

**PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL
COMMITTEE, ODISHA HELD ON 05TH AUGUST, 2022**

The SEAC met on 05th August, 2022 at 10:30 AM in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Sri B. P. Singh. The following members were present in the meeting.

1. Sri B. P. Singh	-	Chairman
2. Dr. K. Murugesan	-	Secretary
3. Dr. D. Swain	-	Member
4. Prof. (Dr.) H.B. Sahu	-	Member
5. Sri J. K. Mahapatra	-	Member
6. Sri K. R. Acharya	-	Member
7. Prof. (Dr.) B.K. Satpathy	-	Member
8. Prof. (Dr.) P.K. Mohanty	-	Member
9. Dr. K.C.S Panigrahi	-	Member
10. Dr.SailabalaPadhi	-	Member

Draft proceeding of the meeting was finalized by the members through e-mail and also final proceeding of the meeting was confirmed by the members through e-mail. The agenda-wise proceedings and recommendations of the committee are detailed below.

ITEM NO. 01

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR KUNTESHU DECORATIVE STONE (GARNETIFEROUS GRANITE GNEISS) MINE OVER AN AREA OF 13.703 HA (33.86 ACRES), LOCATED IN VILLAGE KUNTESHU NO.52, UNDER TEHSIL BANDHUGAON, DISTRICT KORAPUT OF SRI NEMANI RAMKRISHNA - EC

1. The proposal is for Environmental Clearance for Kunteshu Decorative Stone (Garnetiferous Granite Gneiss) mine over an area of 13.703 Ha (33.86 Acres), located in village Kunteshu No.52, under Tehsil Bandhugaon, District Koraput of Sri NemaniRamkrishna.
2. The project falls under category "B" or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. Kunteshu Decorative Stone (Garnetiferous Granite Gneiss) mine over an area of 13.703 Ha (33.86 Acres), located in village Kunteshu No.52, under Tahasil Bandhugaon, District Koraput, Odisha.
4. The lease was granted by Govt. of Odisha, Dept. of Steel & Mines, has issued the Letter of Intent vide their letter no. 6538/S & M, Bhubaneswar, dated 05.09.2019 for grant of mining lease in favour of Sri Nemani Ramkrishna for 30 years.
5. The project was appraised by SEAC, Odisha on 11.11.2020 and the Hon'ble committee has the opinion that the project should be appraised as Cat. A due to presence of interstate boundary (1.5 Km).The project later appraised by EAC and ToR was issued on 05.01.2021 vide letter no. IA/OR/MIN/191282/2021.
6. As per EIA Notification S.O. 2163(E), dated 09.05.2022 the general condition is now not applicable for the minor mineral projects. Therefore, the application for EC has been made to SEIAA, Odisha for appraisal under category B1 vide file no. SIA/OR/MIN/56482/2020.

7. Public Hearing was conducted on dated 29.09.2021 at Mundapadar Village of Bandhugaon Tehsil of Koraput Dist. Main issues raised during PH are Employment, Skill development for local youth, Health facility, Mother and child health care, Educational infrastructure development, road maintenance, Drinking water supply, Solar light, Pollution Control and surface runoff management. Funds allocated towards PH issues is 42.80lakhs.
8. Baseline data collection was done October to December 2020.
9. The Mining plan is being approved by Directorate of Mines, Odisha, Bhubaneswar vide letter no. MXXII-(a)-10/2019/5103/DM dated 27.07.2020.
10. **Location and Connectivity** - The Kunteshu Decorative Stone Deposit lease area falls in Topo sheet No. 65 M/8(E44F8) with geo coordinates Latitude – 18°59'36.09"N to 18°59'59.80"N & Longitude – 83°17'41.90"E to 83°17'52.90"E. The Lease area is on Khata no.67, Plot no. 385/P (13.21 Acre), & 397/P (20.65 Acre) and Kissam: Pahada. No Forest land involved. Jemedipeta Railway Station is of distance of 14 Km, Ledda Railway Station at a distance of 17 Km from the ML area. Nearest Highway is SH 36, 15 Km and SH 4, 11Km from the ML area. Nearest major habitation - Bandhugaon at a distance of 9 Km.
11. **Total Reserves** - As per the estimation, the geological reserve is found to be total rock mass is 1877597 m³ and recoverable decorative stone is 375519 m³ & Mineable reserve is found to be total rock mass is 1407978 m³ and volume of recoverable decorative stone is 281596 m³.
12. **Method Of Mining** - Opencast semi-mechanized mining method in single shift involving drilling, cutting & transportation. The mine shall be developed to produce 2400cum(max) /annum of Rock, and 9000cum/annum is Non saleable stone.
13. The Life of mine is 50 years.
15. **Waste generation and utilization** - The mine shall reject 58304 cum of wasterock mass during the plan period. The waste proposed to be utilized for construction & maintenance of haul road within & outside the lease area connecting to village road. By the end of the life of the mines, the reclamation & rehabilitation programme has been proposed by means of backfilling. At the conceptual period waste generated will be utilized as construction material for local developmental work with due permission from mining officer. In this connection PP has procured a land of 1 acre from distance 3 km from Kuntesu village for establishment of a crusher unit for catering to local need.
16. **Green Belt** - There will be green belt development over an area of 5000sqm along the periphery of the quarry lease area, dump yard, both sides of the transportation road and 2500 nos. of saplings will be planted.
17. **Water Requirement** - The total water requirement shall be 5000 liters/day and will be purchased by Tanker and Rain water harvesting.
18. **Power Requirement** - Power Requirement will be met through DG sets.
19. **Employment Potential** - The project shall create direct employment for 25 persons under skilled worker, semi skilled and unskilled worker at operational stage.

20. The project cost is `2 crores and EMP cost is 9.5 Lakh (capital) and 5.7 Lakh (recurring).

21. The Environment consultant **M/s Kalyani Laboratories Private Limited, Bhubaneswar** along with the proponent has made a presentation on the proposal before the Committee.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Kalyani Laboratories Private Limited, Bhubaneswar**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent.

