

### **Minutes of 686<sup>th</sup> SEAC-2 Meeting Dated 22/09/2022**

The 686<sup>th</sup> meeting of SEAC-2 was held in the Directorate of Environment, U.P. through dual-mode (physically/virtually) at 10:00 AM on 22/09/2022. Following members participated in the meeting:

- |    |                             |                             |
|----|-----------------------------|-----------------------------|
| 1. | Dr. Harikesh Bahadur Singh, | Chairman, SEAC-2            |
| 2. | Dr. Amrit Lal Haldar,       | Member, SEAC-2 (through VC) |
| 3. | Dr. Dineshwar Prasad Singh, | Member, SEAC-2 (through VC) |
| 4. | Shri Tansar Ullah Khan,     | Member, SEAC-2              |
| 5. | Prof. Jaswant Singh,        | Member, SEAC-2              |
| 6. | Dr. Shiv Om Singh,          | Member, SEAC-2 (through VC) |
| 7. | Shri Ashish Tiwari,         | Member Secretary, SEAC-2    |

The Chairman welcomed the members to the 686<sup>th</sup> SEAC-2 meeting which was conducted via dual-mode (virtually/physically). Nodal Officer, SEAC-2 informed the committee that the agenda has been approved by the Member Secretary, SEAC-2/Director, Environment. Nodal Officer, SEAC-2 placed the agenda items along with the available file and documents before the SEAC-2.

**1. Building stone (Sandstone) Mining project at Arai No.-708 Ka, Village-Chandlewan Kalan, Tehsil-Sadar, District-Mirzapur, Shri Devendra Pratap Singh. Area-0.809 Ha. File No. 6669/Proposal No. SIA/UP/MIN/68790/2021**

#### **RESOLUTION AGAINST AGENDA NO-01**

A presentation was made by the project proponent along with their consultant M/s Ind Tech House Consult. During the presentation the project proponent/consultant was not able to properly answer the query raised by the Members of SEAC regarding baseline monitoring of the project.

The committee directed to project proponent/ consultant that in the next time of presentation, responsible persons for monitoring and testing (Lab in-charge and area specific coordinator) should present before SEAC to explain the data along with all original lab reports, photographs mentioning date, time & geo coordinates, committee also directed to submit the following documents/information.

1. Agreement/ Consent between project proponent and competent authority/
2. Land owner for haulage road from lease site to link road.
3. Plan for adopting Latest technology (water sprinklers/ tankers) for mitigating dust at source points in lease area and haulage road during operational activity/vehicular movement and photographs of equipments to be used
4. Revised plan for plantation with area specific plant species, number of plants to be planted along with plantation map and consent/MoU with concern authority and landowner to be submitted.
5. Water requirement details along with source of water and the permission/ agreement with the concerning authority/ water supplying agencies to be submitted.
6. Revised compliance report for TOR additional conditions and compliance of observation/suggestions raised during the public hearing and commitment made by the project proponent in a tabular form with a time bound action plan to be submitted.

The matter shall be discussed after submission of online information on prescribed portal.

2. **Simple soil excavation from Khasra/Gata Nos 586kh, 623kh, 629, 689gh, 622gh, 690kh, 691kh, 685kh and 686, at Village- Sainjni, Tehsil - Chandausi, District – Sambhal. Shri Rajesh Kumar, Area – 1.327 ha. File No. 6963/Proposal No. SIA/UP/MIN/245338/2021**

### **RESOLUTION AGAINST AGENDA NO-02**

The Secretariat informed that due to typographical error in proposal number the above project listed in SEAC-2 meeting dated 22/09/2022. The corrected proposal number of the project is SIA/UP/MIN/72813/2022. The committee opined that the odd proposal number projects should be appraised by SEAC-1 and the above matter should be referred to SEAC-1.

3. **Expansion of Integrated Paint Manufacturing Facility at UPSIDC Industrial Estate at Khasra No.- B1-B2, G-30, 31, 32, 33, 34, 35 & 36, Village- Jainpur, Tehsil - Akbarpur, District- Kanpur Dehat, U.P., M/S. Kansai Nerolac Paints Limited, Shri Abhijit Natoo. File No. 6768/7225/Proposal No. SIA/UP/IND3/69938/2018**

The consultant informed the committee that they are strictly following the rules, regulations and other instructions of QCI/NABET. A presentation was made by the project proponent along with their consultant M/s Kadam Environmental Consultants. Based on the documents submitted and presentation made by the project proponent along with the consultant, the following facts have emerged: -

1. The environmental clearance is sought for Expansion of Integrated Paint Manufacturing Facility at UPSIDC Industrial Estate at Khasra No.- B1-B2, G-30, 31, 32, 33, 34, 35 & 36, Village- Jainpur, Tehsil - Akbarpur, District- Kanpur Dehat, U.P., M/S. Kansai Nerolac Paints Limited.
2. The environmental clearance for the existing plant was issued by MoEF&CC, Govt. of India vide letter no. J-11011/190/2007.IA.II(I), dated 10/08/2007 and again environmental clearance accorded for expansion of existing plant from SEIAA, U.P. vide letter no. 153/Parya/SEAC/3967-4579/2019, dated 16/07/2019.
3. The standard terms of reference for the expansion project was issued through online Parivesh Portal on 28/12/2021.
4. Salient features of the project:

| S. No. | Item  | Details   |  |          |                     |            |       |
|--------|---|---|--|----------|---------------------|------------|-------|
| 1      | Location                                      | Plot No.  | B1-B2, G-30, 31, 32, 33, 34, 35 & 36, Industrial area notified by UPSIDC |          |                     |            |       |
|        |   | Village   | Jainpur  |          |                     |            |       |
|        |   | Taluka  | Akbarbarpur  |          |                     |            |       |
|        |   | District  | Kanpur Dehat   |          |                     |            |       |
|        |   | State   | Uttar Pradesh  |          |                     |            |       |
|        |   | The project is located in the Industrial area notified by UPSIDC (Uttar Pradesh State Industrial Development Corporation)   |  |          |                     |            |       |
| 2      | Total Area of Plot                            | 95,596 sqm  |  |          |                     |            |       |
| 3      | Greenbelt Area                                | 31,533.28 sq. m (33%)   |  |          |                     |            |       |
| 4      | Proposed production (Name and Capacity)       | S. No.  | Name of Products   | Unit     | Production capacity |            |       |
|        |   | 1   | Paint, Varnish and Thinner   | KL/Annum | Existing            | Additional | Total |
|        |   | 2   | Resins   | MT/Annum | 50000               | 46000      | 96000 |
| 5      | Project Cost                                  | INR ~ 11 Crore  |  |          |                     |            |       |
| 6      | Employment with Full capacity Operation after | For operating in full capacity KNPL requires approximately 116 operators, Managers & Officers 125 & 500 Contractual Person. |  |          |                     |            |       |

|    |  |   |
|----|--|---|
|    | expansion                                |   |
| 7  | Power Supply (Grid and Standby)          | Supply: Uttar Pradesh Power Corporation Ltd. (UPPCL)<br>Peak Demand: ~ 3700 KVA   |
| 8  | Fuel                                     | HSD, Bio Fuel & Rice Husk   |
| 9  | Water Supply                             | Source: Ground water and Permitted Quantity : 800 KLD   |
| 10 | Water Requirement                        | 791 KLD (Existing 625 KLD + additional 166 KLD)   |
| 11 | Waste Water Generation                   | Total: 179 KLD and RO reject: 36 KLD<br>Domestic: 43 KLD (STP Capacity : 50 KLD)<br>Industrial: 136 KLD (ETP Capacity : 150 KLD)  |
| 12 | Wastewater Management / Disposal         | The domestic waste water and Industrial effluent generated from the unit are treated separately in STP and ETP of plant. Domestic treated water is completely recycled and reused in cleaning activity, toilet flushing and gardening where as treated water from ETP is reused in process  |
| 13 | Solid / Hazardous Waste Management       | Industrial wastes like process waste/ residue/ paint sludge are stored in designated place in factory premises and disposed off through TSDF as a land filling and incineration co-processing   |
| 14 | Proposed Air Pollution Control Equipment | Adequate stack heights are provided for all flue gas stacks in order to disperse the flue gases effectively.<br>Dust collection and fine particle filtration systems are provided to trap the particulate matter<br>Stack emission quality are maintained as per the UPPCB/CPCB norms.<br>Process vents- closed loop operations in resin manufacturing plant<br>Dust Extraction System is used to capture fugitive emissions of fine particulate matter from powder charging<br>Fume Extraction system with scrubber<br>Close Loop System |

**5. Land use details:**

| S. N. | Title  | Area, m2 | % of total Area |
|-------|--|----------|-----------------|
| 1     | Process area                                   | 26432.7  | 27.6            |
| 2     | Storage area                                   |          |                 |
| a)    | Hazardous chemical storage area                | 4318.1   | 4.5             |
| b)    | Non-hazardous chemical storage area            | 7143.12  | 7.5             |
| c)    | Hazardous waste                                | 560      | 0.6             |
| d)    | Water storage                                  | 3000     | 3.1             |
| e)    | Fuel , solvent & other liquid chemical storage | 1775.1   | 1.9             |
| 3     | Waste water treatment plant (ETP & STP)        | 3000     | 3.1             |
| 4     | Boiler   | 1576.6   | 1.6             |
| 5     | Utilities                                      | 200      | 0.2             |
| 6     | DG & LT room                                   | 563.2    | 0.6             |
| 7     | Admin Building, security cabin                 | 506.4    | 0.5             |
| 8     | Greenbelt area                                 | 31533.28 | 33.0            |
| 9     | Road   | 11490    | 12.0            |
| 10    | Open space                                     | 3497.5   | 3.7             |
| Total |  | 95596    | 100             |

**6. Raw material details:**

| S. No.                 | Chemical | Quantity (MT/Mth) | State          | Means of Transportation | Source                               |
|------------------------|----------|-------------------|----------------|-------------------------|--------------------------------------|
| Existing: Raw Material |          |                   |                |                         |                                      |
| 1                      | Additive | 652               | Liquid, powder | By road                 | Suppliers from various part of India |
| 2                      | Ammonia  | 19                | Liquid         | By road                 | Suppliers from various part of India |
| 3                      | Biocide  | 26                | Liquid, powder | By road                 | Suppliers from various part of India |
| 4                      | Solvent  | 2007              | Liquid         | By road                 | Suppliers from various part of India |
| 5                      | Chemical | 385               | Solid, Liquid  | By road                 | Suppliers from various part of India |

