# --\*\*\*--State Environment Impact Assessment Authority West Bengal Minutes of SEIAA Meeting

Subject: 45<sup>th</sup> meeting of SEIAA (Reconstituted on 17.05.2023)

- Venue:- Conference Room of Environment Department, Prani Sampad Bhavan, 5<sup>th</sup> Floor, LB Block, Sector – III, Salt Lake, Kolkata – 700106
- From :- 05 July 2024
- To :- **05 July 2024**

# CONSIDERATION/RECONSIDERATION OF ENVIRONMENTAL CLEARANCE

(1) Proposed development of a residential & resort complex project comprising of villas, guest rooms alongwith recreational and hospitality facilities at Dag No. - 155, 161 – 164, 210, 399 – 401, 403 - 414, 418 – 420, 422 – 442, 454, 455, 458 - 460, 462 – 505, 513, 578 – 580, 583 – 586, 588 – 597, 604, 605, Mouza - Somsara & Srirampur, P.S. - Dadpur, P.O. – Hanral, Dadpur Gram Panchayat, Dist.- Hooghly, PIN – 712149, West Bengal by **M/s. Purti Hotels and Resorts Private Limited.** 

# Proposal No. :- SIA/WB/INFRA2/446647/2023, File No. : EN/T-II-1/533/2023, Type-EC

# **INTRODUCTION**

The proponent made online application vide proposal no. **SIA/WB/INFRA2/446647/2023** dated **05 October 2023** seeking environment clearance under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proposed project activity is listed at SL. No. 8(a) Building / Construction projects under Category "B2" of EIA Notification 2006.

SEAC, during its 30<sup>th</sup> meeting held on 28.02.2024, recommended the proposed project for Environmental Clearance.

The proposal was placed before SEIAA in its 36<sup>th</sup> meeting held on 27.03.2024 and it was observed that some documents required to be uploaded in the PARIVESH Portal. The project proponent (PP) uploaded their reply on 29.04.2024 which was placed before SEIAA in the 40<sup>th</sup> meeting held on 13.05.2024 and SEIAA observed the following :

- 1. Replies submitted by PP in response to ADS raised by the SEIAA in its meeting dated 27.03.2024 is not satisfactory at all. There is no justification provided for use of 2160 KLD ground water for a projected water requirement of 361 KLD (as per NBC, 2016 guidelines) as have been submitted by the PP. Seeing the water scarcity, judicious use of water resources and considering the water conservation for future consumption such over abstraction should not be permitted.
- 2. PP should also submit conversion of proposed water body in Government land record as a 'water body'/ 'pukur' to claim benefit of reduced green belt area.

The PP uploaded their reply on 27.05.2024. SEIAA considered the submission uploaded by the project proponent on 27.05.2024, during its meeting dated 07.06.2024, and decided to ask the PP for a presentation with supporting documents on the two issues mentioned in the earlier ADS raised by SEIAA.

# PROJECT DETAILS

The project of **Purti Hotels and Resorts Private Limited** located is as follows :

S. No.	State	District
(1.)	West Bengal	Hooghly

The salient features of the project submitted by the project proponent is available at Report under online proposal no. **SIA/WB/INFRA2/446647/2023.** 

# DELIBERATION IN SEIAA

SEIAA considered the recommendation of SEAC and ADS replies submitted by the PP on 29.04.2024 and 27.05.2024. PP could not justify in the ADS reply permission for extraction of 2160 KLD groundwater against its present requirement of 361 KLD. PP attended the hearing before the SEIAA and submitted a different justification (from ADS reply to SEIAA in PARIVESH portal) for having the preset permission of ground water extraction of 2160 KLD.

PP has replied in ADS to do plantation in additional area however, approved plantation plan of DFO has not been submitted.

Since the project has acquired ground water abstraction permission of 2160 KLD of INDUSTRIAL nature against requirement of 361 KLD, as per the present nature of the project, hence a detail assessment and justification of such huge abstraction permission of industrial nature may be done.

# **RECOMMENDATIONS OF SEIAA**

The application for EC is referred back to SEAC for reappraisal.

CONCLUSION

**Referred back to SEAC.** 

#### MISCELLANEOUS

1) Revised DSR of Birbhum District.

# Revised DSR of Birbhum District is approved.

# List of the projects which were placed before the SEIAA, WB in the forty fifth meeting held on 05.07.2024 and the Summary Decisions thereof:

S1. No.	Proposal	Summary Decision
	CONSIDERATION/RECONSIDERATION OF EC	
1.	Proposed development of a residential & resort complex project comprising of villas, guest rooms alongwith recreational and hospitality facilities at Dag No 155, 161 – 164, 210, 399 – 401, 403 - 414, 418 – 420, 422 – 442, 454, 455, 458 - 460, 462 – 505, 513, 578 – 580, 583 – 586, 588 – 597, 604, 605, Mouza - Somsara & Srirampur, P.S Dadpur, P.O. – Hanral, Dadpur Gram Panchayat, Dist Hooghly, PIN – 712149, West Bengal by <b>M/s. Purti Hotels and Resorts</b> <b>Private Limited.</b> <b>Proposal No. :- SIA/WB/INFRA2/446647/2023</b>	Referred back to SEAC
	MISCELLANEOUS	
1.	Revised DSR of Birbhum District	Approved.



# Government of India Ministry of Environment, Forest and Climate Change (Issued by the State Environment Impact Assessment Authority (SEIAA), WEST BENGAL) \*\*\*



# Minutes of 45th meeting of SEIAA (Reconstituted on 17.05.2023) State Environmen t Impact Assessment Authority meeting held from 05/07/2024 to 05/07/2024 Date: 18/07/2024

MoM ID:	EC/MOM/SEIAA	\/188030/7/2024	
Agenda ID:	EC/AGENDA/S	EIAA/188030/7/2024	
Meeting Venue:		om of Environment Department, Prani , Salt Lake, Kolkata 700106.	Sampad Bhavan, 5th Floor, LB
Meeting Mode:	Hybrid		
Date & Time:			
05/07/2024		02:00 PM	05:30 PM

# 1. Opening remarks

SEIAA members greeted each other and started discussion point wise as per the agenda.

# 2. Confirmation of the minutes of previous meeting

Minutes of 44<sup>th</sup> Meeting of SEIAA, WB is uploaded in the PARIVESH Portal.

# 3. Details of proposals considered by the committee

# Day 1 -05/07/2024

3.1. Agenda Item No 1:

# **3.1.1. Details of the proposal**

Residential Complex By Response Tradelinks Pvt. Ltd. by RESPONSE TRADELINKS PRIVATE LIMITED loc ated at JALPAIGURI,WEST BENGAL			
Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
SIA/WB/INFRA2/459278/2024	2N-39/2024(E)	19/01/2024	Building / Construction (8(a))

# **3.1.2.** Deliberations by the committee in previous meetings

# Date of SEIAA 1 :21/06/2024

# **Deliberations of SEIAA 1 :**

# **INTRODUCTION**

The proponent made online application vide proposal no. SIA/WB/INFRA2/459278/2024 dated 19 January 2024 seeking environment clearance under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. 8(a) Building / Construction projects under Category "B2" of EIA Notification 2006.

SEAC, during its 38<sup>th</sup> meeting held on 18.05.2024, recommended the proposed project for Environmental Clearance. **PROJECT DETAILS** 

The project of M/s. Response Tradelinks Pvt. Ltd located is as follows :

S. No.	State	District
(1)	West Bengal	Jalpaiguri

The salient features of the project submitted by the project proponent is available under online proposal no. **SIA/WB/INFRA2/459278/2024** in PARIVESH Portal.

SEIAA considered the recommendation of SEAC and decided that the PP should make a power point presentation along with the consultant to clarify the basis of calculation of waste water generation for Phase – I and Phase – II separately along with detailed explanation.

# Date of SEAC 2 :18/05/2024

# **Deliberations of SEAC 2 :**

• The SEAC scrutinized the documents submitted by the PP in the 38<sup>th</sup> meeting of SEAC, WB (2023-2026) held on 18.05.2024. After careful consideration and detailed deliberation, the committee **recommended the proposed project for Environmental Clearance**.

Date of SEAC 3 :31/01/2024

# **Deliberations of SEAC 3 :**

- An inspection of the project site was conducted by WBPCB on 18.01.2023. (report of inspection is enclosed as Annexure 1).
- Based on the application made, documents uploaded / submitted, and the presentation made by the PP/Consultant, the SEAC made the following observations:

# Mandatory documents:

1) Consent to Establish from WBPCB of built-up area 19611.06 sqm. for Phase-I project.

- 2) LR Dag nos. mentioned in the application are 8 & 9, however the revised fire safety recommendation from WBF&ES has been granted only on LR Dag No.8. Details in this regard should be provided.
- 3) Concurrence from the competent authority regarding disposal of inorganic portion of solid waste.
- 4) The clearance issued from PCCF for the project is in the name of PRM Estate and not in the name of PP. Necessary clarification regarding the above should be submitted.

# Water and wastewater:

- 5) Actual depth of recharge for rainwater. Along with design of all recharge structures should be submitted.
- 6) A hydrogeological study should be conducted to understand the impact of the groundwater withdrawal on the local aquifer.
- 7) A report on impact of basement on shallow groundwater flow to be submitted.
- 8) Flowmeter with totalizer to be provided at all inlet, outlet and recycle lines and the recorded values should be submitted with periodical compliance reports.
- **9**) Regular monitoring and reporting (with periodical compliance reports) of the groundwater level by constructing a piezometer is necessary. The lithology and design of the piezometer should also be submitted.

### Parking area:

10) E-vehicle charging facility 5%. Proposal in this regard should be submitted.

### Solar power

11) Agreement with competent authority for grid metering should be provided with compliance report.

### Need based EMP:

12) EMP as per Office Memorandum of MoEF & CC vide F. No. 22-65/2017.IA.III dated 30.09.2020 to be submitted. Consents from the beneficiaries of the social part of EMP should be furnished. Any other local need should be identified. For plantation other than the mandatory one, space outside the project area should be identified.

# **Recommendation:**

The SEAC recommended that the above documents may be submitted in the PARIVESH portal for further consideration of the application.

All the documents should be duly signed both by the project proponent and the environmental consultant. The SEAC will further consider the case on submission of satisfactory reply on the abovementioned queries only through "PARIVESH" portal.

# 3.1.3. Deliberations by the SEIAA in current meetings

The proposal was placed before SEIAA in its  $43^{rd}$  meeting held on 21.06.2024. SEIAA considered the recommendation of SEAC and decided that the project proponent (PP) should make a power point presentation along with the consultant to clarify the basis of calculation of waste water generation for Phase – I and Phase – II separately along with detailed explanation.

Accordingly, the PP was asked to appear and present before SEIAA on 05.07.2024.

The PP made a presentation on calculation of waste water generation for Phase – I and Phase – II separately along with detailed explanation.

SEIAA considered the recommendation of SEAC and presentation made by the PP and approved the EC based on the Siliguri Municipal Corporation Building Permit No. SWS-OBPAS/0104/2022/0923 dated 04.09.2022 with the following additional conditions –

- 1. At least 5% of the total parking capacity to be provided with electrical charging points for e-vehicles.
- 2. The designated tree plantation area in the DFO approved plan should be used exclusively for tree plantation only, not for any other purpose.
- 3. PP should ensure proper insulation to prevent heating of the water in overhead water tank and distribution pipe.

# 3.1.4. Recommendation of SEIAA

Approved

# 3.1.5. Details of Environment Conditions

# 3.1.5.1. Specific

N/A

# 3.1.5.2. Standard

8( a)	Building / Construction
Stat	utory compliance
1.	The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
1.	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.
1.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
1.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
1.	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.
1.	The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
1.	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
1.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
1.	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
1.	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
Air	quality monitoring and preservation
1.	Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be

	complied with.
1.	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
1.	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 PM2.5) covering upwind and downwind directions during the construction period.
1.	Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
1.	Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
1.	Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
1.	Wet jet shall be provided for grinding and stone cutting.
1.	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
1.	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
1.	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
1.	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
1.	For indoor air quality the ventilation provisions as per National Building Code of India.
Wa	ter quality monitoring and preservation
1.	The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
1.	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
1.	Total fresh water use shall not exceed the proposed requirement as provided in the project details.
1.	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
1.	A certificate shall be obtained from the local body supplying water, specifying the total annual water availability

	with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
1.	At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
1.	Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
1.	Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
1.	Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
1.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
1.	The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
1.	A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
1.	All recharge should be limited to shallow aquifer.
1.	No ground water shall be used during construction phase of the project.
1.	Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
1.	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
1.	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
1.	No sewage or untreated effluent water would be discharged through storm water drains.
1.	Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
1.	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

1.	Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.		
Noi	Noise monitoring and prevention		
1.	Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.		
1.	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.		
1.	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.		
Ene	ergy Conservation measures		
1.	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.		
1.	Outdoor and common area lighting shall be LED.		
1.	Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.		
1.	Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.		
1.	Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.		
1.	Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.		
1.	PP should ensure proper insulation to prevent heating of the water in overhead water tank and distribution pipe.		
Wa	Waste Management		
1.	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.		
1.	Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.		
1.	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.		

1.	Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
1.	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
1.	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
1.	Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
1.	Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
1.	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
1.	Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
Gre	en Cover
1.	No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
1.	A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
1.	Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
1.	Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.
1.	The designated tree plantation area in the DFO approved plan should be used exclusively for tree plantation only, not for any other purpose.
Tra	nsport
1.	A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria. a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic. b. Traffic calming measures. c. Proper design of entry and exit points. d. Parking norms as per local regulation.
1.	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only

during non-peak hours.

# 1. At least 5% of the total parking capacity to be provided with electrical charging points for e-vehicles.

# null

1.

A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

# Human health issues

1.	All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.	
1.	For indoor air quality the ventilation provisions as per National Building Code of India.	
1.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	
1.	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, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	
1.	Occupational health surveillance of the workers shall be done on a regular basis.	
1.	A First Aid Room shall be provided in the project both during construction and operations of the project.	
Miscellaneous		
1.	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.	

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.

1. 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.

 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.

1. The company shall have a well laid down environmental policy duly approved 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.

1.	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 report to the head of the organization.
1.	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
1.	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.
1.	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
1.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
1.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP reportand also that during their presentation to the Expert Appraisal Committee.
1.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
1.	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.
1.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
1.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
1.	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.
1.	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.
1.	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.
Spe	cific Conditions
1.	Recommendations of mitigation measures from possible accident shall be implemented based on Risk Assessment studies conducted for worst case scenarios using latest techniques.

# 3.2. Agenda Item No 2:

The Residential Project by M/s Rajlakshmi Marketing Pvt. Ltd. located at Mouza - Kathore, PS - Barasat, under Barasat Municipality District - North 24 Parganas, West Bengal by RAJLAKSHMI MARKETING PRIVATE L IMITED located at 24 PARAGANAS NORTH, WEST BENGAL

Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
SIA/WB/INFRA2/472397/20 24	2N-100/2024(E)	30/05/2024	Building / Construction (8( a))

# 3.2.2. Deliberations by the committee in previous meetings

# Date of SEIAA 1 :28/06/2024

Deliberations of SEIAA 1 :

# **INTRODUCTION**

The proponent made online application vide proposal no. SIA/WB/INFRA2/472397/2024 dated 30 May 2024 seeking environment clearance under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. 8(a) Building / Construction projects under Category "B2" of EIA Notification 2006.

SEAC, during its 40<sup>th</sup> meeting held on 08.06.2024, observed that the PP has not yet obtained the sanctioned building plan from the competent authority. The PP has also not uploaded the DFO approved plantation plan, water permission, concurrences from local municipality and other mandatory documents.

Considering the above, the SEAC decided in absence of the mandatory documents, the application for EC may be rejected.

# PROJECT DETAILS

The project of M/s. Rajlakshmi Marketing Private Limited located is as follows :

S. No.	State	District
(1.)	West Bengal	North 24 Parganas

The salient features of the project submitted by the project proponent is available under online proposal no. SIA/WB/INFRA2/472397/2024 in PARIVESH Portal.

SEIAA considered the recommendation of SEAC to reject the proposal and decided that the project proponent is required to appear on 05.07.2024 for a hearing before the SEIAA, WB before a final decision on EC application is taken.

# Date of SEAC 2 :08/06/2024

# **Deliberations of SEAC 2 :**

- Based on the application made and the documents uploaded / submitted, in the PARIVESH portal, SEAC observed that the PP has not yet obtained the sanctioned building plan from the competent authority. The PP has also not uploaded the DFO approved plantation plan, water permission, concurrences from local municipality and other mandatory documents.
- Considering the above, the SEAC decided in absence of the mandatory documents, the **application for EC may be rejected**. The PP should completely follow the notification issued by SEIAA vide no. 2495/EN-T-II-I/011/2018 dated 17.12.2019.

The proposal was placed before SEIAA in its 44<sup>th</sup> meeting held on 28.06.2024. SEIAA considered the recommendation of SEAC to reject the proposal and it was decided that the project proponent is required to appear on 05.07.2024 for a hearing before the SEIAA, WB before a final decision on EC application is taken.

# PP attended the hearing before the SEIAA.

SEIAA considered the recommendation of SEAC as well as the submission of the PP and decided to reject the proposal.

# 3.2.4. Recommendation of SEIAA

Reject

# 3.3. Agenda Item No 3:

### **3.3.1.** Details of the proposal

Residential Complex Project by M/s Himanga Mercantiles Pvt. Ltd. by HIMANGA MERCANTILES PRIVATE
LIMITED located at 24 PARAGANAS NORTH, WEST BENGAL

Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
SIA/WB/INFRA2/477423/2024	2N-99/2024(E)	30/05/2024	Building / Construction (8(a))

# **3.3.2.** Deliberations by the committee in previous meetings

Date of SEAC 1 :08/06/2024 Deliberations of SEAC 1 :

- Based on the application made and the documents uploaded / submitted, in the PARIVESH portal, SEAC observed that the PP has not yet obtained the sanctioned building plan from the competent authority. The PP has also not uploaded the DFO approved plantation plan, water permission, concurrences from local municipality and other mandatory documents.
- Considering the above, the SEAC decided in absence of the mandatory documents, the **application for EC may be rejected**. The PP should completely follow the notification issued by SEIAA vide no. 2495/EN-T-II-I/011/2018 dated 17.12.2019.

# 3.3.3. Deliberations by the SEIAA in current meetings

# **INTRODUCTION**

The proponent made online application vide proposal no. SIA/WB/INFRA2/477423/2024 dated 30 May 2024 seeking environment clearance under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. 8(a) Building / Construction projects under Category "B2" of EIA Notification 2006.

SEAC, during its 40<sup>th</sup> meeting held on 08.06.2024, observed that the PP has not yet obtained the sanctioned building plan from the competent authority. The PP has also not uploaded the DFO approved plantation plan, water permission, concurrences from local municipality and other mandatory documents. Considering the above, the SEAC decided in absence of the mandatory documents, the application for EC may be rejected. The PP should completely follow the notification issued by SEIAA vide no. 2495/EN-T-II-I/011/2018 dated 17.12.2019.

# PROJECT DETAILS

The project of M/s. Himanga Mercantiles Private Limited located is as follows :

S. No.	State	District
(1.)	West Bengal	North 24 Parganas

The salient features of the project submitted by the project proponent are available under online proposal no. SIA/WB/INFRA2/477423/2024 in PARIVESH Portal.

# SEIAA considered the recommendation of SEAC and decided to reject the proposal.

### 3.3.4. Recommendation of SEIAA

Reject

# 3.4. Agenda Item No 4:

# **3.4.1. Details of the proposal**

Putulia Sand Mine by AMARENDRA TIWARI located at PASCHIM BARDHAMAN, WEST BENGAL			
Proposal For		Mining EC Under 5 Ha	
Proposal No	File No	Submission Date	Activity (Schedule Item)
SIA/WB/MIN/470101/2024	2N-177/2023(E)	26/04/2024	Mining of minerals (1(a))

# **3.4.2.** Deliberations by the committee in previous meetings

# Date of SEAC 1 :19/06/2024 Deliberations of SEAC 1 :

- The SEAC scrutinized the documents submitted by the PP in the 41<sup>st</sup> meeting of SEAC, WB (2023-2026) held on 19.06.2024.
- The SEAC scrutinized the documents submitted by the PP in the 41<sup>st</sup> meeting of SEAC, WB (2023-2026) held on 19.06.2024 and after careful consideration and detailed deliberation the committee observed that the project area falls under cluster with two other sand blocks [Block No. Putulia Sand Mine of M/s. Maihar Developers and Putulia Sand Mine of M/s. Sreenathji Distributors]. However, the PP had applied for EC instead of ToR for the project. The PP has already made a fresh proposal and applied for ToR (SIA/WB/MIN/473925/2024) which was already considered by SEAC on 40<sup>th</sup> meeting held on 08.06.2024. SEAC noted that the PP had requested to withdraw the EC proposal (SIA/WB/MIN/470101/2024).
- Therefore, the SEAC recommended that the EC proposal (SIA/WB/MIN/470101/2024) may be rejected.

Date of SEAC 2 :18/05/2024

# **Deliberations of SEAC 2 :**

- Based on the submission and presentation made by the PP, the SEAC observed that the **plot area** for the proposed project as per the geo-coordinates mentioned in the revised Mining Plan uploaded by the PP **falls** within the potential mining zone recorded in the approved District Survey Report (DSR) of Paschim Bardhaman district.
- The SEAC noted that the PP has uploaded cluster certificate from the competent authority. In the cluster certificate it is mentioned that the sand block is forming a cluster with adjacent 2 (two) no. sand blocks Block No. Putulia Sand Mine of M/s. Maihar Developers and Putulia Sand Mine of M/s. Sreenathji Distributors. However, the PP has applied for EC instead of ToR for the project.
- The SEAC observed that the PP has not uploaded valid LoI from the competent authority.

The SEAC recommended that the above documents / clarification should be submitted in the PARIVESH portal for further consideration of the application.

All the documents should be duly signed both by the project proponent and the environmental consultant.

The SEAC will further consider the case on submission of satisfactory reply on the above-mentioned queries only through "PARIVESH" portal.

# **3.4.3.** Deliberations by the SEIAA in current meetings

# **INTRODUCTION**

The proponent made online application vide proposal no. **SIA/WB/MIN/470101/2024** dated **26 April 2024** seeking environment clearance under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. **1(a) Mining of minerals** projects under Category "**B2**" of EIA Notification 2006. SEAC, during its 41<sup>st</sup> meeting held on 19.06.2024, observed that the project area falls under cluster with two other sand blocks [Block No. Putulia Sand Mine of M/s. Maihar Developers and Putulia Sand Mine of M/s. Sreenathji Distributors]. However, the PP had applied for EC instead of ToR for the project. The PP has already made a fresh proposal and applied for ToR (SIA/WB/MIN/473925/2024) which was already considered by SEAC on 40<sup>th</sup> meeting held on 08.06.2024. SEAC noted that the PP had requested to withdraw the EC proposal (SIA/WB/MIN/470101/2024). Therefore, the SEAC recommended that the EC proposal (SIA/WB/MIN/470101/2024) may be rejected.

# PROJECT DETAILS

The project of Amarendra Tiwari located is as follows :

S. No.	State	District
(1)	West Bengal	Paschim Bardhaman

The salient features of the project submitted by the project proponent is available under online proposal no. SIA/WB/MIN/470101/2024 in PARIVESH Portal.

SEIAA considered the recommendation of SEAC to reject the proposal and accepted the same.

#### 3.4.4. Recommendation of SEIAA

Reject

#### 3.5. Agenda Item No 5:

# **3.5.1. Details of the proposal**

# **River bed Sand mining (BLOCK ID – MIN\_BNK\_04) on Damodar River** by **WEST BENGAL MINERAL DEVE LOPMENT AND TRADING CORPORATION LIMITED** located at **BANKURA,WEST BENGAL**

Proposal For		Fresh EC	
Proposal No	File No	Submission Date	Activity (Schedule Item)
SIA/WB/MIN/471056/2024	2N-367/2023(E)	02/05/2024	Mining of minerals (1(a))

#### 3.5.2. Deliberations by the committee in previous meetings

# Date of SEAC 1 :19/06/2024

- **Deliberations of SEAC 1 :** 
  - The SEAC scrutinized the documents submitted by the PP in the 41<sup>st</sup> meeting of SEAC, WB (2023-2026) held on 19.06.2024.
  - The SEAC scrutinized the documents submitted by the PP in the 41<sup>st</sup> meeting of SEAC, WB (2023-2026) held on 19.06.2024 and after careful consideration and detailed deliberation the committee **recommended the proposed project for Environmental Clearance** with the conditions that the following should be submitted along with the six monthly compliance report:
    - 1) Monthly monitoring of base flow level at four points of the project should be conducted by installing piezometer and to be reported in the six monthly compliance report.
    - 2) Stipulated plantation should preferably be done adjacent to the project. If not possible due to unavailability of suitable land, plantation may be done at other location in the same block. The particular plantation area should be dedicated and marked for the particular project and to be certified by the respective BDO.
    - 3) Sieve analysis report for grain size distribution should be provided along with six monthly compliance report.
    - 4) Status of the need-based activities to be reported during six monthly progress report. The entire need-based EMP should be completed within first two years of the project period. The planned expenditure for components like need-based activities may be derived based on the project cost. Proper documents should be submitted along with the six-monthly compliance report.
    - 5) Transportation plan should be provided in six monthly compliance report.
    - 6) Basic amenities, safety and occupational health examinations for labourers to be provided along with six monthly compliance reports.
    - 7) The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha within first two years from the starting of the mining operation. To enhance success/ survival rate the plantation shall be attempted during the first two years of the project life and the plantation so done shall be taken care of during the rest of the project life. Species of the plant selected should be self-sustaining in that particular region. Geotagged photographs of actual plantation done to be submitted along with six monthly compliance reports. Credible document regarding plantation by the Forest department on behalf of the project proponent should be submitted.
    - 8) Studies on the biotic components of the river and the impact of sand mining on these components should be submitted.
    - 9) Bank line monitoring report should be submitted along with the six-monthly progress reports.

Date of SEAC 2 :18/05/2024

# **Deliberations of SEAC 2 :**

- Based on the submission and presentation made by the PP, the SEAC observed that **the plot area** for the proposed project as per the geo-coordinates mentioned in the approved Mining Plan with Progressive Mine Closure Plan **falls within the potential mining zone** recorded in the approved District Survey Report (DSR) of Bankura district.
- The SEAC scrutinized the documents submitted by the PP in the 38<sup>th</sup> meeting SEAC, WB held on 18.05.2023 and after careful consideration and detailed deliberation the committee recommended that the PP should submit the following in the PARIVESH portal :-
- 1. The project cost may include the auction bid value, estimated royalty to be paid, cost of any infrastructure built like office space, stockyard, etc. The calculation/documents to estimate the project cost should be submitted. The planned expenditure for components like need-based activities may be derived based on the project cost.
- 2. The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha within first two years from the starting of the mining operation. To enhance success/ survival rate the plantation shall be attempted during the first two years of the project life and the plantation so done shall be taken care of during the rest of the project life. Species of the plant selected should be self-sustaining in that particular region.

