch plant

- On Primary examination it was found that Kutch plant doesn't produce finished steel and is not an Iron and Steel producing unit rather a producer of engineering goods and pipes for mainly Oil and Gas sector from Stainless steel (SS) and Carbon Steel supplied by Steel Plants like AMNS, JSPL, JSL and others.
- It can be termed as fabrication units of different types of pipes and tubes through Welding process.
- The plant is not having any Iron making, Steel Making, Argon Oxygen Decarbonisation (AOD), Vacuum treatment unit, Hot Rolling Mill, Re-rolling or Cold Rolling Mill as in an Iron and Steel plant like the Major Steel Plants or the Secondary Steel sector

Below are the key facilities:

- 1) **ERW (Electrical Resistance Welding) Pipes -** The ERW pipes are used in Oil and Gas sector and water line projects. Major customers for Oil and GAS sectors are PSUs like IOCL, HPCL, ONGC, EIL Etc.
- 2) **Spiral Welded Pipes-** Spiral Welded Pipes which are used for transportation of OIL and GAS. Also being used for the transportation of water. The major customers for oil and gas sectors are the IOCL, HPCL, ONGC, EIL, Reliance Industries, NRL, Adani Gas, GSPL Etc. For water line use GWSSB, PHED Rajasthan, Municipal corporations etc.
- 3) Longitudinal Welded Sub-Merged Arc Welded Pipe (LSAW)/ Circumferential Welded sub-merged Arc Welded Pipes. (CSAW) These Pipes are LSAW & CSAW used in tine pipes for supply of Oil & Gas to PSUs like IOCL, BPCL, HPCL,NRL etc.
- 4) **Stainless Steel Welded Pipes** These pipes/tubes used in power sector, dairy industries, Pharmaceutical sector etc. They are also supplied to customers like BHEL, LET, Godrej, Praj India & TEMA etc

Input Raw Material type & its application-: Raw material used for above final products for Serial Number 1-3 is Carbon Steel Coils (HRC) & Plates and for Serial Number 4 is required Stainless Steel Coils & Plates. These are sourced from various domestic steel mills such as M/S JSW, TATA Steel Ltd, AM&NS, JSSL and wherein Indian Steel Mill don't produce, they are imported.

Process Verification: The manufacturing process of above Pipes & Tubes was thoroughly examined in line with sequence of production and application of each stage of the processes.

Machines & Equipment's verification-: All the machine, equipment and quality instruments were checked their application was noted. RMTL has one Pipe Mill for forming the ERW Pipes, two Mills for Spiral Pipe line, one Mill for LSAW/CSAW line and one welded tube mill for manufacture of Stainless Steel Welded Pipes & Tubes, which is the main equipment for the manufacturing of these Pipes/tubes. Here in all cases Plates and Sheets are curved by pressing and then welded. Pollution load is near to zero.
Commercial documents verification: They have also verified the documents like raw material purchase invoices and sale invoices for supply of Pipes & Tubes. The raw materials are classified in category of "Iron or Steel" under Chapter 72 and final products are classified under Chapter 73 of the Tariff as "Article of Iron Steel". This classification shows the clear demarcation of Iron or steel from the articles of iron steel.

Conclusion by NISST: As per the above examination, it is concluded that the above items manufactured by RMTL does not fall under the purview of Primary/Secondary Metallurgical Process or Iron and Steel sector as per the EIA Notification, 2006 as amended and guideline issued there under. The above pipes & tubes produced are merely the engineering products which are having their application in Oil and Gas sector and various specialized engineering sectors

Details for Indrad plant

- On Primary examination it was found that Indrad plant doesn't produce finished steel and is not iron and steel producing unit rather a producer of engineering good form Stainless steel(SS).
- Indrad plant is manufacture of Special Seamless Tubes and Pipes from Stainless steel supplied by reputed stainless steel producers. These customized tubes and Pipes as low in dimeter as 3mm are articles of steel and engineered for various applications. Plant is not having any iron making, steel making, Argon Oxygen Decarbonisation(AOD),Vaccum treatment unit, Hot Rolling Mill or Cold Rolling Mill as in an Iron and Steel plant.
- The plant does drilling, boring and produces Tubes.
- Input Raw Material, Process, Machines & Equipment's and Commercial documents are verified all the SS seamless Tubes produced in RML are registered unde Engineering Export Promotion Council of India.

Conclusion by NISST: As per the above examination of the Indrad Plant, it shall be concluded that the Seamless Tube Manufactured at RMTL does not fall under the purview of Primary/Secondary Metallurgical Process as per the EIA Notification, 2006 as amended and guideline issued there under. The SS seamless Tube Produced are engineering products having application in various engineering sectors

Deliberations by the Committee

The Committee noted the following:

- 1. Instant proposal is for seeking Expert opinion/clarification regarding coverage of their project activities under Secondary Metallurgy as per the EIA Notification-2006 and amended thereof regarding M/s Ratnamani Metals and Tube Limited having registered office at 17, Rajmugat Society, Naranpura Cross Road, NaranpuraGujarat, Pin- 380013 involves manufacturing and export of Carbon steel, Stainless-Steel Pipes & Tubes having three manufacturing units situated in District Mehsana (2 Units) & another in Kutch Gujarat, India.
- 2. The EAC noted that the Project Proponent as per recommendation of EAC had engaged National Institute of Secondary Steel Technology (Estd. The Ministry of Steel, Govt. of

India) and submitted a report on whether process adopted in the said industry falls under the purview of Primary / Secondary Metallurgy process or not as per provision of the EIA Notification, 2006 and Technical Guidelines issued under thereon.

