

The 501th meeting of the State Expert Appraisal Committee (SEAC) was held on 29th June, 2021 under the Chairmanship of Dr. Praveen Chandra Dubey for the projects / issues received from SEIAA. Following members attended the meeting in person or through video conferencing -

1. Shri Raghvendra Shrivastava, Member.
2. Prof. (Dr.) Rubina Chaudhary, Member.
3. Dr. A. K. Sharma, Member.
4. Prof. (Dr.) Anil Prakash, Member.
5. Dr. Jai Prakash Shukla, Member.
6. Dr. Ravi Bihari Srivastava, Member.
7. Shri A.A. Mishra, Member Secretary.

The Chairman welcomed all the members of the newly constituted State Expert Appraisal Committee. After formal introduction of committee members agenda items were taken up for deliberations.

1. **Case No 8553/2021 M/s Visag Biofuels Pvt. Ltd, Kalptaru Mall (Shree Ji), Maahaveer Chowk, Dist. Balaghat, MP – 481001 Prior Environment Clearance for Grain Based Fuel Ethanol Unit of 195 KLD, 4.0 MW Co-generation Power Plant , By Product : 150 TPD of CO₂ & Recoverable @75 TPD Generation & 112.08 TPD of DDGS, Total Land - 12.745 Ha at Khasra no. 167, Village - Devri, Tehsil & Dist. Balaghat (MP).**

This is case of Prior Environment Clearance for Base fuel ethanol unit of 195 KLD, 4.0 MW Co-generation power plant, By product : 150 TPD of CO₂ & Recoverable @75 TPD Generation & 112.08 TPD of DDGS, Total Land - 12.745 Ha at Khasra no. 167, Village - Devri, Tehsil & Dist. Balaghat (MP).

The case was presented by PP and their consultant before the committee wherein following details were provided through presentation:

- M/s Visag Biofuel Pvt. Limited has proposed grain based 195 KLD of fuel ethanol unit with cogeneration of power (4.0 MW) at Village Devri Tehsil & Dist Balaghat MP.
- The by product is identified as CO₂ -150 TPD (Recoverable @ 50% of total generated), DDGS- 112.08 TPD from the proposed unit.
- Copy of request submitted to WRD, Bhopal seeking permission for drawl of water. The water abstraction is proposed from Ghirsi River.

- Copy of online NOC issued by Office of DFO, Balaghat.
- Copy of Land allotment letter dated 06/04/21 issued by MPIDCL, Bhopal.
- Copy of letter dated 06/04/21 issued by EE, PWD, Balaghat for distance from interstate boundary.
- Copy of P-II from.
- Proposed layout of the unit.
- P.F.R. of the project.

PP submitted that they have submitted notarized affidavit dated 17/06/21 that proposal is for manufacturing fuel ethanol only for the purpose of “Ethanol Blending Programme” (EBP) and will be “Zero Liquid Discharge”, as per the condition given in the gazette notification SO 2339 dated 16th June 2021 Hence submitted the proposal under B-2 Category.

Salient Features of the Project:

| Features | Proposed |
|--|---|
| Site Address | Khasar no 167, Village Devri, Tehsil & Dist Balaghat (MP) |
| Proposed Production Capacity | 195 KLD fuel Ethanol Unit |
| Cost Of Project | Rs. 169 Crores |
| Grain Requirement | 446 MT (approx. 450 MT per day) |
| Boiler Capacity At MCR (100% Load) | 40TPH |
| Boiler capacity at MCR (100% Load) | 49 TPH |
| Steam Requirement | 34 TPH @ 3.5 kg/cm2(g) |
| Fuel | 325 TPD as rice husk |
| Total Water Requirement | 3234 KLD |
| Total Fresh water Requirement | 1200 KLD (6.1 KL per KL of Alcohol) |
| Spent Wash Generation | 1260TPD |
| Power Requirement | 4000 KWhr |
| Capital Cost for Environmental measures | Rs 3179 Lacs |
| Recurring cost for environmental Management (Proposed) | Rs 106 Lacs |

| | |
|--------------------------------------|------------------|
| Alternative Source of Power | DG set of 750KVA |
| Land acquired | 12.745 Ha |
| Land required for plant and building | 6.00 Ha |
| Proposed area for plantation | 4.50 Ha |
| Direct Employment Generation | 67 + 95 |

During presentation as per the Google image based on coordinates provided by PP, it was observed that some trees are in existence within the project boundary on the southern side for which PP submitted that area occupied by trees is left as green area in the proposed layout. PP further submitted that various units are designed in such a way that existing trees will not be uprooted. Further, the proposed site is surrounded by a natural stream from the eastern and southern side for which PP submitted that 200 m area is left as green area from all sides as barrier zone. For habitations on the north, north-east and western side of the proposed unit, PP submitted that 300 meters area is left as no development area. Committee during discussion recommends that the area which is towards natural stream and habitation, dense plantation of native species shall be carried out using preferably by “Miyawaki Technique”, in consultation and executed by concerned DFO. Committee further suggested that before onset of monsoon season, local fruit bearing tree saplings (such as Bel, Harra, Bahera, Amla, Nimbu, Kathal, Mango etc) shall be distributed in nearby villagers to promote plantation from social forestry nursery /Government Horticulture nursery.

During presentation, PP submitted that excess steam will be used for power generation and 50% of CO₂ shall be scrubbed, collected in closed vessels and will be sold out. Committee after deliberations recommends that no volume of CO₂ shall be release in the environment and 100% CO₂ shall be scrubbed, collected in closed vessels and will be sold out. The generated ash shall be disposed for tiles and paver block making. To avoid fugitive emission, no land filling in nearby low lying area is permitted. After presentation committee asked PP to submit following additional information:

1. Revised plantation scheme as suggested by committee.
2. Provisions proposed for Odor management.
3. Distance of river & habitation from main plant and from treatment system.

PP Vide letter dated 29.6.2021 submitted query reply. The presentation and other submissions made by the PP were found to be satisfactory and acceptable hence the case was recommended for grant of Prior Environment Clearance for Grain Based Fuel Ethanol 195 KLD, 4.0 MW Co-generation Power Plant, By Product: 150 TPD of Recoverable CO₂ & 112.08 TPD of DDGS on 12.745 Ha land at Khasra no. 167, Village -Devri, Tehsil & Dist. Balaghat (MP), subject to the following special & general conditions:

A. Project Specific Conditions

- i. Fermentation system shall be based on SSF (Simultaneous Saccharification and Fermentation) Technology and Distillation Plant shall be based on Multi-Pressure Distillation Technology operating on fully automated PLC control system.
- ii. Drier shall be provided to get dry Distillery Distilled Grain Soluble (DDGS).
- iii. 100% CO₂ shall be trapped, stored and utilized appropriately.
- iv. For one KL of fuel ethanol production, maximum water requirement shall not exceed 6.50 KL and spent wash shall not exceed 7.00 KL.