# All the documents should be duly signed both by the project proponent and the environmental consultant.

The SEAC will further consider the case on submission of satisfactory reply on the above-mentioned queries only through "PARIVESH" portal.

### 3.5.3. Deliberations by the SEIAA in current meetings

# **INTRODUCTION**

The proponent made online application vide proposal no. SIA/WB/MIN/471056/2024 dated 02 May 2024 along with copies of EIA/EMP seeking environment clearance under the provisions of the EIA Notification, 2006 for the abovementioned project. The proponent applied under SL. No. 1(a) Mining of minerals projects under Category "B1" of EIA Notification 2006.

The PP obtained ToR vide No. 2196/EN/T-II-1/357/2023 dated 14.09.2023, issued by SEIAA, WB against Proposal No. SIA/WB/MIN/424918/2023.

SEAC, during its 41<sup>st</sup> meeting held on 19.06.2024 recommended the proposed project for Environmental Clearance with additional conditions.

# PROJECT DETAILS

The project of M/s. West Bengal Mineral Development and Trading Corporation Limited located is as follows :

S. No.	State	District
(1.)	West Bengal	Bankura

The salient features of the project submitted by the project proponent is available under online proposal no. SIA/WB/MIN/471056/2024 in PARIVESH Portal.

SEIAA considered the recommendation of SEAC and decided that the application for River bed Sand mining (Block ID – MIN\_BNK\_04) over an area of 15.93 ha (39.37 Acres) on the Damodar River at Plot No- 3449 & 1208, JL No-37 & 60, Mouza-Mejia, Gopalganja & Telengana, P.S.- Mejia, Block- Mejia, District- Bankura, West Bengal by M/s. West Bengal Mineral Development and Trading Corporation Limited falling within the DSR potential zone code BNK\_DA\_MJ\_11\_12\_13\_14\_15\_16\_17 is accepted with the conditions recommended by SEAC with the additional condition that the validity of EC will be for 5 years. However, the PP may apply for extension of EC with revised mining plan before expiry of 5 years hence.

# 3.5.5. Details of Environment Conditions

#### 3.5.5.1. Specific

N/A

# 3.5.5.2. Standard 1( Mining of minerals a) Statutory compliance The Environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Courts, 1. NGT and any other Court of Law, from time to time, and as applicable to the project The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in 1. case of the diversion of forest land for non-forest purpose involved in the project. 1. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable. 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. TThe implementation 1. report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area). The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & 1. Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee. 1. The project proponent shall obtain the necessary permission from the Central Ground Water Authority Solid/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management 1. Rules, 2016/Hazardous & Other Waste Management Rules, 2016. Permission of power supply to be taken from the concerned authority for meeting power demand of the project 1. site. 1. The maximum production or peak production at any given time shall not exceed the limit as prescribed in the EC. The validity of EC will be for 5 years. However, the PP may apply for extension of EC with revised mining 1. plan before expiry of 5 years hence. Air quality monitoring and mitigation measure Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in 1. consultation with the State Pollution Control Board. Online ambient air quality monitoring station/stations may also be installed in addition to the regular air monitoring stations as per the requirement and/or in consultation

with the SPCB

1.	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
1.	Transportation of coal, to the extent if permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water sprinkling/rain gun/ Fog cannon /mist sprinkling etc., shall be carried out in critical areas prone to air pollution with higher level of particulate matter all through the coal transport roads, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
1.	Major approach roads shall be black topped and properly maintained.
1.	PP to install solar lights along the road used for transportation of coal to avoid the accidents at night and also seek its maintenance.
1.	The transportation of coal shall be carried out as per the provisions and route proposed in the approved mining plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed that the impact of sound, dust and accidents could be appropriately mitigated.
1.	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
1.	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
1.	Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.
1.	Adequate number of Fog canon (mist sprayer) shall be installed to reduce the impact of air pollution at dust generating sources with time bound action plan.
1.	PP should Install Wind breaker/shield arrangement along the railway siding for reducing the dust propagation in upwind direction.
1.	Post environmental closure third party monitoring by reputed instituted in air quality, water, land & soil etc shall be carried out and analysed with EMP measures at regular interval. A suitable recommendation in this regard, shall be furnished to IRO, MoEF&CC for compliance. The data used for analysis shall be obtained from continuos AQMS, site specific water regime. Also third party shall analyses the implementation of river diversion, meeting to the requirement of project report.
Wa	ter quality monitoring and mitigation measures
1.	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.
1.	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-1A.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
1.	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent

	regularly to MOEFCC/RO.
1.	Monitoring of water quality upstream and downstream of river including pons, lakes, tanks shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
1.	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
1.	The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation.
1.	Garland drains (of suitable size, gradient and length) around the critical areas i.e. mine shaft and low lying areas, shall be designed keeping at least 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. The sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff
1.	The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly
1.	Industrial waste water from coal handling plant and mine water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder, and as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluent. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste water.
1.	Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
1.	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations shall be prepared, considering the presence of any river/rivulet/pond/lake etc., with impact of mining activities on it, and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the provisions of the approved Mining Plan/ EIA-EMP submitted to this Ministry and the same should be done with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved mining plan and as per the permission of DGMS.
1.	The project proponent shall take all precautionary measures to ensure reverian/ riparian ecosystem in and around the coal mine upto a distance of 5 km. A revarian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.
1.	Domestic water shall be providing to the residents/villages which are coming under the zone of influence of the project due to ground water extraction by installing a RO plant with proper supply line and Taps within 2 years
1.	No obselete technologies for sewage treatment shall be implemented. Construction of Sewage Treatment Plant with latest technology should be completed within 2 years and treated water shall be reused for plantation. CTE and CTO of STP shall be obtained as per the norms.
Noi	se and Vibration monitoring and prevention
1.	Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines

	in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
1.	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.
Mir	ning Plan
1.	5- Star Rating is mandatory to obtaine certification as per guidelines of Mininstry of Coal
1.	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
1.	No change in mining method i.e. UG to OC, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).
1.	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
1.	Underground work place environmental conditions shall be rendered ergonomic and air breathable with adequate illumination in conformance with DGMS standards.
1.	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.
1.	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.
1.	Tranportation by Railway Siding shall be developed to avoid transportation by Road
Lar	ad Recalmation
1.	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
1.	Post-mining land be rendered usable for agricultural/forestry purposes and shall be handed over to the respective State Government, as specified in the Guidelines for Preparation of Mine Closure Plan, issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.
1.	Regular monitoring of subsidence movement on the surface over and around the working areas and its impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence beyond the limit prescribed, appropriate effective mitigation measures shall be taken to avoid loss of life and materials. Cracks should be effectively plugged in with ballast and clay soil/suitable material.
1.	Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
1.	A separate team for subsidence monitoring and surface mitigation measures shall be constituted and continuous monitoring & implementation of mitigation measures be carried out.

1.	Thorough inspection of the mine lease area for any cracks developed at the surface due to mining activities below ground shall be carried out to prevent inrush of water in the mine.
1.	Native tree species shall be selected and planted over areas affected by subsidence.
1.	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.
1.	Apart from possessing a valid lease the proponent shall obtain all other necessary permissions before commencement of any mining or allied activity at the lease hold area.
Pub	lic hearing and Human health issues
1.	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored.
1.	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.
1.	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
1.	Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.
1.	Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the persons employed.
1.	Implementation of the time bound action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the time bound action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
1.	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.I1 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.
1.	PP to conduct need based assessment survey of the area to for in order to decide the activities to be carried under the CSR and to provide detail of the activity carried out with adequate budgetary provision and time bound action plan.
1.	PP should conduct epidemiology study to (analysis of the distribution, patterns and determinants of health and disease conditions in defined populations).
1.	Permanent Health care facilities of Hospital should be established within 5 km of project boundary for the local people.
1.	PP must ensure an emergency action plan during pandemic in order to provide assistance to the nearby villages located within the 10 km radius buffer zone (If required)
1.	PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone with time bound action plan

1. PP to take measure for installation of Renewable Energy sources in nearby area falling within 10 km radius

# **Corporate Environment Responsibility**

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.

1. 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.

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.

1. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground. A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. Any non- compliance or infringement should be reported to the concerned authority

Needs of the locality shall be assessed and the social part of the EMP shall be undertaken as stipulated by MoEF&CC Office Memorandum F. No. 22-65/2017.IA.III dated 30.09.2020. Beneficiary of the social component of EMP should be identified and to be displayed at site. Need based activities for local people is part of the EMP. Details of such activities are submitted by the project proponent. The PP shall submit geo-tagged photographs regarding the implementation of need based activities with actual expenses incurred. The need based activities and plantation will have to be implemented within first two years of starting of mining operation. Photographic evidence of the activities and relevant bills/vouchers are to be given in 6 monthly compliance report.

# Miscellaneous

1.

1.

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.

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.

1. 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.

 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.

1. 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.

1.	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
1.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
1.	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.
1.	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).
1.	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.
1.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
1.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
1.	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.
1.	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.
1.	The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.
1.	Compensation of the land acquired for the project shall be settled as per the R&R Policy. Adequate facility of drinking water, plantation and other social amenities should be provided to established R&R villages.
1.	Persons of nearby villages shall be given training on livelihood and skill development to make them employable with its proper records.
1.	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours

# 3.6. Agenda Item No 6:

# **3.6.1. Details of the proposal**

# MURALIDHAR STONE QUARRY by SOMnath baral located at PURULIA,WEST BENGAL

**Proposal For** 

Proposal No	File No	Submission Date	Activity (Schedule Item)
SIA/WB/MIN/471220/2024	2N-82/2024(E)	06/05/2024	Mining of minerals (1(a))

# 3.6.2. Deliberations by the committee in previous meetings

Date of SEAC 1 :19/06/2024 Deliberations of SEAC 1 :

- The SEAC scrutinized the documents submitted by the PP in the 41<sup>st</sup> meeting of SEAC, WB (2023-2026) held on 19.06.2024. After careful consideration and detailed deliberation, the committee **recommended the proposed project for Environmental Clearance** with the following additional conditions:
  - 1) The Proponent shall prepare a dust and noise minimization plan with adequate details. Care should be taken for prevention of occupational health issues of the workers. Amenities like personal protective equipments (PPEs) should be provided for them.
  - 2) A post closure long-term vegetative stabilisation program should be submitted along with the six-monthly compliance report.
  - 3) Monitoring of  $PM_{10}$ ,  $PM_{2.5}$  and its SiO<sub>2</sub> (free silica) content should be done along with noise levels.
  - 4) Dust suppression by sprinkling water should be adopted specially after dusty operations like drilling, blasting etc.
  - 5) Year-wise excavation schedule showing breakup of pay-mineral (black stone) and waste rock may be clearly drawn up and areas may be demarcated for waste dumping. Site for intermediate stockpiling of the mineral may also be clearly demarcated and show in the surface plan.
  - 6) As far as practicable the waste rock to be produced from the mine may be dumped in the existing pit-void adjacent to/ within the lease hold boundary. Any outside the pit dumping should be temporary in nature. All waste rock dumped outside the pit may be rehandled and backfilled in the mined-out area.
  - 7) The proponent shall review the Progressive Mine Closure Plan every two years from the date of opening of the mine and shall submit the same to the officer authorised by the State Government in this behalf, for its approval under the West Bengal Minor Mineral Concession Rules, 2016. In the event of the progressive mine closure being not approved, or not deemed to be approved, the mining activities shall be discontinued.
  - 8) One year prior to the proposed closure of the mine the proponent shall submit a Final Mine Closure Plan to the officer authorised by the State Government in this behalf, for approval under the West Bengal Minor Mineral Concession Rules, 2016.
  - 9) The project proponent shall ensure that the protective measures contained in the Mine Closure Plan referred to hereinabove including the reclamation and rehabilitation work are carried out in accordance with the approved Mine Closure Plan or with such modifications as are approved by the officer authorised by the State Government in this behalf under the West Bengal Minor Mineral Concession Rules, 2016.
  - 10) In addition to regular submission of environmental compliance reports as required under the EIA Notification, 2006, the proponent shall submit to the officer authorised by the State Government in this behalf, a yearly report before 1st of July every year setting forth the extent of protective and rehabilitative works carried out as envisaged in the approved Mine Closure Plan, and if there is any deviation, reasons thereof.
  - 11) For the purpose of carrying out mining operation in the area, the proponent shall furnish financial assurance. The amount of financial assurance shall be as laid down in the West Bengal Minor Mineral Concession Rules, 2016. The financial assurance may be in any of the forms referred to in the said Rules.
  - 12) Effects of blasting to the nearby localities should be examined and remedial plan should be in line with approved mine plan and as per rules of Mine Safety Authority.
  - 13) Needs of the locality may be assessed and a social part of the EMP should be undertaken as stipulated by MoEF&CC.

# Date of SEAC 2 :18/05/2024 Deliberations of SEAC 2 :

- Based on the submission and presentation made by the PP, the SEAC observed that **the plot area** for the proposed project as per the geo-coordinates mentioned in the revised Mining Plan uploaded by the PP **falls within the potential mining zone** recorded in the approved District Survey Report (DSR) of Purulia district.
- The SEAC scrutinized the documents submitted by the PP in the 38<sup>th</sup> SEAC meeting held on 18.05.2024 and after careful consideration and detailed deliberation the committee made the following observations:-
  - 1. Complete transportation plan for the project. The plan should include the capacity of dumpers, trucks, excavators etc., and the number of trips undertaken per day. This should match with the production schedule as submitted in the approved Mine Plan.
  - 2. Haul road to be shown in the layout plan.
  - 3. Revised need-based EMP for the project as discussed in the meeting including the beneficiaries and the cost outlay each year. The entire need-based EMP should be completed within first two years of the project period. The project cost should include the royalty components also.
  - 4. A Progressive Greenbelt Plan should be prepared. The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha. The areas for plantation, storage of overburden and temporary storage of mined minerals should be marked on the plan. Afforestation/ vegetation should be attempted alongside the village roads or other public land. This may be done with prior approval of the local self-governing bodies. If no public land is available for the purpose the Project Proponent shall arrange for land with his personal means. To enhance success / survival rate the plantation shall be attempted during the first two years of the project life and the plantation so done shall be taken care of during the rest of the project life. Species of the plant selected should be self-sustaining in that particular region. Spatial year wise progressive plantation programme to be submitted.
  - 5. Details of mine closure plan.
  - 6. Plan for mitigation of the Impact of blasting / mining activities on local flora and on-site fauna.
  - 7. Inventory of existing trees at the project site. A plan for their protection as far as possible. Permission for DFO for cutting of any trees with compensatory plantation plan.

The SEAC recommended that the above documents may be submitted in the PARIVESH portal for further consideration of the application.

# All the documents should be duly signed both by the project proponent and the environmental consultant.

The SEAC will further consider the case on submission of satisfactory reply on the above-mentioned queries only through "PARIVESH" portal.

# 3.6.3. Deliberations by the SEIAA in current meetings

# **INTRODUCTION**

The proponent made online application vide proposal no. **SIA/WB/MIN/471220/2024** dated **06 May 2024** seeking environment clearance under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. **1(a) Mining of minerals** projects under Category "**B1**" of EIA Notification 2006. SEAC, during its 41<sup>st</sup> meeting held on 19.06.2024, recommended the proposed project for Environmental Clearance with additional conditions.

# PROJECT DETAILS

The project of **Somnath Baral** located is as follows :

S. No.	State	District	

(1) West Bengal Purulia	(1)	West Bengal	Purulia
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The salient features of the project submitted by the project proponent is available under online proposal no. SIA/WB/MIN/471220/2024 in PARIVESH Portal.

SEIAA considered the recommendation of SEAC and decided that the application for Muralidhar Stone Quarry over an area of 1.40 ha (3.46 acres) at Mouza - Sarberia, Block & PS –Barabazar, Jl No. - 206, Plot No. – 15/190(P) & 15/191(P), District – Purulia, West Bengal by Somnath Baral falling within the DSR potential zone code PUR\_BS\_ZONE\_30 is accepted with the following additional conditions:-

- i. The PP is required to undertake dust suppression by water sprinkling immediately after the drilling and blasting operations and workers would be allowed to work only after subsidence of dust in the area.
- ii. A Progressive Greenbelt Plan should be prepared. The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha. PP will complete the plantation in safety zone with 4-5 ft. tall seedlings before starting the mining activity.
- iii. Regular medical check up of the workers should be done. Chest X-ray (PA View) and pulmonary function test of all workers should be done at least once in six months. The report along with comments of the medical officer should be submitted in the six monthly compliance report.
- iv. Workers exposure to dust (average of at least five consecutive days) should be monitored along with silica content of the dust once in six months and should be submitted along with six monthly compliance report.
- v. Workers should use Personal Protective Equipment (PPE) equipment during the work.
- vi. The PP shall submit geo-tagged photographs regarding the implementation of CER with actual expenses incurred. The CER and plantation will have to be implemented within first two years of starting of mining operation.
- vii. The validity of EC will be for 5 years. However, the PP may apply for extension of EC with revised mining plan before expiry of 5 years hence.

# 3.6.4. Recommendation of SEIAA

Approved

# 3.6.5. Details of Environment Conditions

#### **3.6.5.1. Specific**

N/A

# 3.6.5.2. Standard

1( a)	Mining of minerals		
Stat	Statutory compliance		
1.	The Environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Courts, NGT and any other Court of Law, from time to time, and as applicable to the project		
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.		
1.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.		

1.	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. TThe implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).
1.	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.
1.	The project proponent shall obtain the necessary permission from the Central Ground Water Authority
1.	Solid/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.
1.	Permission of power supply to be taken from the concerned authority for meeting power demand of the project site.
1.	The maximum production or peak production at any given time shall not exceed the limit as prescribed in the EC.
1.	The validity of EC will be for 5 years. However, the PP may apply for extension of EC with revised mining plan before expiry of 5 years hence.
Air	quality monitoring and mitigation measure
1.	Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Online ambient air quality monitoring station/stations may also be installed in addition to the regular air monitoring stations as per the requirement and/or in consultation with the SPCB
1.	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
1.	Transportation of coal, to the extent if permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water sprinkling/rain gun/ Fog cannon /mist sprinkling etc., shall be carried out in critical areas prone to air pollution with higher level of particulate matter all through the coal transport roads, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
1.	Major approach roads shall be black topped and properly maintained.
1.	PP to install solar lights along the road used for transportation of coal to avoid the accidents at night and also seek its maintenance.
1.	The transportation of coal shall be carried out as per the provisions and route proposed in the approved mining plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed that the impact of sound, dust and accidents could be appropriately mitigated.
1.	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.

1.	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
1.	Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.
1.	Adequate number of Fog canon (mist sprayer) shall be installed to reduce the impact of air pollution at dust generating sources with time bound action plan.
1.	PP should Install Wind breaker/shield arrangement along the railway siding for reducing the dust propagation in upwind direction.
1.	Post environmental closure third party monitoring by reputed instituted in air quality, water, land & soil etc shall be carried out and analysed with EMP measures at regular interval. A suitable recommendation in this regard, shall be furnished to IRO, MoEF&CC for compliance. The data used for analysis shall be obtained from continuos AQMS, site specific water regime. Also third party shall analyses the implementation of river diversion, meeting to the requirement of project report.
Wa	ter quality monitoring and mitigation measures
1.	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.
1.	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-1A.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
1.	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
1.	Monitoring of water quality upstream and downstream of river including pons, lakes, tanks shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
1.	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
1.	The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation.
1.	Garland drains (of suitable size, gradient and length) around the critical areas i.e. mine shaft and low lying areas, shall be designed keeping at least 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. The sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff
1.	The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly
1.	Industrial waste water from coal handling plant and mine water shall be properly collected and treated so as to

	conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder, and as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluent. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste water.
1.	Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
1.	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations shall be prepared, considering the presence of any river/rivulet/pond/lake etc., with impact of mining activities on it, and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the provisions of the approved Mining Plan/ EIA-EMP submitted to this Ministry and the same should be done with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved mining plan and as per the permission of DGMS.
1.	The project proponent shall take all precautionary measures to ensure reverian/ riparian ecosystem in and around the coal mine upto a distance of 5 km. A revarian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.
1.	Domestic water shall be providing to the residents/villages which are coming under the zone of influence of the project due to ground water extraction by installing a RO plant with proper supply line and Taps within 2 years
1.	No obselete technologies for sewage treatment shall be implemented. Construction of Sewage Treatment Plant with latest technology should be completed within 2 years and treated water shall be reused for plantation. CTE and CTO of STP shall be obtained as per the norms.
Noi	se and Vibration monitoring and prevention
1.	Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
1.	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.
Mir	ning Plan
1.	5- Star Rating is mandatory to obtaine certification as per guidelines of Mininstry of Coal
1.	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
1.	No change in mining method i.e. UG to OC, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).
1.	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
1.	Underground work place environmental conditions shall be rendered ergonomic and air breathable with adequate illumination in conformance with DGMS standards.
1.	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation)

	Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.
1.	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.
1.	Tranportation by Railway Siding shall be developed to avoid transportation by Road
Lan	d Recalmation
1.	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
1.	Post-mining land be rendered usable for agricultural/forestry purposes and shall be handed over to the respective State Government, as specified in the Guidelines for Preparation of Mine Closure Plan, issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.
1.	Regular monitoring of subsidence movement on the surface over and around the working areas and its impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence beyond the limit prescribed, appropriate effective mitigation measures shall be taken to avoid loss of life and materials. Cracks should be effectively plugged in with ballast and clay soil/suitable material.
1.	Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
1.	A separate team for subsidence monitoring and surface mitigation measures shall be constituted and continuous monitoring & implementation of mitigation measures be carried out.
1.	Thorough inspection of the mine lease area for any cracks developed at the surface due to mining activities below ground shall be carried out to prevent inrush of water in the mine.
1.	Native tree species shall be selected and planted over areas affected by subsidence.
1.	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.
1.	Apart from possessing a valid lease the proponent shall obtain all other necessary permissions before commencement of any mining or allied activity at the lease hold area.
Pub	lic hearing and Human health issues
1.	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored.
1.	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.
1.	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and

	shall also be provided with adequate training and information on safety and health aspects.
1.	Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.
1.	Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the persons employed.
1.	Implementation of the time bound action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the time bound action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
1.	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.I1 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.
1.	PP to conduct need based assessment survey of the area to for in order to decide the activities to be carried under the CSR and to provide detail of the activity carried out with adequate budgetary provision and time bound action plan.
1.	PP should conduct epidemiology study to (analysis of the distribution, patterns and determinants of health and disease conditions in defined populations).
1.	Permanent Health care facilities of Hospital should be established within 5 km of project boundary for the local people.
1.	PP must ensure an emergency action plan during pandemic in order to provide assistance to the nearby villages located within the 10 km radius buffer zone (If required)
1.	PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone with time bound action plan
1.	PP to take measure for installation of Renewable Energy sources in nearby area falling within 10 km radius
Cor	porate Environment Responsibility
1.	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.
1.	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.
1.	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.
1.	Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
1.	PP should establish in house (at project site) environment laboratory for measurement of environment parameter

	with respect to air quality and water (surface and ground. A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. Any non- compliance or infringement should be reported to the concerned authority
1.	Needs of the locality shall be assessed and the social part of the EMP shall be undertaken as stipulated by MoEF&CC Office Memorandum F. No. 22-65/2017.IA.III dated 30.09.2020. Beneficiary of the social component of EMP should be identified and to be displayed at site. Need based activities for local people is part of the EMP. Details of such activities are submitted by the project proponent. The PP shall submit geotagged photographs regarding the implementation of need based activities with actual expenses incurred. <b>The need based activities and plantation will have to be implemented within first two years of starting of mining operation.</b> Photographic evidence of the activities and relevant bills/vouchers are to be given in 6 monthly compliance report.
Mis	cellaneous
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.
1.	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.
1.	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.
1.	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.
1.	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.
1.	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
1.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
1.	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.
1.	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).
1.	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.
1.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
1.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

1.	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.			
1.	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.			
1.	The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.			
1.	Compensation of the land acquired for the project shall be settled as per the R&R Policy. Adequate facility of drinking water, plantation and other social amenities should be provided to established R&R villages.			
1.	Persons of nearby villages shall be given training on livelihood and skill development to make them employable with its proper records.			
1.	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours			
1.	The PP is required to undertake dust suppression by water sprinkling immediately after the drilling and blasting operations and workers would be allowed to work only after subsidence of dust in the area.			
1.	A Progressive Greenbelt Plan should be prepared. The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha. PP will complete the plantation in safety zone with 4-5 ft. tall seedlings before starting the mining activity.			
1.	Regular medical check up of the workers should be done. Chest X-ray (PA View) and pulmonary function test of all workers should be done at least once in six months. The report along with comments of the medical officer should be submitted in the six monthly compliance report.			
1.	Workers exposure to dust (average of at least five consecutive days) should be monitored along with silica content of the dust once in six months and should be submitted along with six monthly compliance report.			
1.	Workers should use Personal Protective Equipment (PPE) equipment during the work.			
1.	The PP shall submit geo-tagged photographs regarding the implementation of CER with actual expenses incurred. The CER and plantation will have to be implemented within first two years of starting of mining operation.			

# 3.7. Agenda Item No 7:

# **3.7.1. Details of the proposal**

Dhatala Blackstone Mine by UJJWAL MANDAL located at BANKURA,WEST BENGAL					
Proposal For		Mining EC Under 5 Ha			
Proposal No	File No	Submission Date	Activity (Schedule Item)		

### **3.7.2.** Deliberations by the committee in previous meetings

#### Date of SEIAA 1 :07/06/2024

Deliberations of SEIAA 1 :

### **INTRODUCTION**

The proponent made online application vide proposal no. **SIA/WB/MIN/457179/2024** dated **09 February 2024** seeking environment clearance under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. **1(a) Mining of minerals** projects under Category **"B2"** of EIA Notification 2006. SEAC, during its 33<sup>rd</sup> meeting held on 20.03.2024, recommended the proposed project for Environmental Clearance

with additional conditions.