- (i) In view of the likely revision of DSR for Koraput District in future the details of this Minor Mineral reserve to be ensured in the revised DSR.
- (ii) NOC from concerned competent authority for usage of road for transportation of minerals.
- (iii) Plantation on both sides of approach road and its maintenance.
- (iv) Zero discharge from lease area to be maintained.
- (v) In case village / any habitation is very nearby, plan to ensure safety of human life and livestock from accidents be submitted.
- (vi) NOC of BDO of Panchayat for usage of haulage road/Panchayat Road.
- (vii) Silt management and mitigation
- (viii) Composition of wastes/dumps and it's storage plan for different years with proposed layout
- (ix) Mitigation of flying rock if likely to generate due to possible use of explosive

ITEM NO. 02

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR MURADIPALI RIVER BED SAND MINE OVER AN AREA OF 12.735 HA/ 31.47 ACRE IN VILLAGE MURADIPALI UNDER LAIKERA TAHASIL OF JHARSUGUDA DISTRICT OF SRI PUSHPAK KUMAR NAIK - EC

1. The proposal is for Environmental Clearance for Muradipali River Bed Sand mine over an area of 12.735 Ha/ 31.47 Acre in village Muradipali under Laikera Tahasil of Jharsuguda District of Sri Pushpak Kumar Naik.
2. The project falls under category "B" or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. Muradipali River Bed Sand mine over an area of 12.735 Ha/ 31.47 Acre in village Muradipali under Laikera Tahasil of Jharsuguda District.
4. Terms of Reference was issued vide letter no. 8995/SEIAA dated 18.09.2020 by SEIAA, Odisha.
5. Public Hearing was conducted in 01.09.2021 at Muradipalli Village, Jharsuguda District, Odisha. Major issues of PH are Employment, Pollution Control, Peripheral development, Supply of sand to local people at affordable cost. Budget proposed for addressing issues raised during PH is 6.65 lakhs.
6. Baseline study was conducted during post Monsoon in 1st October to 31st December 2020.

7. **Location and Connectivity** - The Muradipali River Bed Sand mine is on Khata no- 111, Plot no.337(P), 501 & 640(P) and Kisam - Nadi in village Muradipali in Tahasil Laikera & District - Jharsuguda of Odisha. The area under discussion is featured in Survey of India Topo Sheet No – F45MQ1. It is bounded between the Latitude -21°50'54.89"N to 21°51'34.73"N and Longitude – 84°10'57.55" E to 84°11'19.14" E. Nearest National Highway is NH 200 is at a distance 6.6km and nearest railway station is Dhutra Railway station is at 10km. Nearest habitation is Muradipali village at 1km. Lease area is part of Telen River. There are no National Parks/Sanctuaries/Tiger-Elephant Reserves as per 'Wildlife Protection Act,1972' within 10 km radius from proposed mine site.
8. The mining lease area is listed as an identified sand minor mineral in the Page 37, Sl. 40 of DSR Jharsuguda District.
9. The mining plan has been approved by Office of the Joint Director Geology Sambalpur, Odisha; vide memo no.XIX-J-99/9 on dated 03.12.2019**.
10. **Reserves and Production** - Total Geological Reserve of Kanaka Sand Bed is 35757 cum and Mineable Reserve is 22739 cum. The average production is proposed to be 4000 cum/year and 20000 cum is the total production during the plan period. The sand will be excavated by open cast manual method.
11. **Employment Potential** - Total number of employment will be around 08 including Skilled, Semiskilled and Unskilled
12. **Water requirement** - 3 KLD of water will be required for drinking, domestic purpose and for dust suppression. Water will be withdrawn from tube wells from nearby village through water tankers.
13. Green belt shall be developed along the safety zone, roadside & in nearby village after consultation with local villagers with the native tree species. Species likely to be planted are Chakunda, neem etc as per the availability.
14. The estimated project cost is ` 20lakhs and EMP cost is ` 4 lakhs.
15. The project proponent along with the consultant **M/s Kalyani Laboratories Private Limited, Bhubaneswar** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Kalyani Laboratories Private Limited, Bhubaneswar**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** in addition to the following specific conditions.

- i) Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - B**.
- ii) Regular replenishment study to be conducted and report to be submitted.
- iii) Provision of Bio-toilet shall be made at the site.
- iv) 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.

- v) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made.

ITEM NO. 03

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR NIZGARHZAMI SAND MINING PROJECT OVER AN AREA OF 10.06 HA. OR 24.86 ACRE LOCATED AT VILLAGE - NIZGARHZAMI, TEHSIL- TALCHER, DISTRICT- ANGUL OF SRI PITAMBAR BHUTIA – EC

1. The proposal is for Environmental Clearance for Nizgarhzami Sand mining project over an area of 10.06 Ha. or 24.86 Acre located at Village - Nizgarhzami, Tehsil- Talcher, District- Angul of Sri Pitambar Bhutia.
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. Nizgarhzami Sand mining project over an area of 10.06 Ha. or 24.86 Acre located at Village - Nizgarhzami, Tehsil- Talcher, District- Angul.
4. Terms of Reference was issued vide letter no. 1341/SEIAA dated 24.05.2021 by SEIAA, Odisha.
5. Public Hearing was conducted in 24.11.2021 at Tahasil Office , Talcher under Angul district, Odisha. Major issues of PH are Employment opportunity to local villagers, Plantation in village and Water sprinkling for dust suppression.
6. Baseline study was conducted during post Monsoon in Dec, 2020 to Feb, 2021.
7. Replenishment Study has been submitted and study says replenishment of Sand to be 20120cum which is more than the proposed annual production of 18000cum.
8. **Location and Connectivity** - The area under discussion is featured in Survey of India Topo Sheet No – 73H/1 and is bounded between the Latitude -20° 55’ 20.56” N to 20° 55’ 35.14” N & Longitude – 85° 14’ 19.86” E to 85° 14’ 31.77” E. The Lease area is located at a distance of 3.2kms from Talcher town, 21kms from the District Headquarters Angul and 130kms from the State Capital Bhubaneswar. Talcher Railway station is the nearest railway station located at a distance of 4.13kms from the lease area. Nearest Road bridge is at a distance of 1kms from the mining lease. Metal road connecting to the lease area with the village – Nizgarhzami is at distance of 0.32 meters. SH – 63 is the nearest State Highway which is at distance of 17.7km. NH 200 is the nearest National Highway at 1km and NH 23 which is major district road at a distance of 2.5kms.
9. The mining lease area is listed as an identified sand minor mineral in the DSR page no – 20, Serial no – 11 of the Angul district.
10. The Mining plan has been approved by the Joint Director of Geology Zonal Survey, Dhenkanal vide letter no- 666 on dated 01.06.2020.
11. **Reserves and Production** - Total Geological Reserve of Kanaka Sand Bed is 103069 cum and Mineable Reserve is 90636 cum. The average production is proposed to be 18000 cum/year and 90000 cum is the total production during the plan period. The sand will be excavated by open cast semi mechanized method and by manual method also.