3. The Committee noted that the as per National Institute of Secondary Steel Technology (NISST) report manufacturing process of pipes & tubes by M/s Ratnamani Metals and Tube Limited are merely the engineering products and therefore does not fall under the purview of Primary/Secondary Metallurgical Process or Iron and Steel sector as per the EIA Notification, 2006 as amended and guideline issued there under.

Recommendations of the Committee

The Committee deliberated the recommendations of the National Institute of Secondary Steel Technology. Based on the finding of this Report, the EAC also opines that coverage of project activities of M/s Ratnamani Metals and Tube Limited plats (M/s Ratnamani Metals and Tube Limited at village Bhimsar, Taluka Anjar, District -Katch Gujarat and M/s Ratnamani Metals and Tube Limited at village Indrad, Taluka Kadi, District-Mehsana, Gujarat) does not fall under the Secondary metallurgical industry as per the provision of the EIA Notification 2006 and amended, thereof does not require prior Environmental Clearance. The Policy Sector of IA Division in the Ministry may be requested for issuance of the necessary clarification in this regard.

Agenda No. 14.11:

Factual Corrections in the Minutes of Agenda No. 13.8 of the EAC Meeting held on September 14-15, 2022

Capacity expansion project of ferro manganese and silico -manganese production (Existing: 54 TPD – 2 X6 MVA SAF, proposed: 102 TPD -3X 7.5 MVA SAF) by M/s Ramnik Power & Alloys Pvt. Limited, located at Sarandi Industrial Growth Centre Tehsil – Waraseoni District Balaghat, Madhya Pradesh– Consideration of Environmental Clearance.

[Proposal No. IA/MP/IND/265696/2021; File No. J-11011/161/2011-IA.II(I)] [Consultant: Creative Environ Services; valid upto 22.10.2022]

The name of accredited Consultant may be read as "M/s Creative Environ Services; valid upto 22.10.2022" in place of M/s. Pioneer Enviro Laboratories & Consultants Pvt. Ltd. This was a typing error.

Agenda No. 14.12:

14.11 Installation of Clinker Grinding Unit with Cement Production Capacity of 4.0 MTPA (2 x 2.0 MTPA) and DG Set of 4.0 MW (2 x 2.0 MW) capacity in phased manner, located at Village: Lakhanpur, Tehsil: Bara, District: Prayagraj, Uttar Pradesh by M/s. Eco Plus Cement Industries Pvt. Ltd. - Consideration of Environmental Clearance.

Proposal No. IA/UP/IND/175464/2020; File No. J-11011/244/2020-IA.II(I)] [Consultant: J.M. EnviroNet Pvt. Ltd.; Valid upto 07.02.2023]

- 14.11.1 M/s. Eco Plus Cement Industries Pvt. Ltd. has made an online application vide proposal no. IA/UP/IND/175464/2020 dated 6th July, 2022 along with copy of EIA/EMP report and Form -2 seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 3(b) Cement Plants under Category "B" of the schedule of the EIA Notification, 2006 and attracts the general condition as the Interstate Boundary of Uttar Pradesh - Madhya Pradesh falls at a distance of 1.0 km from the Proposed Project site. Therefore, the project will be treated as Category 'A' and appraised at Central Level by the EAC.
- 14.11.2 The proposal was considered in 10th EAC meeting held on 1st-3rd August, 2022, wherein the EAC recommended the instant proposal for grant of Environmental Clearance with certain specific and general conditions.
- 14.11.3 Further, the Ministry examined the proposal and sought certain information regarding the proximity of schools near the projects. Accordingly, the project was placed in the instant EAC meeting.

Point wise details submitted by Project proponent for deliberations in the EAC meeting

14.11.4 Point-wise reply submitted by PP, vide letter dated 30/09/2022 are deliberated herewith:

Point No. 1: Proximity of nearby settlements (villages), direction distance from the plant.

Reply: The nearby settlements (Villages) Distance & direction from Project Site has been shown in the table provided below -

| S. No. | Habitation | Distance (km) | Direction | | |
|--------|----------------------|--------------------------------------|---------------|--|--|
| | Villages (0 to 1 km) | | | | |
| 1. | Tala | 0.1 to 0.5 Km (Scattered habitation) | SE direction | | |
| 2. | Shivrajpur | 0.7 Km NE c | | | |
| 3. | Lakhanpur | 0.5* Km NW dir | | | |
| | Villages (1 to 2 km) | | | | |
| 4. | Hinauti Pandey | 1.3 Km | ESE direction | | |

| 5. | Gadra | 1.4 Km NNW Directi | | | |
|----|----------------------|--------------------|---------------|--|--|
| 6. | Benipur | 1.5 Km | NNE Direction | | |
| 7. | Shankargarh | 1.5 Km ESE directi | | | |
| | Villages (2 to 3 km) | | | | |
| 8. | Chundwa | 2.4 Km | SSE Direction | | |
| 9. | Manpur | 3.0 Km | NE Direction | | |

Note: *30 to 40 houses of village Lakhanpur fall at distance of 200 - 300 meters, 10-15 houses at a distance of 500 meter and 7-8 houses fall at a distance of 600 - 700 meter from the project boundary.