1. Air quality monitoring and preservation

- i. Adequate numbers of Bag filters (pulse jet type)/ESP shall be provided in boiler (cap. 40TPH) stack to meet the emission norms 50 mg/Nm³. Appropriate APC system shall also be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed fugitive emission standards by MP Pollution Control Board.
- ii. The gaseous emissions shall be dispersed through stack of adequate height (minimum 30 meters) as per CPCB/SPCB guidelines. Stack height shall be tested for emission of PM and SO₂ and height shall be kept maximum.
- iii. The project proponent shall install 24×7 continuous real time emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed by M P Pollution Control Board. Continuous Emission Monitoring System shall be connected to the online servers of “Environmental Surveillance Centre”, MPPCB, Bhopal and CPCB and shall be calibrated as per the specified norms.

- iv. The project proponent shall carryout ambient air quality monitoring for relevant parameters within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions with respect to standards prescribed by M P Pollution Control Board and as prescribed in National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009.
- v. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable).
- vi. The DG sets (750 KVA) shall be equipped with acoustic enclosures & muffles and the adequate stack height as per CPCB norms so that the emissions are in conformity with the extant regulations and the guidelines in this regard.
- vii. Storage of raw materials, coal, fly ash etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- viii. All the internal roads shall be made pucca to avoid fugitive emission.
- xi. For odour management, Ecosorb shall be used and storage area shall be made ventilated.

2. Water quality monitoring and preservation

- i. For online continuous monitoring of influent and effluent, the unit shall install PTZ web based camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises and same shall be connected to “Environmental Surveillance Centre”, MPPCB, Bhopal and CPCB online servers.
- ii. Zero Liquid Discharge shall be ensured through Dryer (1200 kg/hr.), MEE (cap. 41 m³/hr), CPU (cap. 25m³/hr) and RO (cap. 25m³/hr) and no waste/treated water shall be discharged outside the premises. DM plant shall be provided only after RO unit.

- iii. The waste water generated from utilities like cooling bleed, Boiler blow down etc shall also be taken to ZLD system and no discharge of such water shall be allowed.
- iv. Process effluent/any wastewater shall not be allowed to mix with storm water. Catch drain connected to settling tanks of suitable size all around the working shed shall be provided and the collected discharge shall be treated in MEE & dryer.
- v. Similarly, another catch drain connected to settling tanks of suitable size (considering maximum rainfall in the area) shall be provided all around the factory premises as secondary containment system and the collected discharge shall be treated in MEE & dryer. Khus slips shall be planted along drain.
- vi. Total fresh water requirement shall not exceed 1200 KLD. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- vii. The effluent shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the MP Pollution Control Board while granting Consent under the Water (P & C) Act, 1974 whichever is more stringent.

3. Waste management

- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- ii. DDGS shall be stored and disposed off as per the submitted proposal. In any case DWGS shall not be disposed off and stored in premises.
- iii. All hazardous wastes shall be stored in covered shed as per CPCB guidelines and disposed off as per authorization issued by MP Pollution Control Board.
- iv. The boiler ash shall be stored in accordance with fly ash notification and disposed off for tiles and paver block making.
- v. The company shall undertake waste minimization measures as below:-
 - a. Metering and control of quantities of active ingredients to minimize waste.

- b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
- c. Use of automated filling to minimize spillage.
- d. Use of Close Feed system into batch reactors.
- e. Venting equipment through vapour recovery system.
- f. Use of high pressure hoses for equipment clearing to reduce wastewater generation.

4. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

5. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area (4.50 ha. which is 35.31% of total area) with a 9000 native tree species in accordance with CPCB guidelines.
- ii. As proposed by PP, thick greenbelt of native species shall be provided inter alia covering the entire periphery of the plant using “Miyawaki Technique”, in consultation with concerned DFO/ CCF, Research & Extension Circle, Bhopal / Jabalpur or WALMI, Bhopal.
- iii. No tree falling is permitted within plant premises.
- iv. Khus Grass shall be planted along the Ghirsi River and other nearby tributaries.

B. General Conditions

1. Statutory compliance

- i. 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.

- ii. The project proponent shall obtain clearance from the National Board for Wildlife. (if applicable)
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (In-case of the presence of schedule-I species in the study area)
- v. 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 M.P. Pollution Control Board.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time from the M.P. Pollution Control Board.
- vii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- viii. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of MPPCB and “Environmental Surveillance Centre”, MPPCB, Bhopal along with six-monthly monitoring report.

2. Energy Conservation measures

The energy sources for lighting purposes shall preferably be LED based.

3. Safety and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- iv. 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.
- v. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vi. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

4. EMP & Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM no. 22-65/2017/IA-III dated 30.09.2020, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms

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

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP (Rs. 3179.05 Lakhs as capital & Rs. 105.83 lakhs as recurring) has proposed.
- v. 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.
- vi. Under CER programme, concerned DFO shall also be consulted for any tree planting activity like native densification of trees within plant premises or selection of native plant species etc.
- vii. All social activities conducted under CER shall be displayed on the company's website with three months interval and updated regurly.
- viii. CER activities in forest villages and project adjoining areas shall be conducted and executed by State Forest Department.
- ix. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

5. Miscellaneous

- i. The project proponent shall monitor the criteria pollutants level namely; PM10, SO₂ , NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- ii. 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.

- iv. The project authorities must strictly adhere to the stipulations made by the MP Pollution Control Board and the State Government.
- v. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the Expert Appraisal Committee.
- vi. 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).
- vii. 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.

2. Case No 8528/2021 Shri Swapan Vishwas, Village - Aamdoh, Tehsil - Ghoradongri, Dist. Betul, MP Amendment in Prior Environment Clearance for Stone Quarry in an area of 2.725 ha. (6750 cum per annum) (Khasra No. 524, 527), Village - Aamdoh, Tehsil - Ghoradongri, Dist. Betul (MP)

This is case of Stone Quarry. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site at (Khasra No. 524, 527), Village - Aamdoh, Tehsil - Ghoradongri, Dist. Betul (MP) 2.725 Ha. The project requires prior EC before commencement of any activity at site.

Vide SEIAA's letter no. 1221/SEIAA/2021 dated 18.06.2021, this case file was send to SEAC for appraisal in 674 SEIAA meeting dated 07.04.2021 and it was recorded that :-

“PP has applied in Form 4 on Parivesh portal for amendment in EC condition no. 10 as issued by DEIAA Betul ,vide letter No. 65 dated 5/10/2016 (Case No. 32/16). After

detailed discussion, it is decided the case may be sent to SEIAA for examination in modification of EC condition no. 10 as requested by PP.”

The case was presented by PP wherein PP submitted that previously DEIAA, Betul Vide letter No. 65 dated 5/10/2016 (Case No. 32/16) has issued EC for 6750 Cum/Year of Stone in an area of 2.725 ha. at Khasra No. 524, 527. However at the time of EC from DEIAA, PP could not obtained NOC for dam authority and thus DEIAA restricted the mining operations through “Rock breaker” without blasting.