**Minutes of 686<sup>th</sup> SEAC-2 Meeting Dated 22/09/2022**

|                               |  |              |                      |   |   |
|-------------------------------|--|--------------|----------------------|---|---|
| 6                             | Monomer  | 576          | Liquid               | By road                                     | Suppliers from various part of India        |
| 7                             | Pigment  | 4495         | Solid, Liquid, paste | By road                                     | Suppliers from various part of India        |
| 8                             | Powder   | 669          | Solid                | By road                                     | Suppliers from various part of India        |
| 9                             | Vegetable oil (non-edible)                     | 752          | Liquid               | By road                                     | Suppliers from various part of India        |
| 10                            | Resin  | 6585         | Semi Liquid          | In-house -thru' pipeline Purchase - by road | In-house production for captive consumption |
| 11                            | Emulsion                                       | 1561         | Liquid               | In-house -thru' pipeline Purchase - by road | In-house production for captive consumption |
| 12                            | Stainer  | 95           | Liquid               | Transportation within factory premises      | In-house production for captive consumption |
| 13                            | Water  | 1126         | Liquid               | Thru' pipeline                              | Boerwell water                              |
| Existing: Product             |  |              |                      |   |   |
| 1                             | Paint and Varnish, Enamel, Lacquer and Thinner | 12917 kl/mth | Liquid Powder        | By road                                     |   |
| 2                             | Resins   | 4167 MT/mth  | Semi liquid          | By road                                     | Captive consumption                         |
| After Expansion: Raw Material |  |              |                      |   |   |
| 1                             | Additive                                       | 1073         | Liquid, powder       | By road                                     | Suppliers from various part of India        |
| 2                             | Ammonia  | 32           | Liquid               | By road                                     | Suppliers from various part of India        |
| 3                             | Biocide  | 42           | Liquid, powder       | By road                                     | Suppliers from various part of India        |
| 4                             | Solvent  | 3301         | Liquid               | By road                                     | Suppliers from various part of India        |
| 5                             | Chemical                                       | 633          | Solid, Liquid        | By road                                     | Suppliers from various part of India        |
| 6                             | Monomer  | 1196         | Liquid               | By road                                     | Suppliers from various part of India        |
| 7                             | Pigment  | 7396         | Solid, Liquid, paste | By road                                     | Suppliers from various part of India        |
| 8                             | Powder   | 1101         | Solid                | By road                                     | Suppliers from various part of India        |
| 9                             | Vegetable oil (non edible)                     | 1237         | Liquid               | By road                                     | Suppliers from various part of India        |
| 10                            | Resin  | 10834        | Semi Liquid          | Inhouse -thru' pipeline Purchase - by road  | In-house production for captive consumption |
| 11                            | Emulsion                                       | 2568         | Liquid               | Inhouse -thru' pipeline Purchase - by road  | In-house production for captive consumption |
| After Expansion: Raw Material |  |              |                      |   |   |
| 12                            | Stainer  | 157          | Liquid               | Transportation within factory premises      | In-house production for captive consumption |
| 13                            | Water  | 1852         | Liquid               | Thru' pipeline                              | Borewell water                              |
| After Expansion: Product      |  |              |                      |   |   |
| 1                             | Paint and                                      | 21250 Kl/mth | Liquid               | By road                                     |   |

|   |                                      |             |             |         |                     |
|---|--------------------------------------|-------------|-------------|---------|---------------------|
|   | Varnish, Enamel, Lacquer and Thinner |             | Powder      |         |                     |
| 2 | Resins                               | 8000 Mt/mth | Semi liquid | By road | Captive consumption |

7. Water Consumption details for Existing and Proposed Unit:

| <b>Water Consumption from Existing and Proposed Unit</b> |  |  |   |
|--|--|--|---|
| <b>Sr. No.</b>   | <b>Description</b>                                   | <b>Water Consumption in Existing Unit in KLD</b> | <b>Total Water Consumption after Expansion in KLD</b> |
| 1  | Domestic   | 48   | 49  |
|  | RO   | 226  | 349   |
| 2  | Process  | 181  | 291   |
| 3  | Boiler   | 96   | 100   |
| 4  | Cooling Tower  | 213  | 250   |
| 5  | Washings (Vessel, Drum, floor & Lab equipment's etc) | 90   | 97  |
| 6  | Firefighting   | 15   | 15  |
| 7  | Gardening  | 139  | 139   |
| 8  | Total Water Consumption                              | 827  | 999   |
| 9  | Recycled water from ETP, RO & STP                    | 202  | 208   |
| 10   | Total Fresh Water Demand                             | 625  | 791   |

8. Wastewater Generation from Existing and Proposed Unit:

| <b>Wastewater Generation from Existing and Proposed Unit</b> |  |  |   |  |
|--|--|--|---|--|
| <b>Sr. No.</b>   | <b>Description</b>                                   | <b>Wastewater Generation in Existing Unit in KLD</b> | <b>Total Wastewater Generation After Expansion in KLD</b> | <b>Treatment &amp; Disposal Facility</b>   |
| 1  | Domestic   | 43   | 43  | To STP   |
|  | RO   | 45   | 58  | 36 KLD to Gardening & 22 KLD to ETP  |
| 2  | Process  | 0  | 3   | To ETP   |
| 3  | Boiler   | 2  | 2   |  |
| 4  | Cooling Tower  | 32   | 34  |  |
| 5  | Washings (Vessel, Drum, floor & Lab equipment's etc) | 88   | 75  |  |
| 6  | Total Waste water generation                         | 210  | 216   | 136 KLD to ETP followed by RO & MEE<br>36 KLD Primary RO reject to Gardening<br>44 KLD sewage to STP |

9. Hazardous waste details:

| Waste                           | Hazardous Waste Category | Quantity per Year (MT/Yr) |          |       | Source | Method of Collection | Treatment / Disposal   |
|---------------------------------|--------------------------|---------------------------|----------|-------|--------|----------------------|--|
|                                 |                          | Existing                  | Proposed | Total |        |                      |  |
| Chemical Sludge                 | 35.3                     | 42.39                     | 3        | 45    | ETP    | Gunny bag            | Collection, storage, disposal & transportation to active TSDF as landfilling/ Coprocessing |
| Oil and Grease Skimming residue | 35.4                     | 2                         | 1        | 3     | ETP    | In barrel            | Collection, storage, disposal & transportation to active TSDF/ / for                       |

|  |      |       |       |       |  |                     |   |
|--|------|-------|-------|-------|--|---------------------|---|
|  |      |       |       |       |  |                     | in-house incineration/ co-processing  |
| Used / Spent Oil   | 5.1  | 15    | 0     | 15    | DG set, Compressor, gear box   | In barrel           | Collection, storage and sale to APPCB approved authorised recycler  |
| "Ash from incinerator and flue gas cleaning residue"                                 | 37.2 | 24.6  | 17.4  | 42    | Incinerator  | In gunny bag        | Collection, storage & will be sent to secured landfilling at TSDF   |
| MEE Salt   | 37.3 | 105   | 1     | 106   | MEE- ATFD (ZLD plant)  | In gunny bag        | Collection, storage, disposal & transportation to active TSDF as land filling   |
| Spent Carbon or Filter Medium  | 36.2 | 150   | 0     | 150   | ETP & slop oil purification  | In barrels          | Collection, storage, transportation to active TSDF for incineration/ co-processing/   |
| Distillation Residue   | 20.3 | 265   | 189   | 454   | Solvent distillation plant   | In barrels          | Collection, storage, transportation to active TSDF for incineration/ co-processing/   |
| "Contaminated Cotton Rags, other Cleaning material, liner, paper cup etc             | 33.2 | 7.5   | 4.5   | 12    | Manufacturing process  | In barrel           | Collection, storage, disposal & transportation for in-house incineration / to active TSDF/ co-processing/                           |
| "Empty barrel / Containers /liners/ bags contaminated with hazardous chemicals/waste | 33.1 | 125   | 89    | 214   | Paint Manufacturing process  | In gunny bag        | Collection, storage and will be sold to APPCB authorised recycler   |
| Discarded containers/ barrel   | 33.1 | 35000 | 20000 | 55000 | Paint Manufacturing process  | In designated place | Collection, storage and will be sold to UPPCB authorised recycler   |
| Dirty solvent  | 20.2 | 426   | 303   | 729   | Solvent Paint Manufacturing process  | In barrels          | solvent recovery plant/ sale to APPCB approved authorized recycler  |
| Process waste, residue, sludge   | 21.1 | 39    | 25    | 64    | Paint manufacturing process (Waste powder, retained sample, geled paint/resin, spilled RM) | In barrels          | Collection, storage & sell to APPCB authorised recycler/ in-house incinerator / transportation to TSDF landfill site/ Co-processing |
| Spent Ion  | 34.2 | 0     | 5     | 5     | DM plant   | In                  | Collection, Storage,  |

|  |  |  |  |  |  |         |   |
|--|--|--|--|--|--|---------|---|
| Exchange Resin containing toxic metals |  |  |  |  |  | barrels | & sent to In-house Incineration / at TSD / co-processing/ secured landfilling |
|--|--|--|--|--|--|---------|---|

10. The project proposal falls under category-5(h) of EIA Notification, 2006 (as amended).

The consultant (EIA Coordinator) also submitted an affidavit dated 28/07/2022 mentioning is as follows:

1. I, Sameer Ashok Kadam, S/o Sri Ashok Kadam is EIA Coordinator of Kadam Environmental Consultants.
2. I have prepared the EIA/EMP report for the Proposal Expansion of Integrated Paint Manufacturing Facility at UPSIDC Industrial Estate at Khasra No.- B1-B2, G-30, 31, 32, 33, 34, 35 & 36, Village- Jainpur, Tehsil - Akbarpur, District- Kanpur Dehat, U.P., M/S. Kansai Nerolac Paints Limited with my team.
3. I have personally visited the site of proposal and certify that no construction activity has been undertaken on the project site for the present proposal.
4. I am satisfied with that all the necessary data/information submitted along with EIA /EMP are true and correct.
5. I certify that this project proposal has been uploaded for the first time on Parivesh Portal. In case the project is being uploaded for the second time that is only after the withdrawal of previous project has been accepted by SEIAA, UP on Parivesh Portal.
6. I certify that there is no mismatch between information/data provided on the online application submitted on Parivash Portal and hard copy which will be submitted after acceptance of application.
7. I state that all the TOR Points have been complied and all the issues raised during Public Hearing have been properly addressed in EIA report.
8. The EIA report for the Proposal is prepared by my team as per guideline laid down by QCI/NABET.

### **RESOLUTION AGAINST AGENDA NO-03**

**The committee discussed the matter and recommended grant of environmental clearance on the proposal as above alongwith standard environmental clearance conditions prescribed by MoEF&CC, GoI and following additional conditions:**

#### **Additional Conditions:**

1. Plantation should be done as per Miyawaki method i.e. planting different types of trees at very close intervals which give a good green cover. A total of 33% of the plot area should be designated for green belt which should be raised along the boundaries of the plot with minimum of 03 mt width along the periphery in organized manner. Existing plantation and proposed plantation report to be submitted
2. Project proponent is advised to explore the possibility and getting the cement in container rather through the plastic bag.
3. Project proponent should ensure that there will be no use of “Single use of Plastic” (SUP) and submit the compliance report regularly.
4. Project proponent should adhere to the compliance for expansion as per the plan submitted to the committee and also comply the CSR/EMP compliance in time bound manner.

#### **Standard Environmental Clearance Conditions prescribed by MoEF&CC:**

1. **Statutory compliance:**
  1. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

2. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
  3. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. 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. (in case of the presence of schedule species in the study area).
  4. The project proponent shall obtain Consent to Establish/ Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
  5. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
  6. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989
2. **Air quality monitoring and preservation:**
1. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 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.
  2. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
  3. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2s 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.
  4. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and /or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
  5. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
  6. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July , 2010 and amended from time to time shall be followed.
  7. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.
3. **Water quality monitoring and preservation:**
1. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD)
  2. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
  3. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
  4. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
  5. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.



6. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
7. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.
4. **Noise monitoring and prevention :**
  1. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
  2. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
  3. 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 nighttime
5. **Energy Conservation measures:**
  1. The energy sources for lighting purposes shall preferably be LED based.
6. **Waste management:**
  1. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
  2. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
  3. The company shall undertake waste minimization measures as below:-
    - a. Metering and control of quantities of active ingredients to minimize waste.
    - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
    - c. Use of automated filling to minimize spillage.
    - d. Use of Close Feed system into batch reactors.
    - e. Venting equipment through vapour recovery system.
    - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation
7. **Green Belt:**
  1. The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
8. **Safety, public hearing and human health issues:**
  1. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
  2. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
  3. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
  4. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
  5. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
  6. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
  7. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places
9. **Corporate Environment Responsibility:**
  1. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.

- No. 22-65/2017-IA.III dated 1<sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.
2. 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.
  3. 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.
  4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry /Regional Office along with the Six Monthly Compliance Report.
  5. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
10. **Miscellaneous:**
1. 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.
  2. 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.
  3. 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.
  4. 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.
  5. 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.
  6. 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.
  7. The project proponent shall inform the Regional Office as well as the Min is try, 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.
  8. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
  9. 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.
  10. 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).
11. 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.
  12. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
  13. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
  14. 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.
  15. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
  16. 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.