Mitigation measures for nearby villages to mitigate the impacts due to proposed project -

- Earlier, PP has changed the plant layout and proposed 3 tier plantations in East and North east direction. Now, based on the deliberation during EAC meeting, the PP will plant 6 rows shelter belt of trees in the North, North East, East & South East direction and the same has been shown in the updated plant layout is submitted.
- The PP has prepared plant layout in such a way that the impact on nearby habitation will be minimum for that purpose; location of Cement Mill Stack is decided away from the nearby habitation.
- The PP will install high efficiency and latest technology bag house for control of particulate emissions from stack and the emission level will be maintained within the standards and real time data will be transmitted to CPCB and SPCB server.
- Various control measure will be adopted i.e., regular sweeping machine, water sprinkling, covered conveyer belts, covered storage, installation of Bag filters at various material transfer points to control the fugitive emission
- Out of the total project area, 8.52 ha., (~33 % of the total project area) will be developed under greenbelt & plantation in order to reduce dust & noise pollution levels & to increase aesthetic beauty of the area.
- The PP will also do plantation at common land, govt. buildings, schools and village road etc.
- The PP has proposed greenbelt development / plantation all along the boundary of the school premises (Village Lakhanpur, Shivrajpur, Garha and Shankargarh).
- Avenue plantation on the roads of village Lakhanpur & Tala will be developed by the company in the nearby habitations.
- Water sprinkling will be done in every 2-3 days with the help of mist type sprinkler to attenuate the Suspended Particulate Matter.

Point no. 2: Number of schools, community centers direction distance from the plant.

Reply: The nearby Schools, Community Centers with distance & direction from Project Site has been shown in the table below -Nearby schools -

| S. No. | Name of the School | Approx. aerial Distance & direction from Project site | Approx. Number of Students |
|-----------|--|--|----------------------------------|
| | Schools (0 to | 1 km) | 1 |
| 1. | Upper Primary School, Lakhanpur | 0.05 km in North direction | 180 |
| 2. | Dr. Kailash Nath Singh Mahavidyalya, Shankargarh | 1.0 Km in NE direction | 300 |
| 3. | St Joseph's School, Village Garha | 1.0 Km in NNW direction | 220 |
| 4. | Raja Kamalakar Inter College Shankaragarh | 1.0 Km in East direction | 1600 |
| | Schools (1 to | 2 km) | |
| 5. | Govt. Primary School, Shivrajpur | 1.2 Km in NNE direction | 90 |
| 6. | Model Primary School, Shivrajpur | 1.2 Km in NNE direction | 300 |
| 7. | Shankargarh Sarkari Primary school | 1.3 Km in SW direction | 200 |
| 8. | Smt. Patti Devi Balika Inter College, Shankargarh | 1.5 km in NE Direction | 950 |
| 9. | New Children Public School, Shankargarh | 1.5 km in East Direction | 1600 |
| 10. | Narayana Group of Education, Pagwar | 1.8 Km in ESE direction | 300 |
| 11. | Govt. Girls Inter College, Shankargarh | 1.8 Km in East direction | 450 |
| | Schools (2 to | 3 km) | • |
| 12. | Government middle School Patahat Teonthar, Rewa | 2.6 Km in SE direction | 100 |
| 13. | Cambridge High School and College, Shankargarh | 2.6 Km in East direction | 400 |
| 14. | Primary School Kapari | 2.6 Km in East direction | 100 |
| | Schools (3 to | 4 km) | · |
| 15. | Heera Public School, | 3.0 km in South direction | 250 |
| 16. | GPS Patahat, Pathat Kalan | 3.4 Km in SSW direction | 113 |
| 17. | UEGS NAI Basti Khabhara Kala | 3.5 Km in SSW direction | 80 |
| 18. | Model Primary School Sapera Basti Shankargarh | 3.7 Km in ENE direction | 75 |

Nearby Community Centers

| S. No. | Name of the Community Centre | Approx. aerial Distance & direction from Project site | | |
|--------|----------------------------------|--|--|--|
| | Community Centers (0 | to 1 km) | | |
| 1. | Shivrajpur Gram Panchayat Bhawan | 1.0 Km in NNE direction | | |
| | Community Centers (1 to 2 km) | | | |
| 2. | Lakhanpur Gram Panchayat Bhawan | 1.2 Km in NW direction | | |

| S. No. | Name of the Community Centre | Approx. aerial Distance & direction from Project site | |
|-------------------------------|-------------------------------------|--|--|
| | Community Centers (0 | to 1 km) | |
| 3. | Nagar Panchayat Bhawan, Shankargarh | 1.3 Km in NE direction | |
| 4. | Benipur Gram Panchayat Bhawan | 1.6 Km in NNE direction | |
| 5. | RP Bhawan, Shankargarh | 1.6 Km in East direction | |
| 6. | Gadra Gram Panchayat Bhawan | 1.8 Km in NNW direction | |
| 7. | Paguwar Gram Panchayat Bhawan | 2.0 Km in ESE direction | |
| Community Centers (2 to 3 km) | | | |
| 8. | Chundwa Gram Panchayat Bhawan | 2.5 Km in SSE direction | |

Point No. 3: Dominant wind direction and related plume direction. The impact of GLC on nearby schools and human settlements.