During presentation, PP presented various documents such as lease sanction order, Gram Sabha/Gram Panchyat NOC, DFO NOC, Tehsildar Certificate, MO Certificate, Approved Mine Plan, Khasra Panchshala, P-II, DSR, EMP & PFR for appraisal of project before the committee. It was observed by Committee that as per MO letter NIL dated NIL no more mines operating or proposed within 500 meters around the said mine. PP further submitted that:

- ✓ Previously DEIAA, Betul Vide letter No. 65 dated 5/10/16 (Case No. 32/16) has issued EC for 6750 Cum/Year of Stone in an area of 2.725 ha. at Khasra No. 524, 527 with a condition that mining shall be carried out only through rock breaker due to existence of a irrigation dam at a distance of 130 meters.
- ✓ However at the time of EC from DEIAA, PP could not obtained NOC for dam authority and thus DEIAA restricted the mining operations through “Rock breaker” without blasting.
- ✓ As per the local geology (Basalt), the mining is not possible with rock breaker and thus we are unable to meet the targeted production.
- ✓ We have recently obtained NOC from EE, WRD, Betul vide letter no. 578 dated 25/2/21 wherein authority has permitted for mining with Control Blasting opposite site of dam with less number of blasting holes.
- ✓ The dam is 130 meters away from the lease and as per MMR,1996 the minimum criteria is 100 meters.
- ✓ Since our production is only 6750 Cum/Year i.e. daily production will be 22.50 Cum hence we can implement the suggestion of EE, WRD to carryout mining with blasting.
- ✓ Now, the frequency of blasting will be once in a week with controlled muffle blasting.

- ✓ 34 mm dia hole will be used with reduced depth of 1.5 meters (depth of hole) to reduce the impact of vibration.
- ✓ As per the Standard, for safety of structures from threshold damage, the ground peak particle velocity should not exceed 2.0 mm/sec for Stone. In this case the PPV at a distance of 70 meters is 1.81 mm/sec which is safe.
- ✓ Additionally, we will take-up three rows plantation towards the dam site.

PP submitted that since the production is only 6750 Cum/year i.e. daily production will be 22.50 Cum/Year, the frequency of blasting will be reduced to once in a week with single row muffle controlled blasting and the number of hole/blast will be 30 in nos.

After presentation the committee asked PP to submit following details:

1. Revised plantation scheme as suggested by committee.
2. PP commitment that blasting shall be conducted only during day time.

PP vide letter dated 29.6.2021 submitted query reply wherein PP has proposed to carry out 3300 plantations and budgetary allocations in EMP. (Capital Rs. 3.93 lakhs & Recurring Rs. 3.20 lakhs). After deliberation, committee recommends that since PP has obtained permission from EE, WRD, Betul (wherein concerned department /authority has permitted for mining with Control Blasting and less number of blasting holes) hence case is recommended for amendment in EC condition to carryout stone quarry mining with control blasting technique in an area of 2.725 ha., at Khasra No. 524, 527 for 6,750 cum per annum production in Village - Aamdoh, Tehsil - Ghoradongri, Dist. Betul (MP). Other conditions of EC issued by DEIAA Vide letter No. 65 dated 5/10/2016 shall remain unchanged. All social activities conducted under CER shall be displayed on the company's website with three months interval and updated regularly.

3. **Case No 8554/2021 M/s. Oil and Natural Gas Corporation Ltd, Shri Rajesh Sharma, Chief General Manager, I/C HSE, Frontier Basins, ONGC, Ganga Building, IDT Campus, Kaulagarh Road, Dist. Dehradun, Uttarakhand. Prior Environment Clearance for Exploratory Drilling (5 wells) in NELP-VIII Block, VN-ONN/209/3, Dist. Damoh (MP) Category: 1(b) Offshore and Onshore and gas exploration, development & production Project.**

This is case of Prior Environment Clearance for proposed oil and gas exploration, development & production (off-shore and onshore) in "Oil & Gas Exploratory Drilling (5 wells) in NELP-VIII Block, VN-ONN/209/3, Vindhyan Basin, Dist. Damoh Madhya Pradesh, on behalf of Frontier Basins, ONGC, Dehradun (Uttarakhand).

The case was scheduled for the presentation but neither the Project Proponent (PP) nor his representative was present to explain the query which might be raised or to make any commitment which may be desired by the committee during the deliberation. Committee decided to call the PP in subsequent meetings.

4. **Case No 6996/2020 Executive Engineer, Narmada Development Div. No. 28, Punasa, Dist. Khandwa, MP Prior Environment Clearance for ISP - Parwati Micro Lift Irrigation Scheme , Phase III & IV(Pipeline), Division Dewas , , CCA - 1,00,100 ha., and benefit 221 villages of District Sehore, (Tehsil Astha, Ichhawar, Sehore & Shyampur) District Shajapur (Tehsil Kalapipal & Shujalpur) and District Bhopal (Tehsil Bhopal & Huzur).Category: 1(c) River Valley and Hydroelectric Projects.**

This is case of ISP - Parwati Phase III & IV - Lift Micro Irrigation Project. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site at Village - Dhamapuri, Tehsil - Ichhawar, Dist. Sehore and Tehsil - Shujalpur, Dist. Shajapur (MP) Category: 1(c) River Valley Project. The project requires prior EC before commencement of any activity at site.

Earlier this case was scheduled for presentation in 432nd SEAC dated 18/5/2020 ToR was recommended and same was issued on 17-06-20 which was valid till 17-05-24.

PP on line letter dated 21.012021 has requested for modification in issued TOR. SEIAA forwarded PP's online application vide their letter no. 5848 dated 25/01/2021. regarding TOR modification to SEAC. Wherein PP submitted that after detailed survey /DPR the proposed scheme was further revised so CCA area would be now 1,00,100 ha. and by this scheme benefit 221 villages of Sehore, Shajapur and Bhopal districts instead of 207 villages of Sehore, Shajapur districts as planned earlier. Hence, after deliberation the committee has recommended Revised TOR in 478 SEAC meeting dated 01-02-21 with comment that remaining conditions for ToR shall be same as recommended in 432nd SEAC meeting dated 18/05/2020.

PP has submitted the EIA report vide letter dated 14.06.2021 which was forwarded through SEIAA vide letter no. 1282 dated 25.06.2021.

The EIA was presented by PP and their consultant wherein the PP presented following salient features of the project.

- The proposed project, ISP Parwati Phase III & IV Micro Lift Irrigation Scheme, is a Government of Madhya Pradesh lift irrigation project to provide irrigation water to 1,00,100 ha. of Culturable Command Area (CCA).
- Water will be lifted from ISP reservoir to irrigate a total of 1,00,100 ha of CCA on both side of Parwati river covering 221 villages of 8 Tehsil of Sehore, Shajapur & Bhopal districts.
- Scoping Clearance was accorded by SEAC vide letter No. 264/PS-MS/MPPCB/SEAC/432/2020 dated 17/06/2020 for 100000 ha CCA; Scoping Clearance was amended for 100100 ha CCA vide letter No. 159/PS-MS/MPPCB/SEAC/TOR (478)/2021 dated 16/02/2021.
- Study was conducted during February, March & August 2020; Public Hearings were conducted on 27th March 2021, 30th March 2021, 31st March 2021 & 1st April 2021 in districts Dewas, Shajapur, Bhopal & Sehore, MP respectively.
- The scheme is designed to lift 32.04 cumec of water from existing Indira Sagar Project reservoir in 5 stages by using 5 pumps houses through various combinations of twin line rising mains and gravity mains followed by distribution.
- Water will be distributed to command area up to 2.5 ha chak outlets by joining Rising mains and Gravity mains to the primary and secondary distribution networks.
- The scheme will benefit 221 villages of 8 tehsils of Sehore, Shajapur & Bhopal districts.