**4. Building stone (Gitti, Boulder, Khanda) sandstone mine at Araj No. /Plot No./Gata No- 1Mi, khand no.-K/3, at village – Kewalpur, tehsil- Meja, district- Prayagraj, Shri Arun Kumar Singh, Area 2.024 ha. File No. 6881/Proposal No. SIA/UP/MIN/71182/2022**

The consultant informed the committee that they are strictly following the rules, regulations and other instructions of QCI/NABET. A presentation was made by the project proponent along with their consultant M/s Paramarsh Servicing Environment and Development. Based on the documents submitted and presentation made by the project proponent along with the consultant, the following facts have emerged: -

1. The environmental clearance is sought for Building stone (Gitti, Boulder, Khanda) sandstone mine at Araj No. /Plot No./Gata No- 1Mi, khand no.-K/3, Village – Kewalpur, tehsil- Meja, district- Prayagraj, Uttar Pradesh, (Leased area 2.024 ha).
2. The terms of reference in the matter were issued by SEIAA, U.P. vide letter no. 33/Parya/SEIAA/6881/2021 dated 23/04/2022.
3. The public hearing was organized on 20/07/2022 at Tehsil-Meja, District - Prayagraj, Uttar Pradesh. Final EIA report submitted by the project proponent on 02/08/2022.
4. Salient features of the project as submitted by the project proponent:

|    |   |  |
|----|---|--|
| 1. | On-line proposal No.                                    | SIA/UP/MIN/71182/2022  |
| 2. | File No. allotted by SEIAA, UP                          | 6881   |
| 3. | Name of Proponent                                       | Shri Arun Kumar Singh  |
| 4. | Full correspondence address of proponent and mobile no. | S/o Shri Dharmendra Pratap Singh<br>Add:- Village- Manda Khas<br>Tehsil- Meja, District-Prayagraj U.P.- 212302<br>Mobile no. – 9450578238<br>E mail ID - arunstone2022@gmail.com   |
| 5. | Name of Project   | Environment Clearance of Proposed Building Stone (Gitti, Boulder, Khanda) Sandstone mine at Araj No. /Plot No./Gata No- 1Mi, Khand No.-K/3, Area 2.024 ha at Village – Kewalpur, Tehsil- Meja, District- Prayagraj, Uttar Pradesh of Shri Arun Kumar Singh |
| 6. | Project Location (Plot. Khasra/Gata                     | Gata No- 1Mi, Khand No.-K/3  |

|     |   |  |              |              |  |
|-----|---|--|--------------|--------------|--|
|     | No.)  |  |              |              |  |
| 7.  | Name of River   | Building stone project   |              |              |  |
| 8.  | Name of Village   | Village – Kewalpur   |              |              |  |
| 9.  | Tehsil  | Meja   |              |              |  |
| 10. | District  | Prayagraj  |              |              |  |
| 11. | Name of Minor Mineral   | Building Stone (Khanda, Boulder, Gitti)  |              |              |  |
| 12. | Sanctioned Lease Area (in Ha.)  | 2.024 ha   |              |              |  |
| 13. | Max. & Min mRL within lease area                                      | Highest mRL 107.60 mRL<br>Lowest mRL 93.0 mRL  |              |              |  |
| 14. | Pillar Coordinates (Verified by DMO)                                  | Point  | Latitude     | Longitude    |  |
|     |   | A  | 25° 07.942”N | 82° 16.362”E |  |
|     |   | B  | 25° 07.953”N | 82° 16.417”E |  |
|     |   | C  | 25° 07.827”N | 82° 16.410”E |  |
|     |   | D  | 25° 07.845”N | 82° 16.355”E |  |
| 15. | Total Geological Reserves   | 6,05,311 m <sup>3</sup>  |              |              |  |
| 16. | Total Mineable Reserve  | 2,72,616 m <sup>3</sup>  |              |              |  |
| 17. | Total Proposed Production   | 1,01,200 m <sup>3</sup> (5 years)  |              |              |  |
| 18. | Proposed Production /year (as per LoI)                                | 20,240 m <sup>3</sup> /annum, 56,672 TPA   |              |              |  |
| 19. | Sanctioned Period of Mine lease                                       | Plan Period 5 years  |              |              |  |
| 20. | Method of Mining  | Opencast, /Semi-mechanized method  |              |              |  |
| 21. | No. of worker   | 38   |              |              |  |
| 22. | No. of vehicles movement/day  | 7  |              |              |  |
| 23. | Type of Land  | Govt./Non Forest Land  |              |              |  |
| 24. | Depth of Mining   | 7.0 m  |              |              |  |
| 25. | Nearest metalled road from site                                       | 0.20 km  |              |              |  |
| 26. | Water Requirement   | PURPOSE  |              |              |  |
|     |   | Drinking   |              | - 0.38 KLD   |  |
|     |   | Suppression of dust  |              | - 2.4 KLD    |  |
|     |   | Plantation   |              | - 3.0 KLD    |  |
|     |   | Others (if any)  |              | - 0.00 KLD   |  |
|     |   | Total  |              | - 5.78 KLD   |  |
| 27. | Name of QCI Accredited Consultant with QCI No and period of validity. | Paramarsh Servicing Environment and development<br>NABET/EIA/2124 RA 0224, Valid till –01 May 2024 |              |              |  |
| 28. | Any litigation pending against the project or land in any court       | No   |              |              |  |
| 29. | Details of 500 m Cluster Certificate verified by Mining Officer       | Letter No – 3921 /Khanij/2020-21, dated - 02/11/2021   |              |              |  |
| 30. | Details of Lease Area in approved DSR                                 | Serial no. 429, Page no. 39  |              |              |  |
| 31. | Project Cost  | 1.20 Crore   |              |              |  |
| 32. | Proposed CER cost   | 2.4 lacs   |              |              |  |
| 33. | Length and breadth of Haul Road                                       | Length – 0.20 km, Breadth – 6.00 m   |              |              |  |
| 34. | No. of Trees to be Planted  | 3000   |              |              |  |

5. The mining would be restricted to unsaturated zone only above the phreatic water table and will not intersect the ground water table at any point of time.
6. This project does not attract any of the general conditions applicable on mining projects specified in EIA Notification 14/09/2006.
7. The mining operation will not be carried out in safety zone of any bridge or embankment or in eco-fragile zone such as habitat of any wild fauna.
8. There is no litigation pending in any court regarding this project.
9. The project proposal falls under category–I(a) of EIA Notification, 2006 (as amended).

The consultant (EIA Coordinator) also submitted an affidavit dated 20/08/2022 mentioning is as follows:

1. I, Pankaj Srivastava S/o Sri V.V. Srivastava am EIA Coordinator of Paramarsh Servicing Environment and Development.
2. I have prepared the EIA/EMP report for the Proposal No. SIA/UP/MIN/71182/2022 for Building stone (Gitti, Boulder, Khanda) sandstone mine at Araji No. /Plot No./Gata No- 1Mi, khand no.- K/3, Village – Kewalpur, tehsil- Meja, district- Prayagraj, Uttar Pradesh, (Leased area 2.024 ha) with my team.
3. I have personally visited the site of proposal and certify that no Mining activity has been undertaken on the project site for the present proposal.
4. I am satisfied with that all the necessary data/information submitted along with EIA /EMP are true and correct.
5. I certify that this project proposal has been uploaded for the first time on Parivesh Portal. In case the project is being uploaded for the second time that is only after the withdrawal of previous project has been accepted by SEIAA, UP on Parivesh Portal.
6. I certify that there is no mismatch between information/data provided on the online application submitted on Parivash Portal and hard copy which will be submitted after acceptance of application.
7. I state that all the TOR Points have been complied and all the issues raised during Public Hearing have been properly addressed in EIA report.
8. The EIA report for the Proposal is prepared by my team as per guideline laid down by QCI/NABET.

**RESOLUTION AGAINST AGENDA NO. 04**

**The committee discussed the matter and recommended grant of environmental clearance for the project proposal along with general and specific conditions as annexed at Annexure-1 to these minutes. The committee also stipulated the following specific conditions:**

1. The project proponent shall install solar light in their site office.
2. During the submission of 6 monthly compliance reports, the project proponent should make sure that the periodically taken site photographs should also be annexed along with the compliance report.
3. Preference should be given to indigenous local species as per the consultation of the local district Forest Officer.
4. The maximum height of the bench should be 06 meters and the width of the bench should be at least twice the height of the bench as per the mine plan approval letter by DGM, U.P
5. In case the blasting is proposed during a mining operation, the project proponent needs to assess its impact on the displacement of human beings/wild animals/birds/other species, and the suitable measures proposed and taken for their rehabilitation and resettlement need to be clearly described in first 6 monthly compliance report.
6. The project proponent shall submit a final mine closure plan/Exit protocol for rehabilitation of mined-out land to match its surrounding land use 3years before the closure of the mine to SEIAA, UP and Department of Mines and Geology, UP for approval. The project proponent shall ensure the implementation of the approved plan under the supervision of the Dept. of Mines and Geology.
7. The project proponent shall plan and implement collection drain and siltation basins of adequate size to arrest the silt and sediment flow from the quarry area. The surface runoff rainwater harvesting and other water conservation measures on a long-term basis are to be taken in consultation with the Central/State Groundwater Board. The water so collected should be utilized for watering the haulage area, roads, and green belt development, etc.
8. The project proponent shall take all suitable measures to prevent pollution of groundwater and nearby water bodies in consultation with the State Pollution Control Board and consent to operate

- (if applicable) should be obtained from the State Pollution Control Board before the start of production from the mine.
9. Link Road from the quarry site to the main road shall be constructed as an all-weather road with blacktopping and maintained by the project proponent.
  10. Vehicular emissions should be kept under control and regularly monitored. Suitable measures shall be taken for proper maintenance of vehicles used in a quarry operation and transportation.
  11. The project proponent should explore the possibilities of rainwater harvesting.
  12. Agreement/ Consent between project proponent and competent authority/ landowner for haulage road from lease site to link road.
  13. Latest technology (water sprinklers/ tankers) to be adopted for mitigating dust at source points in lease area and haulage road during operational activity/vehicular movement.
  14. As per the proposed plan, plantation with area specific plant species, number of plants to be planted.