Reply: The dominant wind direction is from West. The direction of the Plume related to the dominant wind direction is in East direction. The value of GLC's on nearby schools and human settlements along with baseline concentration is given below -

| S. No. | Name of the School | Approx. aerial Distance & direction from Project site | Baseline Concentration (µg/m³) | GLC (µg/m³) | Resultant (µg/m³) |
|--------|--|--|--------------------------------------|----------------|----------------------|
| | | Schools ((|) to 1 km) | | |
| 1. | Upper Primary School, Lakhanpur | 0.05 km in North direction | 69.7 | 0.50 | 70.2 |
| 2. | Dr. Kailash Nath Singh Mahavidyalya, Shankargarh | 1.0 Km in NE direction | 83.2 | 0.50 | 83.7 |
| 3. | St Joseph's School, Village Garha | 1.0 Km in NNW direction | 59.8 | 0.07 | 59.87 |
| 4. | Raja Kamalakar Inter College Shankaragarh | 1.0 Km in East direction | 83.2 | 0.50 | 83.7 |
| | | Schools (1 | to 2 km) | | |
| 5. | Govt. Primary School, Shivrajpur | 1.2 Km in NNE direction | 69.7 | 0.50 | 70.2 |
| 6. | Model Primary School, Shivrajpur | 1.2 Km in NNE direction | 69.7 | 0.50 | 70.2 |
| 7. | Shankargarh Sarkari Primary school | 1.3 Km in SW direction | 83.2 | 0.50 | 83.7 |

| S. No. | Name of the School | Approx. aerial Distance & direction from Project site | Baseline Concentration (µg/m³) | GLC (µg/m³) | Resultant (µg/m³) |
|---------------------|---|--|--------------------------------------|----------------|----------------------|
| 8. | Smt. Patti Devi Balika Inter College, Shankargarh | 1.5 km in NE Direction | 83.2 | 0.50 | 83.7 |
| 9. | New Children Public School, Shankargarh | 1.5 km in East Direction | 83.2 | 0.50 | 83.7 |
| 10. | Narayana Group of Education, Pagwar | 1.8 Km in ESE direction | 83.2 | 0.50 | 83.7 |
| 11. | Govt. Girls Inter College, Shankargarh | 1.8 Km in East direction | 83.2 | 0.50 | 83.7 |
| Schools (2 to 3 km) | | | | | |
| 12. | Government middle School Patahat Teonthar, Rewa | 2.6 Km in SE direction | 77.8 | 0.50 | 78.3 |
| 13. | Cambridge High School and College, Shankargarh | 2.6 Km in East direction | 83.2 | 0.50 | 83.7 |
| 14. | Primary School Kapari | 2.6 Km in East direction | 72.6 | 0.20 | 72.8 |
| | | Schools (3 to 4 k | km) | | |
| 15. | Heera Public School, | 3.0 km in South direction | 77.8 | 0.20 | 78.0 |
| 16. | GPS Patahat, Pathat Kalan | 3.4 Km in SSW direction | 77.8 | 0.50 | 78.3 |
| 17. | UEGS NAI Basti Khabhara Kala | 3.5 Km in SSW direction | 77.8 | 0.07 | 77.87 |
| 18. | Model Primary School Sapera Basti Shankargarh | 3.7 Km in ENE direction | 83.2 | 0.50 | 83.7 |

The value of GLC on nearby habitations is given in table below -

| S. No. | Habitation | Distance (km) & Direction | Baseline Concentration (µg/m ³) | GLC (µg/m ³) | Resultant (µg/m ³) |
|--------|----------------------|--|---|-----------------------------|-----------------------------------|
| | Villages (0 to 1 km) | | | | |
| 1. | Tala | 0.1 to 0.5 Km in SE direction (Scattered habitation) | 77.8 | 0.50 | 78.3 |
| 2. | Shivrajpur | 0.7 Km in NE direction | 69.7 | 0.50 | 70.2 |

| 3. | Lakhanpur | 0.5* Km in NW direction | 72.6 | 0.20 | 72.8 |
|----------------------|----------------|----------------------------|------|------|------|
| | Villag | ges (1 to 2 km) | | | |
| 4. | Hinauti Pandey | 1.3 Km in ESE direction | 83.2 | 0.50 | 83.7 |
| 5. | Gadra | 1.4 Km in NNW Direction | 80.4 | 0.50 | 80.9 |
| 6. | Benipur | 1.5 Km in NNE Direction | 83.2 | 0.20 | 83.4 |
| 7. | Shankargarh | 1.5 Km in ESE direction | 83.2 | 0.50 | 83.7 |
| Villages (2 to 3 km) | | | | | |
| 8. | Chundwa | 2.4 Km in SSE Direction | 83.2 | 0.50 | 83.7 |
| 9. | Manpur | 3.0 Km in NE Direction | 83.2 | 0.50 | 83.7 |

Measures to be adopted by company to reduce the impact on nearby school & human settlement

- While deliberations during the EAC meeting the PP has committed to provide 6 rows shelter belt of trees of dense canopy in the North, North East, East & South East direction.
- PP has proposed greenbelt development / plantation all along the boundary of the school premises (Village Lakhanpur, Shivrajpur, Garha and Shankargarh).
- $\circ~$ Avenue plantation on the roads of village Lakhanpur & Tala will be developed by the company in the nearby habitations.
- PP has prepared plant layout in such a way that the impact on nearby habitation will be minimum for that purpose, location of Cement Mill Stack is decided away from the nearby habitation.
- PP has designed the layout in such a manner that major noise generating machinery is far away from the school boundary to avoid impact due to generation of noise.
- PP has proposed to convert the kaccha road into paved road from NH-35 to plant boundary.