| District | Tehsil | No. of Villages |
|---------------------|------------------|------------------------|
| Sehore | Astha | 1 |
| | Icchawar | 38 |
| | Sehore | 107 |
| | Shyampur | 2 |
| Total Sehore | | 148 |
| Shajapur | Kalapipal | 62 |
| | Shujalpur | 4 |

| | | |
|-----------------------|---------------|------------|
| Total Shajapur | | 66 |
| Bhopal | Bhopal | 4 |
| | Hazur | 3 |
| Total Bhopal | | 7 |
| Grand Total | | 221 |

The Project consists of following Components:

- Pump Houses (5 nos.) , Distribution Chambers (2 nos.) , Sub station
 - 132/11 KV Transmission line
 - Gravity main (2 nos.) – Main line
 - Rising main (5 nos.) - MS pipeline
 - Branch mains (MS/DI/HDPE) up to 20 ha Chak
 - Distribution Network (HDPE) from 20 ha chak to 2.5 ha chak
- Flow & Pres

| | | |
|----------|--|---|
| 1 | Name of the Project | ISP Parwati Phase-III & IV Micro Lift Irrigation Scheme |
| 2 | Type of Project | Lift Irrigation Project |
| 3 | Location | |
| | i) Supply Source | In Dewas district Indira Sagar Reservoir |
| | ii) Lifting Point | Indira Sagar Reservoir in Dewas District, near Village Fategarh |
| | iii) Feeder Reservoir | Proposed Junction Structure near Village Singarchori in Ashta tehsil, District Sehore |
| | iv) Command | In Sehore, Shajapur & Bhopal districts |
| 4 | Access to the Project | |
| | i) Nearest Airport | Devi Ahilya Airport Indore (M.P.) |
| | ii) Nearest Rail Head | Harda, 120 Km from Indira Sagar Project |
| 5 | Interstate Aspects | |
| | i) State/country wise details of catchment | Not applicable |
| | ii) Submergence due to Project | No submergence due to project, as it is a lift scheme |
| | iii) Water Allocation for the State | The quantum of water being lifted for this project is included in the water share of MP as per NWDT award |
| | iv) Water Allocation for other states | Not applicable |
| | | |

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|----|-----------------------------------|---|
| 6. | Estimated life of the project | 50 Years |
| 7 | Irrigation (ha.) | |
| | (a) Gross command area (GCA) | 1,72,000 ha |
| | (b) Culturable command area (CCA) | 1,00,100 ha |
| | (c) Irrigation Period | Rabi – 100% |
| 8 | Total Discharge (cumec) | 32.04 |
| 9 | Annual Utilization (MCM) | 332.2 |
| 10 | Power Requirement (MW) | 144.994 |
| 11 | Rising Main/Distribution System | Piped - MS/DI/HDPE |
| 12 | Cost of the project | 4131.66 Crores |
| 13 | B.C. Ratio | 1.70 |
| 14 | Protected Areas (PA) in vicinity | nearest PA is Kheoni WLS – 5.7 Km |
| | | ESZ notification is issued, which is 2 km from PA |
| | | |

Permanent Land Requirement

- Permanent land would be required for the construction of pumping stations, Delivery chamber as valve chambers, switch yards and laying of rising main, gravity main, electrical lines.
- Total permanent land requirement has been worked out as 101.28 ha out of which 7.52 ha would be met by Private land, 5.30 ha by Government land and 88.452 ha by forest land.
- Proposal for diversion of 88.452 ha of forest land has been submitted vide reference no. FP/MP/IRRIG/45598/2020.

Land for Transmission Lines

132 kv & 33 kv power lines will be brought from Icchawar substation to pump houses, total length of the 132kv & 33 kv transmission lines are worked out as about 70.5 km. 3.75 Ha of forest land shall be acquired for laying of electrical transmission line.

Temporary Land for Lying of Pipeline

The pipe shall be laid 1.20 m below average ground level and land will be restored immediately on completion of the work. Wherever, the pipeline/ transmission line will be pass through private land, temporary land acquisition will be done as per the applicable law. Total temporary land requirement is worked out as 4119.624 Ha.

During presentation PP stated that in total permanent land requirement has been worked out as 101.28 ha out of which 7.52 ha would be met by Private land, 5.30 ha by Government land and 88.452 ha by forest land and proposal for diversion of 88.452 ha of forest land has been submitted vide reference no. FP/MP/IRRIG/45598/2020. PP also submitted that project is 5.70 kms away from the Kheoni WL Sanctuary and as per CCF, Bhopal letter no. 999 dated 08/06/21 the project is > 2.00 kms away from the notified ESZ of Kheoni WL Sanctuary.

For forest clearance, PP quoted MoEF&CC OM dated 19th March 2013 stating that to avoid delays in execution of linear projects such as roads, transmission lines, pipelines etc. passing partially through forest land following provisions are made:

“OM delinks environment clearance with stage I forest clearance by partially modifying earlier OM dated 09/09/2011 and allows environment clearance to linear projects such as roads, transmission lines, pipelines etc., subject to the following additional conditions:

- i. *Work on non-forest land may only be executed up to such point (to be selected by the user agency) on either side of forest land if it is explicitly certified by the user agency that in case approval under the Forest (Conservation) Act, 1980 for diversion of forest land is declined, it is technically feasible to execute the project along an alternate alignment without involving diversion of forest land.*
- ii. *Commencement of work on non-forest land will not confer any right on the user agency with regard to grant of approval under the Forest (Conservation) Act, 1980.”*

PP submitted that they have also worked out alternate route as per OM dated 19/03/13 avoiding forest area in case FC is denied and submitting a notified affidavit dated 28th June, 2021 with alternate route plan.

After detail discussion, committee has asked the PP to submit the following information:

- Copy of proposal submitted to ministry for diversion of 88.452 ha. of forest land along with an affidavit w.r.t. MoEF&CC's OM dated 19th March 2013, to linear projects such as roads, transmission lines, pipelines etc. passing partially through forest land.
- Copy of CCF, Bhopal letter no. 999 dated 08/06/21.
- An alternate route marked on map along route of Parwati Phase I & II for which forest land in compliance with the OM of MoEF&CC's dated 19th March 2013.
- PP's commitment that native plant or fruit trees as Lemon, Moringa and Jackfruit species shall be distributed in the command area under Local area development in the EMP.
- Undertaking that skill development program as handicraft, pottery, sewing, embroidery training shall be provided to the local people in the beneficiary villages, in consultation with the concerned Gram Panchayat.