**5. Building Stone (Gitti, Boulder, Khanda) Sand Stone mine at Araj No./Plot No./Gata No.- 2098, Khand No. 52, Village – Bhatauti, Tehsil- Meja, District- Prayagraj, Shri Ravi Nandan Shri Ravi Nandan. Area 4.048 ha. File No. 6882/Proposal No. SIA/UP/MIN/71206/202**

The consultant informed the committee that they are strictly following the rules, regulations and other instructions of QCI/NABET. A presentation was made by the project proponent along with their consultant M/s Paramarsh Servicing Environment and Development. Based on the documents submitted and presentation made by the project proponent along with the consultant, the following facts have emerged: -

1. The environmental clearance is sought for Building Stone (Gitti, Boulder, Khanda) Sand Stone mine at Araj No./plot No./Gata No.- 2098, Khand No.-52, Village – Bhatauti, Tehsil- Meja, District- Prayagraj, Uttar Pradesh, (Leased Area : 4.048 ha).
2. The terms of reference in the matter were issued by SEIAA, U.P. vide letter no. 32/Parya/SEIAA/6882/2021, dated 23/04/2022.
3. The public hearing was organized on 20/07//2022 at Tehsil – Meja, District – Prayagraj, UP. Final EIA report submitted by the project proponent on 02/08/2022.
4. Salient features of the project as submitted by the project proponent:

|     |   |   |
|-----|---|---|
| 1.  | On-line proposal No.                                    | SIA/UP/MIN/71206/2022   |
| 2.  | File No. allotted by SEIAA, UP                          | 6882  |
| 3.  | Name of Proponent                                       | Shri Ravi Nandan  |
| 4.  | Full correspondence address of proponent and mobile no. | S/o Shri Nand Lal Yadav R/o: 928, Allapur, Neta Chauraha, Thana- George Town, Tehsil- Sadar, District- Prayagraj-U.P. 211002  |
|     |   | Mobile no. – 9795222227   |
|     |   | E mail ID - ravistone2022@gmail.com   |
| 5.  | Name of Project   | Building Stone (Gitti, Boulder, Khanda) Sand Stone mine at Araj No./Plot No./Gata No.- 2098, Khand No.-52, Area 4.048 ha (10.0 Acres) at Village – Bhatauti, Tehsil- Meja, District- Prayagraj, Uttar Pradesh of Shri Ravi Nandan |
| 6.  | Project Location (Plot. Khasra/Gata No.)                | Gata No.- 2098, Khand No.-52  |
| 7.  | Name of River   | Building Stone Project  |
| 8.  | Name of Village   | Bhatauti  |
| 9.  | Tehsil  | Meja  |
| 10. | District  | Prayagraj   |
| 11. | Name of Minor Mineral                                   | Building Stone (Khanda, Boulder, Gitti)   |
| 12. | Sanctioned Lease Area (in Ha.)                          | Area- 4.048 Ha  |
| 13. | Max. & Min mRL within lease area                        | Highest mRL 104.10 mRL<br>Lowest mRL 97.0 mRL   |

|     |   |   |       |               |                |
|-----|---|---|-------|---------------|----------------|
| 14. | Pillar Coordinates (Verified by DMO)                                  |   | Point | Latitude      | Longitude      |
|     |   |   | A     | 25°09'13.00"N | 82° 02'42.83"E |
|     |   |   | B     | 25°09'13.65"N | 82° 02'46.42"E |
|     |   |   | C     | 25°09'01.12"N | 82° 02'47.28"E |
|     |   |   | D     | 25°09'00.86"N | 82° 02'43.52"E |
| 15. | Total Geological Reserves   | 9,92,708 m <sup>3</sup>   |       |               |                |
| 16. | Total Mineable Reserve  | 6,47,220 m <sup>3</sup>   |       |               |                |
| 17. | Total Proposed Production   | 2,02,400 m <sup>3</sup> (5 years)   |       |               |                |
| 18. | Proposed Production /year (as per Lol)                                | 40,480 m <sup>3</sup> /annum or 1,13,344 TPA  |       |               |                |
| 19. | Sanctioned Period of Mine lease                                       | 5 years   |       |               |                |
| 20. | Production of mine/day  | 135 m <sup>3</sup> /day   |       |               |                |
| 21. | Method of Mining  | Opencast, /Semi-mechanized method   |       |               |                |
| 22. | No. of worker   | 44  |       |               |                |
| 23. | No. of vehicles movement/day  | 17  |       |               |                |
| 24. | Type of Land  | Govt./Non Forest Land   |       |               |                |
| 25. | Depth of Mining   | 6.0 m   |       |               |                |
| 26. | Nearest metalled road from site                                       | 0.30 km   |       |               |                |
| 27. | Water Requirement   | PURPOSE   |       |               |                |
|     |   | Drinking  |       | - 0.44 KLD    |                |
|     |   | Suppression of dust   |       | - 3.6 KLD     |                |
|     |   | Plantation  |       | - 5.0 KLD     |                |
|     |   | Others (if any)   |       | - 0.00 KLD    |                |
|     |   | Total   |       | - 9.00 KLD    |                |
| 28. | Name of QCI Accredited Consultant with QCI No and period of validity. | Paramarsh Servicing Environment and development NABET/EIA/2124 RA 0224, Valid till –01 May 2024 |       |               |                |
| 29. | Any litigation pending against the project or land in any court       | No  |       |               |                |
| 30. | Details of 500 m Cluster Certificate verified by Mining Officer       | Letter No –3922/Khanij/2021-22, dated - 02/11/2021  |       |               |                |
| 31. | Details of Lease Area in approved DSR                                 | Serial no. 418, Page no. 39   |       |               |                |
| 32. | Project Cost  | 1.40 Crore  |       |               |                |
| 33. | Proposed CER cost   | 2.80 lacs   |       |               |                |
| 34. | Length and breadth of Haul Road                                       | Length – 0.30 km, Breadth – 6.00 m  |       |               |                |
| 35. | No. of Trees to be Planted  | 5000  |       |               |                |

- The mining would be restricted to unsaturated zone only above the phreatic water table and will not intersect the ground water table at any point of time.
- This project does not attract any of the general conditions applicable on mining projects specified in EIA Notification 14/09/2006.
- The mining operation will not be carried out in safety zone of any bridge or embankment or in eco-fragile zone such as habitat of any wild fauna.
- There is no litigation pending in any court regarding this project.
- The project proposal falls under category–1(a) of EIA Notification, 2006 (as amended).

The consultant (EIA Coordinator) also submitted an affidavit dated 20/08/2022 mentioning is as follows:

- I, Pankaj Srivastava S/o Sri V.V. Srivastava am EIA Coordinator of Paramarsh Servicing Environment and Development.
- I have prepared the EIA/EMP report for the Proposal No. SIA/UP/MIN/71206/2022 for Building Stone (Gitti, Boulder, Khanda) Sand Stone mine at Araj No./plot No./Gata No.- 2098, Khand No.–52, Village – Bhatauti, Tehsil- Meja, District- Prayagraj, Uttar Pradesh, (Leased Area : 4.048 ha) with my team.

3. I have personally visited the site of proposal and certify that no Mining activity has been undertaken on the project site for the present proposal.
4. I am satisfied with that all the necessary data/information submitted along with EIA /EMP are true and correct.
5. I certify that this project proposal has been uploaded for the first time on Parivesh Portal. In case the project is being uploaded for the second time that is only after the withdrawal of previous project has been accepted by SEIAA, UP on Parivesh Portal.
6. I certify that there is no mismatch between information/data provided on the online application submitted on Parivash Portal and hard copy which will be submitted after acceptance of application.
7. I state that all the TOR Points have been complied and all the issues raised during Public Hearing have been properly addressed in EIA report.
8. The EIA report for the Proposal is prepared by my team as per guideline laid down by QCI/NABET.

**RESOLUTION AGAINST AGENDA NO. 05**

**The committee discussed the matter and recommended grant of environmental clearance for the project proposal along with general and specific conditions as annexed at Annexure-1 to these minutes. The committee also stipulated the following specific conditions:**

1. The project proponent shall install solar light in their site office.
2. During the submission of 6 monthly compliance reports, the project proponent should make sure that the periodically taken site photographs should also be annexed along with the compliance report.
3. Preference should be given to indigenous local species as per the consultation of the local district Forest Officer.
4. The maximum height of the bench should be 06 meters and the width of the bench should be at least twice the height of the bench as per the mine plan approval letter by DGM, U.P
5. In case the blasting is proposed during a mining operation, the project proponent needs to assess its impact on the displacement of human beings/wild animals/birds/other species, and the suitable measures proposed and taken for their rehabilitation and resettlement need to be clearly described in first 6 monthly compliance report.
6. The project proponent shall submit a final mine closure plan/Exit protocol for rehabilitation of mined-out land to match its surrounding land use 3years before the closure of the mine to SEIAA, UP and Department of Mines and Geology, UP for approval. The project proponent shall ensure the implementation of the approved plan under the supervision of the Dept. of Mines and Geology.
7. The project proponent shall plan and implement collection drain and siltation basins of adequate size to arrest the silt and sediment flow from the quarry area. The surface runoff rainwater harvesting and other water conservation measures on a long-term basis are to be taken in consultation with the Central/State Groundwater Board. The water so collected should be utilized for watering the haulage area, roads, and green belt development, etc.
8. The project proponent shall take all suitable measures to prevent pollution of groundwater and nearby water bodies in consultation with the State Pollution Control Board and consent to operate (if applicable) should be obtained from the State Pollution Control Board before the start of production from the mine.
9. Link Road from the quarry site to the main road shall be constructed as an all-weather road with blacktopping and maintained by the project proponent.
10. Vehicular emissions should be kept under control and regularly monitored. Suitable measures shall be taken for proper maintenance of vehicles used in a quarry operation and transportation.
11. The project proponent should explore the possibilities of rainwater harvesting.



12. Agreement/ Consent between project proponent and competent authority/ landowner for haulage road from lease site to link road.
13. Latest technology (water sprinklers/ tankers) to be adopted for mitigating dust at source points in lease area and haulage road during operational activity/vehicular movement.
14. As per the proposed plan, plantation with area specific plant species, number of plants to be planted.

**6. Common Bio Medical Waste Treatment Facility (CBWTF) at Khasra No.- 1577 & 2133 at Village-Bhadon- Mahul, P.O-Martinganj, Distt.- Azamgarh, M/S Silikon Biotech Private Limited. Shri Vinay Kumar Rai. File No. 6695/Proposal No. SIA/UP/MIS/68910/2021**

A presentation was made by the project proponent along with their consultant Environment Division M/s India Glycols Limited, Kashipur. The Secretariat inform the committee that a complaint letter dated 19/09/2022 of Shri Hari Om Sharan Dwivedi and Shri Suresh Chand Yadav letter dated 19/09/2022 received in department against proposed CBWTF M/s Silikon Biotech Private Limited at Village-Bhadon-mahul, PO-Martinganj, Distt-Azamgarh, U.P.

The committee went through the complaint letters and office memorandum of MoEF-CC, GoI OM F No. 20/02/2020-HSMD dated 01/04/2022. The committee requested to SEIAA a letter should be sent to UP Pollution Control Board- Lucknow to sought a factual report in view of complaints received against the CBWTF ( Complaint letters are enclosed). And gap analysis in the light of above office order dated 1/04/2022 within 15 days, so the case to be disposed in scheduled time

The committee also directed to the project proponent/consultant to the following documents/information:

1. Revised layout plan for green belt in proposed CBWTF with area specific plant species, number of plants to be planted.
2. Revised plan of CER./EMP activities as per the discussion held during the presentation to be submitted
3. 500 m radius Google map with showing the all geographical activities like- sensitive places, Highways, railways, educational institutions, residential habitats etc. alongwith distance and directions with supporting documents.

The matter shall be discussed after submission of online information on prescribed portal.

**7. “Ayodhya Barrage Project” with CCA 20000 Ha across River Sarayu (Ghaghara) by M/s Irrigation & Water Resources Department, Ayodhya. Vinod Kumar. File No. 7230/Proposal No. SIA/UP/RIV/82340/2022**

The consultant informed the committee that they are strictly following the rules, regulations and other instructions of QCI/NABET. A presentation was made by the project proponent along with their consultant M/s Mantec Consultants Pvt. Ltd. Based on the documents submitted and presentation made by the project proponent along with the consultant, the following facts have emerged: -

1. The terms of reference are sought for “Ayodhya Barrage Project” with CCA 20000 Ha across River Saryu (Ghaghara), District-Ayodhya, U.P. by M/s Irrigation & Water Resources Department, Ayodhya.
2. Need of the project:
  - To ensure continuous flow of water and to maintain sufficient water levels at Saryu Ghats in Ayodhya during lean period for bathing and other spiritual purposes.

- To ensure availability of sufficient water for Irrigation through Ayodhya Pump Canal (APC) System during Rabi season. During Kharif season, APC system is operational to meet the irrigation requirement from Tedhi river, a channel of Saryu.
- To meet water requirement of Ayodhya for holistic development of the city taking into account the tourism aspect and industrial development also.
- To Develop Tourism in District Ayodhya.

