



सत्यमेव जयते

File No.: 458585/07-MIN/01-2024

Government of India

Ministry of Environment, Forest and Climate Change

(Issued by the State Environment Impact Assessment Authority(SEIAA),  
ODISHA)

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Dated 04/06/2024



To,

Sri. Saroj Kumar Mohanty  
At- Kilipal, Tahasil- Tirtol, District- Jagatsinghpur, Odisha ,Pin- 754137  
kilipalsand2022@gmail.com

**Subject:** Grant of prior Environmental Clearance (EC) to the proposed Mining Project under the provisions of EIA Notification 2006-regarding

**Sir/Madam,**

This is in reference to your application submitted to SEIAA vide proposal number SIA/OR/MIN/458585/2024 dated 13/01/2024 for grant of prior Environmental Clearance (EC) to the project under the provision of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24B0107OR5528308N
(ii) File No.	458585/07-MIN/01-2024
(iii) Clearance Type	Fresh EC
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a)- Mining of minerals
(vii) Name of Project	Proposal for EC mining of sand from Kilipal Mahanadi Sand Sairat Over an area of 13.00 Acres or 5.26 Ha having Khata No. 298, Plot No. 954 located in village- Kilipal, Tahasil-Tirtol, District-Jagatsinghpur
(ix) Location of Project (District, State)	in village- Kilipal,Tahasil-Tirtol, District-Jagatsinghpur
(x) Issuing Authority	SEIAA,Odisha
(xii) Applicability of General Conditions	No

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-2(Part A, B and C)/ EIA & EMP Reports were submitted to the SEAC for an appraisal by the State Level Expert Appraisal Committee(SEAC) under the provision of EIA notification 2006 and its subsequent amendments.

4. The above-mentioned proposal has been considered by SEAC in the meeting held on 01.02.2024. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed from the PARIVESH portal by scanning the QR Code above.

5. Details of the minerals to be mined along with production capacity and the brief on the salient features of the project as submitted by the project proponent in Form- 2 (Part A, B and C)/EIA & EMP reports and as presented before SEAC are annexed to this EC as Annexure (2).

6. This proposal conforms to the item no. 1(a)-‘Mining of Minerals’ in the schedule of EIA Notification, 2006 as amended time to time, and the minor mineral extraction project falls under Category B1 as the mining lease area is more than 5 ha.

7. The proposal was considered for EC by SEAC in its meeting held on 01.02.2024. The SEAC, based on the information submitted by the project proponent in Form-2(Part A, B and C), EIA/EMP report, etc, clarifications/information provided to the ADS sought and after detailed deliberations on all technical aspects and public hearing issues and compliance thereto, recommended the proposal for grant of Environment Clearance for the project valid upto the lease period under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of Specific and Standard EC conditions as detailed.

8.The matter was further examined in the State Environment Impact Assessment Authority (SEIAA), Odisha in its 166<sup>th</sup> meeting held on 07.05.2024 & 08.05.2024 in accordance with the EIA Notification, 2006 and further amendments thereto as well as the Judgement dated 2<sup>nd</sup> February,2022 of Hon’ble National Green Tribunal in OA No.33/2020/EZ (Laxmidhar Palai Vrs. District Collector, Balasore), reply of PP and recommendation of SEAC. After detailed deliberation in the matter, the Authority decided to grant EC with usual stipulated conditions as applicable for sand quarry along with additional specific conditions.

9. Environmental Clearance (EC) is granted to the project under the provisions of EIA Notification No. S.O. 1533 (E) dated the 14<sup>th</sup> September, 2006 of the Government of India in the erstwhile Ministry of Environment and Forests, as amended from time to time for “Proposed mining of Decorative Stone from Kilipal Mahanadi Sand Sairat over an area of 13.00 Acres or 5.26 Ha. bearing Khata No. 298, Plot No. 954 located in village- Kilipal, Tahasil-Tirtol, District-Jagatsinghpur of Sri Saroj Kumar Mohanty, Lease Holder” with the following stipulations under Para A,B,C (specific and standard), environmental conditions and safeguards as given in Annexure (1).