PP vide letter dated 29.06.2021 has submitted reply of the above query. The EIA/EMP and other submissions made by the PP found to be satisfactory and acceptable, hence committee decided to recommend the case for grant of prior Environment Clearance for ISP - Parwati Micro Lift Irrigation Scheme, Phase III & IV(Pipeline), Division Dewas, CCA -1,00,100 ha., under Category: 1(c) River Valley and Hydroelectric Projects, with following conditions:

I. Statutory compliance:

- i. 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. In case the forest clearance is denied, the PP will execute the project along an alternate alignment without involving diversion of forest land as per the plan submitted vide letter dated 29/06/21 in accordance with MoEF&CC notification dated 19/03/13 related to linear projects such as roads, transmission lines, pipelines etc.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife. (if applicable).
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The

recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)

- iv. 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 M.P. Pollution Control Board.
- v. NOC shall be obtained from National Commission of Seismic Design Parameters (NCSDS) of CWC.
- vi. Necessary approval of CEA shall be obtained for those projects having the project cost more than Rs. 1,000 crores.

II. Air quality monitoring and preservation

- i. Regular monitoring of various environmental parameters viz., Water Quality, Ambient Air Quality and Noise levels as per the CPCB guidelines at designated locations shall be carried out on monthly basis and a detailed database of the same shall be prepared and recorded. This shall be used as a baseline data for post construction EIA / Monitoring purposes.
- ii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed standards.
- iii. Necessary control measures such as water sprinkling arrangements, etc. be taken up to arrest fugitive dust at all the construction sites.

III. Water quality monitoring and preservation

- i. Conjunctive use of surface water to be planned in the project to check water logging as well as to increase crops productivity. The field drains shall be connected with natural drainage system.
- ii. Explore the possibility of for providing water to Kheoni Wild Life Sanctuary in consultation with DFO, Dewas.
- iii. Remodeling of existing natural drains (link drains) and connecting them with irrigated land through constructed field drains, collector drains, etc. are to be ensured on priority basis.
- iv. Before impounding of the water, Cofferdams for both at the upstream and downstream are to be decommissioned as per EIA/EMP report so that once the project is commissioned; cofferdam should not create any adverse impact on water environment including the rock mass and muck used for the Cofferdam.

- v. As the reservoir will be acting as balancing reservoir and there would be fluctuation of water level during peaking period, efforts be made to reduce impact on aquatic life including impacts during spawning period both at the upstream and downstream of the project
- vi. Water depth sensors shall be installed at suitable locations to monitor e-flow. Hourly data to be collected and converted to discharge data. The Gauge and Discharge data in the form of Excel Sheet be submitted to the Regional Office, MoEF & CC and to the CWC on weekly basis
- vii. Mixed irrigation shall be practiced and necessary awareness be given to all the farmers and trained in the use of such systems. Proper crops selection shall be carried out for making irrigation facility more effective.
- viii. On Farm Development (OFD) works like landscaping, land leveling, drainage facilities, field irrigation channels and farm roads, etc. should be taken up in phased manner prior to the start of irrigation in the entire command area. The Command Area Development Plan should be strictly implemented as proposed in the EIA/EMP report.

IV. Noise monitoring and prevention

- i. All the equipment likely to generate high noise shall be appropriately enclosed or inbuilt noise enclosures be provided so as to meet the ambient noise standards as notified under the Noise Pollution (Regulation and Control) Rules, 2000, as amended in 2010 under the Environment Protection Act (EPA), 1986.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time .

V. Catchment Area Treatment Plan

- i. Catchment Area Treatment (CAT) Plan as proposed in the EIA/EMP report shall be implemented in consultation with the State Forest Department and shall be implemented in synchronization with the construction of the project.

VI. Waste management

- i. Muck disposal (34.51 lakh cum) be carried out only in the approved and earmarked sites. The dumping sites shall be located sufficiently away from the HFL of the river. Efforts be made to reuse the muck for construction and other filling purposes and balanced be disposed of at the designated disposal sites. Once the muck disposal sites are inactive, proper treatment measures like both engineering and biological measures be carried out so that sites are stabilized

quickly.

- ii. Solid waste management should be planned in details. Land filling of plastic waste shall be avoided and instead be used for various purposes as envisaged in the EIA/EMP reports. Efforts be made to avoid one time use of plastics.

VII. Green Belt, Fisheries and Wildlife Management

- i. Based on the recommendation of Cumulative Impact Assessment and Carrying capacity study of river basin or as per the ToR conditions or minimum 15% of the average flow of four consecutive leanest months, whichever value is higher, shall be released as environmental flow.
- ii. Detailed information on species composition particular to fish species from previous study/literature be inventorised and proper management plan shall be prepared for in-situ conservation in the streams, tributaries of river.
- iii. Biodiversity and Wildlife Conservation Plan prepared for both core and buffer zones shall be implemented and executed with the local State Forest Department.
- iv. To enrich the habitat of the project site, plantation shall be raised as envisaged in the EIA/EMP report. Plantation to be developed along the periphery of the reservoir in multi-layers with local indigenous species in consultation with the local State Forest Department.
- v. Compensatory afforestation programme shall be implemented as per the submitted plan.
- vi. Medicinal Plants/Herbs/Shrubs (such as Khus slips) shall be planted along the underground pipeline wherever possible in consultation with local DFO.
- vii. Fish ladder/pass as envisaged in the EIA/EMP report shall be provided for migration of fishes. Regular monitoring of this facility be carried out to ensure its effectiveness.

VIII. Public hearing and Human health issues

- i. Resettlement & Rehabilitation plan be implemented in consultation with the State Govt. as approved by the State Govt.
- ii. Budget provisions made for the community and social development plan including community welfare schemes shall be implemented in toto.
- iii. Preventive measures viz. fuming and spraying of mosquito control shall be done in and around the labour colonies, affected villages, stagnated pools, etc. Provisions be made to not to create any stagnated pools to avoid creation of breeding grounds of the vector borne diseases
- iv. 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.

- v. Labour force to be engaged for construction works shall be examined thoroughly and adequately treated before issuing them work permit. Medical facilities shall be provided at the construction sites.
- vi. All social activities conducted under CER shall be displayed on the company's website with three months interval and updated regularly.

IX. EMP & Corporate Environment Responsibility

- i. A budgetary provision of Rs 1932.68 Lakh is made for Environmental Management Plan as capital cost and Rs 4265.18 Lakh as recurring cost.
- ii. Under Corporate Environment Responsibility (CER) programme apart from suggested activities also adopt skill development program as handicraft, pottery, sewing, embroidery training shall be provided to the local people in the beneficiary villages, in consultation with the concern Gram Panchayat.
- iii. CER activities in forest villages and project adjoining areas shall be conducted in consultation with State Forest Department.
- iv. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- v. Skill mapping be undertaken for the youths of the affected project area and based on the skill mapping, necessary trainings to the youths be provided for their long time livelihood generation
- vi. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vii. 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.
- viii. 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.
- ix. Post EIA and SIA be prepared for the project through a third party and evaluation report be submitted to the Ministry after five years of commissioning of the project.
 - x. Multi Disciplinary Committee (MDC) be constituted with experts from Ecology, Forestry, Wildlife, Sociology, Soil Conservation, Fisheries, NGO, State Forest Department etc. to oversee implementation of various environmental safeguards proposed in EIA/EMP report during construction of the project. The monitoring report of the Committee shall be uploaded in the website of the Company.
 - xi. Formation of Water User Association/Co-operative be made by involvement of the whole community be ensured for discipline use of available water for irrigation purposes.