3. Description of project components:

1. Barrage:-820m Barrage with 45 Nos. of bays (each of 15.2m Clear Width) has been proposed. There are 25 Nos. of Spillway Gates (15.2m x 7.3m) and 20 Nos. of Under Sluice Gates (15.2m x 8.3m), for passing design discharge of 35,000 cumec (1 in 500 Return Period).
2. Design Flood:- Design flood Values for 100 Year and 500 Year return periods proposed for design are 30000 cumecs and 35000 cumecs respectively. In line with IS 6966 Part I and considering the importance of Barrage, 1 in 100 Year flood has been used for the design of various components of Barrage i.e. Waterway, Crest elevation, Bay width, Stilling basin dimensions, Cut off depths etc. except freeboard. For checking the sufficiency of freeboard, 1 in 500-year flood is utilized.
3. Road Bridge:- A road bridge has been proposed over the barrage with deck level at 98.7 m (96.7 + 2.0). This bridge shall continue on either flank of the barrage and shall connect to Main highways at either flank. The bridge is proposed to withstand two lanes of class A vehicle loading / one lane of 70 R loading.
4. River Diversion & Cofferdam Construction:- The barrage is proposed to be constructed in nine units each having five bays of 15.2 m clear width. The diversion can be easily done by making a coffer dam to cordon off the work area. It is further proposed to restrict the working period to non-monsoon season only. The coffer dam may be rebuilt after every monsoon.
5. Protection Works:- Flexible protection works in the form of Cement Concrete (CC) Blocks, and launching apron are proposed at downstream as well as at upstream. Minimum weight of stone to be used in protection work should be such as to resist a flow velocity of 5 m/s or 50 kg whichever is more. If found economical, wire crates may also be used in place of stones.
6. Navigation Lock:- A navigation channel along the Main Ghaghara River has been provisioned. The proposed Navigation Channel has clear width of 15 m.
7. Fish Pass:- A Denvil type fish pass of width 2 m and length 120 m is proposed adjacent to navigation lock to allow passage of fish and ensure smooth migration of fish from downstream to upstream. However, at construction stage, it may be modified to suits the specific requirement of endemic species of fish found in this stretch of river
8. Afflux Bunds:- Since with pond level of 93.5 and also due to water level corresponding to 1 in 100 / 1 in 500-year flood, a large part of upstream area of the barrage particularly at the left bank was getting submerged overflowing the perennial Tedhi River on the Left Side of the river, Afflux bunds have been proposed on the left bank of barrage on upstream side and downstream side.
9. Intake for Ram Ki Pairi Ghat:- An intake sluice structure has been proposed to draw water through gravity to Ram Ki Pairi artificial Ghat. The location is proposed near the existing pumping station on the right bank ghat
10. Design of Feeder Canal and Cross Drainage Structures:- Proposed Ayodhya Barrage Project will cater to the Irrigation water requirement of existing command area of Ayodhya Pump Canal System (APCS). Command Area and Canal Network of APCS is already developed, but due to insufficient and non-uniform availability of water during the lean season cropping intensity is very less. To serve this purpose, a 200 mm thick PCC Lined feeder canal of about 14.8 km is proposed to off take from the barrage on the left bank for supplying water to APCS for assured irrigation

11. Design for Hydro Mechanical Works:- Hydro-Mechanical (HM) equipment catering to aforesaid requirement comprises the following: -
  - Main Barrage Gates
  - Barrage Under Sluice Gates
12. Head Regulators - Head regulators (HR) have been provided in the canal/branches to regulate the flow and control silt entry into off-taking channel. The aforesaid service & emergency gates are vertical lift fixed wheel type. The gate size, crest level, design head and hoisting capacity of various gates at different locations are indicated in relevant layout Plan. Operation of gate is proposed to be carried out by electric rope drum hoist.
13. Distribution System- NA, as APCS command is already exists, Hence Only Feeder Canal upto APCS head is Proposed in this scheme.
14. Total Project Cost = 2921.51 Cr.
15. B.C. Ratio:- 1.22
16. Estimated life of project = 100 years
17. Project Construction Period = 05 years

4. Salient features of the project:

| PARTICULARS   | DETAILS   |
|---|---|
| Name of Project   | Proposed "AYODHYA BARRAGE PROJECT" with CCA 20000 Ha. across River Saryu (Ghaghara)   |
| Project Proponent   | (Investigation and Planning) Irrigation and Water Resource Department, Saryu Bhawan, Hanuman Garhi, Sahadat Ganj, Ayodhya, Uttar Pradesh-224001   |
| Location of the project   | Ayodhya City, Uttar Pradesh<br>Barrage – District Ayodhya<br>Left Bank - 26°49'05.75"N & 82°12'36.12"E<br>Right Bank - 26°48'38.94"N & 82°12'36.35"E<br>450 m downstream of old Saryu Bridge (Ayodhya - Gonda National Highway)<br>Head Work – District Ayodhya<br>Command Area – District Basti  |
| Access to the Project   | Airport – Lucknow – 150 Km<br>Rail Head – Ayodhya – 5 Km<br>Road Head - NH 27 – Near NH   |
| Land Requirement and Land Use   | The proposed project will have 150 ha of agriculture land is going to be submerged due to the construction of Barrage (115 Ha) and due to provision of 8.1 km long afflux bunds (35 Ha). No forest area is coming under submergence. The present land use of the selected site is un-irrigated land. Diversion of land for this project will be converted into productive agricultural land. Further, land reclamation of about 690 ha is also provisioned due to construction of 8.1 km long U/S Afflux Bunds with top EL. at 98.0 m |
| Total Storage capacity under the scheme                               | 79.26 Mm <sup>3</sup>   |
| Average Annual Rainfall   | 1427 mm   |
| Reserved Forest/ Protected Forest                                     | Parvati Arga Bird Sanctuary ~ 11.64 Km/NW   |
| Seismic Zone  | Zone-III (As per 1893:2002)   |
| Category of Project   | "B1" (With reference to EIA Notification, 2006 and its subsequent amendment dated 14.08.2018 – Schedule 1(c)(ii) Irrigation projects classified as Major Irrigation System (>10,000 and <50,000 Ha.))   |
| <b>Hydrology</b>  |   |
| Catchment Area at Head Work (Gross)                                   | 87220 Sq. Km  |
| Estimated Flood<br>100 Years Return Period<br>500 Years Return Period | 30,000 Cumecs<br>35,000 Cumecs  |

|   |  |
|---|--|
| Design Discharge at Barrage   | 30,000 Cumecs  |
| River Flow Minimum Observed   | (a) Water level (EL-m) 86.65<br>(b) Discharge (m <sup>3</sup> /s.) 41.18 |
| Reservoir<br>Water Levels (EL-m)<br>(a) Maximum Water Level (MWL)<br>(b) Pond Level<br>(c) Minimum Draw Down Level (MDDL)<br>(d) Irrigation Outlet levels<br>(e) Dead Storage Level | 95.483<br><br>93.5<br>90.3<br><br>90.0<br>90.0                           |
| Submergence (Land Affected Sq.km.)<br>(i) Gross<br>(ii) Culturable<br>(iii) Forest<br>(v) Others (specify) (Barren land & Area of River )   | 49.95<br>1.5<br>0<br>48.45   |
| Barrage   |  |
| Length in m   | 820 m  |
| Number of gates   | 25   |
| Type of gates   | Fixed wheel vertical lift  |
| Size of gates (m x m)   | 15.2 x 7.3   |
| Feeder Canal (Renovation of Ayodhya Pump Canal System)  |  |
| Proposed Capacity of Feeder Canal   | 17 Cumec   |
| Current Irrigated Area (Kharif)   | 10,000 Ha  |
| Irrigated Area after completion of project  | 20,000 Ha  |
| Proposed Irrigation in Kharif   | 17,000 Ha  |
| Proposed Irrigation in Rabi   | 12,000 Ha  |
| All weather Crop Irrigation Area  | 3,000 Ha   |
| Irrigation Intensity  | 160%   |
| Water Availability for Irrigation in Barrage  | 190 MCM  |

**5. Environmental sensitivity (10 km radius of the project):**

| S. N. | Particular  | Details  |
|-------|---|--|
| 1.    | State/National boundaries   | No State/National Boundaries is falling within 10 km of the project site.<br>India – Nepal national boundaries is about 92 Km/NE |
| 2.    | Nearest State/National Highway  | NH-27 - 1 Km/E   |
| 3.    | Areas occupied by sensitive manmade land uses (hospitals, schools, places of worship, community facilities) | State Govt. Women Hospital - 0.94 Km/SW<br>Primary School Raiganj Ayodhya - 1.36 Km/SW<br>Shri Ram Mandir Ayodhya - 2.24 Km/SW   |
| 4.    | Reserved Forest/<br>Protected Forest  | Parvati Arga Bird Sanctuary ~ 11.64 Km/NW  |

**6. The project proposal falls under category-3(a) of EIA Notification, 2006 (as amended).**

The consultant (EIA Coordinator) also submitted an affidavit dated 25/08/2022 mentioning is as follows:

1. I, Kamal Saxena S/o Late Hari Dev Saxena is EIA Coordinator of Environmental and Technical Research Centre.

2. I have prepared the form-1, & PFR report for the proposal in the name of “Ayodhya Barrage Project” with CCA 20000 Ha across River Saryu (Ghaghara), District-Ayodhya, U.P. by M/s Irrigation & Water Resources Department, Ayodhya, Uttar Pradesh with my team.
3. I have personally visited the site of proposal and certify that no construction activity has been undertaken on the project site for the present proposal.
4. I am satisfied with that all the necessary data/information submitted along with application/EMP are true and correct.
5. I certify that this project proposal has been uploaded for the first time on Parivesh Portal. In case the project is being uploaded for the second time that is only after the withdrawal of previous project has been accepted by SEIAA, UP on Parivesh Portal.
6. I certify that there is no mismatch between information/data provided on the online application submitted on Parivash Portal and hard copy which will be submitted after acceptance of application.
7. The Form-1 & PFR report for the Proposal is prepared by my team as per guideline laid down by QCI/NABET.

### **RESOLUTION AGAINST AGENDA NO. 07**

**The committee discussed the matter and recommended to issue the standard terms of reference (TOR) for the preparation of Environment Impact Assessment Report:**

1. Scope of EIA Studies
  - I. The EIA Report should identify the relevant environmental concerns and focus on potential impacts that may change due to the construction of proposed project. Based on the baseline data collected for three (3) seasons (Pre-monsoon, Monsoon and Winter seasons), the status of the existing environment in the area and capacity to bear the impact on this should be analysed. Based on this analysis, the mitigation measures for minimizing the impact shall be suggested in the EIA/EMP study.
2. Details of the Project and Site
  - I. General introduction about the proposed project.
  - II. Details of project and site giving L-sections of all U/S and D/S projects of River with all relevant maps and figures. Connect such information as to establish the total length of interference of Natural River, the total length of tunneling of the river and the committed unrestricted release from the site of diversion into the main river
  - III. A map of boundary of the project site giving details of protected areas in the vicinity of project location.
  - IV. Location details on a map of the project area with contours indicating main project features. The project layout shall be superimposed on a contour map of ground elevation showing main project features (viz. location of dam, Head works, main canal, branch canals, quarrying etc.) shall be depicted in a scaled map.
  - V. Layout details and map of the project along with contours with project components clearly marked with proper scale maps of at least a 1:50,000 scale and printed at least on A3 scale for clarity.
  - VI. Existence of National Park, Sanctuary, Biosphere Reserve etc. in the study area, if any, should be detailed and presented on a map with distinct distances from the project components.
  - VII. Drainage pattern and map of the river catchment up to the proposed project site.
  - VIII. Delineation of critically degraded areas in the directly draining catchment on the basis of silt Yield Index as per the methodology of All India Soil and Land Use Survey of India.
  - IX. Soil characteristics and map of the project area.
  - X. Geological and seismo-tectonic details and maps of the area surrounding the proposed project site showing location of dam site and powerhouse site.
  - XI. Remote Sensing studies, interpretation of satellite imagery, topographic sheets along with ground verification shall be used to develop the land use/land cover pattern of the study using overlaying mapping techniques viz. Geographic Information System (GIS), False Color composite (FCC) generated from satellite data of project area.