12. **Employment Potential** - Total number of employment will be around 30 including Skilled, Semiskilled and Unskilled
13. **Water requirement** - 7 KLD of water will be required for drinking, domestic purpose and for dust suppression. Water will be withdrawn from tube wells from nearby village through water tankers.
14. Green belt shall be developed along the approach roadside & in nearby village after consultation with local villagers with the native tree species. 940 saplings will be planted and local species like Chakunda, neem etc as per the availability.
15. The estimated project cost is ` 60lakhs and EMP cost is Rs. 4,67,000 and recurring cost Rs. 4,20,000.
16. The project proponent along with the consultant **M/s P & M Solutions, Noida (U.P)** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s P & M Solutions, Noida (U.P)**, the SEAC decided to take decision on the proposal after receipt of following information/ documents from the proponent.

- (i) Undertaking by Tahasildar that Haulage Road is not constructed.
- (ii) Distance of Talcher King Palace from proposed quarry and distance of new barrage being constructed.
- (iii) NOC certificate from Irrigation Dept. that proposed mining will not affect the barrage proposed/under construction adversely.
- (iv) Mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure – B**. Layout of progressive Mine Closure Plan shall also be incorporated in the Mining Plan.

ITEM NO. 04

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR HAZARIDANGA STONE QUARRY (I TO VIII) OVER A CLUSTER AREA OF 11.938 HECTARES/ 29.49ACRES (CONSISTING OF 8 NOS. QUARRIES) LOCATED AT VILLAGE- HAZARIDANGA, TAHASIL- KOLNARA, DISTRICT- RAYAGADA OF TAHASILDAR, KOLNARA – EC

1. The proposal is for Environmental Clearance for Hazaridanga Stone Quarry (I To VIII) over a cluster area of 11.938 hectares/ 29.49acres (consisting of 8 nos. quarries) located at Village- Hazaridanga, Tahasil- Kolnara, District- Rayagada of Tahasildar, Kolnara.
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. Hazaridanga Stone Quarry (I to VIII, cluster of 8 Quarries) is located at village Hazaridanga, Tehsil Kolnara, District Rayagada of Odisha. The project is proposed by the Tahasildar, Kolnara, Rayagada. The proposed project is in cluster situation as 8 leases are within 500 m radius & total lease area becomes greater than 5 ha. The total cluster area granted under QL is 11.938 ha within 500m.

4. Details of 8 Stone Quarries under total cluster area of 11.938 Ha. is given in Table:

SI no.	Name of Quarry	Lease area (Ha.)	Land Schedule	Kissam
1	Hazaridanga Stone Quarry I	1.011	Khata No-6 Plot No -37	Pahad
2	Hazaridanga Stone Quarry II	2.024	Khata No-6 Plot No -37	Pahad
3	Hazaridanga Stone Quarry III	2.024	Khata No-6 Plot No -99	Pahad
4	Hazaridanga Stone Quarry IV	1.214	Khata No-6 Plot No - 84	Pahad
5	Hazaridanga Stone Quarry V	1.214	Khata No-6 Plot No -84(p)	Pahad
6	Hazaridanga Stone Quarry VI	2.023	Khata No-6 Plot No -98(p)	Pahad
7	Hazaridanga Stone Quarry VII	1.214	Khata No-6 Plot No -98(p)	Pahad
8	Hazaridanga Stone Quarry VIII	1.214	Khata No-6 Plot No -84	Pahad
Total		11.938		

5. The Hazaridanga Stone Quarry (I to VIII) is proposed on Khata no- 6, Plot no- 84, 37, 99, 84, 98(p), 84(p), 98(p) of Pahad Kissam in village - Hazaridanga in Tahasil Kolnara in Rayagada District of Odisha. The mining lease area is identified and listed in the DSR of stone and is mentioned in the DSR page no – 25, 26, 32 & 34, Serial no – 1, 8, 2, 3, 6, 7 & 8 of the Rayagada district. Hazaridanga Stone Quarry (I to VIII) is a minor mineral extraction project for exploitation of stone. The average production from the cluster is proposed to be 27650 cum/year and total production from the cluster will be 133332 cum during the valid lease period of 5 years.
6. **Location and Connectivity** - The area under discussion is featured in Survey of India Topo Sheet No – 65M/7, 65M/8, 65M/11 & 65M/12 and is bounded between the Latitude -19° 14' 50.00" N to 19° 15' 22.17" N, Longitude – 83° 29' 46.66" E to 83° 30' 14.85" E. The lease area is located at a distance of 0.4km from village Hazaridanga and at a distance of 04 kms from Kolnara, 13.0 kms from the District Headquarters Rayagada and 495.0 kms from the State Capital Bhubaneswar. Rayagada Railway station is the nearest railway station located at a distance of 13 kms from the lease area. Nearest Road bridge is at a distance of 4.2 km from the mining lease area. Metal road connecting to the lease area and with the village – Hazaridanga is at distance of 0.1 km. SH – 4 is the nearest State Highway at a distance of 1.1kms. Major district road is at distance of 1.1 km. NH-43 is the nearest National Highway which is at a distance of 87 km.
7. The Mining Plan of each stone quarry (8Nos.) has been approved by the approving authority, Office of the Joint Director of Geology, Zonal Survey, Koraput.
8. TOR has been granted from SEIAA vide letter no 880/SEIAA dated 09.03.2021 for Hazaridanga Stone Quarry (I to VIII) over an Cluster area of 11.938 ha/29.49 Acre of stone in village- Hazaridanga, Tehsil - Kolnara, District- Rayagada, Odisha.
9. The public hearing was conducted on 21st September, 2021 at 11.00A.M in RMC Godown at Padalekapai village (Near Hazaridanga village) under Kolnara Tehsil, District Rayagada.