The proposal was placed before SEIAA in its 38<sup>th</sup> meeting held on 19.04.2024 and it was observed that some documents required to be uploaded in the PARIVESH Portal. The project proponent (PP) uploaded their reply on 09.05.2024 vide letter no. NIL dated 09.05.2024. SEIAA considered the submission by the pp uploaded on 09.05.2024 in its 41<sup>st</sup> meeting held on 27.05.2024 and decided to ask the PP for a presentation. Accordingly the PP is called for presentation in the 42<sup>nd</sup> meeting of SEIAA on 07.06.2024.

## **PROJECT DETAILS**

The project of Ujjwal Mandal located is as follows :

S. No.	S. No. State	
(1.)	West Bengal	Bankura

The salient features of the project submitted by the project proponent is available under online proposal no. SIA/WB/MIN/457179/2024 in PARIVESH Portal.

#### PP appeared before SEIAA and made a presentation.

It was observed by SEIAA that there is mismatch between reply submitted by PP and facts provided in the power point presentation. SEIAA decided that PP should submit the year wise break up of expenditure for EMP, greenbelt development, environmental monitoring and occupational health and safety issues etc. along with maintenance cost of subsequent years.

#### **Date of SEIAA 2 :**27/05/2024

#### **Deliberations of SEIAA 2 :**

#### **INTRODUCTION**

The proponent made online application vide proposal no. **SIA/WB/MIN/457179/2024** dated **09 February 2024** seeking environment clearance under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. **1(a) Mining of minerals** projects under Category "**B2**" of EIA Notification 2006. SEAC, during its 33<sup>rd</sup> meeting held on 20.03.2024, recommended the proposed project for Environmental Clearance with additional conditions.

The proposal was placed before SEIAA in its 38<sup>th</sup> meeting held on 19.04.2024 and it was observed that some documents required to be uploaded in the PARIVESH Portal. The project proponent uploaded their reply on 09.05.2024 vide letter no. NIL dated 09.05.2024.

#### PROJECT DETAILS

The project of Ujjwal Mandal located is as follows :

S. No.	State	District
(1.)	West Bengal	Bankura

The salient features of the project submitted by the project proponent is available under online proposal no. SIA/WB/MIN/457179/2024 in PARIVESH Portal.

SEIAA considered the submission by the pp uploaded on 09.05.2024 and decided to ask the PP for a presentation.

## Date of SEIAA 3 :19/04/2024

#### **Deliberations of SEIAA 3 :**

The proponent made online application vide proposal no. **SIA/WB/MIN/457179/2024** dated **09 February 2024** seeking environment clearance under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. **1(a) Mining of minerals** projects under Category "**B2**" of EIA Notification 2006. SEAC, during its 33<sup>rd</sup> meeting held on 20.03.2024, recommended the proposed project for Environmental Clearance with additional conditions.

## PROJECT DETAILS

The project of **Ujjwal Mandal** located is as follows :

S. No.	State	District
(1.)	West Bengal	Bankura

The salient features of the project submitted by the project proponent is available at <u>Report</u> under online proposal no. **SIA/WB/MIN/457179/2024.** 

SEIAA considered the recommendation of SEAC and decided that the PP along with environmental consultant should be called for presentation of their project particularly safety zone, greenbelt development within the lease area as well as adjoining areas, mine closure plan, land use plan, storage of topsoil and rejects / over burden. PP should also submit detailed estimate of creation of greenbelt.

Date of SEAC 4 :20/03/2024

### **Deliberations of SEAC 4 :**

- The SEAC scrutinized the documents submitted by the PP in the 33<sup>rd</sup> meeting of SEAC, WB (2023-2026) held on 20.03.2024. After careful consideration and detailed deliberation, the committee **recommended the proposed project for Environmental Clearance** with the following additional conditions:
- 1. The PP should apply for Consent to Establish and Consent to Operate to WBPCB if they install a stone crusher at the site. Necessary permission / clearances for the crusher should be obtained.
- 2. The Proponent shall prepare a dust and noise minimization plan with adequate details. Care should be taken for prevention of occupational health issues of the workers. Amenities like personal protective equipment (PPEs) should be provided for them.
- 3. A post closure long-term vegetative stabilisation program should be submitted along with the six monthly compliance report.
- 4. Monitoring of  $PM_{10}$ ,  $PM_{2.5}$  and its SiO<sub>2</sub> (free silica) content should be done along with noise levels.
- 5. Dust suppression by sprinkling water should be adopted specially after dusty operations like drilling, blasting etc.
- 6. Year-wise excavation schedule showing breakup of pay-mineral (black stone) and waste rock may be clearly drawn up and areas may be demarcated for waste dumping. Site for intermediate stockpiling of the mineral may also be clearly demarcated and show in the surface plan.
- 7. As far as practicable the waste rock to be produced from the mine may be dumped in the existing pit-void adjacent to/ within the lease hold boundary. Any outside the pit dumping should be temporary in nature. All waste rock dumped outside the pit may be rehandled and backfilled in the mined-out area.
- 8. The proponent shall review the Progressive Mine Closure Plan every two years from the date of opening of the mine and shall submit the same to the officer authorised by the State Government in this behalf, for its approval under the West Bengal Minor Mineral Concession Rules, 2016. In the event of the progressive mine closure being not approved, or not deemed to be approved, the mining activities shall be discontinued.
- 9. One year prior to the proposed closure of the mine the proponent shall submit a Final Mine Closure Plan to the officer authorised by the State Government in this behalf, for approval under the West Bengal Minor Mineral Concession Rules, 2016.
- 10. The project proponent shall ensure that the protective measures contained in the Mine Closure Plan referred to hereinabove including the reclamation and rehabilitation work are carried out in accordance with the approved Mine Closure Plan or with such modifications as are approved by the officer authorised by the State Government in this behalf under the West Bengal Minor Mineral Concession Rules, 2016.
- 11. In addition to regular submission of environmental compliance reports as required under the EIA Notification, 2006, the proponent shall submit to the officer authorised by the State Government in this behalf, a yearly report before 1st of July every year setting forth the extent of protective and rehabilitative works carried out as envisaged in the approved Mine Closure Plan, and if there is any deviation, reasons thereof.
- 12. For the purpose of carrying out mining operation in the area, the proponent shall furnish financial assurance. The amount of financial assurance shall be as laid down in the West Bengal Minor Mineral Concession Rules, 2016. The financial assurance may be in any of the forms referred to in the said Rules.
- 13. Effects of blasting to the nearby localities should be examined and remedial plan should be in line with approved mine plan and as per rules of Mine Safety Authority.
- 14. Needs of the locality may be assessed and a social part of the EMP should be undertaken as stipulated by MoEF&CC. The activities should be completed within the first two years of the project life. 'Road repair' under need based activities to be provided with justification of its budget in the six-monthly compliance report.

Date of SEAC 5 :21/02/2024

#### **Deliberations of SEAC 5 :**

- Based on the submission and presentation made by the PP, the SEAC observed that **the plot area** for the proposed project as per the geo-coordinates mentioned in the approved 'Mining Plan including Mine Closure Plan' **falls within the potential mining zone** recorded in the approved District Survey Report (DSR) of Bankura district.
- The SEAC noted that land conversion certificate for the whole project has not been submitted and the Mine Plan uploaded not endorsed by the competent authority.
- However, the SEAC made the following submission / clarifications should be uploaded in the PARIVESH portal by the project proponent for further consideration :-
- 1. Endorsed copy of Mine Plan Including Progressive Mine Closure Plan to be resubmitted.
- 2. Land conversion certificate for the entire land of the proposed project should be submitted.
- 3. Plan for overburden management should be properly included in the Progressive Mine Closure Plan.
- 4. Revised project cost (with basis of calculation) for the project considering the current land valuation.
- 5. Traffic management plan.
- 6. Impact of explosives on local flora, fauna and ground water.
- 7. Need based EMP as per Office Memorandum of MoEF & CC vide F. No. 22-65/2017.IA.III dated 30.09.2020 to be submitted. Consents from the beneficiaries of the social part of EMP should be furnished.
- 8. A Progressive Greenbelt Plan should be submitted. Afforestation/ vegetation should be attempted alongside the village roads or other public land. This may be done with prior approval of the local self governing bodies. If no public land is available for the purpose the Project Proponent shall arrange for land with his personal means. To enhance success/ survival rate the plantation shall be attempted during the first two years of the project life and the plantation so done shall be taken care of during the rest of the project life.
- 9. Plan and section of the mine as given in the approved Mine Plan should be submitted.
- 10. Details of occupational health measures to be adopted for the workers employed for the project.
- 11. The PP reported that the closed mine will be utilized for irrigation. An undertaking in this regard should be provided that the PP will protect the embankment and provide fencing around the water-filled mine after closure.

**Recommendation:** The SEAC recommended that the above documents may be submitted in the PARIVESH portal for further consideration of the application.

All the documents should be duly signed both by the project proponent and the environmental consultant. The SEAC will further consider the case on submission of satisfactory reply on the above-mentioned queries only through "PARIVESH" portal.

#### 3.7.3. Deliberations by the SEIAA in current meetings

The proposal was placed before SEIAA in its 38<sup>th</sup> meeting held on 19.04.2024 and it was observed that some documents required to be uploaded in the PARIVESH Portal. The PP uploaded their reply on 09.05.2024 vide letter no. NIL dated 09.05.2024. SEIAA considered the submission by the pp uploaded on 09.05.2024 in its 41<sup>st</sup> meeting held on 27.05.2024 and decided to ask the PP for a presentation. Accordingly the PP was called for presentation in the 42<sup>nd</sup> meeting of SEIAA on 07.06.2024.

PP appeared before SEIAA on 07.06.2024 and made a presentation. It was observed by SEIAA that there is mismatch between reply submitted by PP and facts provided in the power point presentation. SEIAA decided that PP should submit the year wise break up of expenditure for EMP, greenbelt development, environmental monitoring and occupational health and safety issues etc. along with maintenance cost of subsequent years. PP uploaded their reply on 13.06.2024.

SEIAA considered the recommendation of SEAC as well as the submission by the pp uploaded on 13.06.2024 and decided that the application for Dhatala Blackstone Mine Project over an area of 3.44 ha (8.500 acres) at J.L. No.-115, Plot No.- 938, Mouza / Village – Dhatala, Block: Saltora, District: Bankura, West Bengal by Ujjwal Mandal falling within the DSR potential zone code BNK\_BS\_ZONE\_1 is accepted with the following additional conditions:-

i. The PP is required to undertake dust suppression by water sprinkling immediately after the drilling and blasting operations and workers would be allowed to work only after subsidence of dust in the area.

ii. A Progressive Greenbelt Plan should be prepared. The PP has to do tree plantation in an area equivalent to

33% of the lease area @2500 trees / ha. PP will complete the plantation in safety zone with 4-5 ft. tall seedlings before starting the mining activity.

- iii. Regular medical check up of the workers should be done. Chest X-ray (PA View) and pulmonary function test of all workers should be done at least once in six months. The report along with comments of the medical officer should be submitted in the six monthly compliance report.
- iv. Workers exposure to dust (average of at least five consecutive days) should be monitored along with silica content of the dust once in six months and should be submitted along with six monthly compliance report.
- v. Workers should use Personal Protective Equipment (PPE) equipment during the work.
- vi. The PP shall submit geo-tagged photographs regarding the implementation of CER with actual expenses incurred. The CER and plantation will have to be implemented within first two years of starting of mining operation.
- vii. The validity of EC will be for 5 years. However, the PP may apply for extension of EC with revised mining plan before expiry of 5 years hence.

#### 3.7.4. Recommendation of SEIAA

Approved

#### 3.7.5. Details of Environment Conditions

#### 3.7.5.1. Specific

N/A

## 3.7.5.2. Standard

1( a)	Mining of minerals			
Stat	Statutory compliance			
1.	The Environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Courts, NGT and any other Court of Law, from time to time, and as applicable to the project			
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.			
1.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.			
<ul> <li>The project proponent shall prepare a Site-Specific Conservation Plan &amp; Wildlife Management Plan and by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan</li> <li>Management Plan shall be implemented in consultation with the State Forest Department. TThe impreport shall be furnished along with the six-monthly compliance report (in case of the presence or species in the study area).</li> </ul>				
1.	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.			

1.	The project proponent shall obtain the necessary permission from the Central Ground Water Authority		
1.	Solid/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.		
1.	Permission of power supply to be taken from the concerned authority for meeting power demand of the project site.		
1.	The maximum production or peak production at any given time shall not exceed the limit as prescribed in the EC.		
1.	The validity of EC will be for 5 years. However, the PP may apply for extension of EC with revised mining plan before expiry of 5 years hence.		
Air	quality monitoring and mitigation measure		
1.	Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Online ambient air quality monitoring station/stations may also be installed in addition to the regular air monitoring stations as per the requirement and/or in consultation with the SPCB		
1.	The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.		
1.	Transportation of coal, to the extent if permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water sprinkling/rain gun/ Fog cannon /mist sprinkling etc., shall be carried out in critical areas prone to air pollution with higher level of particulate matter all through the coal transport roads, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.		
1.	Major approach roads shall be black topped and properly maintained.		
1.	PP to install solar lights along the road used for transportation of coal to avoid the accidents at night and also seek its maintenance.		
1.	The transportation of coal shall be carried out as per the provisions and route proposed in the approved mining plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed that the impact of sound, dust and accidents could be appropriately mitigated.		
1.	Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.		
1.	Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.		
1.	Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.		
1.	Adequate number of Fog canon (mist sprayer) shall be installed to reduce the impact of air pollution at dust generating sources with time bound action plan.		

1.	PP should Install Wind breaker/shield arrangement along the railway siding for reducing the dust propagation in upwind direction.			
1.	Post environmental closure third party monitoring by reputed instituted in air quality, water, land & soil etc shall be carried out and analysed with EMP measures at regular interval. A suitable recommendation in this regard, shall be furnished to IRO, MoEF&CC for compliance. The data used for analysis shall be obtained from continuos AQMS, site specific water regime. Also third party shall analyses the implementation of river diversion, meeting to the requirement of project report.			
Wa	ter quality monitoring and mitigation measures			
1.	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.			
1.	The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No.J-20012/1/2006-IA.11 (M) dated 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.			
1.	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.			
1.	Monitoring of water quality upstream and downstream of river including pons, lakes, tanks shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.			
1.	Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.			
1.	The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation.			
1.	Garland drains (of suitable size, gradient and length) around the critical areas i.e. mine shaft and low lying areas, shall be designed keeping at least 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. The sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff			
1.	The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the min area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly			
1.	Industrial waste water from coal handling plant and mine water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder, and as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluent. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste water.			
1.	Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.			
1.	The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations shall be prepared, considering the presence of any river/rivulet/pond/lake etc., with impact of			

	mining activities on it, and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the provisions of the approved Mining Plan/ EIA-EMP submitted to this Ministry and the same should be done with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved mining plan and as per the permission of DGMS.		
1.	The project proponent shall take all precautionary measures to ensure reverian/ riparian ecosystem in and around the coal mine upto a distance of 5 km. A revarian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.		
1.	Domestic water shall be providing to the residents/villages which are coming under the zone of influence of the project due to ground water extraction by installing a RO plant with proper supply line and Taps within 2 years		
1.	No obselete technologies for sewage treatment shall be implemented. Construction of Sewage Treatment Plant with latest technology should be completed within 2 years and treated water shall be reused for plantation. CTE and CTO of STP shall be obtained as per the norms.		
Noi	se and Vibration monitoring and prevention		
1.	Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.		
1.	The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.		
Min	ning Plan		
1.	5- Star Rating is mandatory to obtaine certification as per guidelines of Mininstry of Coal		
1.	Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.		
1.	No change in mining method i.e. UG to OC, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).		
1.	Mining shall be carried out as per the approved mining plan (including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).		
1.	Underground work place environmental conditions shall be rendered ergonomic and air breathable with adequate illumination in conformance with DGMS standards.		
1.	No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.		
1.	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.		
1.	Tranportation by Railway Siding shall be developed to avoid transportation by Road		
Lan	Land Recalmation		

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1.	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).		
1.	Post-mining land be rendered usable for agricultural/forestry purposes and shall be handed over to the respective State Government, as specified in the Guidelines for Preparation of Mine Closure Plan, issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.		
1.	Regular monitoring of subsidence movement on the surface over and around the working areas and its impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence beyond the limit prescribed, appropriate effective mitigation measures shall be taken to avoid loss of life and materials. Cracks should be effectively plugged in with ballast and clay soil/suitable material.		
1.	Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.		
1.	A separate team for subsidence monitoring and surface mitigation measures shall be constituted and continuou monitoring & implementation of mitigation measures be carried out.		
1.	Thorough inspection of the mine lease area for any cracks developed at the surface due to mining activities below ground shall be carried out to prevent inrush of water in the mine.		
1.	Native tree species shall be selected and planted over areas affected by subsidence.		
1.	The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.		
1.	Apart from possessing a valid lease the proponent shall obtain all other necessary permissions before commencement of any mining or allied activity at the lease hold area.		
Put	blic hearing and Human health issues		
1.	Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored.		
1.	The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.		
1.	Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.		
1.	Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.		
1.	Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the persons employed.		
1.	Implementation of the time bound action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the time bound action plan submitted with		

budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in
the R&R policy of the company/State Government/Central Government, as applicable.

1. The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.I1 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

PP to conduct need based assessment survey of the area to for in order to decide the activities to be carried under
the CSR and to provide detail of the activity carried out with adequate budgetary provision and time bound action plan.

- 1. PP should conduct epidemiology study to (analysis of the distribution, patterns and determinants of health and disease conditions in defined populations).
- 1. Permanent Health care facilities of Hospital should be established within 5 km of project boundary for the local people.
- 1. PP must ensure an emergency action plan during pandemic in order to provide assistance to the nearby villages located within the 10 km radius buffer zone (If required)
- 1. PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10 km radius buffer zone with time bound action plan
- 1. PP to take measure for installation of Renewable Energy sources in nearby area falling within 10 km radius

## **Corporate Environment Responsibility**

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.

1. 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.

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.

1. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground. A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. Any non- compliance or infringement should be reported to the concerned authority

Needs of the locality shall be assessed and the social part of the EMP shall be undertaken as stipulated by MoEF&CC Office Memorandum F. No. 22-65/2017.IA.III dated 30.09.2020. Beneficiary of the social component of EMP should be identified and to be displayed at site. Need based activities for local people is part of the EMP. Details of such activities are submitted by the project proponent. The PP shall submit geotagged photographs regarding the implementation of need based activities with actual expenses incurred.

The need based activities and plantation will have to be implemented within first two years of starting of mining operation. Photographic evidence of the activities and relevant bills/vouchers are to be given in 6 monthly compliance report.

Mis	Miscellaneous			
1. The project proponent shall make public the environmental clearance granted for their project alor environmental conditions and safeguards at their cost by prominently advertising it at least ir newspapers of the District or State, of which one shall be in the vernacular language within seven addition this shall also be displayed in the project proponent's website permanently.				
1.	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.			
1.	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.			
1.	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.			
1.	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.			
1.	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.			
1. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board State Government.				
1.	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.			
1.	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).			
1.	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.			
1.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.			
1.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.			
1.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorit should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data information/monitoring reports.			
1.	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control 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 Publ Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'b Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.			

1.	The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.		
1.	Compensation of the land acquired for the project shall be settled as per the R&R Policy. Adequate facility of drinking water, plantation and other social amenities should be provided to established R&R villages.		
1.	Persons of nearby villages shall be given training on livelihood and skill development to make them employable with its proper records.		
1.	The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours		
1.	The PP is required to undertake dust suppression by water sprinkling immediately after the drilling and blasting operations and workers would be allowed to work only after subsidence of dust in the area.		
1.	A Progressive Greenbelt Plan should be prepared. The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha. PP will complete the plantation in safety zone with 4-5 ft. tall seedlings before starting the mining activity.		
1.	Regular medical check up of the workers should be done. Chest X-ray (PA View) and pulmonary function test of all workers should be done at least once in six months. The report along with comments of the medical officer should be submitted in the six monthly compliance report.		
1.	Workers exposure to dust (average of at least five consecutive days) should be monitored along with silica content of the dust once in six months and should be submitted along with six monthly compliance report.		
1.	Workers should use Personal Protective Equipment (PPE) equipment during the work.		
1.	The PP shall submit geo-tagged photographs regarding the implementation of CER with actual expenses incurred. The CER and plantation will have to be implemented within first two years of starting of mining operation.		

# 3.8. Agenda Item No 8:

# **3.8.1.** Details of the proposal

Putulia Sand Mine by ADITYA SHARMA located at PASCHIM BARDHAMAN,WEST BENGAL			
Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity (Schedule Item)
SIA/WB/MIN/480275/2024	2N-290/2023(E)	10/06/2024	Mining of minerals (1(a))

# **3.8.2.** Deliberations by the committee in previous meetings

Date of SEAC 1 :19/06/2024

#### **Deliberations of SEAC 1 :**

- Based on the submission and presentation made by the PP, the SEAC observed that **the plot area** for the proposed project as per the geo-coordinates mentioned in the revised Mining Plan uploaded by the PP **falls** within the potential mining zone recorded in the approved District Survey Report (DSR) of Paschim Bardhaman district.
- Based on the presentation and submission made by the PP, the SEAC **recommended** issuance of **Standard Terms of Reference** for EIA preparation for the project with the following additional conditions :-
  - 1) Drone videography of the entire project area explicitly showing the entire project site along with the existing tree plantation/green belt. Minimum 2 minute video to be submitted.
  - 2) Photographs of the site mentioning the geo-coordinates.
  - 3) Standard practice of management of the intermediate storage area should be submitted.
  - 4) Means of access and egress between the embankment and the sand quarry may be clearly earmarked. The Project Proponent must commit that no hard toping or paving of any haulage route within the riverbed will be attempted.
  - 5) A plan on the management and handling of sand during the period of intermediate stockpiling should be submitted.
  - 6) The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha within first two years from the starting of the mining operation. A Progressive Greenbelt Plan may be prepared. The project area being entirely on the riverbed, afforestation/ vegetation should be attempted alongside the village roads or other public land. This may be done with prior approval of the local self-governing bodies. If no public land is available for the purpose the Project Proponent shall arrange for land with his personal means. To enhance success/ survival rate the plantation shall be attempted during the first two years of the project life and the plantation so done shall be taken care of during the rest of the project life. Species of the plant selected should be self-sustaining in that particular region. Spatial year wise progressive plantation programme to be submitted.
  - 7) Plan showing spatial year wise distribution of the proposed greenbelt has to be submitted along-with supporting documents of administrative approval/s.
  - 8) Being a mine in operation, the plantation created so far may be submitted with geotagged photographs.
  - 9) EIA should also include detailed study of the baseline condition and impact on aquatic flora and fauna.
  - 10) The project cost may include the auction bid value, estimated royalty to be paid, cost of any infrastructure built like office space, stockyard, etc. The calculation/documents to estimate the project cost should be submitted. The planned expenditure for components like need-based activities may be derived based on the project cost.
  - 11) A need-based EMP may be prepared in accordance with the MoEF&CC Office Memorandum vide F. No. 22-65/2017.IA.III dated 30.09.2020. Record of communications made in this regard with the identified/ intended beneficiaries (schools/ institutions etc) may also be uploaded. Evidence of the activities already done should be provided by photographs with geo-coordinates. The activities should be completed within the first two years of the project life.
  - 12) A study report on base flow level measured at 5 points with date and supporting photographs should be submitted. It should be committed that mining will be done at least 1m above the base flow level. Accordingly, if required, the excavation plan may also be revised.
  - 13) Management plan including the final closure plan of haul road to be submitted.
  - 14) Sieve analysis report for grain size distribution should be provided.
  - 15) Study and protection plan of the aquatic life available both during the mining and non-mining seasons should be provided.

# The PP shall upload the EIA/EMP report along with the documents / submissions / clarifications sought above in the PARIVESH portal while applying for environmental clearance.

All the documents should be duly signed both by the project proponent and environmental the consultant.

#### **3.8.3.** Deliberations by the SEIAA in current meetings

### **INTRODUCTION**

The proponent made online application vide proposal no. **SIA/WB/MIN/480275/2024** dated **10 June 2024** seeking Terms of Reference (ToR) under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. **1(a) Mining of minerals** projects under Category "**B1**" of EIA Notification 2006. SEAC, during its 41<sup>st</sup> meeting held on 19.06.2024 recommended issuance of Standard Terms of Reference for EIA

preparation for the project with additional conditions.

## PROJECT DETAILS

The project of Aditya Sharma located is as follows :

S. No.	State	District	
(1)	West Bengal	Paschim Bardhaman	

The salient features of the project submitted by the project proponent are available under online proposal no. SIA/WB/MIN/480275/2024 PARIVESH Portal.

SEIAA considered the recommendation of SEAC and approved ToR with the additional condition that potential impact study in the EIA should be done considering the cumulative effect of all the mines in the cluster situation, if any.

#### 3.8.4. Recommendation of SEIAA

Approved

#### 3.8.5. Details of Terms of Reference

#### 3.8.5.1. Specific

<b>A.</b>	STAN	DARD TERMS OF REFERENCE
	1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one ye It may also be categorically informed whether there had been any increase in production after the EIA Notification 199 force, w.r.t. the highest production achieved prior to 1994.
	2.	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
	3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms lease area, production levels, waste generation and its management, mining technology etc. and should be in the name
	4.	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic she geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly sh and other ecological features of the study area (core and buffer zone).
1.	5.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the a geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodie rivers and soil characteristics.
	6.	Details about the land proposed for mining activities should be given with information as to whether mining confe use policy of the State; land diversion for mining should have approval from State land use board or the concerne
	7.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/proced into focus any infringement/deviation/violation of the environmental or forest norms/ conditions? The hierarchica administrative order of the Company to deal with the environmental issues and for ensuring compliance with the may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
	8.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case
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mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be prov

- 9. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in waste generation etc. should be for the life of the mine / lease period.
- 10. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan lease area should be prepared to encompass preoperational, operational and post operational phases and submittee of change of land use should be given.
- 11. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from land use, R&R issues, if any, should be given.
- 12. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the inforest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the state he site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascerta forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be representative of the State Forest Department to assist the Expert Appraisal Committees.
- 13. Status of forestry clearance for the broken up area and virgin forestland involved in the Project including depositi value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should a
- 14. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwa (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details fu of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative required, should be worked out with cost implications and submitted.
- 17. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Res as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location n authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proxin ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Bo and copy furnished.
- 18. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the min be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna p of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their con should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary all for implementing the same should be made as part of the project cost.
- 19. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', ( restrictions for mining operations), should also be indicated and where so required, clearance certifications from t Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the p activities could be considered.
- 20. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTI area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- 21. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the F relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and o sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess requirements, and action programmes prepared and submitted accordingly, integrating the sectorial programmes of departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lead shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should the Report.
- 22. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season); Dece (winter season)]primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, not and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA an Site-specific meteorological data should also be collected. The location of the monitoring stations should be such whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensit There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind dir mineralogical composition of PM10, particularly for free silica, should be given.