X. Miscellaneous

- i. 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.
- ii. 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.
- iii. 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
- iv. 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.
- v. The project authorities must strictly adhere to the stipulations made by the M.P. Pollution Control Board and the State Government.
- vi. 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.
- vii. 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).
- viii. Concealing factual data or submission of false/fabricated data may result in revocation of environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
 - ix. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
 - x. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions
 - xi. 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.
 - xii. 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.

(A. A. Mishra)
Secretary

(Dr. Praveen Chandra Dubey)
Chairman

Following standard conditions shall be applicable for the mining projects of minor mineral in addition to the specific conditions and cases appraised for grant of TOR:

Annexure- ‘A’

Standard conditions applicable to Stone/Murram and Soil quarries:

1. Mining should be carried out as per the submitted land use plan and approved mine plan.
2. The lease boundary should be clearly demarcated at site with the given co-ordinates by pillars and fenced from all around the site. Necessary safety signage & caution boards shall be displayed at mine site.
3. Overhead sprinklers arrangements with solar pumps should be provided for dust suppression at the exit of the lease area and fixed types sprinklers on the evacuation road. PP should maintain a log book wherein daily details of water sprinkling and vehicle movement are recorded.
4. Transportation of material shall only be done in covered & PUC certified vehicles with required moisture to avoid fugitive emissions. Transportation of minerals shall not be carried out through forest area without permissions from the competent authority.
5. Mineral evacuation road shall be made pucca (WBM/black top) by PP.
6. Necessary consents shall be obtained from MPPCB and the air/water pollution control measures have to be installed as per the recommendation of MPPCB.
7. Crusher with inbuilt APCD & water sprinkling system shall be installed minimum 100 meters away from the road and 500 meters away from the habitations only after the permissions of MP Pollution Control Board with atleast 03 meters high wind breaking wall of suitable material to avoid fugitive emissions.
8. Thick plantation shall be carryout in the periphery/barrier zone of the lease, mineral evacuation road and common area in the village. Top soil shall be simultaneously used for the plantation within the lease area and no OB/dump shall be stacked outside the lease area. PP would maintain the plants for five years including casualty replacement. PP should also maintain a log book containing annual details of tree plantation and causality replacement and to take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
9. Appropriate activities shall be taken up for social up-liftment of the area. Funds reserved towards the same shall be utilized through Gram Panchayat/competent authority.
10. Six monthly occupational health surveys of workers shall be carryout and all the workers shall be provided with necessary PPE's. Mandatory facilities such as Rest Shelters, First Aid, Proper Fire Fighting Equipments and Toilets (separate for male & female) shall also be provided for all the mine workers and other staff. Mine's site office, rest shelters etc shall be illuminated and ventilated through solar lights.
11. A separate bank account should be maintained for all the expenses made in the EMP and CER activities by PP for financial accountability and these details should be provided in Annual Environmental Statement. In case the allocated EMP budget for mitigative measures to control the pollution is not utilized fully, the reason of under utilization of budgetary provisions for EMP should be addressed in annual return.
12. To avoid vibration, no overcharging shall be carried out during blasting and muffle blasting shall be adopted. Blasting shall be carried out through certified blaster only and no explosive will be stored at mine site without permission from the competent authority.
13. Mine water should not be discharged from the lease and be used for sprinkling & plantations. For surface runoff and storm water garland drains and settling tanks (SS pattern) of suitable sizes shall be provided.

14. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
15. The amount towards reclamation of the pit and land in MLA shall be carried out through the mining department. The appropriate amount as estimated for the activity by mining department has to be deposited with the Collector to take up the activity after the mine is exhausted.
16. NOC of Gram Panchayat should be obtained for the water requirement and forest department before uprooting any trees in the lease area. PP shall take Socio-economic activities in the region through the 'Gram Panchayat'.
17. The leases which are falling <250 meters of the forest area and PP has obtained approval for the Divisional Level Commissioner committee, all the conditions stipulated by Divisional Level Commissioner committee shall be fulfilled by the PP.
18. The validity of the EC shall be as per the provisions of EIA Notification subject to the following: Expansion or modernization in the project, entailing capacity addition with change in process and or technology and any change in product - mix in proposed mining unit shall require a fresh Environment Clearance.
19. If it being a case of Temporary Permit (TP), the validity of EC should be only up to the validity of TP and PP has to ensure the execution of closure plan.
20. All the mines where production is > 50,000 cum/year, PP shall develop its own website to display various mining related activities proposed in EMP & CER along with budgetary allocations. All the six monthly progress report shall also be uploads on this website along with MoEF&CC & SEIAA, MP with relevant photographs of various activities such as garland drains, settling tanks, plantation, water sprinkling arrangements, transportation & haul road etc. PP or Mine Manager shall be made responsible for its maintenance & regular updation.
21. All the soil queries, the maximum permitted depth shall not exceed 02 meters below general ground level & other provisions laid down in MoEF&CC OM No. L-11011/47/2011-IA.II(M) dated 24/06/2013.
22. The mining lease holders shall after ceasing mining operation, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora , fauna etc. Moreover, A separate budget in EMP & CER shall maintained for development and maintenance of grazing land as per the latest O.M dated 16/01/2020.
23. The project proponent shall follow the mitigation measures provided in MoEFCCs Office Memorandum No. Z-11013/57/2014-IA. II (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".
24. Any change in the correspondence address shall be duly intimated to all the regulatory authority within 30 days of such change.
25. Mining Lease boundary shall be appropriately earmarked with fencing.
26. A display board with following details of the project is mandatory at the entry to the mine.
 - a. Lease owner's Name, Contact details etc.
 - b. Mining Lease area of the project (in ha.)
 - c. Production capacity of the project.

Annexure- 'B'