10. Baseline Study was conducted during period for post monsoon season of 2020 i.e, from October to December, 2020.
11. **Geological and Mineable Reserve:** -Reserve is calculated basing on the existing quarry/surface exposures and cross sectional area method has been taken suitably for reserve estimation. The cross sectional area of the road metal is computed for each section by graphical method. For the purpose of estimation of quantity of the road, railway and building materials, recovery factor is taken as 90% of total rock mass while remaining 10% is assumed to be waste consists of weathered rock and soil.

S no.	Name of the Quarry	Geological reserve (cum)	Mineable reserve (cum)
1	Hazaridanga Stone Quarry I	2,19,745	84,625
2	Hazaridanga Stone Quarry II	2,87,562	1,77,973
3	Hazaridanga Stone Quarry III	1,34,078	93,252
4	Hazaridanga Stone Quarry IV	2,73,167	1,15,684
5	Hazaridanga Stone Quarry V	3,15,057	1,12,417
6	Hazaridanga Stone Quarry VI	5,16,684	2,55,888
7	Hazaridanga Stone Quarry VII	3,19,938	1,48,230
8	Hazaridanga Stone Quarry VIII	1,47,735	88,717
	8 nos.	22,13,966	10,76,786

12. **Method of Mining** - Mining will be done by Opencast semi-mechanized method with adopted of drilling & blasting. There is practically no OB at proposed site as it is already broken. The excavation in ore zone will be carried out by HEMM. In order to prevent haphazard excavation of pits and suitable blending of ore, the excavation has been proposed at one place. Sorting and sizing will be done manually also. The working has been proposed bench will be of height 6m and width 6m.

13. Total Production of the Hazaridanga Stone Quarry (I to VIII) Under Cluster Approach

Sl.No.	Name of Quarry	Useable Rock (cum)	Waste (cum)
1	Hazaridanga Stone Quarry	13034	686
2	Hazaridanga Stone Quarry II	24348	2704
3	Hazaridanga Stone Quarry III	24402	2704
4	Hazaridanga Stone Quarry IV	10854	1205
5	Hazaridanga Stone Quarry V	22842	2538
6	Hazaridanga Stone Quarry VI	11360	2840
7	Hazaridanga Stone Quarry VII	11372	599
8	Hazaridanga Stone Quarry VIII	15120	1680
Total	8 Nos.	133332	14956

14. The waste generated from the cluster is expected to be 14956 Cu.m. and volume of top soil is 19090 Cum. during the plan period are not useable for construction purpose, so these materials will be dumped in the temporary dump of 3 – 8 m height which will be utilized for approach road developers and maintenance purposes. The top soil available will be used for plantation activity and the waste material, which is normally in the form of weathered material, is used for filling, road making and maintenance within the lease hold area only.
15. **Employment Potential** - Total number of employment will be around 101 numbers. including Management, Supervisory personnel, Skilled, Semiskilled and Unskilled.
16. **Water Requirement** - 87 KLD of water will be required for drinking, domestic purpose and for dust suppression. Water will be withdrawn from tube wells from nearby village through water tankers.
17. **Plantation** - Green belt shall be developed along the Safety zone of the lease area with the native tree species. The plantation proposal has been given to plant around 9870 saplings over safety zone of whole cluster and both sides of approach road. Species likely to be planted are Teak, Acasia Neem, Jamun etc as per the availability. Spacing between the saplings will be kept 2.5 meters x 2.5 meters only. (Plantation has been given 2500 Plants/hac.).
18. The estimated project cost is ` 2.4 crores and EMP cost is Rs. 57,54,000 lakhs and recurring cost is Rs. 56,80,000.
19. The project proponent along with the consultant **M/s P&M Solution., Noida -201301 – U.P** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s P&M Solution., Noida -201301 – U.P**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of Sub-Committee of SEAC.

- i. Installation of STP of adequate capacity and requisite design.
- ii. Proposed mitigation measures/ SOP for flying rock.
- iii. Sketch map showing Dump management, garland drain and silt management and photographs of that area.
- iv. Risk involved and measures to be taken for Dump stablization and dump management.
- v. Green belt in safety zone of each mine and all-round the clusters to be confirmed with details.
- vi. Arrangement of pipeline sprinkling (permanent water line) to be explored and confirmed.
- vii. Silt management and detailed plan for the same to arrest /remedy of silt ingress to surrounding agricultural lands.
- viii. Safety measures during blasting including provision of warning to be submitted.

ITEM NO. 05

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR TALAB STONE QUARRY – 1(A) OVER AN AREA OF 5.44 ACRES OR 2.20 HECTARES BEARING KHATA NO. 751, PLOT NO. 1443(P) IN TALAB VILLAGE OF SAMBALPUR TAHASIL, DISTRICT- SAMBALPUR, STATE ODISHA OF SRI NEERAJ KUMAR

AGRAWAL (SUBMITTED UNDER CLUSTER APPROACH WITH TOTAL CLUSTER AREA 12.606 HECTARES WITH CONSISTING OF 5 STONE QUARRIES) - EC

The project proponent did not attend the meeting. The proposal is deferred to next meeting.