- 23. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It is into account the impact of movement of vehicles for transportation of mineral. The details of the model used and parameters used for modeling should be provided. The air quality contours may be shown on a location map clear location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-domina direction may also be indicated on the map.
- 24. The water requirement for the Project, its availability and source should be furnished. A detailed water balance sh provided. Fresh water requirement for the Project should be indicated.
- 25. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should
- 26. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rain harvesting proposed in the Project, if any, should be provided.
- 27. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguary required, should be provided.
- 28. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary of documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hy Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers presses of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working b water and for pumping of ground water should also be obtained and copy furnished.
- 29. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed impact of the same on the hydrology should be brought out.
- 30. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. *A* diagram may also be provided for the same.
- 31. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear a coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up fro commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted cl the area to be covered under plantation and the species to be planted. The details of plantation already done shoul plant species selected for green belt should have greater ecological value and should be of good utility value to th population with emphasis on local and native species and the species which are tolerant to pollution.
- 32. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic a Project in the present road network (including those outside the Project area) should be worked out, indicating wh capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (includir taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of study as per Indian Road Congress Guidelines.
- 33. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report
- 34. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequ sections) should be given in the EIA report.
- 35. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out of pre-placement medical examination and periodical medical examination schedules should be incorporated in the project specific occupational health mitigation measures with required facilities proposed in the mining area may
- 36. Public health implications of the Project and related activities for the population in the impact zone should be systered and the proposed remedial measures should be detailed along with budgetary allocations.
- 37. Measures of socio-economic significance and influence to the local community proposed to be provided by the Pr should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation
- 38. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia i impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides or specific to the proposed Project.
- 39. Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Repo Project.
- 40. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against t should be given.
- 41. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should out.

- 42. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 43. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly in environmental, social, economic, employment potential, etc.
- 44. Besides the above, the below mentioned general points are also to be followed:
  - a. Executive Summary of the EIA/EMP Report (enclosed as **Annexure A**).
  - b. All documents to be properly referenced with index and continuous page numbering.
  - c. Where data are presented in the Report especially in Tables, the period in which the data were collected and the be indicated.
  - d. Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Proje
  - e. Where the documents provided are in a language other than English, an English translation should be provided.
  - f. The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also b submitted.
  - g. While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by vide O.M. No. J-11013/41/2006-IA.II(I) dated 4<sup>th</sup> August, 2009, which are available on the website of this Mini followed.
  - h. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securin should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sough may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other t modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation of the draft EIA/EMP (other the process) will entail conducting the PH again with the revised documentation of the draft entails of the process.
  - i. As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance o stipulated in the environment clearance for the existing operations of the project, should be obtained from the R of Ministry of Environment, Forest and Climate Change, as may be applicable.
  - j. The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clear land features of the adjoining area.

#### B. Additional Terms of Reference imposed by SEAC -

1.

1. Drone videography of the entire project area explicitly showing the entire project site along with plantation/green belt. Minimum 2 minute video to be submitted.

- 2. Photographs of the site mentioning the geo-coordinates.
- 3. Standard practice of management of the intermediate storage area should be submitted.

4. Means of access and egress between the embankment and the sand quarry may be clearly earmarked. The l must commit that no hard toping or paving of any haulage route within the riverbed will be attempted.

5. A plan on the management and handling of sand during the period of intermediate stockpiling should be submit

6. The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha within first tw starting of the mining operation. A Progressive Greenbelt Plan may be prepared. The project area being entirely afforestation/ vegetation should be attempted alongside the village roads or other public land. This may be approval of the local self-governing bodies. If no public land is available for the purpose the Project Proponent land with his personal means. To enhance success/ survival rate the plantation shall be attempted during the first project life and the plantation so done shall be taken care of during the rest of the project life. Species of the plantation be self-sustaining in that particular region. Spatial year wise progressive plantation programme to be submitted.

7. Plan showing spatial year wise distribution of the proposed greenbelt has to be submitted along-with support administrative approval/s.

8. Being a mine in operation, the plantation created so far may be submitted with geotagged photographs.

9. EIA should also include detailed study of the baseline condition and impact on aquatic flora and fauna.

10. The project cost may include the auction bid value, estimated royalty to be paid, cost of any infrastructure space, stockyard, etc. The calculation/documents to estimate the project cost should be submitted. The planner components like need-based activities may be derived based on the project cost.

	11. A need-based EMP may be prepared in accordance with the MoEF&CC Office Memorandum vide F. No. 1 dated 30.09.2020. Record of communications made in this regard with the identified/ intended beneficiaries (sch
	etc) may also be uploaded. The activities should be completed within the first two years of the project life. 12. A study report on base flow level measured at 5 points with date and supporting photographs should be subm committed that mining will be done at least 1m above the base flow level. Accordingly, if required, the excavati be revised.
	13. Management plan including the final closure plan of haul road to be submitted.
	14. Sieve analysis report for grain size distribution should be provided.
	15. Study and protection plan of the aquatic life available both during the mining and non-mining seasons should
	While applying for environmental clearance, the PP shall upload in the PARIVESH portal, the EIA/EMP report documents/ submissions/ clarifications sought hereinabove.
	The West Bengal Pollution Control Board shall arrange public hearing as per EIA Notification, 2006 on sub EIA/EMP prepared by the Project Proponent as per the above-mentioned ToRs. All the issues mentioned in the Report' and public consultation must also be addressed and incorporated in the final EIA / EMP report. The progrequested to pursue the matter with the WBPCB for organizing the public hearing/consultation on submission of the report as per the provision of EIA notification 2006 & its amendments. The project proponent is requested to EIA/EMP prepared as per the above-mentioned ToRs and incorporating all the issues raised during Public I Consultation to the SEAC for further consideration of the proposal for environmental clearance.
	The ToR is valid for a period of 3 (three) years from the date of issue.
Anı	nexure - A
	- A
	Executive Summary
	<ul> <li>The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the informat points:</li> <li>1) Project name and location (Village, District, State, Industrial Estate (if applicable).</li> <li>2) Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier 13) Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative).</li> </ul>
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1.	<ul> <li>The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the information project name and location (Village, District, State, Industrial Estate (if applicable).</li> <li>Project name and location (Village, District, State, Industrial Estate (if applicable).</li> <li>Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier 13 Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative).</li> <li>Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardor Measures for mitigating the impact on the environment and mode of discharge or disposal.</li> <li>Capital cost of the project, estimated time of completion.</li> <li>Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./private land, sta acquisition, nearby (in 2-3 km.) water body, population, with in 10km. other industries, forest, eco-sensitive zet accessibility, (note - in case of industrial estate this information may not be necessary).</li> <li>Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fauna economic condition of the nearby population.</li> <li>Identification of hazards in handling, processing and storage of hazardous material and safety system provided risk.</li> </ul>
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1.	<ul> <li>The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the information project name and location (Village, District, State, Industrial Estate (if applicable).</li> <li>Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier 13 Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative).</li> <li>Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardo. Measures for mitigating the impact on the environment and mode of discharge or disposal.</li> <li>Capital cost of the project - Nature of land - Agricultural (single/double crop), barren, Govt./private land, sta acquisition, nearby (in 2-3 km.) water body, population, with in 10km. other industries, forest, eco-sensitive ze accessibility, (note - in case of industrial estate this information may not be necessary).</li> <li>Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fauna economic condition of the nearby population.</li> <li>Likely impact of the project on air, water, land, flora-fauna and nearby population.</li> <li>Emergency preparedness plan in case of natural or in plant emergencies.</li> <li>Issues raised during public hearing (if applicable) and response given.</li> <li>Environment Management Plan (EMP) as per Office Memorandum issued by the MoEF &amp; CC vide F. No. 22 dated 30.09.2020 with proposed expenditure.</li> </ul>
1.	<ul> <li>The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the information proposal.</li> <li>Project name and location (Village, District, State, Industrial Estate (if applicable).</li> <li>Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier 1</li> <li>Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative).</li> <li>Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardo</li> <li>Measures for mitigating the impact on the environment and mode of discharge or disposal.</li> <li>Capital cost of the project - Nature of land - Agricultural (single/double crop), barren, Govt./private land, sta acquisition, nearby (in 2-3 km.) water body, population, with in 10km. other industries, forest, eco-sensitive zera accessibility, (note - in case of industrial estate this information may not be necessary).</li> <li>Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fauna economic condition of the nearby population.</li> <li>Identification of hazards in handling, processing and storage of hazardous material and safety system provided risk.</li> <li>Likely impact of the project on air, water, land, flora-fauna and nearby population.</li> <li>Emergency preparedness plan in case of natural or in plant emergencies.</li> <li>Issues raised during public hearing (if applicable) and response given.</li> <li>Environment Management Plan (EMP) as per Office Memorandum issued by the MoEF &amp; CC vide F. No. 22</li> </ul>

## 3.8.5.2. Standard

1(<br/>a)Mining of minerals

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1.	An EIA-EMP Report shall be prepared for peak capacity (MTPA)operation in an ML/project area ofha based on the generic structure specified in Appendix III of the EIA Notification, 2006.
1.	An EIA-EMP Report would be prepared for peak capacity operation to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for MTPA of coal production based on approved project/Mining Plan forMTPA. Baseline data collection can be for any season (three months) except monsoon.
1.	If the washery is located within the mine lease or near to the mine lease its location should be cited seperately also, providing pillar cordinates and site layout plan. Insuch cases cumulative impact of mine operation with washery to be assessed and EMP measure to be drawn to the worst scenario
1.	Plan of mechanized transportation of coal to coal washery also for rejects and washed coal to be drawn
1.	Propoer KML file with pin drop and coordinate of mine at 500-1000 m interval be provided
1.	A Study area map of the core zone (project area) and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries, mines, coal washery and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given. The above details to be furnished in tabular form also
1.	Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.
1.	A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.
1.	Catchment area with its drainage map of 25 km area within and outside the mine shall be provided with names, details of rivers/ riverlet system and its respective order. The map should clearly indicate drainage pattern of the catchment area with basin of major rivers. Diversion of drains/ river need eloboration in form of lengthe, quantity and quality of water to be diverted
1.	(Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.
1.	Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
1.	Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing though the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
1.	A detailed Site plan of the mine showing the proposed break-up of the land for mining operations such as the quarry area, OB dumps, green belt, safety zone, buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within and adjacent to the ML), undisturbed area -if any, and landscape features such as existing roads,

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drains/natural water bodies to be left undisturbed along with any natural drainage adjoining the lease /project areas, and modification of thereof in terms of construction of embankments/bunds, proposed diversion/re-channelling of the water courses, etc., approach roads, major haul roads, etc should be indicated.

Original land use (agricultural land/forestland/grazing land/wasteland/water bodies) of the area should be provided as per the tables given below. Impacts of project, if any on the land use, in particular, agricultural land/forestland/grazing land/water bodies falling within the lease/project and acquired for mining operations should be analyzed. Extent of area under surface rights and under mining rights should be specified. Area under Surface Rights

S.N ML/Project Land		Area under Surface	Area Under Mining Rights(ha)	Area under Both (ha)
	use	Rights(ha)	(ha)	(11a)
1	Agricultural land			
2	Forest Land			
3	Grazing Land			
4	Settlements			
5	Others (specify)			

S.N.	Details	Area (ha)
1	Buildings	
2	Infrastructure	
3	Roads	
4	Others (specify)	
	Total	

1.

1.

Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan along with the appropriate budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.

One-season (other than monsoon) primary baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided. The detail of NABL/ MoEF&CC certification of the respective laborartory and NABET accreditation of the consultant to be provided.

1. Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number

	and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.
1.	For proper baseline air quality assessment, Wind rose pattern in the area should be reviewed and accordingly location of AAMSQ shall be planned by the collection of air quality data by adequate monitoring stations in the downwind areas. Monitoring location for collecting baseline data should cover overall the 10 km buffer zone i.e. dispersed in 10 km buffer area. In case of expansion, the displayed data of CAAQMS and its comparison with the monitoring data to be provided
1.	A detailed traffic study along with presence of habitation in 100 mts distance from both side of road, the impact on the air quality with its proper measures and plan of action with timeline for widening of road. The project will increase the no. of vehicle along the road which will indirectly contribute to carbon emission so what will be the compensatory action plan should be clearly spell out in EIA/ EMP report.
1.	The socio-economic study to conducted with actual survey report and a comparative assessment to be provided from the census data should be provided in EIA/ EMP report also occupational status & economic status of the study area and what economically project will contribute should be clearly mention. The study should also include the status of infrastructural facilities and amenities present in the study area and a comparative assessment with census data to be provided and to link it with the initialization and quantification of need based survey for CSR activities to be followed.
1.	The Ecology and biodiversity study should also indicate the likely impact of change in forest area for surface infrastructural development or mining activity in relation to the climate change of that area and what will be the compensatory measure to be adopted by PP to minimize the impact of forest diversion.
1.	Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower for the mine should be submitted.
1.	Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted
1.	Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
1.	Study on land subsidence including modeling for prediction, mitigation/prevention of subsidence, continuous monitoring measures, and safety issues should be carried out.
1.	Detailed water balance should be provided. The break up of water requirement as per different activities in the mining operations, including use of water for sand stowing should be given separately. Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users should be provided.
1.	PP shall submit design details of all Air Pollution control equipment (APCEs) to be implemented as part of Environment Management Plan vis-à-vis reduction in concentration of emission for each APCEs
1.	PP shall propose to use LNG/CNG based mining machineries and trucks for mining operation and transportation of coal. The measures adopted to conserve energy or use of renewable sources shall be explored
1.	PP to evaluate the green house emission gases from the mine operation/ washery plant and corresponding carbon absorption plan.
1.	PP shall explore the use of vent gases as generated from under ground Mine for use of energy generation/ in house

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	energy consumption
1.	Site specific Impact assessment with its mitigation measures, Risk Assessment and Disaster Preparedness and Management Plan should be provided.
1.	Impact of stowing by using coal washery rejects/ flyash/ bottom ash shall be assessed in term of leachate generation and its characteristics
1.	Impact of choice of mining method, technology, selected use of machinery and impact on air quality, mineral transportation, coal handling & storage/stockyard, etc, Impact of blasting, noise and vibrations should be provided.
1.	Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
1.	Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
1.	Details of various facilities to be provided to the workers in terms of parking, rest areas and canteen, and effluents/pollution load resulting from these activities should also be given.
1.	The number and efficiency of mobile/static water jet, Fog cannon sprinkling system along the main mineral transportation road inside the mine, approach roads to the mine/stockyard/siding, and also the frequency of their use in impacting air quality should be provided.
1.	Impacts of CHP, if any on air and water quality should be given. A flow chart showing water balance along with the details of zero discharge should be provided.
1.	Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the pre- mining status should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of re-handling (wherever applicable) and backfilling and progressive mine closure and reclamation should be furnished.
1.	Adequate greenbelt nearby areas, coal stock yard and transportaion area of coal shall be provided with details of species selected and survival rate Greenbelt development should be undertaken particularly around the transport route and CHP.
1.	Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
1.	Details of R&R. Detailed project specific R&R Plan with data on the existing socio- economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
1.	CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
1.	Corporate Environment Responsibility:
1.	a) The Company must have a well laid down Environment Policy approved by the Board of Directors.

1.	b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.						
1.	c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.						
1.	d) To have proper checks and balances, the company should have a well laid down system of reporting of non- compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.						
1.	e) Environ	ment Ma	nagament Cell and its	responsibi	lities to be clea	rly spleel out in EIA/ EN	MP report
1.	f) In built 1	mechanis	sm of self-monitoring of	of complia	nce of environn	nental regulations should	d be indicated.
1.	Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.						
1.	Status of a	ny litigat	tions/ court cases filed/	pending o	n the project sh	ould be provided.	
1.	PP shall submit clarification from PCCF that mine does not falls under corridors of any National Park and Wildlife Sanctuary with certified map showing distance of nearest sanctuary.				any National Park and		
1.	Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.						
	Details on	the Fore	st Clearance should be	given as p	per the format g	iven:	
	Total	ML	Total	-	Extent of Forest Land	which FC is yet to di	Status of appl For
	Project	Area	Forest	Date of FC			diversion of forest land
1.	(ha)		land (ha)				
			If more than one provide details of each FC				
1.	In case of expansion of the proposal, the status of the work done as per mining plan and approved mine closure plan shall be detailed in EIA/ EMP report				approved mine closure		
1.	Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the time bound action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.						
1.	PP shall ca	urry out s	urvey through drone h	ighlighting	g the ground rea	ality for atleast 10 minute	es
1.	Detailed Chronology of the project starting from the first lease deed alloted/Block allotment/ Land acquired to its No. of renewals, CTO /CTE with details of no. renewals, previous EC(s) granted details and its compliance details, NOC details from various Govt bodies like Forest NOC(s), CGWA permissions, Power permissions, etc as per the requisites respectively to be furnished in tabular form.						
1.	A copy of application submitted for 5 star rating system to Ministry of coal for expansion cases may be provided. Certificate /rating given to project shall be provided with EIA-EMP report						

1.	The first page of the EIA/ EMP report must mention the peak capacity production, area, detail of PP, Consultant (NABET acrreditation) and Laboratory (NABL / MoEF & CC certification)
1.	The compliances of ToR must be properly cited with respective chapter section and page no in tabular form and also mention sequence of the respective ToR complied within the EIA-EMP report in all the chapter,s section.
1.	Potential impact study in the EIA should be done considering the cumulative effect of all the mines in the cluster situation, if any.

# 3.9. Agenda Item No 9:

# **3.9.1. Details of the proposal**

Putulia Sand Mine by ANIL KUMAR SINGH located at PASCHIM BARDHAMAN,WEST BENGAL					
Proposal For		Fresh ToR	Fresh ToR		
Proposal No	File No	Submission Date	Activity (Schedule Item)		
SIA/WB/MIN/479397/2024	2N-178/2023(E)	10/06/2024	Mining of minerals (1(a))		

# **3.9.2.** Deliberations by the committee in previous meetings

Date of SEAC 1 :19/06/2024

#### **Deliberations of SEAC 1 :**

- Based on the submission and presentation made by the PP, the SEAC observed that **the plot area** for the proposed project as per the geo-coordinates mentioned in the revised Mining Plan uploaded by the PP **falls** within the potential mining zone recorded in the approved District Survey Report (DSR) of Paschim Bardhaman district.
- Based on the presentation and submission made by the PP, the SEAC **recommended** issuance of **Standard Terms of Reference** for EIA preparation for the project with the following additional conditions :-
  - 1) Drone videography of the entire project area explicitly showing the entire project site along with the existing tree plantation/green belt. Minimum 2 minute video to be submitted.
  - 2) Photographs of the site mentioning the geo-coordinates.
  - 3) Standard practice of management of the intermediate storage area should be submitted.
  - 4) Means of access and egress between the embankment and the sand quarry may be clearly earmarked. The Project Proponent must commit that no hard toping or paving of any haulage route within the riverbed will be attempted.
  - 5) A plan on the management and handling of sand during the period of intermediate stockpiling should be submitted.
  - 6) The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha within first two years from the starting of the mining operation. A Progressive Greenbelt Plan may be prepared. The project area being entirely on the riverbed, afforestation/ vegetation should be attempted alongside the village roads or other public land. This may be done with prior approval of the local self-governing bodies. If no public land is available for the purpose the Project Proponent shall arrange for land with his personal means. To enhance success/ survival rate the plantation shall be attempted during the first two years of the project life and the plantation so done shall be taken care of during the rest of the project life. Species of the plant selected should be self-sustaining in that particular region. Spatial year wise progressive plantation programme to be submitted.
  - 7) Plan showing spatial year wise distribution of the proposed greenbelt has to be submitted along-with supporting documents of administrative approval/s.
  - 8) Being a mine in operation, the plantation created so far may be submitted with geotagged photographs.
  - 9) EIA should also include detailed study of the baseline condition and impact on aquatic flora and fauna.
  - 10) The project cost may include the auction bid value, estimated royalty to be paid, cost of any infrastructure built like office space, stockyard, etc. The calculation/documents to estimate the project cost should be submitted. The planned expenditure for components like need-based activities may be derived based on the project cost.
  - 11) A need-based EMP may be prepared in accordance with the MoEF&CC Office Memorandum vide F. No. 22-65/2017.IA.III dated 30.09.2020. Record of communications made in this regard with the identified/ intended beneficiaries (schools/ institutions etc) may also be uploaded. Evidence of the activities already done should be provided by photographs with geo-coordinates. The activities should be completed within the first two years of the project life.
  - 12) A study report on base flow level measured at 5 points with date and supporting photographs should be submitted. It should be committed that mining will be done at least 1m above the base flow level. Accordingly, if required, the excavation plan may also be revised.
  - 13) Management plan including the final closure plan of haul road to be submitted.
  - 14) Sieve analysis report for grain size distribution should be provided.
  - 15) Study and protection plan of the aquatic life available both during the mining and non-mining seasons should be provided.

# The PP shall upload the EIA/EMP report along with the documents / submissions / clarifications sought above in the PARIVESH portal while applying for environmental clearance.

All the documents should be duly signed both by the project proponent and environmental the consultant.

#### **3.9.3.** Deliberations by the SEIAA in current meetings

## **INTRODUCTION**

The proponent made online application vide proposal no. **SIA/WB/MIN/479397/2024** dated **10 June 2024** seeking Terms of Reference (ToR) under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. **1(a) Mining of minerals** projects under Category "**B1**" of EIA Notification 2006.

SEAC, during its 41<sup>st</sup> meeting held on 19.06.2024 recommended issuance of Standard Terms of Reference for EIA preparation for the project with additional conditions.

## PROJECT DETAILS

The project of Anil Kumar Singh located is as follows :

S. No.	State	District	
(1)	West Bengal	Paschim Bardhaman	

The salient features of the project submitted by the project proponent are available under online proposal no. SIA/WB/MIN/479397/2024 PARIVESH Portal.

SEIAA considered the recommendation of SEAC and approved ToR with the additional condition that potential impact study in the EIA should be done considering the cumulative effect of all the mines in the cluster situation, if any.

#### 3.9.4. Recommendation of SEIAA

Approved

#### 3.9.5. Details of Terms of Reference

#### 3.9.5.1. Specific

A. S	A. STANDARD TERMS OF REFERENCE					
	1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in one year prior to 1994. It may also be categorically informed whether there had been any increase in produc after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.				
	2.	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should given.				
	3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one anothe terms of the mine lease area, production levels, waste generation and its management, mining technology etc. should be in the name of the lessee.				
1.	4.	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposh topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of proposed area should clearly show the land use and other ecological features of the study area (core buffer zone).				
	5.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological may the area, geomorphology of land forms of the area, existing minerals and mining history of the a important water bodies, streams and rivers and soil characteristics.				
	6.	Details about the land proposed for mining activities should be given with information as to whether mir conforms to the land use policy of the State; land diversion for mining should have approval from State l use board or the concerned authority.				
	7.	It should be clearly stated whether the proponent Company has a well laid down Environment Po approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of prescribed operating process/procedures to bring into focus any infringement/deviation/violation of				

environmental or forest norms/ conditions? The hierarchical system or administrative order of the Comp to deal with the environmental issues and for ensuring compliance with the EC conditions may also given. The system of reporting of non-compliances / violations of environmental norms to the Board Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the I Report.

- 8. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope stud case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in e case should also be provided.
- 9. The study area will comprise of 10 km zone around the mine lease from lease periphery and the contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctu national park, migratory routes of fauna, water bodies, human settlements and other ecological featu should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperatio operational and post operational phases and submitted. Impact, if any, of change of land use should given.
- 11. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, dista from mine lease, its land use, R&R issues, if any, should be given.
- 12. A Certificate from the Competent Authority in the State Forest Department should be provided, confirm the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Proponent regarding the status of forests, the site may be inspected by the State Forest Department al with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificat this regard as mentioned above be issued. In all such cases, it would be desirable for representative of State Forest Department to assist the Expert Appraisal Committees.
- 13. Status of forestry clearance for the broken up area and virgin forestland involved in the Project includ deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy the forestry clearance should also be furnished.
- 14. Implementation status of recognition of forest rights under the Scheduled Tribes and other Tradition Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area details furnished. Impact of the project on the wildlife in the surrounding and any other protected area accordingly, detailed mitigative measures required, should be worked out with cost implications submitted.
- 17. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necess clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and c furnished.
- 18. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the peripher the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species d authenticated, separately for core and buffer zone should be furnished based on such primary field surv clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the st area, the necessary plan along with budgetary provisions for their conservation should be prepared consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of fu for implementing the same should be made as part of the project cost.
- 19. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Ara Range', (attracting court restrictions for mining operations), should also be indicated and where so requi clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Departm should be secured and furnished to the effect that the proposed mining activities could be considered.
- 20. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agendemarcating LTL. HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need obtain approval of the concerned Coastal Zone Management Authority).

- 21. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While prepart the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survise, should be undertaken to assess their requirements, and action programmes prepared submitted accordingly, integrating the sectorial programmes of line departments of the State Governmen may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. 'issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discus in the Report.
- 22. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon seaso December-February (winter season)]primary baseline data on ambient air quality as per CPCB Notifica of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also collected. The location of the monitoring stations should be such as to represent whole of the study area justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. The should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downw direction. The mineralogical composition of PM10, particularly for free silica, should be given.
- 23. Air quality modeling should be carried out for prediction of impact of the project on the air quality of area. It should also take into account the impact of movement of vehicles for transportation of mineral. details of the model used and input parameters used for modeling should be provided. The air qua contours may be shown on a location map clearly indicating the location of the site, location of sensi receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also indicated on the map.
- 24. The water requirement for the Project, its availability and source should be furnished. A detailed w balance should also be provided. Fresh water requirement for the Project should be indicated.
- 25. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Pro should be provided.
- 26. Description of water conservation measures proposed to be adopted in the Project should be given. Det of rainwater harvesting proposed in the Project, if any, should be provided.
- 27. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necess safeguard measures, if any required, should be provided.
- 28. Based on actual monitored data, it may clearly be shown whether working will intersect groundwa Necessary data and documentation in this regard may be provided. In case the working will interse groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. 'Report inter-alia, shall include details of the aquifers present and impact of mining activities on thaquifers. Necessary permission from Central Ground Water Authority for working below ground water for pumping of ground water should also be obtained and copy furnished.
- 29. Details of any stream, seasonal or otherwise, passing through the lease area and modification / divers proposed, if any, and the impact of the same on the hydrology should be brought out.
- 30. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL bgl. A schematic diagram may also be provided for the same.
- 31. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the sa will have to be executed up front on commencement of the Project. Phase-wise plan of plantation compensatory afforestation should be charted clearly indicating the area to be covered under plantation the species to be planted. The details of plantation already done should be given. The plant species select for green belt should have greater ecological value and should be of good utility value to the lopopulation with emphasis on local and native species and the species which are tolerant to pollution.
- 32. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in traffic as a result of the Project in the present road network (including those outside the Project area) sho be worked out, indicating whether it is capable of handling the incremental load. Arrangement improving the infrastructure, if contemplated (including action to be taken by other agencies such as S Government) should be covered. Project Proponent shall conduct Impact of Transportation study as Indian Road Congress Guidelines.
- 33. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the Report.