Standard conditions applicable for the Sand Mine Quarries*

1. District Authority should annually record the deposition of sand in the lease area (at an interval of 100 meters for leases 10 ha or > 10.00 ha and at an interval of 50 meters for leases < 10 ha.) before monsoon & in the last week of September and maintain the records in RL (Reduce Level) Measurement Book. Accordingly authority shall allow lease holder to excavate only the replenished quantity of sand in the subsequent year.
2. The lease boundary should be clearly demarcated at site with the given co-ordinates by pillars. Necessary safety signage & caution boards shall be displayed at mine site.
3. Overhead sprinklers arrangements with solar pumps should be provided for dust suppression at the exit of the lease area and fixed types sprinklers on the evacuation road. PP should maintain a log book wherein daily details of water sprinkling and vehicle movement are recorded.
4. Only registered vehicles/tractor trolleys which are having the necessary registration and permission for the aforesaid purpose under the Motor Vehicle Act and also insurance coverage for the same shall alone be used for said purpose.
5. Transportation of material shall only be done in covered & PUC certified vehicles with required moisture to avoid fugitive emissions. Transportation of minerals shall not be carried out through forest area without permissions from the competent authority.
6. Mineral evacuation road shall be made Pucca (WBM/black top) by PP.
7. Sand and gravel shall not be extracted up to a distance of 1 kilometer (1Km) from major bridges and highways on both sides, or five times (5x) of the span (x) of a bridge/public civil structure (including water intake points) on up-stream side and ten times (10x) the span of such bridge on down-stream side, subjected to a minimum of 250 meters on the upstream side and 500 meters on the downstream side.
8. Mining depth should be restricted to 3 meters or water level, whichever is less and distance from the bank should be 1/4th or river width and should not be less than 7.5 meters. No in-stream mining is allowed. Established water conveyance channels should not be relocated, straightened, or modified.
9. Demarcation of mining area with pillars and geo-referencing should be done prior to the start of mining.
10. PP shall carry out independent environmental audit atleast once in a year by reputed third party entity and report of such audit be placed on public domain.
11. No Mining shall be carried out during Monsoon season.
12. The mining shall be carried out strictly as per the approved mine plan and in accordance with the Sustainable Sand Mining Management Guidelines, 2016 and Enforcement & Monitoring Guidelines for Sand Mining, 2020 issued by the MoEF&CC ensuring that the annual replenishment of sand in the mining lease area is sufficient to sustain the mining operations at levels prescribed in the mining plan.
13. If the stream is dry, the excavation must not proceed beyond the lowest undisturbed elevation of the stream bottom, which is a function of local hydraulics, hydrology, and geomorphology.
14. After mining is complete, the edge of the pit should be graded to a 2.5:1 slope in the direction of the flow.
15. Necessary consents shall be obtained from MPPCB and the air/water pollution control measures have to be installed as per the recommendation of MPPCB.

16. Thick plantation shall be carryout on the banks of the river adjacent to the lease, mineral evacuation road and common area in the village. PP would maintain the plants for five years including casualty replacement. PP should also maintain a log book containing annual details of tree plantation and causality replacement and to take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
17. Appropriate activities shall be taken up for social up-liftment of the area. Funds reserved towards the same shall be utilized through Gram Panchayat/competent authority.
18. Six monthly occupational health surveys of workers shall be carryout and all the workers shall be provided with necessary PPE's. Mandatory facilities such as Rest Shelters, First Aid, Proper Fire Fighting Equipments and Toilets (separate for male & female) shall also be provided for all the mine workers and other staff. Mine's site office, rest shelters etc shall be illuminated and ventilated through solar lights.
19. A separate bank account should be maintained for all the expenses made in the EMP and CER activities by PP for financial accountability and these details should be provided in Annual Environmental Statement. In case the allocated EMP budget for mitigative measures to control the pollution is not utilized fully, the reason of under utilization of budgetary provisions for EMP should be addressed in annual return.
20. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
21. The amount towards reclamation of the pit and land in MLA shall be carried out through the mining department. The appropriate amount as estimated for the activity by mining department has to be deposited with the Collector to take up the activity after the mine is exhausted.
22. NOC of Gram Panchayat should be obtained for the water requirement and forest department before uprooting any trees in the lease area.
23. The leases which are falling <250 meters of the forest area and PP has obtained approval for the Divisional Level Commissioner committee, all the conditions stipulated by Divisional Level Commissioner committee shall be fulfilled by the PP.
24. The validity of the EC shall be as per the provisions of EIA Notification subject to the following: Expansion or modernization in the project, entailing capacity addition with change in process and or technology and any change in product - mix in proposed mining unit shall require a fresh Environment Clearance.
25. If it being a case of Temporary Permit (TP), the validity of EC should be only up to the validity of TP and PP has to ensure the execution of closure plan.
26. A separate budget in EMP & CER shall maintained for development and maintenance of grazing land as per the latest O.M dated 16/01/2020.
27. The project proponent shall follow the mitigation measures provided in MoEFCCs Office Memorandum No. Z-11013/57/2014-IA. II (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".
27. Any change in the correspondence address shall be duly intimated to all the regulatory authority within 30 days of such change.
28. Mining Lease boundary shall be appropriately earmarked with fencing.
29. A display board with following details of the project is mandatory at the entry to the mine.
 - a. Lease owner's Name, Contact details etc.
 - b. Mining Lease area of the project (in ha.)

- c. Production capacity of the project.
28. Following conditions must be implemented by PP in case of sand mining as per NGT (CZ) order dated 19/10/2020 in OA NO. 66/2020 and SEIAA's instruction vide letter No. 5084 dated 09/12/2020.
- i. The Licensee must use minimum number of poclains and it should not be more than two in the project site.
 - ii. The District Administration should assess the site for Environmental impact at the end of first year to permit the continuation of the operation.
 - iii. The ultimate working depth shall be 01 m from the present natural river bed level and the thickness of the sand available shall be more than 03 m the proposed quarry site.
 - iv. The sand quarrying shall not be carried out blow the ground water table under any circumstances. In case, the ground water table occurs within the permitted depth at 01 meter, quarrying operation shall be stopped immediately.
 - v. The sand mining should not disturb in any way the turbidity, velocity and flow pattern of the river water.
 - vi. The mining activity shall be monitored by the Taluk level Force once in a month by conducting physical verification.
 - vii. After closure of the mining, the licensee shall immediately remove all the sheds put up in the quarry and all the equipments used for operation of sand quarry. The roads/pathways shall be leveled to let the river resume its normal course without any artificial obstruction to the extent possible.
 - viii. The mined out pits to be backfilled where warranted and area should be suitable landscaped to prevent environmental degradation.
 - ix. PP shall adhere to the norms regarding extent and depth of quarry as per approved mining plan. The boundary of the quarry shall be properly demarcated by PP.

Annexure- 'C'

Standard conditions applicable for the Sand deposits on Agricultural Land/ Khodu Bharu Type Sand Mine Quarries*

1. Mining should be done only to the extent of reclaiming the agricultural land.
2. Only deposited sand is to be removed and no mining/digging below the ground level is allowed.
3. The mining shall be carried out strictly as per the approved mining plan.
4. The lease boundary should be clearly demarcated at site with the given co-ordinates by pillars and necessary safety signage & caution boards shall be displayed at mine site.
5. Overhead sprinklers arrangements with solar pumps should be provided for dust suppression at the exit gate of the lease area and fixed types sprinklers on the evacuation road. PP should maintain a log book wherein daily details of water sprinkling and vehicle movement are recorded.
6. The mining activity shall be done as per approved mine plan and as per the land use plan submitted by PP.
7. Transportation of material shall only be done in covered & PUC certified vehicles with required moisture to avoid fugitive emissions. Transportation of minerals shall not be carried out through forest area without permissions from the competent authority.
8. Mineral evacuation road shall be made Pucca (WBM/black top) by PP.
9. For carrying out mining in proximity to any bridge and/or embankment, appropriate safety zone on upstream as well as on downstream from the periphery of the mining site shall be ensured taking

into account the structural parameters, location aspects, flow rate, etc., and no mining shall be carried out in the safety zone.