ITEM NO. 06

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR SINDRIGAON SAND QUARRY OVER AN AREA OF 8.320 HA OR 20.558 ACRES AT KHATA NO.- 207, PLOT NO.- 1326, VILLAGE- SINDRIGAON, TAHASIL- BALLIGUDA, DISTRICT KANDHAMA OF SRI. BIPIN BIHARI PATRA - EC

1. The proposal is for Environmental Clearance for Sindrigaon Sand Quarry over an area of 8.320 Ha or 20.558 acres At Khata no.- 207, plot no.- 1326, Village- Sindrigaon, Tahasil- Balliguda, District Kandhama of Sri. Bipin Bihari Patra.
2. The project falls under category "B" or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. This is a sand mining project located on dry river bed of river Kharag at Khata No. -207, Plot No.-1326, village- Sindrigaon, Tahasil- Balliguda, District-Kandhamal, State-Odisha over an area of 8.320 Ha or 20.550 acres.
4. Terms of Reference was issued vide letter no. 1513/SEIAA dated 17.06.2021 by SEIAA, Odisha.
5. The public hearing has been conducted on 12/01/2022 at Sindrigaon High school in village Sindrigaon Village, Tahasil- Balliguda District Kandhamal, Odisha. Major issues of PH is Employment Generation, Pollution due to mining.
6. Baseline study was conducted during pre- monsoon season during March to May, 2021.
7. Replenishment Study has been submitted and study says the rate of replenishment was approx. 9 times (considering total area) & 2 times (considering mineable area) as per the actual production. It means reserve mentioned in approved mine plan of Khadga river will not reduced after mining.
8. **Location and Connectivity** - The area under discussion is on Khata No. 207, Plot No. 1326, village- Sindrigaon, Tahasil- Balliguda, District-Kandhamal, State-Odisha and featured in Survey of India Topo Sheet No – F44X15, F44X16, F45S3, F45S4 and is bounded between the Latitude - 20°14'43.4"N to 20°15'1.6"N & Longitude – 83°55'48.3"E to 83°55'59.7"E. Mine site is connected via approach road which connects Killarghat- Jiddipanga road in East direction. This road further connects NH 59 is at approx. 5.5 km in SW direction. Deogan Road Railway station is the nearest railway station located at a distance of 61kms from the lease area. Nearest Airport is Biju Patnaik International Airport, Bhubaneswar, approx. 200 Km Nearest Road bridge is at a distance of 2.15kms from the mining lease. Sindrigaon village is 0.4 km from the proposed area in NE direction.
9. The quarry lease has been allotted to Sri Bipin Bihari Patra, for quarrying of sand (minor mineral) by the Tahasildar Balliguda vide letter no.1939 dated 01/08/2018 for 5 years.
10. Mining Plan has been approved by Joint Director of Geology South zone, Berhampur vide Memo no 1168(2)/SZ dated 05.10.2018.

11. **Reserves and Production** - Total Geological Reserve of Sindrigaon Sand Quarry is 99850 cum and Mineable Reserve is 22867 cum. The average production is proposed to be 3091cum (max)/year and 15264 cum is the total production during the plan period. The sand will be excavated by open cast manual method.
12. **Employment Potential** - Total number of employment will be around 8 including Skilled, Semiskilled and Unskilled
13. **Water requirement** - 4 KLD of water will be required for drinking, domestic purpose and for dust suppression. Water will be withdrawn from tube wells from nearby village through water tankers.
14. Green belt shall be developed along the approach roadside & in nearby village after consultation with local villagers with the native tree species. 500 saplings will be planted and local species like Chakunda, neem etc as per the availability.
15. The estimated project cost is ` 50 lakhs and EMP cost is about Rs. 5.62 lakhs (Capital), Rs. 3.61 lakhs (recurring).
16. The project proponent along with the consultant **M/s Atmos Sustainable Solutions, Noida (U.P)** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Atmos Sustainable Solutions, Noida (U.P)**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** in addition to the following specific conditions.

- i) Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - B**.
- ii) Regular replenishment study to be conducted and report to be submitted.
- iii) Provision of Bio-toilet shall be made at the site.
- iv) 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.
- v) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made.

ITEM NO. 07

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR DWARAGAM STONE QUARRY OVER AN AREA OF 12.8721 HA VILLAGE- DWARAGAM, TAHASIL – DIGAPAHANDI, DISTRICT- GANJAM OF SMT.LAXMI SETHI - EC

1. The proposal is for Environmental Clearance for Dwaragam Stone Quarry over an area of 12.8721 ha village- Dwaragam, Tahasil – Digapahandi, District- Ganjam of Smt.Laxmi Sethi.
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. Dwaragam stone quarry project is located at village- Dwaragam, Tahasil- Digapahandi, District- Ganjam, State - Odisha (khata no.-317, plot no.-382) over an area of 12.8721 ha or 31.808 acres.
4. The Quarry lease has been allotted to Smt. Laxmi Sethi for quarrying of stone (minor mineral) by the Tahasildar Digapahandi vide letter no. - 3833 dated 05.07.2019 for 5 years.
5. Mining Plan has been approved by Joint Director, Geology Authorized officer, Joint Director Geology South Zone, Berhampur vide Memo no. 486/SZ dated 17.05.2021.
6. **Location and Connectivity** - The area under discussion is featured in Survey of India Topo Sheet No – 74A/11 and is bounded between the Latitude -19°20'19.9"N to 19°20'32.7"N, Longitude – 84°31'18.0"E to 84°31'40.4"E. Berhampur Railway station is the nearest railway station located at a distance of 29.40kms from the lease area. Nearest Airport is Biju Patnaik International Airport, Bhubaneswar, approx. 169 Km. Nearest Road bridge is at a distance of 3.50kms from the mining lease. Dwaragam village is 420m from the proposed area.
7. TOR has been granted from SEIAA vide letter no 1809/SEIAA dated 26.07.2021 for Dwaragam Stone Quarry.
8. The public hearing has been conducted on 26.04.2022 at village- Dwaragam under Digapahandi Tehsil of District Ganjam, Odisha under the supervision of Addl. District Magistrate, Ganjam.
9. Baseline Study was conducted during period for pre- monsoon season during March, 2021 to May, 2021.
10. **Geological and Mineable Reserve:** -Total Geological Reserve of Dwaragam Stone Quarry is 16, 59,344 cum and Mineable Reserve is 12,61,296 cum. The average production is proposed to be 5000 cum /year and 25000 cum is the total production during the plan period. The stone will be excavated by open cast semi mechanised method.
11. **Method of Mining** - Mining will be carried out by opencast semi-mechanized method with adoption of drilling & blasting. Handling of rock mass will be done both manually & by excavators. Handpicks, spade, chisel, hammer will be used by manual labors for sorting & sizing. Loosening of rock mass will done by drilling & blasting. In order to prevent haphazard excavation of pits and suitable blending of ore, the excavation has been proposed at one place. In mine, proposed height is 5m & width of bench is more than 5m.
12. A total of 2,775 cum (10%) waste/rejects is likely to be generated during the plan period which will be dumped in the NW site which will cover an area of 1000 sq.m. (0.1 ha) & dump height will be 4m.