Point no. 4: The steps taken by the industry to reduce adverse pollution impact on sensitive receptors.

Reply: All the possible measures will be taken by the company to reduce the impact of pollution on the sensitive receptors which are as follows:

- The PP will install high efficiency and latest technology bag houses for control of particulate emissions from stacks and the emission level will be maintained within the standards and real time data will be transmitted to CPCB and SPCB server.
- Various control measure will be adopted i.e. regular sweeping machine, water sprinkling, covered conveyer belts, covered storage, installation of Bag filters at various material transfer points to control the fugitive emission
- Out of the total project area, 8.52 ha, (~33 % of the total project area) will be developed under greenbelt & plantation in order to reduce dust & noise pollution levels & to increase aesthetic beauty of the area.
- The PP will also do plantation at common land, govt. buildings, schools and village road etc.
- The PP will propose a plan of water sprinkling in every 2-3 days in nearby habitation and for that purpose company will be using mist type sprinkler to mitigate the Suspended Particulate Matter and also will use in plant premises to control fugitive dust emission.

Point no. 5: The change in layout done by the industry to reduce the adverse impact on nearby settlements if any.

Reply: In compliance to the Specific ToR point no. 5, PP has planned the orientation of the Plant Layout in such a way that the adverse impacts on nearby settlements can be reduced. 6 rows shelter belt of trees of dense canopy has been proposed to be developed towards Shankargarh town & nearest habitation Tala which are in the downwind direction of dominant wind direction (i.e., East direction) and towards Lakhanpur & Shivrajpur which are in North & North East direction. Dense plantation will be done towards north and south east direction where villages are located. Plantation on east side of the unit taking it as a center.

The PP has prepared plant layout in such a way that the impact on nearby habitation will be minimum for that purpose location of Cement Mill Stack is decided away from the nearby habitation.

Now, after deliberations by the EAC meeting, the PP will provide 6 rows shelter belt of trees in the North, North East, East & South East direction to minimize the impact.

Point No. 6: Specific plan regarding air pollution control devices and green belts incorporated in order to reduce the pollution impact.

- Reply: Efficient Air Pollution Control Equipment (APCE) will be installed for the control of emissions from all the sources within the prescribed limit.
 - Cement Mill stack will be equipped with high efficiency Bag House for effective control of emissions.

- For better efficiency Air to cloth ratio will be maintained around 1.0.
- 100% Homopolymer Acrylic with PTFE impregnation and Oil and water repellent Finish will be used in the Bag House.
- For bag filters, Pulse Jet bag filters will be used which can automatically clean using compressed air.
- The periodic cleaning of the bags will be done by the company.
- \circ Dust extraction mechanism will be developed to control the fugitive emissions.

The details of the APCEs are given below -

| S. No. | Locations | Proposed APCE | Nos. | Efficiency |
|--------|-----------------|---------------|------|------------|
| 1. | Cement Mill | Bag House | 1 | 99.99% |
| 2. | Coal Crusher | Bag Filter | 1 | 99.99% |
| 3. | Packing Plant | Bag Filters | 4 | 99.99% |
| 4. | Transfer Points | Bag Filters | 20 | 99.99% |

Design specification of Bag House is given below -

| Cement Mill Bag House | | | |
|-----------------------|-----------------------------|-----------|--|
| S. No | Particular | Unit | Specification |
| 1 | Application | | For Cement Mill |
| 2 | Type / Make | | Pulse Jet (Offline cleaning) |
| 3 | Volumetric Flow (Nm3/hr.) | m3/hr | 915768 |
| 4 | Air to Cloth Ratio-Absolute | M3/Min/M2 | 1.00 |
| 5 | Filtration area: Total | m2 | 18000 |
| 6 | No. of modules | | 2 |
| 7 | Nos of Bags. | Nos | 4640 |
| 8 | Type of filter cloth | Туре | 100% Homopolymer Acrylic with PTFE impregnation and Oil and water repellent Finish |
| 9 | Type of bag cleaning system | | Pulse jet |
| 10 | Volume | m3/s | 0.23 Nm3/s |
| 11 | Pressure | bar | 4-6 |
| 12 | Inlet operation temperature | oC | 80 to 90 |
| 13 | Inlet maximum temperature | oC | 120 |
| 14 | Pressure before filter | mbar | -42 to -45 |
| 15 | Design Pressure | | +/- 500 |
| 16 | No. of solenoid valves | Nos | 232 |
| 17 | Duration of pulsation | | 400 Sec |

| | Cement Mill Bag House | | | |
|----|-----------------------|--------|-----|--|
| 18 | Stack height | Meter | 55 | |
| 19 | Stack diameter | Meter | 2.5 | |
| 20 | Inlet dust load | gm/m3 | 430 | |
| 21 | Outlet dust load | mg/Nm3 | 30 | |

Greenbelt/Plantation Programme

- Out of Total project area is 25.829 ha; 8.52 ha (i.e., ~33%) area will be developed under greenbelt/plantation in accordance with CPCB guidelines. It is proposed to plant about 2500 saplings per hectare considering the survival rate of 90%.
- Native plant species has been / will be planted in consultation with local horticulturist such-Mangiferaindica (Mango), Azadiractaindica (Neem), Dalbergia sissoo (Shisham), Terminalia arjuna (Arjun), Syzygium cumini (Jamun), Pongamia pinnata (Karanj), Roystonea regia (Royal Palm), Albizialebbeck (Siris), Delonixregia (Gulmahar), Tectona grandis (Sagwan), Ficus religiosa (Peepal), Saraca asoca (Ashoka), Butea Monosper maetc and same species will be continued for increase the density.
- All earmarked areas for greenbelt/ plantation will be vegetated and the expected growth rate will be more than 90%.