**A. Stipulations:**

Sl.	Descriptions	Stipulation
(i)	Lease Area:	13.00 Acres or 5.26Ha
(ii)	No Mining Zone:	1/4 <sup>th</sup> of river width for protection of river bank and 7.5 meter safety zone from all side of lease boundary.
(iii)	Maximum Depth of Mining:	<b>1.0 meter</b> as per the approved mining plan
(iv)	Permitted Quantity:	Ø <b>15150 cum/year</b> upto the valid lease period (i.e. for 1 <sup>st</sup> year, 2 <sup>nd</sup> year, 3 <sup>rd</sup> year, 4 <sup>th</sup> year & 5 <sup>th</sup> year) from the date of issue of EC. Ø Total production in 5 years: <b>75750cum</b>
(v)	Validity Period of EC:	The EC is valid till the validity of DSR or validity of lease period whichever is earlier.
(vi)	Method of Mining(as per approved mining plan):	Manual

10. The SEIAA, Odisha reserves the right to alter /modify the above conditions or stipulate any further condition in the interest of environment protection.

11. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

12.The PP is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.

13. This issue with an approval of the Competent Authority.

## Copy To

1. **Additional Chief Secretary**, Forest, Environment & Climate Change Dept., Government of Odisha for information.
2. **Member Secretary**, State Pollution Control Board, Odisha, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-8, Bhubaneswar for information and necessary action.
3. **Member Secretary**, SEAC, Paribesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar for information.
4. **Deputy D.G.Forest.**, Regional Office (RO), Ministry of Environment & Forests, A/3, Chandrasekharpur, Bhubaneswar for information and necessary action.
5. **The Director of Mines**, Mines & Geology Dept, Govt. of Odisha, Bhubaneswar for information and necessary action.
6. **The Directorate of Minor Minerals**, Govt. of Odisha, Bhubaneswar for information.
7. **Collector & DM**, Jagatsinghpur/DFO, Jagatsinghpur/ **Sub Collector**, Jagatsinghpur /**Tahasildar**, Tirtol/DDM, Jagatsinghpur/**Mining Officer**, Jagatsinghpur for Information and necessary action with specific reference to para in respect of year wise permitted quantity for extraction.
8. Guard file for record/Website/Parivesh Portal.

## Annexure 1

### Specific EC Conditions for (Mining Of Minerals)

#### 1. Specific Conditions

S. No	EC Conditions
1.1	<b>B: ENVIRONMENTAL CONDITIONS AND SAFEGUARDS WHICH NEED TO BE COMPLIED WITH BY THE CONCERNED TAHASILDAR/MINING OFFICER BEFORE EXECUTING LEASE AGREEMENT:</b>
1.2	<b>Boundary Demarcation:-</b> The boundary of the lease area shall be demarcated on ground at the project cost, by erecting 1.20 meter (4 feet approx.) high reinforced concrete pillars above ground, each inscribed with its serial number, distance from pillar to pillar and GPS co-ordinates by any empanelled agency of ORSAC.
1.3	<b>Digital Map:-</b> A digital map (in KML format as well as PDF version) showing GPS coordinates of all boundary pillars duly countersigned by the concerned Mining Officer shall be submitted to SEIAA, Odisha through email at info.seiaaodisha@gmail.com.
1.4	<b>Intimation of EC:-</b> The copies of the EC shall be sent to the Sarpanch(s) of the concerned Gram Panchayat(s), Urban Local Bodies and relevant other Offices of the Government with a request to display the same for 30 days from the date of receipt.
1.5	<b>Tree Plantation:-</b> Compensatory Tree Planting (CTP) shall be carried out with minimum @100 trees per Ha. of lease area as per the approved cost norm for avenue plantations of the State Forest Department. The Project Proponent (lease holder) shall deposit Rs. 3,00,000/-, with the respective District Environment Society for raising 600 plants of native species within 2 years in a suitable location adjoining to quarry.
1.6	<b>State EMF Fund:-</b> An amount equal to five percent(5%) of the royalty payable shall be collected from the lessee by the concerned Tahasildar/Mining Officer and deposited to the State Environment Management Fund, which will be utilized as per provisions of Rule 49(3) of the OMMC Rule, 2016

S. No	EC Conditions
	preferably, in and around the areas where mining activities are undertaken.
1.7	<b>Condition by Collector:-</b> Any other condition(s) the Collector & Chairman, District Environment Impact Assessment Authority (DEIAA), may impose in the interest of protection and safeguarding the local environment.
1.8	<b>Transfer of EC:-</b> Any transfer of EC to a PP/Lessee shall be considered by SEIAA, Odisha only after receipt of the full compliance report through concerned Tahasildar/Mining Officer on the above environmental conditions and safeguards.