13. **Employment Potential** - Total number of employment will be around 23 numbers including Management, Supervisory personnel, Skilled, Semiskilled and Unskilled.
14. **Water Requirement** - There is requirement of approx. 4.5 KLD water for this project. 0.3 KLD will be for drinking/domestic purpose which will be taken from nearby source/ water tanker.
15. **Plantation** - Plantation will be done in mining lease approach road. About 1320 number of trees will be planted along approach road in the first year & at other place after consultation with the local authorities.
16. The estimated project cost is ` 50 lakhs and EMP cost is Rs. 11,60,000.00(Capital Cost), and Rs. 4,90,000 (Recurring cost).
17. The project proponent along with the consultant **M/s Atmos Sustainable Solutions, Noida (U.P)** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Atmos Sustainable Solutions, Noida (U.P)**, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent.

- i. Detailed mitigation measures for flying rock.
- ii. Risk involved and measures to be taken for Dump stabilization and dump management.
- iii. Green belt plantation should be increased in safety zone.
- iv. Silt management and detailed plan for the same to arrest /remedy of silt ingress to surrounding agricultural lands and budget should be allocated to it.
- v. Safety measures during blasting including provision of warning to be submitted.

ITEM NO. 08

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR JALAMERIPALLI SAND QUARRY OVER AREA OF 8.8777 HA VILLAGE JALAMERIPALLI, TEHSIL- DIGAPAHANDI, DISTRICT- GANJAM OF SMT.LAXMI SETHI - EC

1. The proposal is for Environmental Clearance for Jalameripalli Sand Quarry over area of 8.8777 ha village Jalameripalli, Tehsil- Digapahandi, District- Ganjam of Smt.Laxmi Sethi.
2. The project falls under category "B" or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. This is a sand mining project located on dry river bed of river Ghodahada at Khata No. – 327, Plot No.-1488, Village-Jalameripalli, Tahasil: Digapahandi, District: Ganjam, State: Odisha over an area of 8.8777 ha or 21.937 acres
4. Terms of Reference was issued vide letter no. 1801/SEIAA dated 26.07.2021 by SEIAA, Odisha.
5. The public hearing has been conducted on 20/04/2022 at Kothaghara of village- Jalmeripalli (Plot no.-1476, Khatano.-324, Mouza Jalmeripalli) under Digapahandi Tehsil of District Ganjam.Major issues of PH is Protection of stone pitched river embankment , Pollution due to mining, loading & transportation of sand during day time only.

6. Baseline study was conducted during pre- monsoon season during March to May, 2021.
7. This replenishment study shows, the rate of replenishment was approx. more than 100% (i.e, 1.5 times more) as per the actual production. It means reserve mentioned in approved mine plan of Godadaha river will not reduce after mining.
8. **Location and Connectivity** - The area under discussion is on Khata No. 327, Plot No. 1488, Village- Jalameripalli, Tahasil: Digapahandi, District: Ganjam, State: Odisha and featured in Survey of India Topo Sheet No – E45A7, E45A11 and is bounded between the Latitude - 19°22'58.0"N to 19°23'07.3"N & Longitude – 84°29'49.5"E to 84°30'14.7"E. The mine site is well connected by approach road of 0.04 km which further connects to metalled road in South direction. This road further connects NH 326 is at approx. 3.45 km in NE direction. This is a single lane road. Berhampur Railway station is the nearest railway station located at a distance of 33kms from the lease area. Nearest Airport is Biju Patnaik International Airport, Bhubaneswar, approx. 168 Km. Nearest Road bridge is at a distance of 0.02kms from the mining lease. Jalameripalli village is 80m from the proposed area. Nearest river embankment is near Jalameripalli Road Bridge, Ghodahada River at a distance of 0.02 km in NE direction. Changurhidebi Reserve Forest at a distance of 2.50 Km in SE.
9. The quarry lease has been allotted to Smt. Laxmi Sethi, for quarrying of sand (minor mineral) by the Tahasildar Digapahandi vide letter no.3834 dated 05/07/2019 for 5 years.
10. Mining Plan has been approved by Joint Director of Geology South zone, Berhampur vide memo no. 488/SZ dated 17.05.2021.
11. **Reserves and Production** - Total Geological Reserve of Jalameripalli Sand Quarry is 140700 cum and Mineable Reserve is 54820 cum. The average production is proposed to be 5000cum /year and 25000 cum is the total production during the plan period. The sand will be excavated by open cast manual method.
12. **Employment Potential** - Total number of employment will be around 16 including Skilled, Semiskilled and Unskilled
13. **Water requirement** - 2 KLD of water will be required for drinking, domestic purpose and for dust suppression. Water will be withdrawn from tube wells from nearby village through water tankers.
14. Plantation will be done in mining lease approach road. About 700 number of trees will be planted along approach road in the first year & at other place after consultation with the local authorities.
15. The estimated project cost is ` 30 lakhs and EMP cost is Rs.6.20 Lakh (capital cost) & Rs. 4.35 Lakh (recurring cost)
16. The project proponent along with the consultant **M/s Atmos Sustainable Solutions, Noida (U.P)** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Atmos Sustainable Solutions, Noida (U.P)**, the SEAC recommended for grant of

Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** in addition to the following specific conditions.

- i) Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - B**.
- ii) Regular replenishment study to be conducted and report to be submitted.
- iii) Provision of Bio-toilet shall be made at the site.
- iv) 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.
- v) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made.
- vi) Pillar posting to be made to prevent river embankment from erosion.
- vii) Permission from concerned Executive Engineer of Water Resources regarding the mining activity in the proposed quarry.
- viii) Greenbelt plantation should be carried out on stable river bank/embankment.
- ix) Stone Patching at a stretch of 700meters to protect river embankment.