| Proposed action plan for Greenbelt development / plantation by M/s. EcoPlus Cemen | it |
|---|----|
| Industries Pvt. Ltd. is given below: | |

| Year | Area (ha) | No. of Plants per Ha | Total Nos. of Plant | Location in the plant area |
|-----------------------|--------------|----------------------|------------------------|---|
| 01 st Year | 3 | 2500 | 7500 | All along the Plant Boundary |
| 02 nd Year | 3 | 2500 | 7500 | Internal roads, Machinery area, CCR Office |
| 03 rd Year | 2.52 | 2500 | 6300 | Packing Plant area and Raw Material Storage area |
| Total | 8.52 | 2500 | 21,300 | |

Specific plan regarding greenbelt development -

- 6 rows shelter belt of trees has been proposed to be developed in the downwind direction of dominant wind direction (i.e., East direction) and this is also shown in the plant layout.
- Dense plantation will be done towards north and south east direction where villages are located and this is also shown in the plant layout.
- \circ $\,$ Plantation on east side of the unit taking it as a center.
- Avenue plantation will be done by the company in the nearby habitations.

- The selection of plant species may involve plant characteristics, tolerance, canopy structure, foliage form, height of plant and its overall lowering and production potential.
- Tall trees will be planted in land scalping areas on periphery

Deliberation by the Committee

- 14.11.5 The Committee noted the following:
 - i. The EAC noted that the Project was deliberated and recommended by EAC on 10th EAC held on August 1-3, 2022. Further the Ministry sought requisite information regarding the proximity village and school near the project.
 - ii. The Committee noted that during the time of ToR appraisal, PP has changed the plant layout and proposed 3 tier plantations in East and North east direction for minimising the impact on nearby habitation.
 - iii. The Committee noted that the proximity of villages was already discussed and deliberated in 10th EAC meeting, and certain mitigation measures were suggested.
 - iv. The committee also deliberated the dominant wind direction and related plume direction and found the impact of GLC on nearby schools and human settlements are within the NAAQS. The maximum incidental concentration due to the project is $0.5 \ \mu g/m3$.
 - v. The EAC deliberated and advised for dense plantation towards the villages (shelter belt comprising of total of 6 rows of 2x2 m plantation) with tall trees & broad leaves with thick canopy to act as green barrier for air pollution & noise levels towards the villages.
 - vi. EAC deliberated the proposed Air Pollution Control Equipment and found it satisfactory.

Recommendations of the Committee

14.11.6 In view of the foregoing and after detailed deliberations, the committee **recommended** for stipulation of additional specific mitigation measures/conditions, as tabulated:

| Specific | Recommendations of mitigation | Recommendations of mitigation |
|-----------|--|--|
| Condition | measures in 10 th EAC Meeting | measures in 10 th EAC Meeting held on |
| No. | held on August 1-3, 2022 | September 29-30, 2022 |

| A. (vii) | Three tier Green Belt shall be developed in a time frame of one year covering at least 33% of the total project area 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 | Three tier Green Belt shall be developed in a time frame of one year covering at least 33% of the total project area 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 |
|----------|--|--|
| | developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years. | with new plants in the subsequent years. |
| | Additional green belt shall be provided north and south east where villages – Tala and Shivrajpur are located within 1 km from the project site. | Additional green belt as shelter belt comprising of total of 6 rows of 2x2 m plantation shall be provided North, North East, East & South East direction where villages/schools are located within 1 km from the project site. |
| | Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC. | Compliance status in this regard, shall be submitted to concerned Regional Office of the MoEF&CC. |
| A(xxix) | _ | Fog / Mist Sprinklers shall be installed and operated on regular basis to attenuate the Suspended Particulate Matter in the project premises and its nearby area. The PP will do water sprinkling in every 2-3 days in nearby habitations, school, to control fugitive dust emission. |

The Meeting ended with thanks to the Chair.

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
 - 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 10km 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 m 5 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 (10km 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 <u>all</u> 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 8th June, 2022 on the status of compliance of conditions stipulated in <u>all</u> 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 8th 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 | | Sampl | ing | Remarks | | |
|------------|----------------------|----------------|---------------|------------------------|--|--|
| | | Network | Frequency | | | |
| A. | Air Environment | | | | | |
| Mi | icro-Meteorological | | | • IS 5182 Part 1-20 | | |
| • | Wind speed (Hourly) | Minimum 1 site | 1 hourly | • Site specific | | |
| • | Wind direction | in the project | continuous | primary data is | | |
| • | Dry bulb temperature | impact area | | essential | | |
| • | Wet bulb temperature | | | • Secondary data | | |
| • | Relative humidity | | | from IMD, New | | |
| • | Rainfall | | | Delhi | | |
| • | Solar radiation | | | • CPCB guidelines to | | |
| • | Cloud cover | | | be considered. | | |
| • | Environmental Lapse | | | | | |
| | Rate | | | | | |
| Po | llutants | | | • Sampling as per | | |
| • | PM _{2.5} | At least 8-12 | As per | CPCB guidelines | | |
| | DM | locations | National | • Collection of AAQ | | |
| • | PM ₁₀ | | Ambient Air | data (except in | | |
| • | SO ₂ | | Quality | monsoon season) | | |
| • | NOx | | Standards, | • Locations of various | | |
| • | СО | | CPCB | stations for different | | |
| • | HC | | Notification. | | | |