- 34. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and v adequate number of sections) should be given in the EIA report.
- 35. Occupational Health impacts of the Project should be anticipated and the proposed preventive measu spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measu with required facilities proposed in the mining area may be detailed.
- 36. Public health implications of the Project and related activities for the population in the impact zone sho be systematically evaluated and the proposed remedial measures should be detailed along with budge allocations.
- 37. Measures of socio-economic significance and influence to the local community proposed to be provided the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given v time frames for implementation.
- 38. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should in alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupation health impacts besides other impacts specific to the proposed Project.
- 39. Public Hearing points raised and commitment of the Project Proponent on the same along with time bo Action Plan with budgetary provisions to implement the same should be provided and also incorporate the final EIA/EMP Report of the Project.
- 40. Details of litigation pending against the project, if any, with direction /order passed by any Court of I against the Project should be given.
- 41. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of E should be clearly spelt out.
- 42. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 43. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project s clearly indicate environmental, social, economic, employment potential, etc.
- 44. Besides the above, the below mentioned general points are also to be followed:
  - a. Executive Summary of the EIA/EMP Report (enclosed as Annexure A).
  - b. All documents to be properly referenced with index and continuous page numbering.
  - c. Where data are presented in the Report especially in Tables, the period in which the data were colled and the sources should be indicated.
  - d. Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be availa during appraisal of the Project.
  - e. Where the documents provided are in a language other than English, an English translation should provided.
  - f. The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry s also be filled and submitted.
  - g. While preparing the EIA report, the instructions for the Proponents and instructions for the Consult issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4<sup>th</sup> August, 2009, which are availa on the website of this Ministry, should be followed.
  - h. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) entail conducting the PH again with the revised documentation.
  - i. As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status compliance of the conditions stipulated in the environment clearance for the existing operations of project, should be obtained from the Regional Office of Ministry of Environment, Forest and Clin Change, as may be applicable.
  - j. The EIA report should also include (i) surface plan of the area indicating contours of main topograp features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit external dumps, if any, clearly showing the land features of the adjoining area.

1.

1. Drone videography of the entire project area explicitly showing the entire project site along with existing tree plantation/green belt. Minimum 2 minute video to be submitted.

2. Photographs of the site mentioning the geo-coordinates.

3. Standard practice of management of the intermediate storage area should be submitted.

4. Means of access and egress between the embankment and the sand quarry may be clearly earmard. The Project Proponent must commit that no hard toping or paving of any haulage route within the river will be attempted.

5. A plan on the management and handling of sand during the period of intermediate stockpiling should submitted.

6. The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha wi first two years from the starting of the mining operation. A Progressive Greenbelt Plan may be prepa The project area being entirely on the riverbed, afforestation/ vegetation should be attempted alongside village roads or other public land. This may be done with prior approval of the local self-governing boc If no public land is available for the purpose the Project Proponent shall arrange for land with his personeans. To enhance success/ survival rate the plantation shall be attempted during the first two years of project life and the plantation so done shall be taken care of during the rest of the project life. Species of plant selected should be self-sustaining in that particular region. Spatial year wise progressive planta programme to be submitted.

7. Plan showing spatial year wise distribution of the proposed greenbelt has to be submitted along-v supporting documents of administrative approval/s.

8. Being a mine in operation, the plantation created so far may be submitted with geotagged photograph

9. EIA should also include detailed study of the baseline condition and impact on aquatic flora and faur

10. The project cost may include the auction bid value, estimated royalty to be paid, cost of infrastructure built like office space, stockyard, etc. The calculation/documents to estimate the project should be submitted. The planned expenditure for components like need-based activities may be deribased on the project cost.

11. A need-based EMP may be prepared in accordance with the MoEF&CC Office Memorandum vid No. 22-65/2017.IA.III dated 30.09.2020. Record of communications made in this regard with the identif intended beneficiaries (schools/ institutions etc) may also be uploaded. The activities should be comple within the first two years of the project life.

12. A study report on base flow level measured at 5 points with date and supporting photographs should submitted. It should be committed that mining will be done at least 1m above the base flow le Accordingly, if required, the excavation plan may also be revised.

13. Management plan including the final closure plan of haul road to be submitted.

14. Sieve analysis report for grain size distribution should be provided.

15. Study and protection plan of the aquatic life available both during the mining and non-mining seas should be provided.

While applying for environmental clearance, the PP shall upload in the PARIVESH portal, the EIA/EMP report along with the documents/ submissions/ clarifications sought hereinabove.

The West Bengal Pollution Control Board shall arrange public hearing as per EIA Notification, 2006 on submission of draft EIA/EMP prepared by the Project Proponent as per the above-mentioned ToRs. All the issu mentioned in the 'Public Hearing Report' and public consultation must also be addressed and incorporated in the final EIA / EMP report. The project proponent is requested to pursue the matter with the WBPCB for organizin the public hearing/consultation on submission of the draft EIA/EMP report as per the provision of EIA notificat 2006 & its amendments. The project proponent is requested to submit the final EIA/EMP prepared as per the above-mentioned ToRs and incorporating all the issues raised during Public Hearing / Public Consultation to th SEAC for further consideration of the proposal for environmental clearance.

The ToR is valid for a period of 3 (three) years from the date of issue.

#### Annexure - A

1.

#### **Executive Summary**

Annexure

The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating information on following points:

- 1) Project name and location (Village, District, State, Industrial Estate (if applicable).
- Products and capacities. If expansion proposal, then existing products with capacities and reference to ear EC.
- 3) Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative).
- 4) Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid hazardous wastes.
- 5) Measures for mitigating the impact on the environment and mode of discharge or disposal.
- 6) Capital cost of the project, estimated time of completion.
- 7) Site selected for the project Nature of land Agricultural (single/double crop), barren, Govt./private la status of is acquisition, nearby (in 2-3 km.) water body, population, with in 10km. other industries, for eco-sensitive zones, accessibility, (note in case of industrial estate this information may not be necessary
  - 8) Baseline environmental data air quality, surface and ground water quality, soil characteristic, flora fauna, socio-economic condition of the nearby population.
  - 9) Identification of hazards in handling, processing and storage of hazardous material and safety sys provided to mitigate the risk.
  - 10) Likely impact of the project on air, water, land, flora-fauna and nearby population.
  - 11) Emergency preparedness plan in case of natural or in plant emergencies.
  - 12) Issues raised during public hearing (if applicable) and response given.
  - 13) Environment Management Plan (EMP) as per Office Memorandum issued by the MoEF & CC vide F. 22-65/2017-IA.III dated 30.09.2020 with proposed expenditure.
  - 14) Occupational Health Measures.
  - 15) Post project monitoring plan.

#### 3.9.5.2. Standard

1( a)	Mining of minerals							
null	null							
1.	An EIA-EMP Report shall be prepared for peak capacity (MTPA)operation in an ML/project area ofha based on the generic structure specified in Appendix III of the EIA Notification, 2006.							
1.	An EIA-EMP Report would be prepared for peak capacity operation to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for MTPA of coal production based on approved project/Mining Plan forMTPA. Baseline data collection can be for any season (three months) except monsoon.							
1.	If the washery is located within the mine lease or near to the mine lease its location should be cited seperately also, providing pillar cordinates and site layout plan. Insuch cases cumulative impact of mine operation with washery to be assessed and EMP measure to be drawn to the worst scenario							
1.	Plan of mechanized transportation of coal to coal washery also for rejects and washed coal to be drawn							
1.	Propoer KML file with pin drop and coordinate of mine at 500-1000 m interval be provided							

1.	A Study area map of the core zone (project area) and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries, mines, coal washery and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given. The above details to be furnished in tabular form also						
1.	defined			ral land (irrigated and un-irriga ecords), along with other physic			
1.	of the co			one and 25 km of the study area ams outside the lease/project are			
1.	Catchment area with its drainage map of 25 km area within and outside the mine shall be provided with names, details of rivers/ riverlet system and its respective order. The map should clearly indicate drainage pattern of the catchment area with basin of major rivers. Diversion of drains/ river need eloboration in form of lengthe, quantity and quality of water to be diverted						
1.	(Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.						
1.	Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.						
1.	Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing though the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.						
1.	A detailed Site plan of the mine showing the proposed break-up of the land for mining operations such as the quarry area, OB dumps, green belt, safety zone, buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within and adjacent to the ML), undisturbed area -if any, and landscape features such as existing roads, drains/natural water bodies to be left undisturbed along with any natural drainage adjoining the lease /project areas, and modification of thereof in terms of construction of embankments/bunds, proposed diversion/re-channelling of the water courses, etc., approach roads, major haul roads, etc should be indicated.						
	Original land use (agricultural land/forestland/grazing land/wasteland/water bodies) of the area should be provided as per the tables given below. Impacts of project, if any on the land use, in particular, agricultural land/forestland/grazing land/water bodies falling within the lease/project and acquired for mining operations should be analyzed. Extent of area under surface rights and under mining rights should be specified. Area under Surface Rights						
1.	S.N	ML/Project Land use	Area under Surface Rights(ha)	Area Under Mining Rights(ha) (ha)	Area under Both (ha)		
	1	Agricultural land					
	2	Forest Land					

	3	Grazing Land						
	4	Settlements						
	5	Others (specify)						
	S.N.	Details	Area (ha)					
		Buildings	Area (na)					
		Infrastructure						
		Roads						
	4	Others (specify)						
		Total						
1.	<ul> <li>by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan along with the appropriate budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt. should also be obtained and furnished.</li> <li>One-season (other than monsoon) primary baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided. The detail of NABL/ MoEF&amp;CC certification of the respective laborartory and NABET accreditation of the consultant to be provided.</li> </ul>							
1.	superim and loca lease/pro (based c The mo surface	50, 000 scale) of the sposed with location of the sampling piect area, the propose n flow). One station sh nitoring should be as p water as per ISI stand along with the specific	habitats, other stations in bo d impacts in ould be in the per CPCB gu dards and CF	r industries th core and the downw e upwind/up idelines an	/mines, pollu d buffer zone ind (air)/dow ostream/non- d parameters	ting sources, sho es should be sel ynstream (surfac impact/non-pollu for water testin	build be provident on the exact of the water)/grouting area as an area of for both group of the both g	ded. The number basis of size of undwater regime a control station. round water and
1.	location downwi disperse	per baseline air quality of AAMSQ shall be p nd areas. Monitoring le d in 10 km buffer area ing data to be provided	lanned by the ocation for co In case of ex	e collection llecting bas	of air qualit seline data sh	y data by adequ ould cover over	ate monitorin all the 10 km	ng stations in the buffer zone i.e.
1.	on the a increase	ed traffic study along ir quality with its prop the no. of vehicle alon satory action plan shou	er measures and the road w	nd plan of hich will ir	action with ti directly cont	meline for wide ribute to carbon	ning of road.	The project will
1.	The soc	io-economic study to a	conducted wit	h actual su	rvey report a	and a comparativ	ve assessmen	t to be provided
								Page 66

	from the census data should be provided in EIA/ EMP report also occupational status & economic status of the study area and what economically project will contribute should be clearly mention. The study should also include the status of infrastructural facilities and amenities present in the study area and a comparative assessment with census data to be provided and to link it with the initialization and quantification of need based survey for CSR activities to be followed.
1.	The Ecology and biodiversity study should also indicate the likely impact of change in forest area for surface infrastructural development or mining activity in relation to the climate change of that area and what will be the compensatory measure to be adopted by PP to minimize the impact of forest diversion.
1.	Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower for the mine should be submitted.
1.	Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted
1.	Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
1.	Study on land subsidence including modeling for prediction, mitigation/prevention of subsidence, continuous monitoring measures, and safety issues should be carried out.
1.	Detailed water balance should be provided. The break up of water requirement as per different activities in the mining operations, including use of water for sand stowing should be given separately. Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users should be provided.
1.	PP shall submit design details of all Air Pollution control equipment (APCEs) to be implemented as part of Environment Management Plan vis-à-vis reduction in concentration of emission for each APCEs
1.	PP shall propose to use LNG/CNG based mining machineries and trucks for mining operation and transportation of coal. The measures adopted to conserve energy or use of renewable sources shall be explored
1.	PP to evaluate the green house emission gases from the mine operation/ washery plant and corresponding carbon absorption plan.
1.	PP shall explore the use of vent gases as generated from under ground Mine for use of energy generation/ in house energy consumption
1.	Site specific Impact assessment with its mitigation measures, Risk Assessment and Disaster Preparedness and Management Plan should be provided.
1.	Impact of stowing by using coal washery rejects/ flyash/ bottom ash shall be assessed in term of leachate generation and its characteristics
1.	Impact of choice of mining method, technology, selected use of machinery and impact on air quality, mineral transportation, coal handling & storage/stockyard, etc, Impact of blasting, noise and vibrations should be provided.
1.	Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.

1.	Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
1.	Details of various facilities to be provided to the workers in terms of parking, rest areas and canteen, and effluents/pollution load resulting from these activities should also be given.
1.	The number and efficiency of mobile/static water jet, Fog cannon sprinkling system along the main mineral transportation road inside the mine, approach roads to the mine/stockyard/siding, and also the frequency of their use in impacting air quality should be provided.
1.	Impacts of CHP, if any on air and water quality should be given. A flow chart showing water balance along with the details of zero discharge should be provided.
1.	Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the pre- mining status should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of re-handling (wherever applicable) and backfilling and progressive mine closure and reclamation should be furnished.
1.	Adequate greenbelt nearby areas, coal stock yard and transportaion area of coal shall be provided with details of species selected and survival rate Greenbelt development should be undertaken particularly around the transport route and CHP.
1.	Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
1.	Details of R&R. Detailed project specific R&R Plan with data on the existing socio- economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
1.	CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
1.	Corporate Environment Responsibility:
1.	a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
1.	b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
1.	c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
1.	d) To have proper checks and balances, the company should have a well laid down system of reporting of non- compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
1.	e) Environment Managament Cell and its responsibilities to be clearly spleel out in EIA/ EMP report
1.	f) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.
1.	Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.
1.	Status of any litigations/ court cases filed/pending on the project should be provided.

1.	PP shall submit clarification from PCCF that mine does not falls under corridors of any National Park and Wildlife Sanctuary with certified map showing distance of nearest sanctuary.						
1.	Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.						
	Details on the Forest Clearance should be given as per the format given:						
	Total	ML	Total			which FC is yet to dive	
	Project	Area	Forest	Date of FC	Extent of Forest Land		Status of appl For diversion of forest land
1.	(ha)		land (ha)				
			If more than one provide details of each FC				
1.			on of the proposal, the ed in EIA/ EMP report		the work done	as per mining plan and	approved mine closure
1.	Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the time bound action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.						
1.	PP shall carry out survey through drone highlighting the ground reality for atleast 10 minutes						
1.	Detailed Chronology of the project starting from the first lease deed alloted/Block allotment/ Land acquired to its No. of renewals, CTO /CTE with details of no. renewals, previous EC(s) granted details and its compliance details, NOC details from various Govt bodies like Forest NOC(s), CGWA permissions, Power permissions, etc as per the requisites respectively to be furnished in tabular form.						
1.	A copy of application submitted for 5 star rating system to Ministry of coal for expansion cases may be provided. Certificate /rating given to project shall be provided with EIA-EMP report						
1.	The first page of the EIA/ EMP report must mention the peak capacity production, area, detail of PP, Consultant (NABET acrreditation) and Laboratory (NABL / MoEF & CC certification)						
1.	The compliances of ToR must be properly cited with respective chapter section and page no in tabular form and also mention sequence of the respective ToR complied within the EIA-EMP report in all the chapter,s section.						
1.	Potential impact study in the EIA should be done considering the cumulative effect of all the mines in the cluster situation, if any.						

# 3.10. Agenda Item No 10:

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# **3.10.1. Details of the proposal**

Fakirpur Sand Mine by SUBHAS KUMAR PODDAR located at PURBA BARDHAMAN,WEST BENGAL					
Proposal For		Fresh ToR			
Proposal No File No		Submission Date	Activity		

			(Schedule Item)
SIA/WB/MIN/478082/2024	2N-33/2023(E)	08/06/2024	Mining of minerals (1(a))

# **3.10.2.** Deliberations by the committee in previous meetings

Date of SEAC 1 :19/06/2024



#### **Deliberations of SEAC 1 :**

- Based on the submission and presentation made by the PP, the SEAC observed that **the plot area** for the proposed project as per the geo-coordinates mentioned in the revised Mining Plan uploaded by the PP **falls** within the potential mining zone recorded in the approved District Survey Report (DSR) of Purba Bardhaman district.
- Based on the presentation and submission made by the PP, the SEAC **recommended** issuance of **Standard Terms of Reference** for EIA preparation for the project with the following additional conditions :-

1) Cluster Certificate from the competent authority.

- 2) Taking into consideration the replenishment rates reported in the approved DSR for Purba Bardhaman, both geological and mining reserves for second year (of production) onwards may be re-estimated and the annual production levels may be modified accordingly.
- 3) Drone videography of the entire project area explicitly showing the entire project site along with the existing tree plantation/green belt. Minimum 2 minute video to be submitted.
- 4) Photographs of the site mentioning the geo-coordinates.
- 5) Standard practice of management of the intermediate storage area should be submitted.
- 6) Means of access and egress between the embankment and the sand quarry may be clearly earmarked. The Project Proponent must commit that no hard toping or paving of any haulage route within the riverbed will be attempted.
- 7) A plan on the management and handling of sand during the period of intermediate stockpiling should be submitted.
- 8) The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha within first two years from the starting of the mining operation. A Progressive Greenbelt Plan may be prepared. The project area being entirely on the riverbed, afforestation/ vegetation should be attempted alongside the village roads or other public land. This may be done with prior approval of the local self-governing bodies. If no public land is available for the purpose the Project Proponent shall arrange for land with his personal means. To enhance success/ survival rate the plantation shall be attempted during the first two years of the project life and the plantation so done shall be taken care of during the rest of the project life. Species of the plant selected should be self-sustaining in that particular region. Spatial year wise progressive plantation programme to be submitted.
- 9) Plan showing spatial year wise distribution of the proposed greenbelt has to be submitted along-with supporting documents of administrative approval/s.
- 10) Being a mine in operation, the plantation created so far may be submitted with geotagged photographs.
- 11) EIA should also include detailed study of the baseline condition and impact on aquatic flora and fauna.
- 12) The project cost may include the auction bid value, estimated royalty to be paid, cost of any infrastructure built like office space, stockyard, etc. The calculation/documents to estimate the project cost should be submitted. The planned expenditure for components like need-based activities may be derived based on the project cost.
- 13) A need-based EMP may be prepared in accordance with the MoEF&CC Office Memorandum vide F. No. 22-65/2017.IA.III dated 30.09.2020. Record of communications made in this regard with the identified/ intended beneficiaries (schools/ institutions etc) may also be uploaded. Evidence of the activities already done should be provided by photographs with geo-coordinates. The activities should be completed within the first two years of the project life.
- 14) A study report on base flow level measured at 5 points with date and supporting photographs should be submitted. It should be committed that mining will be done at least 1m above the base flow level. Accordingly, if required, the excavation plan may also be revised.
- 15) Management plan including the final closure plan of haul road to be submitted.
- 16) Sieve analysis report for grain size distribution should be provided.
- 17) Study and protection plan of the aquatic life available both during the mining and non-mining seasons should be provided.

The PP shall upload the EIA/EMP report along with the documents / submissions / clarifications sought above in the PARIVESH portal while applying for environmental clearance.

All the documents should be duly signed both by the project proponent and environmental the consultant.

## 3.10.3. Deliberations by the SEIAA in current meetings

## **INTRODUCTION**

The proponent made online application vide proposal no. **SIA/WB/MIN/478082/2024** dated **08 June 2024** seeking Terms of Reference (ToR) under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. **1(a) Mining of minerals** projects under Category **"B1"** of EIA Notification 2006. SEAC, during its 41<sup>st</sup> meeting held on 19.06.2024 recommended issuance of Standard Terms of Reference for EIA preparation for the project with additional conditions.

#### PROJECT DETAILS

The project of Subhas Kumar Poddar located is as follows :

S. No.	State	District
(1)	West Bengal	Purba Bardhaman

The salient features of the project submitted by the project proponent are available under online proposal no. SIA/WB/MIN/478082/2024 PARIVESH Portal.

SEIAA considered the recommendation of SEAC and approved ToR with the additional condition that potential impact study in the EIA should be done considering the cumulative effect of all the mines in the cluster situation, if any.

#### 3.10.4. Recommendation of SEIAA

Approved

#### **3.10.5. Details of Terms of Reference**

#### 3.10.5.1. Specific

A. 9	STAN	DARD TERMS OF REFERENCE
	1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in one year prior to 1994. It may also be categorically informed whether there had been any increase in produc after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
	2.	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should given.
	3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one anothe terms of the mine lease area, production levels, waste generation and its management, mining technology etc. should be in the name of the lessee.
1.	4.	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposh topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proper area should clearly show the land use and other ecological features of the study area (core and buffer zone).
	5.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of area, geomorphology of land forms of the area, existing minerals and mining history of the area, important w bodies, streams and rivers and soil characteristics.
	6.	Details about the land proposed for mining activities should be given with information as to whether min conforms to the land use policy of the State; land diversion for mining should have approval from State land board or the concerned authority.

- 7. It should be clearly stated whether the proponent Company has a well laid down Environment Policy appro by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed opera process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest nor conditions? The hierarchical system or administrative order of the Company to deal with the environme issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of r compliances / violations of environmental norms to the Board of Directors of the Company and/or sharehole or stakeholders at large, may also be detailed in the EIA Report.
- 8. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in a of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should be provided.
- 9. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data containe the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, natio park, migratory routes of fauna, water bodies, human settlements and other ecological features should indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational post operational phases and submitted. Impact, if any, of change of land use should be given.
- 11. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance f mine lease, its land use, R&R issues, if any, should be given.
- 12. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Propor regarding the status of forests, the site may be inspected by the State Forest Department along with the Regio Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- Status of forestry clearance for the broken up area and virgin forestland involved in the Project includ deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of forestry clearance should also be furnished.
- 14. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Fo Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and de furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordin detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elepl Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indica supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- 18. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species c authenticated, separately for core and buffer zone should be furnished based on such primary field survey, cle indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, necessary plan along with budgetary provisions for their conservation should be prepared in consultation v State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing same should be made as part of the project cost.
- 19. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Rar (attracting court restrictions for mining operations), should also be indicated and where so required, cleara certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secu and furnished to the effect that the proposed mining activities could be considered.
- 20. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarca LTL. HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concer Coastal Zone Management Authority).
- 21. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respective SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-w should be undertaken to assess their requirements, and action programmes prepared and submitted according the section of the society in the study area.

integrating the sectorial programmes of line departments of the State Government. It may be clearly brought whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting village(s) including their R&R and socio-economic aspects should be discussed in the Report.

- 22. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon seaso December-February (winter season)]primary baseline data on ambient air quality as per CPCB Notification 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also collected. The location of the monitoring stations should be such as to represent whole of the study area justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There she be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. mineralogical composition of PM10, particularly for free silica, should be given.
- 23. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the are should also take into account the impact of movement of vehicles for transportation of mineral. The details of model used and input parameters used for modeling should be provided. The air quality contours may be sho on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- 24. The water requirement for the Project, its availability and source should be furnished. A detailed water bala should also be provided. Fresh water requirement for the Project should be indicated.
- 25. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project sho be provided.
- 26. Description of water conservation measures proposed to be adopted in the Project should be given. Detail rainwater harvesting proposed in the Project, if any, should be provided.
- 27. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necess safeguard measures, if any required, should be provided.
- 28. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necess data and documentation in this regard may be provided. In case the working will intersect groundwater tabl detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall incl details of the aquifers present and impact of mining activities on these aquifers. Necessary permission f Central Ground Water Authority for working below ground water and for pumping of ground water should be obtained and copy furnished.
- 29. Details of any stream, seasonal or otherwise, passing through the lease area and modification / divers proposed, if any, and the impact of the same on the hydrology should be brought out.
- 30. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and A schematic diagram may also be provided for the same.
- 31. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the lin and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will hav be executed up front on commencement of the Project. Phase-wise plan of plantation and compensa afforestation should be charted clearly indicating the area to be covered under plantation and the species to planted. The details of plantation already done should be given. The plant species selected for green belt sho have greater ecological value and should be of good utility value to the local population with emphasis on le and native species and the species which are tolerant to pollution.
- 32. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck tra as a result of the Project in the present road network (including those outside the Project area) should be wor out, indicating whether it is capable of handling the incremental load. Arrangement for improving infrastructure, if contemplated (including action to be taken by other agencies such as State Government) she be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Cong Guidelines.
- 33. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the Report.
- 34. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and v adequate number of sections) should be given in the EIA report.
- 35. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt in detail. Details of pre-placement medical examination and periodical medical examination schedules should incorporated in the EMP. The project specific occupational health mitigation measures with required facili proposed in the mining area may be detailed.
- 36. Public health implications of the Project and related activities for the population in the impact zone should

systematically evaluated and the proposed remedial measures should be detailed along with budge allocations.

- 37. Measures of socio-economic significance and influence to the local community proposed to be provided by Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time fra for implementation.
- 38. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should interinclude the impacts of change of land use, loss of agricultural and grazing land, if any, occupational he impacts besides other impacts specific to the proposed Project.
- 39. Public Hearing points raised and commitment of the Project Proponent on the same along with time bo Action Plan with budgetary provisions to implement the same should be provided and also incorporated in final EIA/EMP Report of the Project.
- 40. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law aga the Project should be given.
- 41. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of E should be clearly spelt out.
- 42. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 43. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall cle indicate environmental, social, economic, employment potential, etc.
- 44. Besides the above, the below mentioned general points are also to be followed:
  - a. Executive Summary of the EIA/EMP Report (enclosed as Annexure A).
  - b. All documents to be properly referenced with index and continuous page numbering.
  - c. Where data are presented in the Report especially in Tables, the period in which the data were collected and sources should be indicated.
  - d. Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available du appraisal of the Project.
  - e. Where the documents provided are in a language other than English, an English translation should be provid
  - f. The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall be filled and submitted.
  - g. While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants iss by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4<sup>th</sup> August, 2009, which are available on website of this Ministry, should be followed.
  - h. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in struc and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will er conducting the PH again with the revised documentation.
  - As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of complia of the conditions stipulated in the environment clearance for the existing operations of the project, should obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may applicable.
  - j. The EIA report should also include (i) surface plan of the area indicating contours of main topographic featu drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and exte dumps, if any, clearly showing the land features of the adjoining area.