Standard EC Conditions for (Mining of minerals)

1. Statutory Compliance

S. No	EC Conditions
1.1	<b>C: ENVIRONMENTAL CONDITIONS AND SAFEGUARDS WHICH NEED TO BE COMPLIED ON FIELD AFTER THE LEASE AGREEMENT</b>
1.2	<b>Maximum Depth of Mining:</b> Maximum yearly quantity of extraction from the quarry shall not exceed annual limit as specified above under stipulation in Table 'A stipulations'-sl.A(iv) and the total production shall be 75750 cum during the valid lease period of five years as per the approved mining plan. The PP is required to submit Replenishment Study of the sand annually prepared through NABET/QCI accredited Consultant by following the guidelines issued by MoEF&CC in their notification Enforcement and Monitoring Guideline of Sand Mining 2020. The Project proponent shall follow the said guidelines during operation of quarry upto the lease period. Any flouting of this restriction shall make this EC liable to cancellation.
1.3	<b>Annual Replenishment Rate Study of Sand:-</b> The Project Proponent shall carry out by engaging appropriate consultant, annual replenishment rate study of sand as per prescribed drone method by collecting pre monsoon & post monsoon data from the field to know the quantum of volume of sand deposited/replenished & extracted in the mining lease area. The detailed comparison of both pre-monsoon and post-monsoon elevation data shall be included in the study report. The detailed methodology for finding the rate of replenishment study of sand is laid down in the Enforcement & Monitoring Guidelines for Sand Mining, 2020 issued by the MoEF & CC, Govt. of India. The finding of the study shall be submitted to SEIAA to assess the actual rate of replenishment of mined out sand in the lease area.
1.4	<b>District Survey Report:</b> In view of likely revision of DSR as per the Ministry guidelines, the mention of this deposit in DSR with final coordinates is to be ensured by concerned District Collector/Mining Officer/Tahasildar <b>before expiry of the existing current DSR</b> . The boundary area of the deposit as per the updated DSR defined by geo coordinates based on DGPS survey be superimposed on the cadastral map. The Grant of EC for further period will be considered after submission of DSR approved by SEIAA as per the MoEF& CC, Govt. of India Notification S.O. 3611(E) dated 25.07.2018, Sustainable sand mining guidelines-2016 and Enforcement & Monitoring Guideline for sand mining-2020 and also as per the Hon'ble Supreme Court order vide its order dated 10.11.2021 in Civil Appeal Nos. 3661-3662 of 2020 (State of Bihar Vrs. Pawan Kumar and Others).