ITEM NO. 09

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR JAIPUR & NUAPADA MAHANADI PATHA CLUSTER SAND QUARRY WITH PROPOSED EXCAVATION OF 51,000 M3/YEAR OF SAND OF TAHASILDAR RAGHUNATHPUR HAVING AN AREA OF 16.16 HA. LOCATED AT KHATA NO. 324 & 703, PLOT NO.282,2717,389,538,260 & 261, AT- JAIPUR & NUAPADA UNDER RAGHUNATHPUR TAHASIL OF JAGATSINGHPUR DISTRICT OF TAHASILDAR, RAGHUNATHPUR - EC

The project proponent did not attend the meeting. The proposal is deferred to next meeting.

ITEM NO. 10

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR KANTIO-PUTASAHU SAND QUARRY OVER AN AREA OF 12.50 ACRES / 5.06 HA. AT KANTIO-PUTASAHU, TAHASIL-KAMAKSHYANAGAR IN THE DISTRICT OF DHENKANAL OF TAHASILDAR, KAMAKSHYANAGAR - EC

1. The proposal is for Environmental Clearance for forKantio-Putasahi Sand Quarry over an area of 12.50 acres / 5.06 Ha. at Kantio-Putasahi, Tahasil-Kamakshyanagar in the district of Dhenkanal of Tahasildar, Kamakshyanagar.
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. This is a sand mining project Kantio-PutasahiSand Quarry located at Brahmani River over an area of 12.50 acres/ 5.06 Ha. at Kantio-Putasahi village, Kamakshyanagar, Tahasil, Dhenkanal district, Odisha.

4. The Tahasildar of Kamakhyanagar issued letter to get approved mining plan and obtaining Environmental clearance vide letter no.819, Dt.19/02/2020 after district collector, Dhenkanal approval of New Sand Mine leases and Successful Bidder name will be selected after auction.
5. The mining plan was approved by Joint Director of Geology, Zonal Survey, Dhenkanal, Odisha vide Letter No. 421/DZ/29.04. 2020.
6. Terms of Reference (TOR), was issued by SEIAA, Odisha, vide proposal Letter Ref. No. ToRF. No. 10259/SEIAA dated: 17.12.2020
7. Public Hearing was conducted on 21.09.2021 at 11.00 AM at Madan Mohan Jew of Kantio- Putasahi village in the district of Dhenkanal. Major issues of PH are Dust Suppression, water pollution control, Afforestation Programme, Local Employment opportunities, Provision for repair and maintenance of village roads, Strict adherence of Sand mining guidelines.
8. The baseline data was collected for the winter season i.e. October to December 2020 in the 10 km study area.
9. **Location and Connectivity** - The area under discussion is featured in Survey of India Topo Sheet No – (73H/9) and is bounded between the Latitude -20° 45' 44.86" N to 20° 45' 54.35" N & Longitude – 85° 30' 05.03" E to 85° 30' 18.05" E. The Lease area is located at a distance of 15 kms from Dhenkanal town, 19km from Tahasil Kamakhyanagar and 66 kms from the State Capital Bhubaneswar. Sadashibapur Railway Station is the nearest railway station located at a distance of 3.0 kms from the lease area. Nearest Road Bridge is at a distance of 5.90 kms from the mining lease. Darajang road connecting to the lease area with the District road is at distance of 5.18kms. NH – 42 is the nearest major district road which is at distance of 4.35 km. SH 64 is the nearest State Highway which is at a distance of 30.16 kms.
10. **Reserves and Production** - The total geological reserve has been estimated as 189796 Cum. Similarly, the mineable reserve of river bed sand is worked out to be 97320 Cum. The project has been proposed for a total production of 91050 Cum of Sand from this Quarry. During the plan period maximum of 18210 Cum of sand will be produced per annum by Open Cast Manual mining method. Excavation & loading of sand into the dumpers and trucks/tractors will be done manually.
11. **Replenishment study**- As per the replenishment study, Mineable area is 40550 Sq.m. Estimated Annual replenishment Volume is 4055 m³ or 6488 Tonnes. However, the Mineable Reserve as per approved Mining Plan is 97320 m³. The Annual proposed production is 18210 cubic meters. Since the mining is not done yet estimated Replenishment reserve pre monsoon period is 14,192.5 m³. The excavation may be replenished in one to two years during the subsequent flood/rainy season due to irregular monsoon in the State of Odisha
12. **Water Requirement** – The total water requirement will be 2.5 KLD for different purposes like Domestic, Dust suppression, plantation purposes.
13. **Power Requirement** - No use of electric power as the operation will be done in day time. However solar lights will be used for day to day living purposes.
14. **Employment Potential** - Total number of employees will be around 13 in the mine.
15. **Greenbelt plantation** will be by planting 50 saplings of suitable species per annum by the

lessee in vicinity of the river bank, haulage roads and near village.

16. **Project Cost** - The project cost is estimated to be Rs. 40.0 lakhs and there is a budgetary provision of Rs.2.5 lakhs as capital cost and Rs.6.0 Lakhs as recurring cost towards environmental protection measures.
17. The project proponent along with the consultant **M/s Right source Industrial Solutions Pvt. Ltd.** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Right source Industrial Solutions Pvt. Ltd.**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** in addition to the following specific conditions.

- i) Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - B**.
- ii) Regular replenishment study to be conducted and report to be submitted.
- iii) Provision of Bio-toilet shall be made at the site.
- iv) 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.
- v) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made
- vi) NOC from concerned authority for usage of approach road shall be obtained and maintained by lessee.

ITEM NO. 11

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BRAHMANI RIVER SAND QUARRY, TALAJHAGADAPDA OVER AN AREA OF 12.50 ACRE/5.06 HA. LOCATED AT TALAJHAGADAPDA VILLAGE OF KAMAKHYANAGAR TAHASIL IN DISTRICT OF DHENKANAL OF TAHASILDAR, KAMAKSHYANAGAR – EC

1. The proposal is for Environmental Clearance for Brahmani River Sand Quarry, Talajhagadapda over an area of 12.50 Acre/5.06 Ha. located at Talajhagadapda village of Kamakhyanagar Tahasil in district of Dhenkanal of Tahasildar, Kamakshyanagar.
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. This is a sand mining project Talajhagadapda Sand Mine at Brahmani River over an area of 12.50 acres/ 5.06 Ha. in Khata No.:47, Plot No . Plot no-953/982, 953/983 ,Kisam : Nadi, Talajhagadapda Village, Kamakhyanagar Tahasil, Dhenkanal District, Odisha.
4. The Tahasildar of Kamakhyanagar issued letter to get approved mining plan and obtaining Environmental clearance vide letter no.819, Dt.19/02/2020 after district collector, Dhenkanal approval of New Sand Mine leases and Successful Bidder name will be selected after

auction .