### B. Additional Terms of Reference imposed by SEAC -

1.

- 1. Cluster Certificate from the competent authority.
- 2. Taking into consideration the replenishment rates reported in the approved DSR for Purba Bardhan both geological and mining reserves for second year (of production) onwards may be re-estimated and annual production levels may be modified accordingly.
  - 3. Drone videography of the entire project area explicitly showing the entire project site along with existing tree plantation/green belt. Minimum 2 minute video to be submitted.

- 4. Photographs of the site mentioning the geo-coordinates.
- 5. Standard practice of management of the intermediate storage area should be submitted.

6. Means of access and egress between the embankment and the sand quarry may be clearly earmar The Project Proponent must commit that no hard toping or paving of any haulage route within the river will be attempted.

7. A plan on the management and handling of sand during the period of intermediate stockpiling should submitted.

8. The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha wi first two years from the starting of the mining operation. A Progressive Greenbelt Plan may be prepa The project area being entirely on the riverbed, afforestation/ vegetation should be attempted alongside village roads or other public land. This may be done with prior approval of the local self-governing bod If no public land is available for the purpose the Project Proponent shall arrange for land with his person means. To enhance success/ survival rate the plantation shall be attempted during the first two years of project life and the plantation so done shall be taken care of during the rest of the project life. Species of plant selected should be self-sustaining in that particular region. Spatial year wise progressive planta programme to be submitted.

9. Plan showing spatial year wise distribution of the proposed greenbelt has to be submitted along-v supporting documents of administrative approval/s.

10. Being a mine in operation, the plantation created so far may be submitted with geotagged photograph

11. EIA should also include detailed study of the baseline condition and impact on aquatic flora and faur

12. The project cost may include the auction bid value, estimated royalty to be paid, cost of infrastructure built like office space, stockyard, etc. The calculation/documents to estimate the project should be submitted. The planned expenditure for components like need-based activities may be derivated on the project cost.

13. A need-based EMP may be prepared in accordance with the MoEF&CC Office Memorandum vid No. 22-65/2017.IA.III dated 30.09.2020. Record of communications made in this regard with the identif intended beneficiaries (schools/ institutions etc) may also be uploaded. The activities should be comple within the first two years of the project life.

14. A study report on base flow level measured at 5 points with date and supporting photographs should submitted. It should be committed that mining will be done at least 1m above the base flow le Accordingly, if required, the excavation plan may also be revised.

15. Management plan including the final closure plan of haul road to be submitted.

16. Sieve analysis report for grain size distribution should be provided.

17. Study and protection plan of the aquatic life available both during the mining and non-mining seas should be provided.

While applying for environmental clearance, the PP shall upload in the PARIVESH portal, the EIA/EMP report al with the documents/ submissions/ clarifications sought hereinabove.

The West Bengal Pollution Control Board shall arrange public hearing as per EIA Notification, 2006 on submissio draft EIA/EMP prepared by the Project Proponent as per the above-mentioned ToRs. All the issues mentioned in 'Public Hearing Report' and public consultation must also be addressed and incorporated in the final EIA / EMP rep The project proponent is requested to pursue the matter with the WBPCB for organizing the public hearing/consulta on submission of the draft EIA/EMP report as per the provision of EIA notification 2006 & its amendments. The pro proponent is requested to submit the final EIA/EMP prepared as per the above-mentioned ToRs and incorporating the issues raised during Public Hearing / Public Consultation to the SEAC for further consideration of the proposal environmental clearance.

The ToR is valid for a period of 3 (three) years from the date of issue.

#### Annexure - A

Annexure

#### **Executive Summary** The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the informa on following points: Project name and location (Village, District, State, Industrial Estate (if applicable). 1) Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier E 2) Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative). 3) 4) Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazard wastes. Measures for mitigating the impact on the environment and mode of discharge or disposal. 5) Capital cost of the project, estimated time of completion. 6) Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./private land, st 7) of is acquisition, nearby (in 2-3 km.) water body, population, with in 10km. other industries, forest, eco-sensi zones, accessibility, (note - in case of industrial estate this information may not be necessary). Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fat 8) socio-economic condition of the nearby population. 9) Identification of hazards in handling, processing and storage of hazardous material and safety system provide mitigate the risk. 10) Likely impact of the project on air, water, land, flora-fauna and nearby population. 11) Emergency preparedness plan in case of natural or in plant emergencies. 12) Issues raised during public hearing (if applicable) and response given. 13) Environment Management Plan (EMP) as per Office Memorandum issued by the MoEF & CC vide F. No. 65/2017-IA.III dated 30.09.2020 with proposed expenditure. 14) Occupational Health Measures. 15) Post project monitoring plan. 3.10.5.2. Standard 1( Mining of minerals a) null An EIA-EMP Report shall be prepared for peak capacity (.....MTPA)operation in an ML/project area of.....ha 1. based on the generic structure specified in Appendix III of the EIA Notification, 2006. An EIA-EMP Report would be prepared for peak capacity operation to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, 1. generation of data on impacts including prediction modeling for..... MTPA of coal production based on approved project/Mining Plan for.....MTPA. Baseline data collection can be for any season (three months) except monsoon. If the washery is located within the mine lease or near to the mine lease its location should be cited separately also, providing pillar cordinates and site layout plan. Insuch cases cumulative impact of mine operation with 1. washery to be assessd and EMP measure to be drawn to the worst scenario

1. Plan of mechanized transportation of coal to coal washery also for rejects and washed coal to be drawn

1. | Propoer KML file with pin drop and coordinate of mine at 500-1000 m interval be provided

A Study area map of the core zone (project area) and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries, mines, coal washery and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given. The above details to be furnished in tabular form also

1.	Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.								
1.	A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.								
1.	Catchment area with its drainage map of 25 km area within and outside the mine shall be provided with names, details of rivers/ riverlet system and its respective order. The map should clearly indicate drainage pattern of the catchment area with basin of major rivers. Diversion of drains/ river need eloboration in form of lengthe, quantity and quality of water to be diverted								
1.	(Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.								
1.					e used, etc., rationale for selection al impacts should be provided.	on of specified technology			
1.	river	s/wa		igh the ML and adjoir	tural drainage, diversion and chain the lease/project and the im				
1.	quar (with drain areas	ry ar hin a ns/na s, an	ea, OB dumps, green be ind adjacent to the MI tural water bodies to be d modification of there	lt, safety zone, buildin ), undisturbed area left undisturbed alon eof in terms of cons	d break-up of the land for minings, infrastructure, CHP, ETP, St -if any, and landscape features ng with any natural drainage ad struction of embankments/bunds najor haul roads, etc should be in	ockyard, township/colony s such as existing roads, ljoining the lease /project s, proposed diversion/re-			
	prov land shou	ided /fores ild be	as per the tables given stland/grazing land/wate	below. Impacts of per bodies falling with	ng land/wasteland/water bodies) project, if any on the land use, in the lease/project and acquire s and under mining rights should	in particular, agricultural ed for mining operations			
S.N ML/Project Land Area under Area Under Mining use Rights(ha) Area un Rights(ha) (ha)									
1.		1	Agricultural land		(ha)				
		2	Forest Land						
		3	Grazing Land						
		4	Settlements						
		5	Others (specify)						
			1	1	1				

	S.N.	Details	Area (ha)			
	1	Buildings				
	2	Infrastructure				
	3	Roads				
	4	Others (specify)				
		Total				
1.	discipline clearly sp be given. by Schedu corridor t prepared	. The list of flora a ecifying whether th If the study area has ale-I species, or if the hen a Comprehens	nd fauna dul e study area e endangered te project fall ive Conserva EIA-EMP R	the study area (10km) should be carried out by an institution of relevant y authenticated separately for the core and study area and a statement forms a part of the migratory corridor of any endangered fauna should flora and fauna, or if the area is occasionally visited or used as a habitat s within 15 km of an ecologically sensitive area, or used as a migratory tion Plan along with the appropriate budgetary provision should be eport; and comments/observation from the CWLW of the State Govt.		
1.	and heavy season m	y metals such as Ha et data coinciding v IoEF&CC certificat	g, Pb, Cr, As with the same	baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx s, etc), noise, water (surface and groundwater), soil - along with one- e season for AAQ collection period should be provided. The detail of spective laboratory and NABET accreditation of the consultant to be		
1.	superimpo and locati lease/proj (based on The moni surface w	osed with location o ion of the sampling ect area, the propos flow). One station s toring should be as	f habitats, oth stations in t ed impacts in should be in t per CPCB g ndards and C	core and buffer zone) showing the location of various sampling stations ber industries/mines, polluting sources, should be provided. The number both core and buffer zones should be selected on the basis of size of in the downwind (air)/downstream (surface water)/groundwater regime he upwind/upstream/non-impact/non-polluting area as a control station. guidelines and parameters for water testing for both ground water and CPCB classification wherever applicable. Observed values should be s.		
1.	For proper baseline air quality assessment, Wind rose pattern in the area should be reviewed and accordingly location of AAMSQ shall be planned by the collection of air quality data by adequate monitoring stations in the downwind areas. Monitoring location for collecting baseline data should cover overall the 10 km buffer zone i.e. dispersed in 10 km buffer area. In case of expansion, the displayed data of CAAQMS and its comparison with the monitoring data to be provided					
1.	on the air increase t	quality with its pro- he no. of vehicle alo	per measures ong the road	ce of habitation in 100 mts distance from both side of road, the impact and plan of action with timeline for widening of road. The project will which will indirectly contribute to carbon emission so what will be the y spell out in EIA/ EMP report.		
1.	from the study area the status census da	census data should a and what economic of infrastructural fa	be provided in cally project watching and a	with actual survey report and a comparative assessment to be provided in EIA/ EMP report also occupational status & economic status of the will contribute should be clearly mention. The study should also include amenities present in the study area and a comparative assessment with with the initialization and quantification of need based survey for CSR		
1.				Id also indicate the likely impact of change in forest area for surface vity in relation to the climate change of that area and what will be the		

	compensatory measure to be adopted by PP to minimize the impact of forest diversion.
1.	Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower for the mine should be submitted.
1.	Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted
1.	Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
1.	Study on land subsidence including modeling for prediction, mitigation/prevention of subsidence, continuous monitoring measures, and safety issues should be carried out.
1.	Detailed water balance should be provided. The break up of water requirement as per different activities in the mining operations, including use of water for sand stowing should be given separately. Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users should be provided.
1.	PP shall submit design details of all Air Pollution control equipment (APCEs) to be implemented as part of Environment Management Plan vis-à-vis reduction in concentration of emission for each APCEs
1.	PP shall propose to use LNG/CNG based mining machineries and trucks for mining operation and transportation of coal. The measures adopted to conserve energy or use of renewable sources shall be explored
1.	PP to evaluate the green house emission gases from the mine operation/ washery plant and corresponding carbon absorption plan.
1.	PP shall explore the use of vent gases as generated from under ground Mine for use of energy generation/ in house energy consumption
1.	Site specific Impact assessment with its mitigation measures, Risk Assessment and Disaster Preparedness and Management Plan should be provided.
1.	Impact of stowing by using coal washery rejects/ flyash/ bottom ash shall be assessed in term of leachate generation and its characteristics
1.	Impact of choice of mining method, technology, selected use of machinery and impact on air quality, mineral transportation, coal handling & storage/stockyard, etc, Impact of blasting, noise and vibrations should be provided.
1.	Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
1.	Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
1.	Details of various facilities to be provided to the workers in terms of parking, rest areas and canteen, and effluents/pollution load resulting from these activities should also be given.
1.	The number and efficiency of mobile/static water jet, Fog cannon sprinkling system along the main mineral

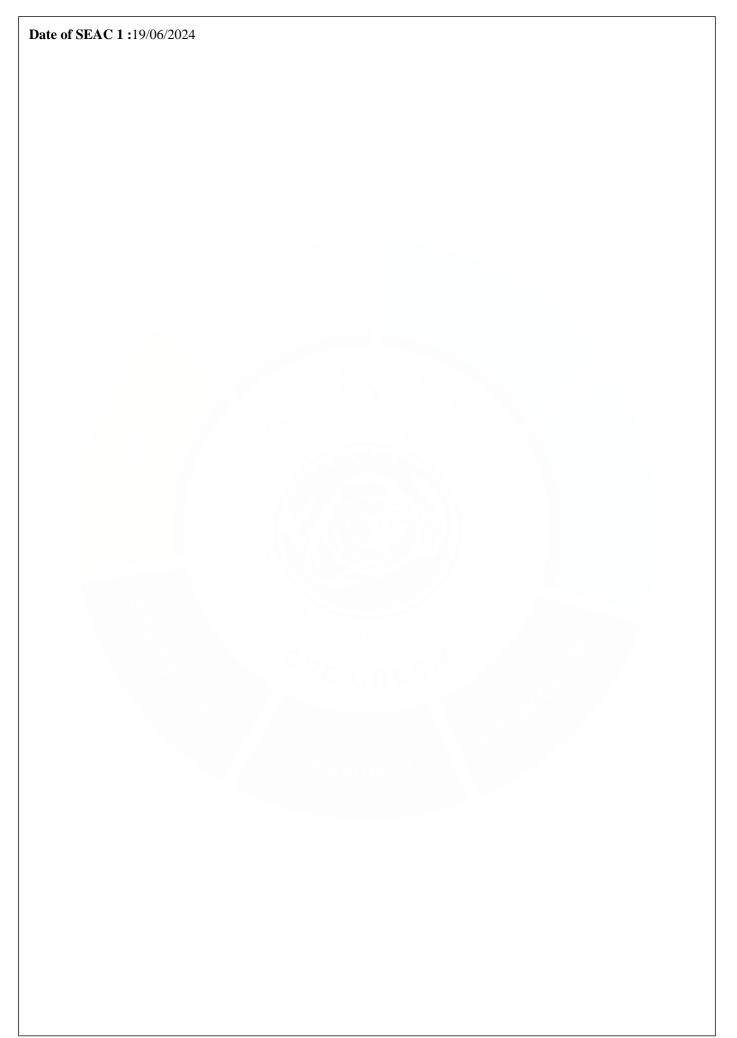
	transportation road inside the mine, approach roads to the mine/stockyard/siding, and also the frequency of their use in impacting air quality should be provided.
1.	Impacts of CHP, if any on air and water quality should be given. A flow chart showing water balance along with the details of zero discharge should be provided.
1.	Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the pre- mining status should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of re-handling (wherever applicable) and backfilling and progressive mine closure and reclamation should be furnished.
1.	Adequate greenbelt nearby areas, coal stock yard and transportaion area of coal shall be provided with details of species selected and survival rate Greenbelt development should be undertaken particularly around the transport route and CHP.
1.	Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
1.	Details of R&R. Detailed project specific R&R Plan with data on the existing socio- economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
1.	CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
1.	Corporate Environment Responsibility:
1.	a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
1.	b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
1.	c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
1.	d) To have proper checks and balances, the company should have a well laid down system of reporting of non- compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
1.	e) Environment Managament Cell and its responsibilities to be clearly spleel out in EIA/ EMP report
1.	f) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.
1.	Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.
1.	Status of any litigations/ court cases filed/pending on the project should be provided.
1.	PP shall submit clarification from PCCF that mine does not falls under corridors of any National Park and Wildlife Sanctuary with certified map showing distance of nearest sanctuary.
1.	Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

	Details on the Forest Clearance should be given as per the format given:						
	Total	ML	Total				
	Project	Area	Forest	Date of FC	Extent of Forest Land	Balance area for which FC is yet to be obtained	Status of appl For diversion of forest land
1.	(ha)		land (ha)				
			If more than one provide details of each FC				
1.			on of the proposal, the ed in EIA/ EMP report	status of t	the work done	as per mining plan and	approved mine closure
1.	Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the time bound action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.						
1.	PP shall carry out survey through drone highlighting the ground reality for atleast 10 minutes						
1.	Detailed Chronology of the project starting from the first lease deed alloted/Block allotment/ Land acquired to its No. of renewals, CTO /CTE with details of no. renewals, previous EC(s) granted details and its compliance details, NOC details from various Govt bodies like Forest NOC(s), CGWA permissions, Power permissions, etc as per the requisites respectively to be furnished in tabular form.						
1.	A copy of application submitted for 5 star rating system to Ministry of coal for expansion cases may be provided. Certificate /rating given to project shall be provided with EIA-EMP report						
1.			e EIA/ EMP report m ion) and Laboratory (N			acity production, area, d fication)	etail of PP, Consultant
1.	-	The compliances of ToR must be properly cited with respective chapter section and page no in tabular form and also mention sequence of the respective ToR complied within the EIA-EMP report in all the chapter, s section.					
1.	Potential impact study in the EIA should be done considering the cumulative effect of all the mines in the cluster situation, if any.						

## 3.11. Agenda Item No 11:

## **3.11.1. Details of the proposal**

Becharhat Sand Mine by MATIAR RAHAMAN located at PURBA BARDHAMAN, WEST BENGAL					
Proposal For		Fresh ToR			
Proposal No	File No	Submission Date	Activity (Schedule Item)		
SIA/WB/MIN/477000/2024	2N-213/2023(E)	07/06/2024	Mining of minerals (1(a))		



#### **Deliberations of SEAC 1 :**

- Based on the submission and presentation made by the PP, the SEAC observed that **the plot area** for the proposed project as per the geo-coordinates mentioned in the revised Mining Plan uploaded by the PP **falls** within the potential mining zone recorded in the approved District Survey Report (DSR) of Purba Bardhaman district.
- Based on the presentation and submission made by the PP, the SEAC **recommended** issuance of **Standard Terms of Reference** for EIA preparation for the project with the following additional conditions :-

1) Cluster Certificate from the competent authority.

- 2) Taking into consideration the replenishment rates reported in the approved DSR for Purba Bardhaman, both geological and mining reserves for second year (of production) onwards may be re-estimated and the annual production levels may be modified accordingly.
- 3) Drone videography of the entire project area explicitly showing the entire project site along with the existing tree plantation/green belt. Minimum 2 minute video to be submitted.
- 4) Photographs of the site mentioning the geo-coordinates.
- 5) Standard practice of management of the intermediate storage area should be submitted.
- 6) Means of access and egress between the embankment and the sand quarry may be clearly earmarked. The Project Proponent must commit that no hard toping or paving of any haulage route within the riverbed will be attempted.
- 7) A plan on the management and handling of sand during the period of intermediate stockpiling should be submitted.
- 8) The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha within first two years from the starting of the mining operation. A Progressive Greenbelt Plan may be prepared. The project area being entirely on the riverbed, afforestation/ vegetation should be attempted alongside the village roads or other public land. This may be done with prior approval of the local self-governing bodies. If no public land is available for the purpose the Project Proponent shall arrange for land with his personal means. To enhance success/ survival rate the plantation shall be attempted during the first two years of the project life and the plantation so done shall be taken care of during the rest of the project life. Species of the plant selected should be self-sustaining in that particular region. Spatial year wise progressive plantation programme to be submitted.
- 9) Plan showing spatial year wise distribution of the proposed greenbelt has to be submitted along-with supporting documents of administrative approval/s.
- 10) Being a mine in operation, the plantation created so far may be submitted with geotagged photographs.
- 11) EIA should also include detailed study of the baseline condition and impact on aquatic flora and fauna.
- 12) The project cost may include the auction bid value, estimated royalty to be paid, cost of any infrastructure built like office space, stockyard, etc. The calculation/documents to estimate the project cost should be submitted. The planned expenditure for components like need-based activities may be derived based on the project cost.
- 13) A need-based EMP may be prepared in accordance with the MoEF&CC Office Memorandum vide F. No. 22-65/2017.IA.III dated 30.09.2020. Record of communications made in this regard with the identified/ intended beneficiaries (schools/ institutions etc) may also be uploaded. Evidence of the activities already done should be provided by photographs with geo-coordinates. The activities should be completed within the first two years of the project life.
- 14) A study report on base flow level measured at 5 points with date and supporting photographs should be submitted. It should be committed that mining will be done at least 1m above the base flow level. Accordingly, if required, the excavation plan may also be revised.
- 15) Management plan including the final closure plan of haul road to be submitted.
- 16) Sieve analysis report for grain size distribution should be provided.
- 17) Study and protection plan of the aquatic life available both during the mining and non-mining seasons should be provided.

The PP shall upload the EIA/EMP report along with the documents / submissions / clarifications sought above in the PARIVESH portal while applying for environmental clearance.

All the documents should be duly signed both by the project proponent and environmental the consultant.

## 3.11.3. Deliberations by the SEIAA in current meetings

### **INTRODUCTION**

The proponent made online application vide proposal no. **SIA/WB/MIN/477000/2024** dated **07 June 2024** seeking Terms of Reference (ToR) under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. **1(a) Mining of minerals** projects under Category "**B1**" of EIA Notification 2006. SEAC, during its 41<sup>st</sup> meeting held on 19.06.2024 recommended issuance of Standard Terms of Reference for EIA preparation for the project with additional conditions.

## PROJECT DETAILS

The project of Matiar Rahaman located is as follows :

S. No.	State	District	
(1)	West Bengal	Purba Bardhaman	

The salient features of the project submitted by the project proponent are available under online proposal no. SIA/WB/MIN/477000/2024 PARIVESH Portal.

SEIAA considered the recommendation of SEAC and approved ToR with the additional condition that potential impact study in the EIA should be done considering the cumulative effect of all the mines in the cluster situation, if any.

#### 3.11.4. Recommendation of SEIAA

Approved

## **3.11.5. Details of Terms of Reference**

#### 3.11.5.1. Specific

А.	A. STANDARD TERMS OF REFERENCE							
	1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any year prior to 1994. It may also be categorically informed whether there had been any increase in production a the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.						
	2.	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should given.						
	3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one anothe terms of the mine lease area, production levels, waste generation and its management, mining technology etc. should be in the name of the lessee.						
1.	4.	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposh topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proper area should clearly show the land use and other ecological features of the study area (core and buffer zone).						
	5.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of area, geomorphology of land forms of the area, existing minerals and mining history of the area, important w bodies, streams and rivers and soil characteristics.						
	6.	Details about the land proposed for mining activities should be given with information as to whether mir conforms to the land use policy of the State; land diversion for mining should have approval from State land board or the concerned authority.						

- 7. It should be clearly stated whether the proponent Company has a well laid down Environment Policy appro by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed opera process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest nor conditions? The hierarchical system or administrative order of the Company to deal with the environme issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of r compliances / violations of environmental norms to the Board of Directors of the Company and/or sharehole or stakeholders at large, may also be detailed in the EIA Report.
- 8. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in a of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should be provided.
- 9. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data containe the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, natio park, migratory routes of fauna, water bodies, human settlements and other ecological features should indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational post operational phases and submitted. Impact, if any, of change of land use should be given.
- 11. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance f mine lease, its land use, R&R issues, if any, should be given.
- 12. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Propor regarding the status of forests, the site may be inspected by the State Forest Department along with the Regio Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- Status of forestry clearance for the broken up area and virgin forestland involved in the Project includ deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of forestry clearance should also be furnished.
- 14. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Fo Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and de furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordin detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elepl Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indica supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- 18. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species c authenticated, separately for core and buffer zone should be furnished based on such primary field survey, cle indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, necessary plan along with budgetary provisions for their conservation should be prepared in consultation v State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing same should be made as part of the project cost.
- 19. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Rar (attracting court restrictions for mining operations), should also be indicated and where so required, cleara certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secu and furnished to the effect that the proposed mining activities could be considered.
- 20. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarca LTL. HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concer Coastal Zone Management Authority).
- 21. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respective SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-w should be undertaken to assess their requirements, and action programmes prepared and submitted according the section of the society in the study area.

integrating the sectorial programmes of line departments of the State Government. It may be clearly brought whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting village(s) including their R&R and socio-economic aspects should be discussed in the Report.

- 22. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon seaso December-February (winter season)]primary baseline data on ambient air quality as per CPCB Notification 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also collected. The location of the monitoring stations should be such as to represent whole of the study area justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There she be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. mineralogical composition of PM10, particularly for free silica, should be given.
- 23. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the are should also take into account the impact of movement of vehicles for transportation of mineral. The details of model used and input parameters used for modeling should be provided. The air quality contours may be sho on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- 24. The water requirement for the Project, its availability and source should be furnished. A detailed water bala should also be provided. Fresh water requirement for the Project should be indicated.
- 25. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project sho be provided.
- 26. Description of water conservation measures proposed to be adopted in the Project should be given. Detail rainwater harvesting proposed in the Project, if any, should be provided.
- 27. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necess safeguard measures, if any required, should be provided.
- 28. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necess data and documentation in this regard may be provided. In case the working will intersect groundwater tabl detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall incl details of the aquifers present and impact of mining activities on these aquifers. Necessary permission f Central Ground Water Authority for working below ground water and for pumping of ground water should be obtained and copy furnished.
- 29. Details of any stream, seasonal or otherwise, passing through the lease area and modification / divers proposed, if any, and the impact of the same on the hydrology should be brought out.
- 30. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and A schematic diagram may also be provided for the same.
- 31. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the lin and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will hav be executed up front on commencement of the Project. Phase-wise plan of plantation and compensa afforestation should be charted clearly indicating the area to be covered under plantation and the species to planted. The details of plantation already done should be given. The plant species selected for green belt sho have greater ecological value and should be of good utility value to the local population with emphasis on le and native species and the species which are tolerant to pollution.
- 32. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck tra as a result of the Project in the present road network (including those outside the Project area) should be wor out, indicating whether it is capable of handling the incremental load. Arrangement for improving infrastructure, if contemplated (including action to be taken by other agencies such as State Government) she be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Cong Guidelines.
- 33. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the Report.
- 34. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and v adequate number of sections) should be given in the EIA report.
- 35. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt in detail. Details of pre-placement medical examination and periodical medical examination schedules should incorporated in the EMP. The project specific occupational health mitigation measures with required facili proposed in the mining area may be detailed.
- 36. Public health implications of the Project and related activities for the population in the impact zone should

systematically evaluated and the proposed remedial measures should be detailed along with budge allocations.