- XII. Land details including forests, private and other land.
- XIII. Demarcation of snow fed and rain fed areas for a realistic estimate of the water availability.
- XIV. Different riverine habitats like rapids, pools, side pools and variations in the river substratum - bedrocks, rocks, boulders, sand/silt or clay etc. need to be covered under the study.

3. Description of Environment and Baseline Data

- I. To know the present status of environment in the area, baseline data with respect to environmental components air, water, noise, soil, land and biology & biodiversity (flora & fauna), wildlife, socio-economic status etc. should be collected with 10 km radius of the main components of the project/site i.e. dam site and power house site. The air quality and noise are to be monitored at such locations which are environmentally & ecologically more sensitive in the study area. The baseline studies should be collected for 3 seasons (Pre-Monsoon, Monsoon and Post Monsoon seasons). The study area should comprise of the following:
  - Catchment area up-to the dam site.
  - Submergence Area
  - Project area or the direct impact area should comprise of area falling within 10 km radius from the periphery of reservoir, land coming under submergence and area downstream of dam upto the point where Tail Race Tunnel (TRT) meets the river.
  - Downstream upto 10 km from tip of Tail Race Tunnel (TRT)

4. Details of the Methodology

- I. The methodology followed for collection of base line data along with details of number of samples and their locations in the map should be included. Study area should be demarcated properly on the appropriate scale map. Sampling sites should be depicted on map for each parameter with proper legends. For forest classification, Champion and Seth (1968) classification should be followed.

5. Methodology for collection of Biodiversity Data

- I. The number of sampling locations should be adequate to get a reasonable idea of the diversity and other attributes of flora and fauna. The guiding principles should be the size of the study area (larger area should have larger number of sampling locations) and inherent diversity at the location, as known from secondary sources (e.g. eastern Himalayan and low altitude sites should have a larger number of sampling locations owing to higher diversity).
- II. The entire area should be divided in grids of 5km X 5km preferably on a GIS domain. There after 25% of the grids should be randomly selected for sampling of which half should be in the directly affected area (grids including project components such as reservoir, dam, powerhouse, tunnel, canal etc.) and the remaining in the rest of the area (areas of influence in 10 km radius from project components). At such chosen location, the size and number of sampling units (e.g. quadrats in case of flora/transects in case of fauna) must be decided by species area curves and the details of the same (graphs and cumulative number of species in a tabulated form) should be provided in the EIA report. Some of the grids on the edges may not be completely overlapping with the study area boundaries. However these should be counted and considered for selecting 25% of the grids. The number of grids to be surveyed may come out as a decimal number (i.e. it has an integral and a fractional part) which should be rounded to the next whole number.
- III. The conventional sampling is likely to miss the presence of rare, endangered and threatened (R.E.T.) species since they often occur in low densities and in case of faunal species are usually secretive in behaviour. Reaching the conclusion about the absence of such species in the study area based on such methodology is misleading. It is very important to document the status of such species owing to their high conservation value. Hence likely presence of such species should be ascertained from secondary sources by a proper literature survey for the said area including referring to field guides which are now available for many taxonomic groups in India. Even literature from studies/surveys in the larger landscapes which include the study area for the concerned project must be referred to since most species from adjoining catchments is likely to be present in the catchments in question. In fact such literature from the entire state can be referred to. Once a listing of possible R.E.T. species from the said area is developed, species specific methodologies should be adopted to ascertain their presence in the

study area which would be far more conclusive as compared to the conventional sampling. If the need be, modern methods like camera trapping can be resorted to, particularly for areas in the eastern Himalayas and for secretive/nocturnal species. A detailed listing of the literature referred to, for developing lists of R.E.T. species should be provided in the EIA reports.

- IV. The R.E.T. species referred to in this point should include species listed in Schedule I and II of Wildlife (Protection) Act, 1972 and those listed in the red data books (BSI, ZSI and IUCN).

## 6. Components of the EIA Study

Various aspects to be studied and provided in the EIA/EMP report are as follows:

### A. Physical and Chemical Environment

- Geological & Geophysical Aspects and Seismo - Tectonics:
  - Physical geography, Topography, Regional Geological aspects and structure of the Catchment.
  - Tectonics, seismicity and history of past earthquakes in the area. A site specific study of the earthquake parameters will be done. The results of the site specific earthquake design shall be sent for approval of the NCSDP (National committee of Seismic Design Parameters, Central water commission, New Delhi for large dams.
  - Landslide zone or area prone to landslide existing in the study area should be examined.
  - Presence of important economic mineral deposit, if any.
  - Justification for location & execution of the project in relation to structural components (dam height).
  - Impact of project on geological environment.
- Meteorology, Air and Noise:
  - Meteorology (viz. Temperature, Relative humidity, wind speed/direction etc.) to be collected from nearest IMD station.
  - Ambient Air Quality with parameters viz. Suspended Particulate Matter (SPM), Respirable Suspended Particulate Matter (RSPM) i.e. suspended particulate materials.
  - Existing noise levels and traffic density in the study area at 6 locations.
- Soil Characteristics
  - Soil classification, physical parameters (viz., texture, porosity, bulk density and water holding capacity) and chemical parameters (viz. pH, electrical conductivity, magnesium, calcium, total alkalinity, chlorides, sodium, potassium, organic carbon, available potassium, available phosphorus, SAR, nitrogen and salinity, etc.) (6 locations).
- Remote sensing and GIS Studies
  - Generation of thematic maps viz., slope map, drainage map, soil map, land use and land cover map, etc. Based on these, thematic maps, an erosion intensity map should be prepared.
- Water Quality
  - History of the ground water table fluctuation in the study area.
  - Water quality for both surface water and ground water for (i) Physical parameters (pH, temperature, electrical conductivity, TSS); (ii) Chemical parameters (Alkalinity, Hardness, BOD, COD, NO<sub>2</sub>, PO<sub>4</sub>, Cl, SO<sub>4</sub>, Na, K, Ca, Mg, Silica, Oil & Grease, phenolic compounds, residual sodium carbonate); (iii) Bacteriological parameter (MPN, Total coliform) and (iv) Heavy Metals (Pb, As, Hg, Cd, Cr-6, total Cr, Cu, Zn, Fe) (6 locations).
  - Delineation of sub and micro-watersheds, their locations and extent based on the All India Soil and Land Use Survey of India (AISLUS), Department of Agriculture, Government of India. Erosion levels in each micro-watershed and prioritization of micro-watershed through silt yield index (SYI) method of AISLUS.

### B. Water Environment & Hydrology

- Hydro-Meteorology of the project viz. precipitation (snowfall, rainfall), temperature, relative humidity, etc. Hydro-meteorological studies in the catchment area should be established along-with real time telemetry and data acquisition system for inflows monitoring.
- Run off, discharge, water availability for the project, sedimentation rate, etc.
- Basin characteristics
- Catastrophic events like cloud bursts and flash floods, if any, should be documented.
- For estimation of Sedimentation Rate, direct sampling of river flow is to be done during the EIA study. The study should be conducted for minimum one year. Actual silt flow rate to be expressed in ha-m km<sup>2</sup> year<sup>-1</sup>.
- Set up a G&D monitoring station and a few rain gauge stations in the catchment area for collecting data during the investigation.
- Flow series, 10 daily with 90%, 75% and 50% dependable years discharges.
- Information on the 10-daily flow basis for the 90 per cent dependable year the flow intercepted at the dam, the flow diverted to the power house and the spill comprising the environmental flow and additional flow towards downstream of the dam for the project may be given.
- The minimum environmental flow shall be 20% of the flow of four consecutive lean months of 90% dependable year, 30% of the average monsoon flow. The flow for remaining months shall be in between 20-30%, depending on the site specific requirements. A site specific study shall be carried out by an expert organization.
- Hydrological studies/data as approved by CWC shall be utilized in the preparation of EIA/ EMP report. Actual hydrological annual yield may also be given in the report.
- Sedimentation data available with CWC may be used to find out the loss in storage over the years.
- A minimum of 1 km distance from the tip of the reservoir to the tail race tunnel should be maintained between upstream and downstream projects.

#### C. Biological Environment

Besides primary studies, review of secondary data/literature published for project area on flora & fauna including RET species shall be reported in EIA/EMP report.

##### ➤ Flora:

- Characterization of forest types (as per Champion and Seth method) in the study area and extent of each forest type as per the Forest Working Plan.
- Documentation of all plant species i.e. Angiosperm, Gymnosperm, Pteridophytes, Bryophytes (all groups).
- General vegetation profile and floral diversity covering all groups of flora including lichens and orchids. A species wise list may be provided.
- Assessment of plant species with respect to dominance, density, frequency, abundance, diversity index, similarity index, importance value index (IVI), Shannon Weiner index etc. of the species to be provided. Methodology used for calculating various diversity indices along with details of locations of quadrates, size of quadrates etc. to be reported within the study area in different ecosystems.
- Existence of National park, Sanctuary, Biosphere Reserve etc in the study area, if any, should be detailed.
- Economically important species like medicinal plants, timber, fuel wood etc.
- Details of endemic species found in the project area.
- Flora under RET categories should be documented using International Union for the Conservation of Nature and Natural Resources (IUCN) criteria and Botanical Survey of India's Red Data list along-with economic significance. Species diversity curve for RET species should be given.
- Cropping pattern and Horticultural Practices in the study area.

##### ➤ Fauna:



- Fauna study and inventorisation should be carried out for all groups of animals in the study area. Their present status alongwith Schedule of the species.
- Documentation of fauna plankton (phyto and zooplankton), periphyton, benthos and fish should be done and analysed.
- Information (authenticated) on Avi-fauna and wildlife in the study area.
- Status of avifauna their resident/ migratory/ passage migrants etc.
- Documentation of butterflies, if any, found in the area.
- Details of endemic species found in the project area.
- RET species-voucher specimens should be collected along-with GPS readings to facilitate rehabilitation. RET faunal species to be classified as per IUCN Red Data list and as per different schedule of Indian Wildlife (Protection) Act, 1972.
- Existence of barriers and corridors, if any, for wild animals.
- Compensatory afforestation to compensate the green belt area that will be removed, if any, as part of the proposed project development and loss of biodiversity.
- Collection of primary data on agricultural activity, crop and their productivity and irrigation facilities components.
- For categorization of sub-catchment into various erosion classes and for the consequent CAT plan, the entire catchment (Indian Portion) is to be considered and not only the directly the draining catchment.

**D. Aquatic Ecology**

- Documentation of aquatic fauna like macro-invertebrates, zooplankton, phytoplanktons, benthos etc.
- Fish and fisheries, their migration and breeding grounds.
- Fish diversity composition and maximum length & weight of the measured populations to be studies for estimation of environmental flow.
- Conservation status of aquatic fauna.
- Sampling for aquatic ecology and fisheries and fisheries must be conducted during three seasons - Pre-monsoon (summer), monsoon and winter. Sizes (length & weight) of important fish species need to be collected and breeding and feeding grounds should also be identified along the project site or in vicinity.

**E. Socio-Economic**

- Collection of baseline data on human settlements, health status of the community and existing infrastructure facilities for social welfare including sources of livelihood, job opportunities and safety and security of workers and surroundings population.
- Collection of information with respect to social awareness about the developmental activity in the area and social welfare measures existing and proposed by project proponent.
- Collection of information on sensitive habitat of historical, cultural and religious and ecological importance.
- The socio-economic survey/ profile within 10 km of the study area for demographic profile; Economic Structure; Developmental Profile; Agricultural Practices; Infrastructure, education facilities; health and sanitation facilities; available communication network etc.
- Documentation of demographic, Ethnographic, Economic Structure and development profile of the area.
- Information on Agricultural Practices, Cultural and aesthetic sites, Infrastructure facilities etc.
- Information on the dependence of the local people on minor forest produce and their cattle grazing rights in the forest land.
- List of all the Project Affected Families with their name, age, educational qualification, family size, sex, religion, caste, sources of income, land & house holdings, other properties, occupation, source of income, house/land to be acquired for the project and house/land left with the family, any other property, possession of cattle, type of house etc.