S. No	EC Conditions
1.5	<p><b>No change in the mining plan without prior approval of SEIAA:-</b> Any change in the calendar plan, change in production quantity or method of mining shall not be made without prior approval of the SEIAA. Mining activity shall adhere to the working parameters of approved mining plan prepared for this project. The detailed production of sand from the lease area of each year shall be submitted in tabular form during submission of compliance report.</p>
1.6	<p><b>Environmental Management Plan:-</b> (i) EMP shall be implemented by PP to ensure compliance with the environmental conditions specified above. The year wise funds earmarked for environmental protection measures shall be kept in separate account and shall be spent according to the plan proposed in EMP. Year wise progress of implementation of EMP shall be reported to the SEIAA, Odisha and OSPCB along with the compliance report. The concerned Mining Officer shall ensure the compliance of this condition along with all lease holders of his jurisdiction.</p> <p>(ii) The PP will implement the EMP with a budgetary allocation of <b>Rs. 5,62,500/- (as Capital Cost) and Rs. 3,37,000/- (as recurring cost) as proposed during the valid lease period of 5 years.</b> The detailed expenditure on EMP shall be submitted with six monthly compliance report.</p>
1.7	<p>No Working Zone: - The lessee shall ensure that no sand mining is carried out in the areas as specified below:-</p> <ol style="list-style-type: none"> <li>During the rainy season;</li> <li>Within the water channel or stream flow area throughout the year;</li> <li>Mining shall not be undertaken in a mining lease located in 250-500 meter of bridge, 200 meter upstream and downstream of water supply/irrigation scheme, 100 meter from the edge of National Highway and railway line, 50 meter from a reservoir, canal or building, 25 meter from the edge of State Highway and 10 meter from the edge of other roads except on special exemption by the Sub-Divisional level Joint Inspection Committee.</li> <li>The mining or any ancillary activity shall not in any way disturb the flow pattern of the river water during the non- monsoon period.</li> <li>No stream shall be diverted for the purpose of sand mining and no natural water course shall be obstructed.</li> <li>Sand mining operations shall not affect the existing sources for irrigation / drinking water / industrial purpose.</li> <li>The natural sand dunes, if any, near or surrounding the lease area shall not be disturbed.</li> </ol>
1.8	<p><b>Transport Safeguards:</b></p> <ol style="list-style-type: none"> <li>Consent / NoC shall be obtained from the concerned authority if village road is to be used for transportation. The said road shall also be maintained by the lessee.</li> <li>No transportation of the minerals shall be allowed on any road passing through villages/habitations without prior explicit permission.</li> <li>Transportation of minerals through existing rural roads can be allowed only by the concerned Govt. Department/ Gram Panchayat/BDO after required strengthening such that the carrying capacity of road is increased to handle the mineral carrying truck traffic. The project proponent shall bear the cost towards the widening and strengthening of existing public roads in case the same is proposed to be used for the project.</li> <li>Project proponent shall ensure that the transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and traffic density.</li> <li>Vehicles hired for transportation of minor mineral from the site should be in good condition and should have pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours. Speed of vehicle be regulated and in no case &gt;30 Kms / hr. be allowed.</li> </ol>

S. No	EC Conditions
	<p>f) The vehicles shall not be overloaded and shall be covered with Tarpaulin. The concerned Tahasildar/Mining Officer may collect an appropriate additional road maintenance levy from the lessee as part of the lease conditions on the basis of quantum of mineral transported, and utilize the proceeds of the levy for proper maintenance of the extraction paths and roads to prevent their degradation on account of plying of mineral carrying trucks.</p> <p>g) Water spraying should be made on the village road to control particulate matter (dust particles) pollution in surrounding air during transportation from the quarry.</p>
1.9	<p><b>Other Environmental Conditions:-</b> a)The Project Proponent shall follow all the provisions of Sand Policy of Govt. Of Odisha dated 02.09.2021 for this sand mining project.</p> <p>b) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made.</p> <p>c) The concerned Tahasildar/Mining Officer shall take adequate measures to prevent unauthorized mining;</p> <p>d) The project proponent should carry out river bed sand mining manually(as proposed) by engaging local laborers to check over exploitation of sand at the source;</p> <p>e) The lessee shall ensure safety of human life and livestock from accidents in case village / any habitation is very nearby the mining lease area.</p> <p>f) At the end of mine closure, the proponent shall immediately remove all the sheds put up in the quarry and all the equipment in the area before closure of the quarry.</p>
1.10	<p><b>Public Hearing Compliance:-</b> The activities proposed in action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the action plan and within a stipulated time frame as submitted in the Final EIA/EMP Report. The Status Report on implementation of action plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration. The project proponent shall comply in true spirit all the issues raised and recorded in proceedings of public hearing w.r.t. environment / pollution / CER shall be complied by the Mining Authority as per OM F. No. 22-65/2017-IA.III, dated 30.09.2020 of MoEF&amp;CC, Govt. of India. The PP will spend Rs. 1.40Lakhs/annum towards addressing public hearing issues.</p>
1.11	<p><b>Half-yearly Compliance Report:-</b> It shall be mandatory for the project management to submit half yearly compliance reports on the status of implementation of the above stipulated environmental safeguards to the SEIAA, Odisha / Regional Office of the MoEF&amp; CC, Bhubaneswar in soft copies on 1st day of June and December of each calendar year. No hard copy of six-monthly compliance report shall be submitted to SEIAA. The proponent shall upload the six-monthly compliance report including results of monitored data, as applicable in the website of the Ministry(www.parivesh.nic.in) for monitoring of EC Conditions, failing which EC is liable to be revoked.</p>
1.12	<p><b>Concomitant Monitoring:-</b> The conditions stipulated in the environmental clearance will be closely monitored on the ground by the lease granting authority, i.e. the concerned Mining Officer, who shall ensure compliance of the stipulated conditions and take corrective measures promptly in case of any non- compliance and also ensure that the project proponent submits quarterly compliance reports.</p>
1.13	<p><b>Independent Monitoring:-</b>The concerned Regional Office of the MoEF &amp; CC/ SPCB, Odisha shall periodically monitor compliance of the stipulated conditions as applicable for this project. The project authorities should extend full cooperation to the MoEF &amp; CC officer(s)/SPCB officer(s) by furnishing the requisite data / information / monitoring reports.</p>