- 37. Measures of socio-economic significance and influence to the local community proposed to be provided by Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time fra for implementation.
- 38. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should interinclude the impacts of change of land use, loss of agricultural and grazing land, if any, occupational he impacts besides other impacts specific to the proposed Project.
- 39. Public Hearing points raised and commitment of the Project Proponent on the same along with time bo Action Plan with budgetary provisions to implement the same should be provided and also incorporated in final EIA/EMP Report of the Project.
- 40. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law aga the Project should be given.
- 41. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of E should be clearly spelt out.
- 42. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 43. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall cle indicate environmental, social, economic, employment potential, etc.
- 44. Besides the above, the below mentioned general points are also to be followed:
  - a. Executive Summary of the EIA/EMP Report (enclosed as Annexure A).
  - b. All documents to be properly referenced with index and continuous page numbering.
  - c. Where data are presented in the Report especially in Tables, the period in which the data were collected and sources should be indicated.
  - d. Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available du appraisal of the Project.
  - e. Where the documents provided are in a language other than English, an English translation should be provid
  - f. The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall be filled and submitted.
  - g. While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants iss by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4<sup>th</sup> August, 2009, which are available on website of this Ministry, should be followed.
  - h. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in struc and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will er conducting the PH again with the revised documentation.
  - As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of complia of the conditions stipulated in the environment clearance for the existing operations of the project, should obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may applicable.
  - j. The EIA report should also include (i) surface plan of the area indicating contours of main topographic featu drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and exte dumps, if any, clearly showing the land features of the adjoining area.

#### B. Additional Terms of Reference imposed by SEAC -

1.

- 1. Cluster Certificate from the competent authority.
- 2. Taking into consideration the replenishment rates reported in the approved DSR for Purba Bardhan both geological and mining reserves for second year (of production) onwards may be re-estimated and annual production levels may be modified accordingly.
  - 3. Drone videography of the entire project area explicitly showing the entire project site along with existing tree plantation/green belt. Minimum 2 minute video to be submitted.

- 4. Photographs of the site mentioning the geo-coordinates.
- 5. Standard practice of management of the intermediate storage area should be submitted.

6. Means of access and egress between the embankment and the sand quarry may be clearly earmar The Project Proponent must commit that no hard toping or paving of any haulage route within the river will be attempted.

7. A plan on the management and handling of sand during the period of intermediate stockpiling should submitted.

8. The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha wi first two years from the starting of the mining operation. A Progressive Greenbelt Plan may be prepa The project area being entirely on the riverbed, afforestation/ vegetation should be attempted alongside village roads or other public land. This may be done with prior approval of the local self-governing bod If no public land is available for the purpose the Project Proponent shall arrange for land with his perso means. To enhance success/ survival rate the plantation shall be attempted during the first two years of project life and the plantation so done shall be taken care of during the rest of the project life. Species of plant selected should be self-sustaining in that particular region. Spatial year wise progressive planta programme to be submitted.

9. Plan showing spatial year wise distribution of the proposed greenbelt has to be submitted along-v supporting documents of administrative approval/s.

10. Being a mine in operation, the plantation created so far may be submitted with geotagged photograph

11. EIA should also include detailed study of the baseline condition and impact on aquatic flora and faur

12. The project cost may include the auction bid value, estimated royalty to be paid, cost of infrastructure built like office space, stockyard, etc. The calculation/documents to estimate the project should be submitted. The planned expenditure for components like need-based activities may be derivated on the project cost.

13. A need-based EMP may be prepared in accordance with the MoEF&CC Office Memorandum vid No. 22-65/2017.IA.III dated 30.09.2020. Record of communications made in this regard with the identifi intended beneficiaries (schools/ institutions etc) may also be uploaded. The activities should be complewithin the first two years of the project life.

14. A study report on base flow level measured at 5 points with date and supporting photographs should submitted. It should be committed that mining will be done at least 1m above the base flow le Accordingly, if required, the excavation plan may also be revised.

15. Management plan including the final closure plan of haul road to be submitted.

16. Sieve analysis report for grain size distribution should be provided.

17. Study and protection plan of the aquatic life available both during the mining and non-mining seas should be provided.

While applying for environmental clearance, the PP shall upload in the PARIVESH portal, the EIA/EMP report al with the documents/ submissions/ clarifications sought hereinabove.

The West Bengal Pollution Control Board shall arrange public hearing as per EIA Notification, 2006 on submissio draft EIA/EMP prepared by the Project Proponent as per the above-mentioned ToRs. All the issues mentioned in 'Public Hearing Report' and public consultation must also be addressed and incorporated in the final EIA / EMP rep The project proponent is requested to pursue the matter with the WBPCB for organizing the public hearing/consulta on submission of the draft EIA/EMP report as per the provision of EIA notification 2006 & its amendments. The pro proponent is requested to submit the final EIA/EMP prepared as per the above-mentioned ToRs and incorporating the issues raised during Public Hearing / Public Consultation to the SEAC for further consideration of the proposal environmental clearance.

The ToR is valid for a period of 3 (three) years from the date of issue.

#### Annexure - A

Annexure

#### **Executive Summary** The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the informa on following points: Project name and location (Village, District, State, Industrial Estate (if applicable). 1) Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier E 2) Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative). 3) 4) Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazard wastes. Measures for mitigating the impact on the environment and mode of discharge or disposal. 5) Capital cost of the project, estimated time of completion. 6) Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./private land, st 7) of is acquisition, nearby (in 2-3 km.) water body, population, with in 10km. other industries, forest, eco-sensi zones, accessibility, (note - in case of industrial estate this information may not be necessary). Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fat 8) socio-economic condition of the nearby population. 9) Identification of hazards in handling, processing and storage of hazardous material and safety system provide mitigate the risk. 10) Likely impact of the project on air, water, land, flora-fauna and nearby population. 11) Emergency preparedness plan in case of natural or in plant emergencies. 12) Issues raised during public hearing (if applicable) and response given. 13) Environment Management Plan (EMP) as per Office Memorandum issued by the MoEF & CC vide F. No. 65/2017-IA.III dated 30.09.2020 with proposed expenditure. 14) Occupational Health Measures. 15) Post project monitoring plan. 3.11.5.2. Standard 1( Mining of minerals a) null An EIA-EMP Report shall be prepared for peak capacity (.....MTPA)operation in an ML/project area of.....ha 1. based on the generic structure specified in Appendix III of the EIA Notification, 2006. An EIA-EMP Report would be prepared for peak capacity operation to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, 1. generation of data on impacts including prediction modeling for..... MTPA of coal production based on approved project/Mining Plan for.....MTPA. Baseline data collection can be for any season (three months) except monsoon. If the washery is located within the mine lease or near to the mine lease its location should be cited separately also, providing pillar cordinates and site layout plan. Insuch cases cumulative impact of mine operation with 1.

1. Plan of mechanized transportation of coal to coal washery also for rejects and washed coal to be drawn

1. Propoer KML file with pin drop and coordinate of mine at 500-1000 m interval be provided

washery to be assessd and EMP measure to be drawn to the worst scenario

A Study area map of the core zone (project area) and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries, mines, coal washery and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given. The above details to be furnished in tabular form also

1.	Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.								
1.	A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.								
1.	Catchment area with its drainage map of 25 km area within and outside the mine shall be provided with names, details of rivers/ riverlet system and its respective order. The map should clearly indicate drainage pattern of the catchment area with basin of major rivers. Diversion of drains/ river need eloboration in form of lengthe, quantity and quality of water to be diverted								
1.	(Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included. The Progressive mine development and Conceptual Final Mine Closure Plan should also be shown in figures. Details of mine plan and mine closure plan approval of Competent Authority should be furnished for green field and expansion projects.								
1.				e used, etc., rationale for selection al impacts should be provided.	on of specified technology				
1.	rivers/w		igh the ML and adjoir	tural drainage, diversion and chain the lease/project and the im					
1.	quarry a (within drains/na areas, a	rea, OB dumps, green be and adjacent to the MI atural water bodies to be nd modification of ther	lt, safety zone, buildin , undisturbed area e left undisturbed alon eof in terms of cons	d break-up of the land for minings, infrastructure, CHP, ETP, St -if any, and landscape features ng with any natural drainage ad struction of embankments/bunds najor haul roads, etc should be in	ockyard, township/colony such as existing roads, joining the lease /project s, proposed diversion/re-				
	provided land/fore	l as per the tables giver estland/grazing land/wate be analyzed. Extent of are	below. Impacts of per bodies falling with	ng land/wasteland/water bodies) project, if any on the land use, in the lease/project and acquire s and under mining rights should	in particular, agricultural ed for mining operations				
S.N ML/Project Land Area under Area Under Mining use Area under Area Under Mining Rights(ha) Area un (ha)									
1.			Rights(ha)	(ha)					
		Agricultural land							
	2	Forest Land							
	3	Grazing Land							
	4	Settlements							
	5	Others (specify)							

<ul> <li>NABL/ MoEF&amp;CC certification of the respective laborartory and NABET accreditation of the consultant to be provided.</li> <li>Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.</li> <li>For proper baseline air quality assessment, Wind rose pattern in the area should be reviewed and accordingly location of AAMSQ shall be planned by the collection of air quality data by adequate monitoring stations in the downwind areas. Monitoring location for collecting baseline data should cover overall the 10 km buffer zone i.e. dispersed in 10 km buffer area. In case of expansion, the displayed data of CAAQMS and its comparison with the monitoring data to be provided</li> <li>A detailed traffic study along with presence of habitation in 100 mts distance from both side of road, the impact on the air quality with its proper measures and plan of action with timeline for widening of road. The project will</li> </ul>					
Image: Infrastructure         Image: Infrastructure           3         Roads           4         Others (specify)           1         Total           5         Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or as a migratory corridor then a Comprehensive Conservation Plan along with the appropriate budgetary provision should be prepared and submitted with ELA-EMP Report; and comments/observation from the CWLW of the State Govt should alos be obtained and frumished.           0         One-season (other than monscon) primary baseline data on environmental quality - air (PM10, PM2.5, SOX, NOX and heavy metals such as Hg. Pb. Cr. As, etc), noise, water (surface and groundwater), soil - along with one season met duta coinciding with the same season for AAQ collection period should be provided. The numbe and location of the sampling stations in both core and buffer zones should be selected on the basis of size on lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (base/on flow). One station should be in the dynind/upstream/non-impact/non-politing area as a control station The monitoring should be as per CPCB guidelines and parameters for water testing for both groundwater regime (based on flow). One station should be in the dynind/upstream/non-impact/non-politing area sis outol station The monitoring stations for doleceting baseline data build every evortal and accordin		S.N.	Details	Area (ha)	
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4         Others (specify)           Total         Total           Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevana discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area has ondargered flora and fauna, ori if the argical corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, ori if the appropriate budgetary provision should be proprieded and submitted with EIA-EMP Report, and comments/observation from the CWLW of the State Govt should also be obtained and furnished.           One-season (other than monsoon) primary baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one season met data coinciding with the same season for AAQ collection period should be provided.           Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations in both core and buffer zones should be selected on the basis of size oi leas/project area, the proposed impacts in the downwind (air/downstrean) (surface water/)groundwater regime for both groups and parameters for water testing for both groups and under an surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be as per CPCB guidelines and parameters for water testing for both groups and under an surface water as per ISI standards and CPCB classification wherever applicable. Observed and accordingly location of AAMS galta be planeed by the collection of air quality data by adequate monitoring studies in the down with diridovity data by adequate monintoring stations in the downwind aira/down the resease and onotha		2	Infrastructure		
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<ul> <li>discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora and fauna, or if the area is occasionally visited or used as a habitat by Schedule-I species, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan along with the appropriate budgetary provision should be prepared and submitted with EIA-EMP Report; and comments/observation from the CWLW of the State Govt should also be obtained and furnished.</li> <li>One-season (other than monsoon) primary baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one season met data coinciding with the same season for AAQ collection period should be provided. The detail of NABL/ MOEF&amp;CC certification of the respective laborartory and NABET accreditation of the consultant to be provided.</li> <li>Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of the unsus sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station The monitoring should be a sper CPCB guidelines and parameters for water testing for both ground water and surface water as are FISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.</li> <li>For proper baseline ai</li></ul>			Total		
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<ul> <li>superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.</li> <li>For proper baseline air quality assessment, Wind rose pattern in the area should be reviewed and accordingly location of AAMSQ shall be planned by the collection of air quality data by adequate monitoring stations in the downwind areas. Monitoring location for collecting baseline data should cover overall the 10 km buffer zone i.e dispersed in 10 km buffer area. In case of expansion, the displayed data of CAAQMS and its comparison with the monitoring data to be provided</li> <li>A detailed traffic study along with presence of habitation in 100 mts distance from both side of road, the impact on the air quality with its proper measures and plan of action with timeline for widening of road. The project will increase the no. of vehicle along the road which will indirectly contribute to carbon emission so what will be the compensatory action plan should be provided in EIA/ EMP report.</li> <li>The socio-economic study to conducted with actual survey report and a comparative assessment to be provided the status of infrastructural facilities and amenities present in the study area and a comparative assessment with census data to be provided in EIA/ EMP report also occupational status &amp; economic status of the study area and what economically project will contribute should be clearly mention. Th</li></ul>	1.	season met data coinciding with the same season for AAQ collection period should be provided. The detail of NABL/ MoEF&CC certification of the respective laboratory and NABET accreditation of the consultant to be			
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	1.	from the study area the status census da	census data should and what economic of infrastructural fa ta to be provided an	be provided a cally project v acilities and a	in EIA/ EMP report also occupational status & economic status of the will contribute should be clearly mention. The study should also include amenities present in the study area and a comparative assessment with
	1.				

	compensatory measure to be adopted by PP to minimize the impact of forest diversion.
1.	Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower for the mine should be submitted.
1.	Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted
1.	Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
1.	Study on land subsidence including modeling for prediction, mitigation/prevention of subsidence, continuous monitoring measures, and safety issues should be carried out.
1.	Detailed water balance should be provided. The break up of water requirement as per different activities in the mining operations, including use of water for sand stowing should be given separately. Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users should be provided.
1.	PP shall submit design details of all Air Pollution control equipment (APCEs) to be implemented as part of Environment Management Plan vis-à-vis reduction in concentration of emission for each APCEs
1.	PP shall propose to use LNG/CNG based mining machineries and trucks for mining operation and transportation of coal. The measures adopted to conserve energy or use of renewable sources shall be explored
1.	PP to evaluate the green house emission gases from the mine operation/ washery plant and corresponding carbon absorption plan.
1.	PP shall explore the use of vent gases as generated from under ground Mine for use of energy generation/ in house energy consumption
1.	Site specific Impact assessment with its mitigation measures, Risk Assessment and Disaster Preparedness and Management Plan should be provided.
1.	Impact of stowing by using coal washery rejects/ flyash/ bottom ash shall be assessed in term of leachate generation and its characteristics
1.	Impact of choice of mining method, technology, selected use of machinery and impact on air quality, mineral transportation, coal handling & storage/stockyard, etc, Impact of blasting, noise and vibrations should be provided.
1.	Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
1.	Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
1.	Details of various facilities to be provided to the workers in terms of parking, rest areas and canteen, and effluents/pollution load resulting from these activities should also be given.
1.	The number and efficiency of mobile/static water jet, Fog cannon sprinkling system along the main mineral

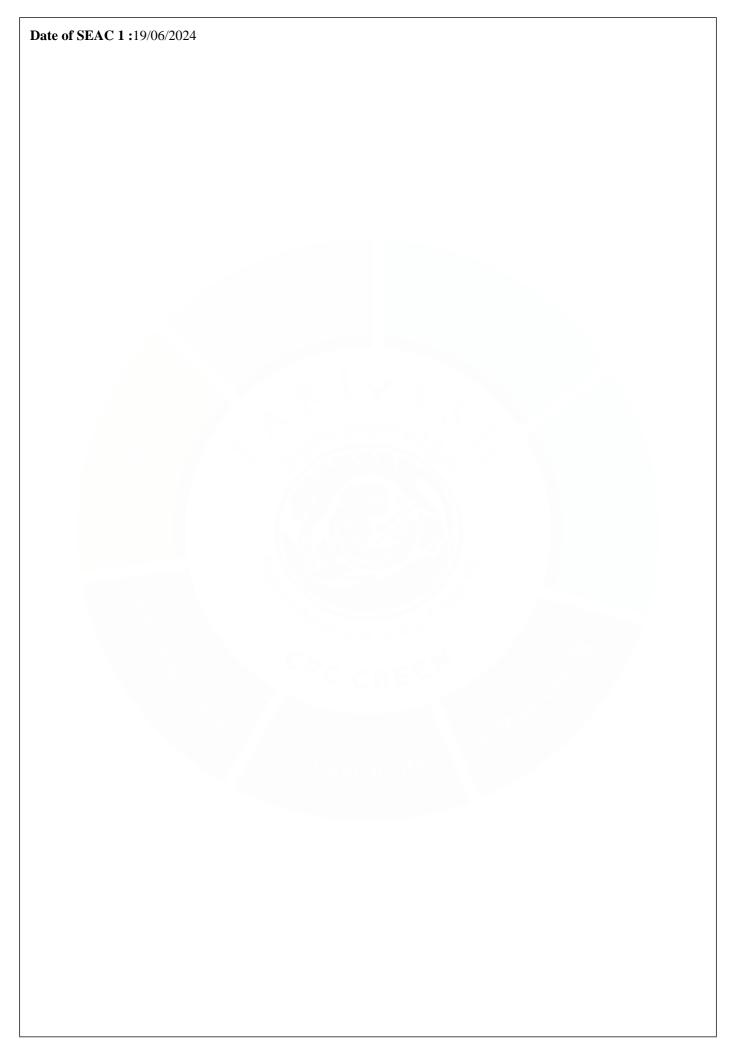
	transportation road inside the mine, approach roads to the mine/stockyard/siding, and also the frequency of their use in impacting air quality should be provided.				
1.	Impacts of CHP, if any on air and water quality should be given. A flow chart showing water balance along with the details of zero discharge should be provided.				
1.	Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the pre- mining status should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of re-handling (wherever applicable) and backfilling and progressive mine closure and reclamation should be furnished.				
1.	Adequate greenbelt nearby areas, coal stock yard and transportaion area of coal shall be provided with details of species selected and survival rate Greenbelt development should be undertaken particularly around the transport route and CHP.				
1.	Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.				
1.	Details of R&R. Detailed project specific R&R Plan with data on the existing socio- economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.				
1.	CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.				
1.	Corporate Environment Responsibility:				
1.	a) The Company must have a well laid down Environment Policy approved by the Board of Directors.				
1.	b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.				
1.	c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.				
1.	d) To have proper checks and balances, the company should have a well laid down system of reporting of non- compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.				
1.	e) Environment Managament Cell and its responsibilities to be clearly spleel out in EIA/ EMP report				
1.	f) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.				
1.	Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.				
1.	Status of any litigations/ court cases filed/pending on the project should be provided.				
1.	PP shall submit clarification from PCCF that mine does not falls under corridors of any National Park and Wildlife Sanctuary with certified map showing distance of nearest sanctuary.				
1.	Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.				

	Details on the Forest Clearance should be given as per the format given:							
	Total	ML	Total		Extent of Forest Land	Balance area for which FC is yet to be obtained	Status of appl For diversion of forest land	
	Project	Area	Forest	Date of FC				
1.	(ha)		land (ha)					
			If more than one provide details of each FC					
1.			on of the proposal, the ed in EIA/ EMP report	status of t	the work done	as per mining plan and	approved mine closure	
1.	Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the time bound action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.							
1.	PP shall ca	urry out s	urvey through drone hi	ighlighting	the ground rea	lity for atleast 10 minute	es	
1.	Detailed Chronology of the project starting from the first lease deed alloted/Block allotment/ Land acquired to its No. of renewals, CTO /CTE with details of no. renewals, previous EC(s) granted details and its compliance details, NOC details from various Govt bodies like Forest NOC(s), CGWA permissions, Power permissions, etc as per the requisites respectively to be furnished in tabular form.							
1.	A copy of application submitted for 5 star rating system to Ministry of coal for expansion cases may be provided. Certificate /rating given to project shall be provided with EIA-EMP report							
1.	The first page of the EIA/ EMP report must mention the peak capacity production, area, detail of PP, Consultant (NABET acrreditation) and Laboratory (NABL / MoEF & CC certification)				etail of PP, Consultant			
1.	-			•	-	hapter section and page IA-EMP report in all the		
1.	Potential cluster sit			ıld be don	e considering	the cumulative effect of	of all the mines in the	

## 3.12. Agenda Item No 12:

## **3.12.1. Details of the proposal**

Kalinagar Sand Mine by HIMANSHU SANTRA located at PURBA BARDHAMAN, WEST BENGAL					
Proposal For		Fresh ToR			
Proposal No	File No	Submission Date	Activity (Schedule Item)		
SIA/WB/MIN/476968/2024 2N-264/2023(E)		07/06/2024	Mining of minerals (1(a))		



#### **Deliberations of SEAC 1 :**

- Based on the submission and presentation made by the PP, the SEAC observed that **the plot area** for the proposed project as per the geo-coordinates mentioned in the revised Mining Plan uploaded by the PP **falls** within the potential mining zone recorded in the approved District Survey Report (DSR) of Purba Bardhaman district.
- Based on the presentation and submission made by the PP, the SEAC **recommended** issuance of **Standard Terms of Reference** for EIA preparation for the project with the following additional conditions :-

1) Cluster Certificate from the competent authority

- 2) Taking into consideration the replenishment rates reported in the approved DSR for Purba Bardhaman, both geological and mining reserves for second year (of production) onwards may be re-estimated and the annual production levels may be modified accordingly.
- 3) Drone videography of the entire project area explicitly showing the entire project site along with the existing tree plantation/green belt. Minimum 2 minute video to be submitted.
- 4) Photographs of the site mentioning the geo-coordinates.
- 5) Standard practice of management of the intermediate storage area should be submitted.
- 6) Means of access and egress between the embankment and the sand quarry may be clearly earmarked. The Project Proponent must commit that no hard toping or paving of any haulage route within the riverbed will be attempted.
- 7) A plan on the management and handling of sand during the period of intermediate stockpiling should be submitted.
- 8) The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha within first two years from the starting of the mining operation. A Progressive Greenbelt Plan may be prepared. The project area being entirely on the riverbed, afforestation/ vegetation should be attempted alongside the village roads or other public land. This may be done with prior approval of the local self-governing bodies. If no public land is available for the purpose the Project Proponent shall arrange for land with his personal means. To enhance success/ survival rate the plantation shall be attempted during the first two years of the project life and the plantation so done shall be taken care of during the rest of the project life. Species of the plant selected should be self-sustaining in that particular region. Spatial year wise progressive plantation programme to be submitted.
- 9) Plan showing spatial year wise distribution of the proposed greenbelt has to be submitted along-with supporting documents of administrative approval/s.
- 10) Being a mine in operation, the plantation created so far may be submitted with geotagged photographs.
- 11) EIA should also include detailed study of the baseline condition and impact on aquatic flora and fauna.
- 12) The project cost may include the auction bid value, estimated royalty to be paid, cost of any infrastructure built like office space, stockyard, etc. The calculation/documents to estimate the project cost should be submitted. The planned expenditure for components like need-based activities may be derived based on the project cost.
- 13) A need-based EMP may be prepared in accordance with the MoEF&CC Office Memorandum vide F. No. 22-65/2017.IA.III dated 30.09.2020. Record of communications made in this regard with the identified/ intended beneficiaries (schools/ institutions etc) may also be uploaded. Evidence of the activities already done should be provided by photographs with geo-coordinates. The activities should be completed within the first two years of the project life.
- 14) A study report on base flow level measured at 5 points with date and supporting photographs should be submitted. It should be committed that mining will be done at least 1m above the base flow level. Accordingly, if required, the excavation plan may also be revised.
- 15) Management plan including the final closure plan of haul road to be submitted.
- 16) Sieve analysis report for grain size distribution should be provided.
- 17) Study and protection plan of the aquatic life available both during the mining and non-mining seasons should be provided.

The PP shall upload the EIA/EMP report along with the documents / submissions / clarifications sought above in the PARIVESH portal while applying for environmental clearance.

All the documents should be duly signed both by the project proponent and environmental the consultant.

## 3.12.3. Deliberations by the SEIAA in current meetings

### **INTRODUCTION**

The proponent made online application vide proposal no. **SIA/WB/MIN/476968/2024** dated **07 June 2024** seeking Terms of Reference (ToR) under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. **1(a) Mining of minerals** projects under Category "**B1**" of EIA Notification 2006. SEAC, during its 41<sup>st</sup> meeting held on 19.06.2024 recommended issuance of Standard Terms of Reference for EIA preparation for the project with additional conditions.

## PROJECT DETAILS

The project of Himanshu Santra located is as follows :

S. No.	State	District
(1)	West Bengal	Purba Bardhaman

The salient features of the project submitted by the project proponent are available under online proposal no. SIA/WB/MIN/476968/2024 PARIVESH Portal.

SEIAA considered the recommendation of SEAC and approved ToR with the additional condition that potential impact study in the EIA should be done considering the cumulative effect of all the mines in the cluster situation, if any.

#### 3.12.4. Recommendation of SEIAA

Approved

## **3.12.5. Details of Terms of Reference**

#### 3.12.5.1. Specific

A. STANDARD TERMS OF REFERENCE						
	1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in one year prior to 1994. It may also be categorically informed whether there had been any increase in produc after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.				
1.	2.	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should given.				
	3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one anothe terms of the mine lease area, production levels, waste generation and its management, mining technology etc. should be in the name of the lessee.				
	4.	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposh topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proper area should clearly show the land use and other ecological features of the study area (core and buffer zone).				
	5.	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of area, geomorphology of land forms of the area, existing minerals and mining history of the area, important w bodies, streams and rivers and soil characteristics.				
	6.	Details about the land proposed for mining activities should be given with information as to whether mir conforms to the land use policy of the State; land diversion for mining should have approval from State land board or the concerned authority.				

- 7. It should be clearly stated whether the proponent Company has a well laid down Environment Policy appro by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed opera process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest nor conditions? The hierarchical system or administrative order of the Company to deal with the environme issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of r compliances / violations of environmental norms to the Board of Directors of the Company and/or sharehole or stakeholders at large, may also be detailed in the EIA Report.
- 8. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in a of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should be provided.
- 9. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data containe the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, natio park, migratory routes of fauna, water bodies, human settlements and other ecological features should indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational post operational phases and submitted. Impact, if any, of change of land use should be given.
- 11. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance f mine lease, its land use, R&R issues, if any, should be given.
- 12. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Propor regarding the status of forests, the site may be inspected by the State Forest Department along with the Regio Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- Status of forestry clearance for the broken up area and virgin forestland involved in the Project includ deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of forestry clearance should also be furnished.
- 14. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Fo Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and de furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordin detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elepl Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indica supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- 18. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species c authenticated, separately for core and buffer zone should be furnished based on such primary field survey, cle indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, necessary plan along with budgetary provisions for their conservation should be prepared in consultation v State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing same should be made as part of the project cost.
- 19. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Rar (attracting court restrictions for mining operations), should also be indicated and where so required, cleara certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secu and furnished to the effect that the proposed mining activities could be considered.
- 20. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarca LTL. HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concer Coastal Zone Management Authority).
- 21. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respective SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-w should be undertaken to assess their requirements, and action programmes prepared and submitted according the section of the society in the study area.

integrating the sectorial programmes of line departments of the State Government. It may be clearly brought whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting village(s) including their R&R and socio-economic aspects should be discussed in the Report.