10. No Mining shall be carried out during Monsoon season.
11. The mining shall be carried out strictly as per the approved mine plan and in accordance with the Sustainable Sand Mining Management Guidelines, 2016 issued by the MoEF&CC.
12. Necessary consents shall be obtained from MPPCB and the air/water pollution control measures have to be installed as per the recommendation of MPPCB.
13. Thick plantation shall be carryout on the banks of the river adjacent to the lease, mineral evacuation road and common area in the village. PP would maintain the plants for five years including casualty replacement. PP should also maintain a log book containing annual details of tree plantation and causality replacement and to take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
14. Appropriate activities shall be taken up for social up-liftment of the area. Funds reserved towards the same shall be utilized through Gram Panchayat/competent authority.
15. Six monthly occupational health surveys of workers shall be carryout and all the workers shall be provided with necessary PPE's. Mandatory facilities such as Rest Shelters, First Aid, Proper Fire Fighting Equipments and Toilets (separate for male & female) shall also be provided for all the mine workers and other staff. Mine's site office, rest shelters etc shall be illuminated and ventilated through solar lights.
16. A separate bank account should be maintained for all the expenses made in the EMP and CER activities by PP for financial accountability and these details should be provided in Annual Environmental Statement. In case the allocated EMP budget for mitigative measures to control the pollution is not utilized fully, the reason of under utilization of budgetary provisions for EMP should be addressed in annual return.
17. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
18. The amount towards reclamation of the pit and land in MLA shall be carried out through the mining department. The appropriate amount as estimated for the activity by mining department has to be deposited with the Collector to take up the activity after the mine is exhausted.
19. NOC of Gram Panchayat should be obtained for the water requirement and forest department before uprooting any trees in the lease area.
20. The leases which are falling <250 meters of the forest area and PP has obtained approval for the Divisional Level Commissioner committee, all the conditions stipulated by Divisional Level Commissioner committee shall be fulfilled by the PP.
21. The validity of the EC shall be as per the provisions of EIA Notification subject to the following: Expansion or modernization in the project, entailing capacity addition with change in process and or technology and any change in product - mix in proposed mining unit shall require a fresh Environment Clearance.
22. If it being a case of Temporary Permit (TP), the validity of EC should be only up to the validity of TP and PP has to ensure the execution of closure plan.
23. A separate budget in EMP & CER shall maintained for development and maintenance of grazing land as per the latest O.M dated 16/01/2020.
24. The project proponent shall follow the mitigation measures provided in MoEFCCs Office Memorandum No. Z-11013/57/2014-IA. II (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”.

25. Any change in the correspondence address shall be duly intimated to all the regulatory authority within 30 days of such change.
26. Mining Lease boundary shall be appropriately earmarked with fencing.
27. A display board with following details of the project is mandatory at the entry to the mine.
 - a. Lease owner's Name, Contact details etc.
 - b. Mining Lease area of the project (in ha.)
 - c. Production capacity of the project.

Annexure- 'D'

General conditions applicable for the granting of TOR

1. The date and duration of carrying out the baseline data collection and monitoring shall be informed to the concerned Regional Officer of the M.P Pollution Control Board.
2. During monitoring, photographs shall be taken as a proof of the activity with latitude & longitude, date, time & place and same shall be attached with the EIA report. A drone video showing various sensitivities of the lease and nearby area shall also be shown during EIA presentation.
3. An inventory of various features such as sensitive area, fragile areas, mining / industrial areas, habitation, water-bodies, major roads, etc. shall be prepared and furnished with EIA.
4. An inventory of flora & fauna based on actual ground survey shall be presented.
5. Risk factors with their management plan should be discussed in the EIA report.
6. The EIA report should be prepared by the accredited consultant having no conflict of interest with any committee processing the case.
7. The EIA document shall be printed on both sides, as far as possible.
8. All documents should be properly indexed, page numbered.
9. Period/date of data collection should be clearly indicated.
10. The letter /application for EC should quote the SEIAA case No./year and also attach a copy of the letter prescribing the TOR.
11. The copy of the letter received from the SEAC prescribing TOR for the project should be attached as an annexure to the final EIA/EMP report.
12. The final EIA/EMP report submitted to the SEIAA must incorporate all issues mentioned in TOR and that raised in Public Hearing with the generic structure as detailed out in the EIA report.
13. Grant of TOR does not mean grant of EC.
14. The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared. If consultant has engaged other laboratory for carrying out the task of monitoring and analysis of pollutants, a representative from laboratory shall also be present to answer the site specific queries.
15. On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed TORs (TOR proposed by the project proponent and additional TOR given by the MOEF & CC) have been complied with and the data submitted is factually correct.
16. While submitting the EIA/EMP reports, the name of the experts associated with involved in the preparation of these reports and the laboratories through which the samples have been got analyzed

- should be stated in the report. It shall be indicated whether these laboratories are approved under the Environment (Protection) Act, 1986 and also have NABL accreditation.
17. All the necessary NOC's duly verified by the competent authority should be annexed.
 18. PP has to submit the copy of earlier Consent condition /EC compliance report, whatever applicable along with EIA report.
 19. The EIA report should clearly mention activity wise EMP and CER cost details and should depict clear breakup of the capital and recurring costs along with the timeline for incurring the capital cost. The basis of allocation of EMP and CER cost should be detailed in the EIA report to enable the comparison of compliance with the commitment by the monitoring agencies.
 20. A time bound action plan should be provided in the EIA report for fulfillment of the EMP commitments mentioned in the EIA report.
 21. The name and number of posts to be engaged by the PP for implementation and monitoring of environmental parameters should be specified in the EIA report.
 22. EIA report should be strictly as per the TOR, comply with the generic structure as detailed out in the EIA notification, 2006, baseline data is accurate and concerns raised during the public hearing are adequately addressed.
 23. The EIA report should be prepared by the accredited consultant having no conflict of interest with any committee processing the case.
 24. Public Hearing has to be carried out as per the provisions of the EIA Notification, 2006. The issues raised in public hearing shall be properly addressed in the EMP and suitable budgetary allocations shall be made in the EMP and CER based on their nature.
 25. Actual measurement of top soil shall be carried out in the lease area at minimum 05 locations and additionally N, P, K and Heavy Metals shall be analyzed in all soil samples. Additionally in one soil sample, pesticides shall also be analysed.
 26. A separate budget in EMP & CER shall maintained for development and maintenance of grazing land as per the latest O.M dated 16/01/2020.
 27. PP shall submit biological diversity report stating that there is no adverse impact in- situ and on surrounding area by this project on local flora and fauna's habitat, breeding ground, corridor/ route etc. This report shall be filed annually with six-monthly compliance report.
 28. The project proponent shall provide the mitigation measures as per MoEFCCs Office Memorandum No. Z-11013/57/2014-IA. II (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" with EIA report.

FOR PROJECTS LOCATED IN SCHEDULED (V) TRIBAL AREA , following should be studied and discussed in EIA Report before Public Hearing as per the instruction of SEIAA vide letter No. 1241 dated 30/07/2018.

29. Detailed analysis by a National Institute of repute of all aspects of the health of the residents of the Schedule Tribal block.
30. Detailed analysis of availability and quality of the drinking water resources available in the block.
31. A study by CPCB of the methodology of disposal of industrial waste from the existing industries in the block, whether it is being done in a manner that mitigate all health and environmental risks.
32. The consent of Gram Sabha of the villages in the area where project is proposed shall be obtain.