- Special attention has to be given to vulnerable groups like women, aged persons etc. and to any ethnic/indigenous groups that are getting affected by the project.

## **7. Impact Prediction and Mitigation Measures**

The adverse impact due to the proposed project should be assessed and effective mitigation steps to abate these impacts should be described.

### **A. Air Environment**

- Changes in ambient and ground level concentrations due to total emissions from point, line and area sources.
- Effect on soil, material, vegetation and human health.
- Impact of emissions from DG set used for power during the construction, if any, on air environment.
- Pollution due to fuel combustion in equipments and vehicles
- Fugitive emissions from various sources

### **B. Water Environment**

- Changes in surface and ground water quality
- Steps to develop pisci-culture and recreational facilities
- Changes in hydraulic regime and downstream flow.
- Water pollution due to disposal of sewage
- Water pollution from labour colonies/ camps and washing equipment.

### **C. Land Environment**

- Adverse impact on land stability, catchment of soil erosion, reservoir sedimentation and spring flow (if any) (a) due to considerable road construction / widening activity (b) interference of reservoir with the inflowing stream (c) blasting for commissioning of HRT, TRT and some other structures.
- Changes in land use / land cover and drainage pattern
- Immigration of labour population
- Quarrying operation and muck disposal
- Changes in land quality including effects of waste disposal
- River bank and their stability
- Impact due to submergence.

### **D. Biological Environment**

- Impact on forests, flora, fauna including wildlife, migratory avi-fauna, rare and endangered species, medicinal plants etc.
- Pressure on existing natural resources
- Deforestation and disturbance to wildlife, habitat fragmentation and wild animal's migratory corridors
- Compensatory afforestation-identification of suitable native tree species for compensatory afforestation and green belt.
- Impact on fish migration and habitat degradation due to decreased flow of water
- Impact on breeding and nesting grounds of animals and fish.

### **E. Socio-economic aspects**

- Impact on local community including demographic profile.
- Impact on socio-economic status
- Impact on economic status.
- Impact on human health due to water / vector borne disease
- Impact on increase traffic
- Impact on Holy Places and Tourism

- Impacts of blasting activity during project construction which generally destabilize the land mass and leads to landslides, damage to properties and drying up of natural springs and cause noise pollution will be studied. Proper record shall be maintained of the baseline information in the post project period.
- Positive and negative impacts likely to be accrued due to the project are listed.

**8. Environmental Management Plans**

1. Catchment Area Treatment (CAT) Plan should be prepared micro-watershed wise. Identification of free draining/ directly draining catchment based upon Remote Sensing and Geographical Information System (GIS) methodology and Sediment Yield Index (SYI) method of AISLUS, Deptt. of Agriculture, Govt. of India coupled with ground survey. Areas or watersheds falling under 'very severe' and 'severe' erosion categories should be provided and required to be treated. Both biological as well as engineering measures should be proposed in consultation with State Forest Department for areas requiring treatment. Year-wise schedule of work and monetary allocation should be provided. Mitigation measures to check shifting cultivation in the catchment area with provision for alternative and better agricultural practices should be included.
2. Compensatory Afforestation shall be prepared by the State Forest Department in lieu of the forestland proposed to be diverted for construction of the project as per the Forest (Conservation) Act, 1980. Choice of plants for afforestation should include native and RET species, if any. This will be a part of the forest clearance proposal.
3. Biodiversity and Wildlife Conservation and Management Plan for the conservation and preservation of rare, endangered or endemic floral/faunal species or some National Park/Sanctuary/ Biosphere Reserve or other protected area is going to get affected directly or indirectly by construction of the project, then suitable conservation measures should be prepared in consultation with the State Forest Department and with the physical and financial details. Suitable conservation techniques (in-situ/ ex-situ) will be proposed under the plan and the areas where such conservation is proposed will be marked on a project layout map.
4. Fisheries Conservation and Management Plan - a specific fisheries management measures should be prepared for river and reservoir. If the construction of fish ladder/ fish-way etc. is not feasible then measures for reservoir fisheries will be proposed. The plan will detail out the number of hatcheries, nurseries, rearing ponds etc. proposed under the plan with proper drawings. If any migratory fish species is getting affected then the migratory routes, time/season of upstream and downstream migration, spawning grounds etc will be discussed in details.
5. Resettlement and Rehabilitation Plan needed to be prepared on the basis of findings of the socio-economic survey coupled with the outcome of public consultation held. The R&R package shall be prepared after consultation with the representatives of the project affected families and the State Government. Detailed budgetary estimates are to be provided. Resettlement site should be identified. The plan will also incorporate community development strategies.
6. Green Belt Development Plan along the periphery of the reservoir, approach roads around the colonies and other project components, local plant species must be suggested with physical and financial details. A layout map showing the proposed sites for developing the green belt should be prepared.
7. Reservoir Rim Treatment Plan for stabilization of land slide / land slip zones, if any, around the reservoir periphery is to be prepared based on detailed survey of geology of the reservoir rim area. Suitable engineering and biological measures for treatment of identified slip zones to be suggested with physical and financial schedule. Layout map showing the landslide/landslip zones shall be prepared and appended in the chapter.
8. Muck Disposal Plan suitable sites for dumping of excavated materials should be identified in consultation with State Pollution Control Board and State Forest Department. All muck disposal sites should be minimum 30 m away from the HFL of river. The quantity of muck to be generated and the quantity of muck proposed to be utilized shall be calculated in consultation with the project authorities. Details of each dumping site viz. area, capacity, total quantity of muck that can be dumped

- etc. should be worked out and discussed in the plan. Plan for rehabilitation of muck disposal sites should also be given. The L-section / cross section of muck disposal sites and approach roads should be given. The plan shall have physical and financial details of the measures proposed. Layout map showing the dumping sites vis-à-vis other project components will be prepared and appended in the chapter.
9. Restoration Plan for Quarry Sites and landscaping of colony areas, working areas, roads etc. Details of the coarse/fine aggregate/clay etc. required for construction of the project and the rock/clay quarries/river shoal sites identified for the project should be discussed along-with the Engineering and Biological measures proposed for their restoration with physical and financial details. Layout map showing quarry sites vis-à-vis other project components, should be prepared.
  10. Study of Design Earthquake Parameters: A site specific study of earthquake parameters should be done. Results of the site specific earthquake design parameters should be approved by National Committee of Seismic Design Parameters, Central Water Commission (NCSDP), New Delhi.
  11. Dam Break Analysis and Disaster Management Plan The outputs of dam break model should be illustrated with appropriate graphs and maps clearly bringing out the impact of Dam Break scenario. To identify inundation areas, population and structures likely to be affected due to catastrophic floods in the event of dam failure. DMP will be prepared with the help of Dam Break Analysis. Maximum water level that would be attained at various points on the downstream in case of dam break will be marked on a detailed contour map of the downstream area, to show the extent of inundation. The action plan will include Emergency Action and Management plan including measures like preventive action notification, warning procedure and action plan for co-ordination with various authorities.
  12. Water, Air and Noise Management Plans to be implemented during construction and post-construction periods.
  13. Public Health Delivery Plan including the provisions of drinking water supply for local population shall be in the EIA/EMP Report. Status of the existing medical facilities in the project area shall be discussed. Possibilities of strengthening of existing medical facilities, construction of new medical infrastructure etc. will be explored after assessing the need of the labour force and local populace.
  14. Labour Management Plan for their Health and Safety.
  15. Sanitation and Solid waste management plan for domestic waste from colonies and labour camps etc.
  16. Local Area Development Plan to be formulated in consultation with the Revenue Officials and Village Panchayats. Appropriate schemes shall be prepared under EMP for the Local Area Development Plan with sufficient financial provisions.
  17. Environmental safeguards during construction activities including Road Construction.
  18. Energy Conservation Measures for the work force during construction with physical and financial details. Alternatives will be proposed for the labour force so that the exploitation of the natural resource (wood) for the domestic and commercial use is curbed.
  19. Environmental Monitoring Programme to monitor the mitigatory measures implemented at the project site is required will be prepared. Provision for Environment Management Cell should be made. The plan will spell out the aspects required to be monitored, monitoring indicators/parameters with respect to each aspect and the agency responsible for the monitoring of that particular aspect throughout the project implementation.
  20. A summary of Cost Estimates for all the plans, cost for implementing all the Environmental Management Plans.

**8. “Building Stone (Sandstone) Mining” At Arazi No. - 428 Village- Dhuriya, Tehsil- Chunar, District- Mirzapur, Shri Manish Singh. M/s Baghel Infraprojects Pvt. Ltd. Area- 2.828 Ha. File No. 7092/Proposal No. SIA/UP/MIN/76270/2022**

The committee noted that the matter was earlier discussed in 643<sup>rd</sup> SEIAA meeting dated 25/08/2022 and directed are as follows:

*“SEIAA noted that the above project was taken in its 625<sup>th</sup> meeting in which SEIAA observed that Point no. 28 of salient features of the project mentions:-*

*“There are numbers of areas occupied by sensitive man made land uses within 15 km of radius only schools, small hospital and temples are present.” Hence SEIAA opined that PP/consultant should clarify their statement and submit a letter from District Administration whether mining can be carried out with the presence of these sensitive man-made structures or not?”*

*The project proponent has submitted his reply vide letter dated 03.08.2022 stating that it was a typographical error and there are no area occupied by sensitive man made land uses. This project was appraised by SEAC-2 in its 663<sup>rd</sup> meeting dated 16.06.2022, thus SEIAA opined to refer the reply to SEAC-2 for their deliberation/recommendation.”*

As per the direction of SEIAA, the matter was listed in 686<sup>th</sup> SEAC meeting dated 22/09/2022. The committee discussed the matter and opined that the project proponent/consultant shall present before SEAC and make a presentation to clarify the queries raised by SEIAA.

**(Prof. Jaswant Singh)  
Member, SEAC-2**

**(Dr. Amrit Lal Haldar)  
Member, SEAC-2**

**(Dr. Dineshwar Prasad Singh)  
Member, SEAC-2**

**(Tanzar Ullah Khan)  
Member, SEAC-2**

**(Dr. Shiv Om Singh)  
Member, SEAC-2**

**(Dr. Harikesh Bahadur Singh)  
Chairman, SEAC-2**

**(Ashish Tiwari)  
Member-Secretary, SEAC-2**

**Nodal, SEAC-2**

MoM prepared by Secretariat in consultation with  
Chairman & Members on the basis of decisions  
taken by SEAC-2 during the meeting.