| Attributes | Sampling | | Remarks | |
|--|---------------|---------------|---|--|
| | Network | Frequency | | |
| Other parameters relevant to the project and topography of the area | | | parameters should be related to the characteristic properties of the parameters. 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, 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. | |
| Hourly equivalent | At least 8-12 | As per | - | |
| noise levels | locations | CPCB norms | | |
| C. Water | | | | |

| Attributes | | | Sampl | ling | Remarks | |
|----------------------|------------------------|------------------|-----------------|------------------|----------------------------|--|
| | | | Network | Frequency | | |
| Parameters for water | | | imples for wate | r quality shoul | d be collected and | |
| qua | ality | analyzed as per: | | | | |
| • | pH, temp, turbidity, | • | IS: 2488 (Par | t 1-5) methods | for sampling and testing | |
| | magnesium hardness, | | of Industrial e | effluents | | |
| | total alkalinity, | • | Standard me | thods for exa | amination of water and | |
| | chloride, sulphate, | | wastewater a | nalysis publisl | hed by American Public | |
| | nitrate, fluoride, | | Health Assoc | iation. | | |
| | sodium, potassium, | | | | | |
| | | | | | | |
| • | lotal nitrogen, total | | | | | |
| | pnospnorus, DO, | | | | | |
| _ | BOD, COD, Phenor | | | | | |
| • | Total coliforma faccal | | | | | |
| • | coliforms | | | | | |
| • | Phyto-plankton | | | | | |
| • | Zoo-plankton | | | | | |
| | Microalgae/microalgal | | | | | |
| • | bloom | | | | | |
| Foi | · River Bodies | • | Surface | • Yield of | water sources to be | |
| • | Total Carbon | | water quality | measured | during critical season | |
| • | рН | | of the | Standard | methodology for | |
| • | Dissolved Oxvgen | | nearest | collection | of surface water (BIS | |
| • | Biological Oxygen | | River (60m | standards |) | |
| | Demand | | upstream | | | |
| • | Free NH4 | | and | | | |
| • | Boron | | downstream) | | | |
| • | Sodium Absorption | | and other | | | |
| | Ratio | | surface | | | |
| • | Electrical | | water bodies | | | |
| | Conductivity | | | | | |
| • | TDS | | | | | |
| Foi | r Ground Water | • | Ground water | r monitoring da | ata should be collected at | |
| | | | minimum of | 8 locations (f | rom existing wells /tube | |
| | | | wells/existing | g current record | s) from the study area and | |
| | T 691 O. 1 | | shall be inclu | ded. | | |
| D. ' | Iraffic Study | | | | | |
| • | Type of vehicles | - | | | | |
| • | Frequency of vehicles | | | | | |
| | tor transportation of | | | | | |
| | materials | | | | | |

| Attributes Sampling Re | marks |
|--|-----------------|
| Network Frequency | |
| Additional traffic due | |
| to proposed project | |
| Parking arrangement | |
| E. Land Environment | |
| Soil Soil samples be collected as per BIS specifi | ications |
| Particle size | |
| distribution | |
| • Texture | |
| • pH | |
| Electrical conductivity | |
| Cation exchange | |
| capacity | |
| Alkali metals | |
| Sodium Absorption | |
| Ratio (SAR) | |
| • Permeability | |
| Water holding capacity | |
| Porosity | |
| Land use/Landscape - | |
| Location code | |
| Total project area | |
| • Topography | |
| • Drainage (natural) | |
| • Cultivated, forest, | |
| plantations, water | |
| bodies, roads and | |
| settlements | |
| E. Biological Environment | |
| • Detailed description of flora and fauna (| terrestrial and |
| • Primary productivity aquatic) existing in the study area shall | be given with |
| • Aquatic weeds special reference to rare, endemic an | d endangered |
| • Enumeration of phyto species. Indicator species which indic | ate ecological |
| plankton, zoo plankton and environment degradation should be | identified and |
| and benthos included to clearly state whether the pro- | sposed project |
| • Fisheries would result in to any adverse effect on | any species. |
| • Diversity indices • Samples to conect from upstream and control of the stream and control of t | whistream and |
| Trophic levels also from dug wells close to activity site | |
| • Kare and endangered • For forest studies direction of wir | ud should be |
| Maxing Darks/ | a should be |
| Ivianne Parks/ Senetueries/ closed | |

| Attributes | Sampling | | Remarks | |
|---------------------------|----------------------------------|--|-----------------------------|--|
| | Network | Frequency | | |
| areas /coastal | Secondary da | ndary data to collect from Government offices. | | |
| regulation zone (CRZ) | NGOs, publis | shed literature. | | |
| Terrestrial | | | | |
| • Vegetation-species | | | | |
| list, economic | | | | |
| importance, forest | | | | |
| produce, medicinal | | | | |
| value | | | | |
| • Importance value index | | | | |
| (IVI) of trees | | | | |
| • Fauna | | | | |
| • Avi fauna | | | | |
| • Rare and endangered | | | | |
| species | | | | |
| Sanctuaries / National | | | | |
| park / Biosphere | | | | |
| reserve | | | | |
| Migratory routes | | | | |
| F. Socio-economic | Γ | | | |
| • Demographic structure | Socio-econom | nic survey is | based on proportionate, | |
| • Infrastructure resource | stratified and | random sampli | ng method. | |
| base | • Primary data | collection throu | igh questionnaire | |
| • Economic resource | • Secondary da | ata from census | s records, statistical hard | |
| base | books, topo sl | heets, health rec | cords and relevant official | |
| • Health status: | records availa | able with Govt. | agencies | |
| Morbidity pattern | | | | |
| • Cultural and aesthetic | | | | |
| attributes | | | | |
| Education | | | | |