S. No	EC Conditions
1.14	<b>Revocation of EC:-</b> The SEIAA, Odisha may revoke or suspend the EC, if implementation of any of the above conditions is not satisfactory. The SEIAA, Odisha reserves the right to alter /modify the above conditions or stipulate any further condition in the interest of environment protection.
1.15	<b>Change in Ownership of Lease:-</b> This EC shall not be transferred without the permission of SEIAA, Odisha. The concerned Mining Officer shall inform the SEIAA of any change in ownership of the mining lease. No mining is allowed without transfer of EC as per the provision of the Para 11 of EIA Notification,2006, as amended from time to time.
1.16	<b>Statutory compliance on Grant of CTE &amp; CTO from SPCB:-</b> Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board. The SPCB, Odisha shall ensure that there is no change in the extraction quantity as given in the EC stipulations in respect of year wise permitted quantity before giving 'consent to operate' to this project.
1.17	<b>Basis of Permitted Quantity:-</b> It is made clear that the EC granted is on adhoc basis as the applicant has not submitted the approved District Survey Report (DSR) or Annual Replenishment Rate Study Report (ARRS). In the absence of approved District Survey Report (DSR) the area for removal of minerals shall not exceed 60% of the mine lease area, and any deviation or relaxation in this regard shall be adequately supported by the scientific report (Refer Para: 4.3 (r) of the Enforcement & Monitoring Guidelines for Sand Mining issued in January, 2020 by the Ministry of Environment, Forest and Climate change). The permitted quantity in the 1st year has been calculated on the basis of 60% mine lease area or quantity mentioned in the Mining Plan, whichever is less. Further in the absence of approved Annual Replenishment Rate Study Report an annual replenishment rate of @25% of the 1st year quantity is allowed for 2nd year w.r.t Order dated 02.02.2022 of the Hon'ble NGT in OA No.33/2020/EZ (Laxmidhar Palai Vrs. District Collector, Balasore). Further amendment to the permitted quantity in the 2nd year shall be considered on submission of duly approved ARRS.
1.18	The above conditions will 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 and the Public Liability Insurance Act,1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court and any other Court of Law relating to the subject matter.
1.19	This Environmental Clearance (EC) is subject to orders/judgment of Hon'ble Supreme Court of India, Hon'ble High Court and Hon'ble NGT as may be applicable.
1.20	Any appeal against this environmental clearance 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.