- 22. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon seaso December-February (winter season)]primary baseline data on ambient air quality as per CPCB Notification 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also collected. The location of the monitoring stations should be such as to represent whole of the study area justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There she be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. mineralogical composition of PM10, particularly for free silica, should be given.
- 23. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the are should also take into account the impact of movement of vehicles for transportation of mineral. The details of model used and input parameters used for modeling should be provided. The air quality contours may be sho on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- 24. The water requirement for the Project, its availability and source should be furnished. A detailed water bala should also be provided. Fresh water requirement for the Project should be indicated.
- 25. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project sho be provided.
- 26. Description of water conservation measures proposed to be adopted in the Project should be given. Detail rainwater harvesting proposed in the Project, if any, should be provided.
- 27. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necess safeguard measures, if any required, should be provided.
- 28. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necess data and documentation in this regard may be provided. In case the working will intersect groundwater tabl detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall incl details of the aquifers present and impact of mining activities on these aquifers. Necessary permission f Central Ground Water Authority for working below ground water and for pumping of ground water should be obtained and copy furnished.
- 29. Details of any stream, seasonal or otherwise, passing through the lease area and modification / divers proposed, if any, and the impact of the same on the hydrology should be brought out.
- 30. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and A schematic diagram may also be provided for the same.
- 31. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the lin and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will hav be executed up front on commencement of the Project. Phase-wise plan of plantation and compensa afforestation should be charted clearly indicating the area to be covered under plantation and the species to planted. The details of plantation already done should be given. The plant species selected for green belt sho have greater ecological value and should be of good utility value to the local population with emphasis on le and native species and the species which are tolerant to pollution.
- 32. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck tra as a result of the Project in the present road network (including those outside the Project area) should be wor out, indicating whether it is capable of handling the incremental load. Arrangement for improving infrastructure, if contemplated (including action to be taken by other agencies such as State Government) she be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Cong Guidelines.
- 33. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the Report.
- 34. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and v adequate number of sections) should be given in the EIA report.
- 35. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt in detail. Details of pre-placement medical examination and periodical medical examination schedules should incorporated in the EMP. The project specific occupational health mitigation measures with required facili proposed in the mining area may be detailed.
- 36. Public health implications of the Project and related activities for the population in the impact zone should

systematically evaluated and the proposed remedial measures should be detailed along with budge allocations.

- 37. Measures of socio-economic significance and influence to the local community proposed to be provided by Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time fra for implementation.
- 38. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should interinclude the impacts of change of land use, loss of agricultural and grazing land, if any, occupational he impacts besides other impacts specific to the proposed Project.
- 39. Public Hearing points raised and commitment of the Project Proponent on the same along with time bo Action Plan with budgetary provisions to implement the same should be provided and also incorporated in final EIA/EMP Report of the Project.
- 40. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law aga the Project should be given.
- 41. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of E should be clearly spelt out.
- 42. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 43. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall cle indicate environmental, social, economic, employment potential, etc.
- 44. Besides the above, the below mentioned general points are also to be followed:
  - a. Executive Summary of the EIA/EMP Report (enclosed as Annexure A).
  - b. All documents to be properly referenced with index and continuous page numbering.
  - c. Where data are presented in the Report especially in Tables, the period in which the data were collected and sources should be indicated.
  - d. Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available du appraisal of the Project.
  - e. Where the documents provided are in a language other than English, an English translation should be provid
  - f. The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall be filled and submitted.
  - g. While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants iss by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4<sup>th</sup> August, 2009, which are available on website of this Ministry, should be followed.
  - h. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in struc and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will er conducting the PH again with the revised documentation.
  - As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of complia of the conditions stipulated in the environment clearance for the existing operations of the project, should obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may applicable.
  - j. The EIA report should also include (i) surface plan of the area indicating contours of main topographic featu drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and exte dumps, if any, clearly showing the land features of the adjoining area.

### B. Additional Terms of Reference imposed by SEAC -

1.

- 1. Cluster Certificate from the competent authority.
- 2. Taking into consideration the replenishment rates reported in the approved DSR for Purba Bardhan both geological and mining reserves for second year (of production) onwards may be re-estimated and annual production levels may be modified accordingly.
  - 3. Drone videography of the entire project area explicitly showing the entire project site along with existing tree plantation/green belt. Minimum 2 minute video to be submitted.

- 4. Photographs of the site mentioning the geo-coordinates.
- 5. Standard practice of management of the intermediate storage area should be submitted.

6. Means of access and egress between the embankment and the sand quarry may be clearly earmar The Project Proponent must commit that no hard toping or paving of any haulage route within the river will be attempted.

7. A plan on the management and handling of sand during the period of intermediate stockpiling should submitted.

8. The PP has to do tree plantation in an area equivalent to 33% of the lease area @2500 trees / ha wi first two years from the starting of the mining operation. A Progressive Greenbelt Plan may be prepa The project area being entirely on the riverbed, afforestation/ vegetation should be attempted alongside village roads or other public land. This may be done with prior approval of the local self-governing bod If no public land is available for the purpose the Project Proponent shall arrange for land with his person means. To enhance success/ survival rate the plantation shall be attempted during the first two years of project life and the plantation so done shall be taken care of during the rest of the project life. Species of plant selected should be self-sustaining in that particular region. Spatial year wise progressive planta programme to be submitted.

9. Plan showing spatial year wise distribution of the proposed greenbelt has to be submitted along-v supporting documents of administrative approval/s.

10. Being a mine in operation, the plantation created so far may be submitted with geotagged photograph

11. EIA should also include detailed study of the baseline condition and impact on aquatic flora and faur

12. The project cost may include the auction bid value, estimated royalty to be paid, cost of infrastructure built like office space, stockyard, etc. The calculation/documents to estimate the project should be submitted. The planned expenditure for components like need-based activities may be derivated on the project cost.

13. A need-based EMP may be prepared in accordance with the MoEF&CC Office Memorandum vid No. 22-65/2017.IA.III dated 30.09.2020. Record of communications made in this regard with the identif intended beneficiaries (schools/ institutions etc) may also be uploaded. The activities should be comple within the first two years of the project life.

14. A study report on base flow level measured at 5 points with date and supporting photographs should submitted. It should be committed that mining will be done at least 1m above the base flow le Accordingly, if required, the excavation plan may also be revised.

15. Management plan including the final closure plan of haul road to be submitted.

16. Sieve analysis report for grain size distribution should be provided.

17. Study and protection plan of the aquatic life available both during the mining and non-mining seas should be provided.

While applying for environmental clearance, the PP shall upload in the PARIVESH portal, the EIA/EMP report al with the documents/ submissions/ clarifications sought hereinabove.

The West Bengal Pollution Control Board shall arrange public hearing as per EIA Notification, 2006 on submissio draft EIA/EMP prepared by the Project Proponent as per the above-mentioned ToRs. All the issues mentioned in 'Public Hearing Report' and public consultation must also be addressed and incorporated in the final EIA / EMP rep The project proponent is requested to pursue the matter with the WBPCB for organizing the public hearing/consulta on submission of the draft EIA/EMP report as per the provision of EIA notification 2006 & its amendments. The pro proponent is requested to submit the final EIA/EMP prepared as per the above-mentioned ToRs and incorporating the issues raised during Public Hearing / Public Consultation to the SEAC for further consideration of the proposal environmental clearance.

The ToR is valid for a period of 3 (three) years from the date of issue.

#### Annexure - A

Annexure

#### **Executive Summary** The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the informa on following points: Project name and location (Village, District, State, Industrial Estate (if applicable). 1) Products and capacities. If expansion proposal, then existing products with capacities and reference to earlier E 2) Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative). 3) 4) Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazard wastes. Measures for mitigating the impact on the environment and mode of discharge or disposal. 5) Capital cost of the project, estimated time of completion. 6) Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./private land, st 7) of is acquisition, nearby (in 2-3 km.) water body, population, with in 10km. other industries, forest, eco-sensi zones, accessibility, (note - in case of industrial estate this information may not be necessary). Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fat 8) socio-economic condition of the nearby population. 9) Identification of hazards in handling, processing and storage of hazardous material and safety system provide mitigate the risk. 10) Likely impact of the project on air, water, land, flora-fauna and nearby population. 11) Emergency preparedness plan in case of natural or in plant emergencies. 12) Issues raised during public hearing (if applicable) and response given. 13) Environment Management Plan (EMP) as per Office Memorandum issued by the MoEF & CC vide F. No. 65/2017-IA.III dated 30.09.2020 with proposed expenditure. 14) Occupational Health Measures. 15) Post project monitoring plan. 3.12.5.2. Standard 1( Mining of minerals a) null An EIA-EMP Report shall be prepared for peak capacity (.....MTPA)operation in an ML/project area of.....ha 1. based on the generic structure specified in Appendix III of the EIA Notification, 2006. An EIA-EMP Report would be prepared for peak capacity operation to cover the impacts and environment management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, 1. generation of data on impacts including prediction modeling for..... MTPA of coal production based on approved project/Mining Plan for.....MTPA. Baseline data collection can be for any season (three months) except monsoon.

1. If the washery is located within the mine lease or near to the mine lease its location should be cited seperately also, providing pillar cordinates and site layout plan. Insuch cases cumulative impact of mine operation with washery to be assessed and EMP measure to be drawn to the worst scenario

1. Plan of mechanized transportation of coal to coal washery also for rejects and washed coal to be drawn

1. | Propoer KML file with pin drop and coordinate of mine at 500-1000 m interval be provided

A Study area map of the core zone (project area) and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries, mines, coal washery and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given. The above details to be furnished in tabular form also

1.	Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.				
1.	A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.				
1.	details of catchment	f rivers/ riverlet system a	and its respective orde or rivers. Diversion of	vithin and outside the mine shall r. The map should clearly indica drains/ river need eloboration in	te drainage pattern of the
1.	depth an approved sections also be s	d progressive stage-wise l rated capacity and cale should be included. The	working scheme until ndar plans of producti Progressive mine dev of mine plan and mine	tudy area and the seams to be we the end of mine life should be pr ion from the approved Mining P elopment and Conceptual Final 1 e closure plan approval of Comp	ovided on the basis of the lan. Geological maps and Mine Closure Plan should
1.				e used, etc., rationale for selection al impacts should be provided.	on of specified technology
1.	rivers/wa		igh the ML and adjoir	cural drainage, diversion and chain the lease/project and the im	
1.	quarry an (within a drains/na areas, an	rea, OB dumps, green be and adjacent to the MI atural water bodies to be ad modification of ther	lt, safety zone, buildin , undisturbed area e left undisturbed alon eof in terms of cons	d break-up of the land for minings, infrastructure, CHP, ETP, St- if any, and landscape features ng with any natural drainage ad struction of embankments/bunds najor haul roads, etc should be in-	ockyard, township/colony such as existing roads, joining the lease /project s, proposed diversion/re-
	provided land/fore	as per the tables given estland/grazing land/wate e analyzed. Extent of are	below. Impacts of per bodies falling with	ng land/wasteland/water bodies) project, if any on the land use, in the lease/project and acquire s and under mining rights should	in particular, agricultural ed for mining operations
	S.N	ML/Project Land use	Area under Surface	Area Under Mining Rights(ha)	Area under Both (ha)
1.			Rights(ha)	(ha)	
1.	1	Agricultural land			
	2	Forest Land			
	3	Grazing Land			
	4	Settlements			
	5	Others (specify)			

	S.N.	Details	Area (ha)	
	1	Buildings		
	2	Infrastructure		
	3	Roads		
	4	Others (specify)		
		Total		
1.	discipline clearly sp be given. by Schedu corridor t prepared	. The list of flora a ecifying whether th If the study area has ale-I species, or if th hen a Comprehens	nd fauna dul e study area s endangered he project fall ive Conserva EIA-EMP R	the study area (10km) should be carried out by an institution of relevant y authenticated separately for the core and study area and a statement forms a part of the migratory corridor of any endangered fauna should flora and fauna, or if the area is occasionally visited or used as a habitat s within 15 km of an ecologically sensitive area, or used as a migratory ation Plan along with the appropriate budgetary provision should be eport; and comments/observation from the CWLW of the State Govt.
1.	and heavy season m	y metals such as H et data coinciding y	g, Pb, Cr, As with the same	baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx s, etc), noise, water (surface and groundwater), soil - along with one- e season for AAQ collection period should be provided. The detail of spective laborartory and NABET accreditation of the consultant to be
1.	Map (1: 50, 000 scale) of the study area (core and buffer zone) showing the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources, should be provided. The number and location of the sampling stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Observed values should be provided along with the specified standards.			
1.	For proper baseline air quality assessment, Wind rose pattern in the area should be reviewed and accordingly location of AAMSQ shall be planned by the collection of air quality data by adequate monitoring stations in the downwind areas. Monitoring location for collecting baseline data should cover overall the 10 km buffer zone i.e. dispersed in 10 km buffer area. In case of expansion, the displayed data of CAAQMS and its comparison with the monitoring data to be provided			
1.	on the air increase t	quality with its pro he no. of vehicle al	per measures	ce of habitation in 100 mts distance from both side of road, the impact and plan of action with timeline for widening of road. The project will which will indirectly contribute to carbon emission so what will be the y spell out in EIA/ EMP report.
1.	from the study area the status census da	census data should and what economic of infrastructural fa	be provided is cally project vacilities and a	with actual survey report and a comparative assessment to be provided in EIA/ EMP report also occupational status & economic status of the will contribute should be clearly mention. The study should also include amenities present in the study area and a comparative assessment with with the initialization and quantification of need based survey for CSR
1.				ld also indicate the likely impact of change in forest area for surface vity in relation to the climate change of that area and what will be the
				Page 105

	compensatory measure to be adopted by PP to minimize the impact of forest diversion.
1.	Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower for the mine should be submitted.
1.	Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted. Hydrological studies as per GEC 2015 guidelines to be prepared and submitted
1.	Impact of mining and water abstraction from the mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
1.	Study on land subsidence including modeling for prediction, mitigation/prevention of subsidence, continuous monitoring measures, and safety issues should be carried out.
1.	Detailed water balance should be provided. The break up of water requirement as per different activities in the mining operations, including use of water for sand stowing should be given separately. Source of water for use in mine, sanction of the Competent Authority in the State Govt. and impacts vis-à-vis the competing users should be provided.
1.	PP shall submit design details of all Air Pollution control equipment (APCEs) to be implemented as part of Environment Management Plan vis-à-vis reduction in concentration of emission for each APCEs
1.	PP shall propose to use LNG/CNG based mining machineries and trucks for mining operation and transportation of coal. The measures adopted to conserve energy or use of renewable sources shall be explored
1.	PP to evaluate the green house emission gases from the mine operation/ washery plant and corresponding carbon absorption plan.
1.	PP shall explore the use of vent gases as generated from under ground Mine for use of energy generation/ in house energy consumption
1.	Site specific Impact assessment with its mitigation measures, Risk Assessment and Disaster Preparedness and Management Plan should be provided.
1.	Impact of stowing by using coal washery rejects/ flyash/ bottom ash shall be assessed in term of leachate generation and its characteristics
1.	Impact of choice of mining method, technology, selected use of machinery and impact on air quality, mineral transportation, coal handling & storage/stockyard, etc, Impact of blasting, noise and vibrations should be provided.
1.	Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop etc, management plan for maintenance of HEMM and other machinery/equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
1.	Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP/ Silo into wagons and trucks/tippers.
1.	Details of various facilities to be provided to the workers in terms of parking, rest areas and canteen, and effluents/pollution load resulting from these activities should also be given.
1.	The number and efficiency of mobile/static water jet, Fog cannon sprinkling system along the main mineral

	transportation road inside the mine, approach roads to the mine/stockyard/siding, and also the frequency of their use in impacting air quality should be provided.
1.	Impacts of CHP, if any on air and water quality should be given. A flow chart showing water balance along with the details of zero discharge should be provided.
1.	Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the pre- mining status should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of re-handling (wherever applicable) and backfilling and progressive mine closure and reclamation should be furnished.
1.	Adequate greenbelt nearby areas, coal stock yard and transportaion area of coal shall be provided with details of species selected and survival rate Greenbelt development should be undertaken particularly around the transport route and CHP.
1.	Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
1.	Details of R&R. Detailed project specific R&R Plan with data on the existing socio- economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.
1.	CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
1.	Corporate Environment Responsibility:
1.	a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
1.	b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
1.	c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
1.	d) To have proper checks and balances, the company should have a well laid down system of reporting of non- compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
1.	e) Environment Managament Cell and its responsibilities to be clearly spleel out in EIA/ EMP report
1.	f) In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.
1.	Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.
1.	Status of any litigations/ court cases filed/pending on the project should be provided.
1.	PP shall submit clarification from PCCF that mine does not falls under corridors of any National Park and Wildlife Sanctuary with certified map showing distance of nearest sanctuary.
1.	Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

	Details on	the Fore	st Clearance should be	given as p	er the format g	iven:								
	Total	ML	Total											
	Project	Area	Forest	Date of FC								Date Forest	Balance area for which FC is yet to be obtained	Status of appl For diversion of forest land
1.	(ha)		land (ha)											
			If more than one provide details of each FC											
1.			on of the proposal, the ed in EIA/ EMP report	status of t	the work done	as per mining plan and	approved mine closure							
1.	Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of Public Hearing, the points raised by the general public and commitments made by the proponent and the time bound action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.													
1.	PP shall carry out survey through drone highlighting the ground reality for atleast 10 minutes													
1.	Detailed Chronology of the project starting from the first lease deed alloted/Block allotment/ Land acquired to its No. of renewals, CTO /CTE with details of no. renewals, previous EC(s) granted details and its compliance details, NOC details from various Govt bodies like Forest NOC(s), CGWA permissions, Power permissions, etc as per the requisites respectively to be furnished in tabular form.													
1.	A copy of application submitted for 5 star rating system to Ministry of coal for expansion cases may be provided. Certificate /rating given to project shall be provided with EIA-EMP report													
1.	The first page of the EIA/ EMP report must mention the peak capacity production, area, detail of PP, Consultant (NABET acrreditation) and Laboratory (NABL / MoEF & CC certification)													
1.	1		1 1	~	1	hapter section and page IA-EMP report in all the								
1.	Potential i cluster situ	-	•	lld be don	e considering	the cumulative effect of	of all the mines in the							

# 3.13. Agenda Item No 13:

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# **3.13.1. Details of the proposal**

Residential Building by Arrjavv Builder Pvt. Ltd. by ARRJAVV BUILDER PRIVATE LIMITED locat LKATA,WEST BENGAL			VATE LIMITED located at KO	
Proposal For		Fresh EC		
Proposal No	File No	Submission Date	Activity (Schedule Item)	
SIA/WB/INFRA2/465150/2024	2N-62/2024(E)	07/03/2024	Building / Construction (8(a))	

## Date of SEIAA 1 :21/06/2024 Deliberations of SEIAA 1 :

# **INTRODUCTION**

The proponent made online application vide proposal no. SIA/WB/INFRA2/465150/2024 dated 07 March 2024 seeking environment clearance under the provisions of the EIA Notification, 2006 for the above-mentioned project. The proponent applied under SL. No. 8(a) Building / Construction projects under Category "B2" of EIA Notification 2006.

SEAC, during its 38<sup>th</sup> meeting held on 18.05.2024, recommended the proposed project for Environmental Clearance. **PROJECT DETAILS** 

The project of M/s. Arrjavv Builder Pvt. Ltd located is as follows :

S. No.	State	District
(1.)	West Bengal	Kolkata

The salient features of the project submitted by the project proponent are available under online proposal no. SIA/WB/INFRA2/465150/2024 in PARIVESH Portal.

SEIAA considered the recommendation of SEAC and decided to seek clarification over approved plantation plan from the Divisional Forest Officer, Forest Utilisation Division.

#### Date of SEAC 2 :18/05/2024 Deliberations of SEAC 2 :

• The SEAC scrutinized the documents submitted by the PP in the 38<sup>th</sup> meeting of SEAC, WB (2023-2026) held on 18.05.2024. After careful consideration and detailed deliberation, the committee **recommended the proposed project for Environmental Clearance**.

## Date of SEAC 3 :20/03/2024

#### **Deliberations of SEAC 3 :**

Based on the application made, documents uploaded / submitted, and the presentation made by the PP/Consultant, the SEAC made the following observations:

#### **Mandatory Documents**

1) The sanctioned land use statement has not been uploaded in the portal. Necessary documents should be submitted.

## Greenbelt

2) Tree felling permission from DFO should be submitted.

- 3) The PP should submit a revised plantation plan showing the number of trees, name of species and trees retained and relocated by the PP in the project area. The trees retained and relocated should be marked with double yellow rings and white rings respectively. Mandatory plantation, compensatory plantation for the felled trees and lawn area should be demarcated. The additional trees to be planted for the trees felled for the building construction should be indicated.
- 4) The retained trees should be protected from mechanical injury and soil compaction during construction activities by providing a physical barrier around the trees. Trenching for underground utilities should avoid tree roots and be routed around trees to prevent severing of roots and damage to the tree.
- 5) The glass façade or window, if any, should be bird-friendly.

The SEAC recommended that the above documents may be submitted in the PARIVESH portal for further consideration of the application.

## All the documents should be duly signed both by the project proponent and the environmental consultant.

The SEAC will further consider the case on submission of satisfactory reply on the above-mentioned queries only through "PARIVESH" portal.

#### 3.13.3. Deliberations by the SEIAA in current meetings

The proposal was placed before SEIAA in its 43<sup>rd</sup> meeting held on 21.06.2024. During the meeting, SEIAA considered the recommendation of SEAC and decided to seek clarification over approved plantation plan from the Divisional Forest Officer, Forest Utilisation Division. It was communicated accordingly to the concerned authority on 01.07.2024. **SEIAA considered the recommendation of SEAC and approved the EC based on the KMC Building Permit No.** 2023070217 dated 12.02.2024 with the following additional conditions –

- 1. At least 10% of the total parking capacity to be provided with electrical charging points for e-vehicles.
- 2. The designated tree plantation area in the DFO approved plan should be used exclusively for tree plantation only, not for any other purpose. Additional number of trees may be planted in the north side of the building. Entire plantation area should be demarcated by vegetative fencing.
- 3. PP should ensure proper insulation to prevent heating of the water in overhead water tank and distribution pipe.

#### **3.13.4. Recommendation of SEIAA**

Approved

## **3.13.5. Details of Environment Conditions**

#### 3.13.5.1. Specific

N/A

## 3.13.5.2. Standard

8( a)	Building / Construction
Stat	tutory compliance
1.	The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
1.	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.
1.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
1.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
1.	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.
1.	The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for

	the project from the competent authority.
1.	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
1.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
1.	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.
1.	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
Air	quality monitoring and preservation
1.	Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
1.	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
1.	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 PM2.5) covering upwind and downwind directions during the construction period.
1.	Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
1.	Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
1.	Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
1.	Wet jet shall be provided for grinding and stone cutting.
1.	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
1.	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Management Rules 2016.
1.	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
1.	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

1.	For indoor air quality the ventilation provisions as per National Building Code of India.	
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# Water quality monitoring and preservation

1. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.

- 1. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- 1. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
- The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- 1. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- 1. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- 1. Use of water saving devices/fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- 1. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- 1. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

1. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.

1. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

- 1. All recharge should be limited to shallow aquifer.
- 1. No ground water shall be used during construction phase of the project.
- Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines
   of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.

1.	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
1.	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
1.	No sewage or untreated effluent water would be discharged through storm water drains.
1.	Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
1.	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
1.	Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
Noi	se monitoring and prevention
1.	Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
1.	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
1.	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
Ene	ergy Conservation measures
1.	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
1.	Outdoor and common area lighting shall be LED.
1.	Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
1.	Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
1.	Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
1.	Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter

	shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
1.	PP should ensure proper insulation to prevent heating of the water in overhead water tank and distribution pipe.
Wa	ste Management
1.	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
1.	Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
1.	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
1.	Organic waste compost/Vermiculture pit/Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
1.	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
1.	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
1.	Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
1.	Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
1.	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Waste Management Rules, 2016.
1.	Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
Gre	en Cover
1.	No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
1.	A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
1.	Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations

	to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.			
1.	Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.			
1.	The designated tree plantation area in the DFO approved plan should be used exclusively for tree plantation only, not for any other purpose. Additional number of trees may be planted in the north side of the building. Entire plantation area should be demarcated by vegetative fencing.			
Tra	nsport			
1.	A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria. a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic. b. Traffic calming measures. c. Proper design of entry and exit points. d. Parking norms as per local regulation.			
1.	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.			
1.	At least 10% of the total parking capacity to be provided with electrical charging points for e-vehicles.			
null				
1.	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.			
Hui	nan health issues			
1.	All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.			
1.	For indoor air quality the ventilation provisions as per National Building Code of India.			
1.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.			
1.	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, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.			
1.	Occupational health surveillance of the workers shall be done on a regular basis.			
1.	A First Aid Room shall be provided in the project both during construction and operations of the project.			
Mis	Miscellaneous			
1.	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of			

	which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
1.	ii. 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.
1.	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.
1.	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.
1.	The company shall have a well laid down environmental policy duly approved 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.
1.	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 report to the head of the organization.
1.	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
1.	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.
1.	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
1.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
1.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP reportand also that during their presentation to the Expert Appraisal Committee.
1.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).
1.	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.
1.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
1.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
1.	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.
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,

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.

1. 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.

Specific Conditions				
1.	Recommendations of mitigation measures from possible accident shall be implemented based on Risk Assessment studies conducted for worst case scenarios using latest techniques.			

# 4. Any Other Item(s)

N/A

## 5. List of Attendees

Sr. No.	Name	Designation	Email ID	Remarks
1	Shri Dharmdeo Rai IFS	Member Secretary, SEIAA	env******@gmail.com	
2	Dr Ashit Kumar Mukherjee	Chairman, SEIAA	ash*******@yahoo.com	
3	Dr Nilangshu Bhusan Basu	SEIAA Member	nb.*******@gmail.com	