- 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 Parameter | Location | Frequency | Responsibility | | |
|-----------------|--------------------|-------------------------|----------|-----------|----------------|--|--|
| Construct | Construction phase | | | | | | |
| | | | | | | | |
| Operation phase | | | | | | | |
| | | | | | | | |

7. Additional Studies

- 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.
- 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

| S | Physical activity | and action plan | Year of implementation (Budget in INR) | | | Total Expenditure |
|---|-------------------------|------------------|---|-----------------|-----------------|----------------------|
| 0 | Name of the Activity | Physical Targets | 1 st | 2 nd | 3 rd | (Rs. in 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 1m-5m 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.
- 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 mg/Nm3 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. PM (PM₁₀ and P_{2.5}) present in the ambient air must be analysed for source analysis natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ 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 1m-5m 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. PM (PM₁₀ and PM_{2.5}) present in the ambient air must be analysed for source analysis natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ 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 mg/Nm3 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 mg/Nm3 shall be furnished.
- 16. Action plan for 100 % solid waste utilization shall be submitted.
- 17. PM (PM₁₀ and P_{2.5}) present in the ambient air must be analysed for source analysis natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ 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 mg/Nm3 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 mg/Nm3 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 mg/Nm3 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 mg/Nm3 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 8/10 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 km.) water body, population, with in 10km 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

| S. | Name | Position | 29/09/2022 | 30/09/2022 |
|------------------------------|--|-------------|------------|------------|
| No. | | | | |
| 1. | Shri Rajive Kumar | Chairman | Present | Present |
| 2. | Dr. Dipankar Shome | Member | Present | Present |
| 3. | Dr. S. Ranganathan | Member | Present | Present |
| 4. | Dr. Ranjit Prasad | Member | Present | Present |
| 5. | Dr. S. K. Singh | Member | Present | Present |
| 6. | Dr. Tejaswini Ananthkumar | Member | Present | Present |
| 7. | Dr. Hemant Sahasrabuddhe | Member | Present | Present |
| 8. | Dr. Jai Krishna Pandey | Member | Present | Present |
| 9. | Dr. E V R Raju | Member | Present | Present |
| 10. | Dr. B. N. Mohapatra, DG, | Member | Present | Present |
| | (Representatives of NCCBM) | | | |
| 11. | Shri Nazimuddin, Scientist 'F' | Member | Present | Present |
| | (Representative of CPCB) | | | |
| 12. | Dr. S. Raghavan, Scientist 'D' | Member | Present | Present |
| | (Representative of National Institute of | | | |
| | Occupational Health (NIOH) | | | |
| 13. | Dr. Sanjay Bist, Scientist 'E' | Member | Present | Present |
| | (Representative of Indian Meteorological | | | |
| | Department) | | | |
| 14. | Dr. R.B. Lal, | Member | Present | Present |
| | Scientist E, MoEFCC | Secretary | | |
| Other Officers of the MoEFCC | | | | |
| 15. | Dr R P Rastogi | Scientist C | Present | Present |
| 16. | Dr Sandeepan BS | Scientist B | Present | Present |

ANNEXURE-4

Approval of EAC Chairman

Email

Additional Director MoEFCC Dr R B LAL

Re: Approval of Draft minutes of the 14th EAC Meeting held on September 29-30, 2022

| From rajivalumar1092@amail.com | Eri Oct 07 2022 04:04 DM |
|--|--------------------------|
| Subject : Re: Approval of Draft minutes of the 14th EAC Meeting held on September 29-30, 2022 | I attachment |
| To : Additional Director MoEFCC Dr R B LAL <rb.lal@nic.in></rb.lal@nic.in> | |
| Cc : chairman eac ind 1 <chairman.eac.ind.1@gmail.com>, ranganathan metals <ranganathan.metals@gmail.com>, ranjitnitj@gmail.com, rajuevr60@gmail.com, sksinghdce@gmail.com, dshome61@gmail.com, tejaswini acf <tejaswini.acf@gmail.com>, sshemant 801 <sshemant_801@rediffmail.com>, NCCBM DIRECTOR GENERAL <dg@ncbindia.com>, Nazimuddin <nazim.cpcb@nic.in>, Raghavan S <raghuharihar@gov.in>, raghuharihar@gov.in>, raghuharihar@gov.in>, drjkpandey eac industry1 <drjkpandey.eac.industry1@gmail.com></drjkpandey.eac.industry1@gmail.com></raghuharihar@gov.in></nazim.cpcb@nic.in></dg@ncbindia.com></sshemant_801@rediffmail.com></tejaswini.acf@gmail.com></ranganathan.metals@gmail.com></chairman.eac.ind.1@gmail.com> | |

Dear Dr Lal,

The draft minutes are approved. Kindly do needful.

With best wishes

Rajive Kumar Chairman EAC- Industry-1