## Annexure-2

1. **Proposal in brief:** The highlights of the proposal as ascertained from the application and as revealed from proceedings/discussion held during the meeting of SEAC/SEIAA, are given as under.
  1. This proposal is for Environmental Clearance of Kilipal Mahanadi Sand Sairat over an area of 13.00 Acres or 5.26 Ha. having Khata No. 298, Plot No. 954 in village Kilipal under Tirtol Tahasil of Jagatsinghpur District of Sri Saroj Kumar Mohanty.
  2. **Category:** As per the EIA notification 2006 and its subsequent amendments, proposed project falls in category B under schedule of Item 1(a)-Mining of minerals.
  3. Quarry lease has been awarded to Sri Saroj Kumar Mohanty, S/o Khetrabasi Mohanty, by Tahasildar of Tirtol for 5 years via letter no. 1989 dated 29/09/2021.
  4. The mining plan was approved by Deputy Director Geology, Authorized officer, Directorate of Geology, Bhubaneswar vide letter no.7133/DG and date.02.12.2021.
  5. Mining lease is an identified sairat source in the DSR page No.20, Sl.no.18, Annexure I. The proposed mine is an existing Mine.
  6. **TOR details:** Terms of Reference (TOR), was issued by SEIAA, Odisha, vide proposal Letter File. No.-SIA/OR/MIN/71478/2022 vide letter No. 4478/SEIAA on dated 05.05.2022.
  7. **Public hearing details:** Public hearing was conducted on 23.11.2022 at front of Devi Brick KILN, Tarajanga, Kilipala, Tehsil- Tirtol, Dist-Jagatsinghpur at 10.30 AM. Issues raised during public hearing are covering of sand loaded vehicle for control of air pollution, protection of river embankment and availability of sand at concessional price.an amount of Rs. 40, 000 has been incurred for action plan of public hearing.
  8. **Location and connectivity:** The proposed project is located at Khata no-298, Plot No-954 in village Kilipala, Tahasil Tirtol, district Jagatsinghpur bounded by geo coordinates Latitude: N20°19'05.70" to N20°19'19.20" and Longitude: E86°18'36.10" to E86°18'47.10" bearing Toposheet No. 73L/7. The Nearest NH is NH-53 at a distance 19km and nearest airport is Biju Pat tanaik international Airport, Bhubaneswar is at about 53 km.
  9. **Total Reserves and proposed production:**

<b>As per Approved Mining Plan</b>	
<b>Geological Reserve</b>	<b>Mineable Reserve</b>
26462	21935

Mining Lease	Year	Surface Area in m <sup>2</sup>	Thickness in m	Production (m <sup>3</sup> )
	A	B	C	D=B*C
Kilipal Mahanadi Sand Sairat	1st Year	15150	1	15150
	2nd Year	15150	1	15150
	3rd Year	15150	1	15150
	4th Year	15150	1	15150
	5th Year	15150	1	15150
Total				75750cum

10. **Replenishment study details:** Replenishment Study Report has prepared by Drone method with Pre-monsoon Survey on 23.06.2023 and Post Monsoon Survey on 28.11.2023 and 47106.9389 cum of sand has been replenished annually.Available Sand inside the Lease Area is 78511 cum.However, the total volume of sand available in Kilipal Mahanadi Sand Sairat after Replenishment study is around 78511.5649 m<sup>3</sup> after leaving the safety zone area which can be treated as safe extractable within the framework of the study after arrival of river level and common safe workable area 52331.485 m<sup>2</sup>.

11. **Mining method:** Open cast manual mining will be adopted with production capacity of maximum 15150 m<sup>3</sup>/year.

12. **Water requirement:** Total water required for the proposed project is 5 KLD.

S. No.	Particulars	Quantity (KLD)	Source
1.	Dust Suppression (on haul roads etc.)	1.0	Water will be sourced from nearest available source.
2.	Green Belt Development/ Plantation	2.0	
3.	Drinking/Domestic & Sanitation	2.0	
Total		5.0	

13. **Baseline study details:** Baseline study of the study area was conducted during pre-monsoon from 1st March 2022 to 31st May 2022 for Kilipala Mahanadi Sand Quarry.