**Annexure-1**

**General and Specific Conditions for Gitti, Patthar & Boulder Mining Projects: -**

**A. General Conditions:**

1. This environmental clearance is subject to allotment of mining lease in favour of project proponent by District Administration/Mining Department.
2. Forest clearance shall be taken by the proponent as necessary under the law.
3. Any addition of the mining area, change of Khasra numbers, enhancement of capacity, change in mining technology, modernization, and scope of working shall again require prior environmental clearance as per EIA notification, 2006.
4. No change in the calendar plan including excavation, the quantum of mineral and waste shall be made.
5. Mining will be carried out as per the approved mining plan. In case of any violation of the mining plan, the Environmental Clearance given by SEIAA will stand cancelled.
6. Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for RSPM, SPM, SO<sub>2</sub>, NO<sub>x</sub> monitoring. The location of the stations should be decided based on the meteorological data, topographical features, and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board. The monitored data for criteria pollutants shall be regularly uploaded on the company's website and also displayed on the website.
7. Data on ambient air quality (RPM, SPM, SO<sub>2</sub>, NO<sub>x</sub>) should be regularly submitted to the Integrated Regional Office, MoEF&CC, GoI, Lucknow and the State Pollution Control Board / Central Pollution Control Board once in six months.
8. Ambient air quality at the boundary of the mine premises shall conform to the norms prescribed in MoEF notification no. GSR/826(E) dated 16.11.09.
9. Fugitive dust emissions from all the sources shall be controlled regularly. Water spraying arrangement on haul roads, loading and unloading, and at transfer points shall be provided and properly maintained.
10. Measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. shall be provided with earplugs/muffs and health records of the workers shall be maintained.
11. Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time. Oil and grease traps shall be installed before the discharge of workshop effluents.
12. Personnel working in areas shall be provided with protective respiratory devices like masks and they shall also be imparted adequate training and information on safety and health aspects.
13. Special measures shall be adopted to prevent the nearby settlements from the impacts of mining activities.
14. The transportation of the materials shall be limited to the day hours' time only.
15. Provision shall be made for housing the laborers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche, etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
16. A separate Environmental Management Cell with suitably qualified personnel shall be setup under the control of a Senior Executive, who will report directly to the Head of the Organization.
17. The Project Proponent shall inform the Integrated Regional Office, MoEF&CC, GoI, Lucknow and State Pollution Control Board regarding the date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
18. The funds earmarked for environmental protection measures shall be kept in a separate account and shall not be diverted for other purposes. The year-wise expenditure shall be reported to the Integrated Regional Office, MoEF&CC, GoI, Lucknow and State Pollution Control Board

19. The Integrated Regional Office, MoEF&CC, GoI, Lucknow and State Pollution Control Board shall monitor compliance with the stipulated conditions. A complete set of documents including Environment Impact Assessment Report, Environmental Management Plan, Public hearing, and other documents information should be given to the Integrated Regional Office, MoEF&CC, GoI, Lucknow and State Pollution Control Board
20. A copy of the environmental clearance shall be submitted by the Project Proponent to the Heads of the Local Bodies, Panchayat, and Municipal Bodies as applicable in the matter.
21. The Project Proponent shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Level Environment Impact Assessment Authority (SEIAA).
22. The Project Proponent has to submit a regular half-yearly compliance report of the stipulated prior environmental clearance terms and conditions in hard and soft copy to the SEIAA, U.P. on 1<sup>st</sup> June and 1<sup>st</sup> December of each calendar year.
23. The SEIAA may alter/modify the above conditions or stipulate any further condition in the interest of environmental protection.
24. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

**B. Specific Conditions:**

1. At the time of operation, the project proponent will comply with all the guidelines issued by the Government of India/State Govt./District Administration related to Covid-19.
2. This environmental clearance does not create or verify any claim of the applicant on the proposed site/activity.
3. In case it has been found that the E.C. obtained by providing incorrect information, submitting that the distance between the two adjoining mines is greater than 500mt. and the area is less than 05ha, but factually the distance is less than 500 mt, and the mine is located in the cluster of area equal to or more than 05ha, the E.C issued will stand revoked.
4. This environmental clearance shall be subject to a valid lease in favor of the project proponent for the proposed mining proposals. In case, the project proponent does not have a valid lease, this environmental clearance shall automatically become null and void.
5. The Environmental clearance will be co-terminus with the mining lease period/Mining Plan whichever is less. The Mining plan approved by the Dept. of Mines and Geology shall be strictly implemented and shall not be operated beyond the validity period.
6. Explosive cannot be stored on the site. The Project proponent shall take approval from Chief Controller of Explosive, if applicable for use or storage of explosive or any such materials.
7. A comprehensive EIA including mining areas within 15 K.M. to assess the impact of the mining activity on the surrounding area shall be undertaken and a report submitted to this Authority within one year.
8. No two pits shall be simultaneously worked i.e. before the first is exhausted and reclamation work completed, no mineral bearing area shall be worked.
9. After exhausting the first mine pit and before starting mining operations in the next pit, reclamation and plantation work in the exhausted pit shall be completed to ensure that reclamation, forest cover, and vegetation are visible during the first year of mining operations in the next pit. This process will follow till the last pit is exhausted. Adequate rehabilitation of mined pit shall be completed before any new ore-bearing area is worked for expansion.
10. An adequate buffer zone shall be maintained between two consecutive mineral-bearing deposits.
11. The sprinkling of water on haul roads to control dust will be ensured by the project proponent.
12. Green belt development shall be carried out considering CPCB guidelines including the selection of plant species and in consultation with the local DFO / Agriculture Department. Herbs and shrubs shall also form a part of the afforestation programme besides tree plantation.

- The company shall involve local people in the plantation programme. Details of year-wise afforestation programme including rehabilitation of mined-out area shall be submitted to the Integrated Regional Office, MoEF&CC, GoI, Lucknow every year.
13. Blast vibrations study shall be conducted and an observation report submitted to the Integrated Regional Office, MoEF&CC, GoI, Lucknow and UPPCB within six months. The report shall also include measures for the prevention of blasting associated impact on nearby houses and agricultural fields.
  14. Controlled blasting techniques with sequential blasting shall be adopted. The blasting shall be carried out in the daytime only. The project proponent shall ensure prevention of displacement of human beings/wild animals/birds etc. and in case any such displacement is caused due to blasting/mining operation by any chance the project proponent shall take suitable measures for their rehabilitation and resettlement.
  15. Appropriate arrangement for shelter and drinking water for the mining workers has to be ensured at the mining site.
  16. Maintenance of village roads used for transportation of minerals is to be done by the company regularly at its own expenses. The link roads from mining area to main road shall be constructed as all-weather road with black topping and maintained by the project proponent.
  17. The surface runoff rain water harvesting/rain water recharge and water conservation measures will be taken by project proponent in consultation with central /State ground water Board .The project proponent shall plan and implement collection drain and siltation basins of adequate size to arrest the silt and sediment flows from the mining area. The supernatant of the siltation basin and rain water harvested water shall be utilized for watering the haulage area, roads and green belt development etc.
  18. Status of implementation shall be submitted to the Integrated Regional Office, MoEF&CC, GoI, Lucknow and UP Pollution Control Board within six months and thereafter every year from the next consequent year.
  19. The self-environmental audit shall be conducted annually. Every three years third-party environmental audit shall be carried out.
  20. Measures for prevention and control of soil erosion and management of silt shall be undertaken. Protection of dumps against erosion shall be carried out with geotextile matting or other suitable material, and thick plantations of native trees and shrubs shall be carried out at the dump slopes. Dumps shall be protected by retaining walls.
  21. Trenches/garland drains shall be constructed at foot of dumps and coco filters installed at regular intervals to arrest silt from being carried to water bodies. An adequate number of Check Dams and Gully Plugs shall be constructed across seasonal/perennial nallahs if any flowing through the ML area and silts arrested. De silting at regular intervals shall be carried out.
  22. Garland drain of appropriate size, gradient, and length shall be constructed for both mine pit and waste dump and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide an adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and de silted at regular intervals.
  23. Ground and surface water, if any in and near the core zone (within 5.0 km of the lease) shall be regularly monitored for contamination and depletion due to mining activity and records maintained. The monitoring data shall be submitted to the Integrated Regional Office, MoEF&CC, GoI, Lucknow and U.P. Pollution Control Board regularly. Further, monitoring points shall be located between the mine, and drainage in the direction of flow of groundwater shall be set up and records maintained.
  24. Fugitive dust generation shall be controlled. Fugitive dust emission shall be regularly monitored at locations of nearest human habitation (including schools and other public amenities located nearest to sources of dust generation as applicable) and records submitted to the Integrated Regional Office, MoEF&CC, GoI, Lucknow and U.P. Pollution Control Board regularly.
  25. Baseline data for ambient air quality shall be generated and maintained and RSPM level in ambient air in the nearby human habitation (villages) shall also be monitored along with other parameters.



26. Corporate Environmental Responsibility (CER) shall be by the project proponent and the details of the various heads of expenditure are to be submitted as per the guidelines provided in the recent CER notification No. 22-65/2017-IA.III dated 01/05/2018. Work to be executed with the installation of five hand pumps for drinking water, solar light in villages of streets, construction of two numbers of toilets at the primary school with name displayed and address and details of the beneficiary and gram Pradhan along with phone number, photographs should be submitted to Directorate as well as to the District Magistrate / Chief Development officers.
27. Transportation of minerals shall be done by covering the trucks with tarpaulin or other suitable mechanisms so that no spillage of mineral/dust takes place.
28. Occupational health and safety measures for the workers including identification of work-related health hazards, training on malaria eradication, HIV, and health effects on exposure to mineral dust, etc. shall be carried out. Periodic monitoring for exposure to respirable mineral dust on the workers shall be conducted and records maintained including the health records of the workers. Awareness programmes for workers on the impact of mining on their health and precautionary measures like the use of personal protective equipment etc. shall be carried out periodically. A review of the impact of various health measures shall be conducted followed by follow-up action wherever required.
29. The project proponent will ensure for employing local people as per requirement, necessary protection measures around the mine pit and waste dump, and garland drain around the mine pit and waste dump.
30. Topsoil / solid waste shall be stacked properly with proper slope and adequate safeguards and shall be utilized for backfilling (wherever applicable) for reclamation and rehabilitation of the mined-out area. Topsoil shall be separately stacked for utilization later for reclamation and shall not be stacked along with overburden.
31. Overburden (OB) shall be stacked at the earmarked dump site(s) only and shall not be kept active for long period. The maximum height of the dump shall not exceed 20 m, each stage shall preferably be of a maximum of 10 m and the overall slope of the dump shall not exceed 35°. The OB dump shall be backfilled. The OB dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface runoff.
32. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Regional Office, Ministry of Environment & Forests, GoI, Lucknow, and U.P. Pollution Control Board on a six-monthly basis.
33. The slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by the Indian Bureau of Mines.
34. Permission for the abstraction of groundwater shall be taken from Central Ground Water Board. Regular monitoring of ground and surface water sources for level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year i.e., premonsoon (April/May), monsoon (August), post-monsoon (November), and winter (January), and the data thus collected shall be regularly sent to MoEF&CC, Central Ground Water Authority, and Regional Director, Central Ground Water Board.
35. The wastewater from the mine shall be treated to conform to the prescribed standards before discharging into the natural stream. The discharged water from the Tailing Dam, if any shall be regularly monitored and report submitted to the Integrated Regional Office, MoEF&CC, GoI, Lucknow, Central Pollution Control Board, and the State Pollution Control Board.
36. Hydrogeological study of the area shall be reviewed by the project proponent annually. In case the adverse effect on groundwater quality and quantity is observed mining shall be stopped and resumed only after mitigating steps to contain any adverse impact on groundwater is implemented.
37. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of minerals and others shall have valid permissions as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. The vehicles transporting minerals shall be covered with a tarpaulin or other suitable enclosures so that no dust particles / fine matters escape during the period of transportation. No overloading of minerals for transportation shall

- be committed. The trucks transporting minerals shall not pass through the wildlife sanctuary if any in the study area.
38. Prior permission from the Competent Authority shall be obtained for the extraction of groundwater if any.
  39. A final mine closure plan, along with details of Corpus Fund, shall be submitted to the Integrated Regional Office, MoEF&CC, GoI, Lucknow and U.P. Pollution Control Board 5 years in advance of final mine closure for approval.
  40. Project Proponent shall explore the possibility of using solar energy where ever possible.
  41. Commitment towards CER has to be followed strictly.
  42. Regular health checkup record of the mineworkers has to be maintained at the site in a proper register. It should be made available for inspection whenever asked.
  43. Project Proponent has to strictly follow the direction/guidelines issued by MoEF&CC, CPCB, and other Govt. Agencies from time to time.
  44. The blasting will be done only after getting permission from the Mining Department.