- **Air :** PM10 levels were ranging from 52.3 to 94.10 µg/m<sup>3</sup>; PM2.5 levels were ranging from 20.40 to 44.20 µg/m<sup>3</sup>; SO<sub>2</sub> levels were ranging from 4.10 to 20.60 µg/m<sup>3</sup>; NO<sub>x</sub> levels were found ranging from 9.30 to 41.20 µg/m<sup>3</sup>.
- **Noise:** The noise levels varied in the study area during day time from 46.7 dB (A) Leq at Khunta l village to 55.3 Leq dB (A) at T-Point where Vehicle Movement is Higher which is increase the noise level. The night time noise level in the study area is in the range of 35.2 (A) Leq at Hajipur Village to 49.6 Leq dB (A) at T-Point because, because Due to surrounding activities of Project site.
- **Ground water monitoring results:** pH ranges from 7.18 to 7.81. TDS in samples ranges from 127 mg/l to 212 mg/l. Total Hardness in the water ranges from 85 mg/l to 142 mg/l. Calcium content in the water ranges from 15.4 mg/l to 25.6 mg/l, Magnesium content in the water ranges from 6.91 mg/l to 11.5 mg/l. Total alkalinity in the water samples ranges from 48 mg/l to 80 mg/l. Chlorides range from 76.4 mg/l to 257.3 mg/l.
- **Surface water monitoring results:** All samples were colourless meeting desirable norms (<5 Hazen). All samples meet the desirable standards (pH ranges from 7.11 – 7.69). TDS in samples ranges from 214 mg/l to 406 mg/l. Total hardness in the water ranges from 143 mg/l to 272 mg/l. Calcium content in the water ranges from 25.9 mg/l to 49.1 mg/l, Magnesium content in the water ranges from 11.6 mg/l to 22.0 mg/l, Total alkalinity in the water samples ranges from 54.5 mg/l to 97.1 mg/l. Chloride ranges from 26.3 mg/l to 51.3 mg/l.
- **Soil monitoring results:** All the samples showed pH in the range from 7.25 – 7.69. Conductivity of the samples were in the range from 0.19 µmhos/cm – 0.68 µmhos/cm. Moisture were in the range from 5.6% to 13.4%. Organic Carbon ranges from 0.26% - 0.62%. Organic Matter ranges from 0.45% - 1.07%. Phosphorus in the samples ranges from 27.46mg/kg- 53.15 mg/kg. Total Nitrogen ranges from 116 mg/kg- 143 mg/kg. Potassium in the samples ranges from 143 mg/kg - 341 mg/kg. Calcium in the samples ranges from 98 mg/kg - 207 mg/kg. Magnesium ranges from 27 mg/kg – 73 mg/kg. Chloride ranges from 97 mg/kg- 286 mg/kg.

14. **Greenbelt development:** 50 trees per year will be planted as greenbelt development.

Year	Number of saplings purposed	Location	Type of saplings
1st Year	50	Plantation is carried out safety zone of the lease area (river bank areas)	Teak, Mango,
2nd Year	50		
3rd Year	50		

<b>4th Year</b>	<b>50</b>		<b>Jammu, Jhaun, Neem etc.</b>
<b>5th Year</b>	<b>50</b>		
<b>Total</b>	<b>250</b>		

15. **Manpower requirement:** 26 persons will be engaged as manpower for the proposed project.

Designation	No. of Manpower
Supervisory Personnel/ Statutory Personnel	2
Skilled laborers (Operator and Helper)	2
Unskilled Laborer	22
<b>Total</b>	<b>26</b>

16. **Project cost:** Estimated cost of the project is Rs. 20 Lakhs. EMP cost incurs capital cost of Rs. 1,45,000, and recurring cost of Rs.75,000.

S. no	Particulars	Capital Cost	Annual Recurring cost
1	Pollution Control	55,000	20,000
2	Pollution Monitoring	25,000	10,000
3	Afforestation along Approach Road	35,000	25,000
4	Occupational health and safety	30,000	20,000
5	Reclamation /Rehabilitation of mined out area	-	-
<b>Total</b>		<b>1,45,000</b>	<b>75,000</b>

17. **Environment Consultant:** The Environment consultant **M/s Green Circle Inc, Vadodara** along with the proponent made a presentation on the proposal before the Committee.

18. Considering the information furnished and the presentation made by the consultant, **M/s Green Circle Inc, Vadodara** along with the project proponent.

19. Any deficiencies/omission have been noticed in the above documents- Nil

2. Whether SEAC recommended the proposal – The proposal was placed in the SEAC meeting held on 01.02.2024 and **the SEAC recommended for grant of Environmental Clearance** for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** and following specific conditions:
- Amended EIA Notification dated 25<sup>th</sup> July, 2018, Guidelines for sustainable sand mining, 2016 and Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India shall be adhered to in execution of Mining as per **Annexure – B**.
  - In absence of proper Replenishment Study Report, the SEAC recommended sand for 1<sup>st</sup> year to a capacity of 60% of annual production capacity as approved in the mining plan.
  - Issues raised in Public Hearing shall be complied by the project proponent.
  - Sand extraction shall be limited to quantity and depth as per replenishment study report. Regular replenishment study as per guidelines to be conducted and report to be submitted.
  - Provision of Bio-toilet shall be made at the site.
  - Avenue plantation and plantation on both sides of the haulage road in consultation with/ on the advice of concerned Forest Department, Government of Odisha & W.R. Department Government of Odisha as well.
  - Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made.
  - No natural water course shall be obstructed or diverted for the purpose of sand mining.

- i) As per Sand Sustainable Guidelines, 2020, the proponent shall ensure that no mining should be allowed below water level.
3. The proposal was placed in 159<sup>th</sup> meeting of SEIAA held on 04.03.2024 & 06.03.2024. The Authority observed that the EMP submitted by the consultant/PP does not address the environmental concerns as well as issues raised in the Public Hearing held on 23.11.2022. After detailed deliberation in the matter, the Authority decided that the PP is required to prepare EMP and CER afresh indicating year wise, item-wise budget for activities proposed in the EMP and CER. Accordingly, ADS raised by SEIAA to PP for submission clarification.
  4. The PP has submitted the revised EMP report by M/s. Green Circle Inc. with budget provision of Rs. 0.90 Lakh/annum and CER cost of Rs. 1.20 lakh/annum for 3 years.
  5. Again, the proposal was placed in 161<sup>st</sup> meeting held on 20.03.2024 & 21.03.2024. The Authority perused the EMP which is not as per the guidelines and after prepared in a lackadaisical manner. Hence, the same is rejected. Further, the Authority decided to issue show cause notice to the consultant M/s. Green Circle Inc, Vadodara for debarment. The PP is required to submit revised EMP through another NABET empanel consultant indicating year-wise and item-wise budget for activities proposed in the EMP & CER.
  6. Now, the PP has submitted the revised EMP with mentioned that Rs. 5,62,500/- (Capital Cost), Rs. 3,37,000/- Recurring cost and Rs. 1.40 Lakh/annum is foe CER cost.

**Decision of Authority: Approved**

After detailed deliberations in the matter, the Authority decided **to grant Environmental Clearance** with usual stipulated conditions as applicable for sand quarry.

- Maximum depth of mining 1.0 meter and maximum quantity of extraction shall be limited to **15150 cum** per annum for lease period.
- The PP is required to carry out the Annual Rate of Replenishment Study (ARRS) through ORSAC empanel agency in subsequent year and submit the report to SEIAA, Odisha.
- The EC is valid till validity of DSR or validity of lease period whichever is earlier.
- The Grant of EC for further period will be considered after submission of approved DSR by SEIAA as per the MoEF& CC, Govt. of India Notification S.O. 3611(E) dated 25.07.2018, Sustainable sand mining guidelines-2016 and Enforcement & Monitoring Guideline for sand mining-2020 and also as per the Hon'ble Supreme Court order vide its order dated 10.11.2021 in Civil Appeal Nos. 3661-3662 of 2020 (State of Bihar Vrs. Pawan Kumar and Others).
- The Project Proponent (lease holder) shall deposit Rs.3,00,000/-, with the respective District Environment Society for raising 600 plants (minimum @100 trees per Ha) of native species within 2 years in a suitable location adjoining to quarry.
- The PP will implement the EMP with a budgetary allocation of Rs. 5,62,500/- (Capital Cost), Rs. 3,37,000/- Recurring cost and Rs. 1.40 Lakh/annum is foe CER cost.