5. The mining plan was approved by Joint Director of Geology, Zonal Survey, Dhenekanal, Odisha vide Letter No. 425/DZ/29.04. 2020.
6. Terms of Reference (TOR), was issued by SEIAA, Odisha, vide proposal Letter Ref. No. ToRF. No. 10251/SEIAA dated: 17.12.2020.
7. Public Hearing was conducted on 28.10.2021 at 11.00 AM at near Mangala Mandir of Tala jhagadapada village in the district of Dhenkanal. Major issues of PH are Dust Suppression, water pollution control, Afforestation Programme, Local Employment opportunities, Provision for repair and maintenance of village roads, Construction of bathing ghats along with dress changing room. Provision of drinking water.
8. The baseline data was collected for the winter season i.e. October to December 2020 in the 10 km study area.
9. **Location and Connectivity** - The area under discussion is featured in Survey of India Topo Sheet No – (73H/9 & 73 H/10) and is bounded between the Latitude -20° 44' 57.69" N to 20° 45' 09.19" N & Longitude – 85° 35' 30.28" E to 85° 35' 40.40" E. The lease area is located at a distance of 0.6 km from village Talajhagadapada and at a distance of 19.5 kms from Kamakhyanagar, 9.0 kms from the District Headquarters Dhenkanal and 105.0 kms from the State Capital Bhubaneswar. Dhenkanal Railway station is the nearest railway station located at a distance of 8.15 kms from the lease area. Nearest Road Bridge is at a distance of 3.82 km from the mining lease area. Kaccha road connecting to the lease area and with the village – Talajhagadapada is at distance of 0.57 km. SH –64 is the nearest major district road is at distance of 44.0 km. NH-42 is the nearest National Highway which is at a distance of 8.25 km.
10. **Reserves and Production** - The total geological reserve has been estimated as 161920 Cum. Similarly, the mineable reserve of river bed sand is worked out to be 84042 Cum. The project has been proposed for a total production of 84040 Cum of Sand from this Quarry. During the plan period maximum of 16808 Cum of sand will be produced per annum by Open Cast Manual mining method. Excavation & loading of sand into the dumpers and trucks/tractors will be done manually.
11. **Replenishment study** - As per the replenishment study, Mineable area is 43772 Sq.m. Estimated Annual replenishment Volume is 3501.76 m³ or 5602.81 Tonnes. However, the Mineable Reserve as per approved Mining Plan is 84042 m³. The Annual proposed production is 16808 cubic meters. Since the mining is not done yet estimated Replenishment reserve pre monsoon period is 9629.84 m³. The excavation may be replenished in one to two years during the subsequent flood/rainy season due to irregular monsoon in the State of Odisha.
12. **Water Requirement** – The total water requirement will be 2.5 KLD for different purposes like Domestic, Dust suppression and plantation purposes.
13. **Power Requirement** - No use of electric power as the operation will be done in day time. However solar lights will be used for day to day living purposes.
14. **Employment Potential** - Total number of employees will be around 15 in the mine.

15. **Greenbelt plantation** will be by planting 50 saplings of suitable species per annum by the lessee in vicinity of the river bank, haulage roads and near village.
16. **Project Cost** - The project cost is estimated to be Rs. 40.0 lakhs and there is a budgetary provision of Rs.2.5 lakhs as capital cost and Rs.6.0 Lakhs as recurring cost towards environmental protection measures.
17. The project proponent along with the consultant **M/s Right source Industrial Solutions Pvt. Ltd.** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Right source Industrial Solutions Pvt. Ltd.**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** in addition to the following specific conditions.

- i) Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - B**.
- ii) Regular replenishment study to be conducted and report to be submitted.
- iii) Provision of Bio-toilet shall be made at the site.
- iv) 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.
- v) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made
- vi) NOC from concerned authority for usage of approach road shall be obtained and maintained by lessee.
- vii) Construction of bathing ghats including the dress changing room shall be carried out by lessee in consultation to district administration.

ITEM NO. 12

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BARUAN SAND MINE OVER AN EXTENT OF 5.06 HA, BRAHMANI RIVER, AT BARUAN VILLAGE, KAMAKHYANAGAR TAHASIL, DHENKANAL DISTRICT OF TAHASILDAR, KAMAKHYANAGAR - EC

1. The proposal is for Environmental Clearance for Baruan Sand Mine over an extent of 5.06 ha, Brahmani River, at Baruan Village, Kamakhyanagar Tahasil, Dhenkanal District of Tahasildar, Kamakhyanagar.
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. This is a sand mining project Baruan Sand Mine at Brahmani River over an area of 12.50 acres/ 5.06 Ha. in KhataNo.: Khata no- 328, Plot no-3586, Kisam :Nadi, Baruan Village, Kamakhyanagar Tahasil, Dhenkanal District, Odisha.
4. The Tahasildar of Kamakhyanagar issued letter to get approved mining plan and obtaining Environmental clearance vide letter no.819, Dt.19/02/2020 after district collector, Dhenkanal approval of New Sand Mine leases and Successful Bidder name will be selected after

auction .

5. The mining plan was approved by Joint Director of Geology, Zonal Survey, Dhenekanal, Odisha vide Letter No. 415/DZ/29.04. 2020.
6. Terms of Reference (TOR), was issued by SEIAA, Odisha, vide proposal Letter Ref. No. ToRF. No. 657/SEIAA dated: 26.02.2021.
7. Public Hearing was conducted on 30.10.2021 at 11.00 AM at Kartikeswara Puja Mandap (Puruna Baisingha Village) of Baruan village in the district of Dhenkanal. Major issues of PH are generation of local employment opportunities, engagement of local tractors, repair and maintenance of village road, construction of river embankment or patching through stone boulder, provision of fund for village temple development, Adequate air and water pollution control and afforestation.
8. The baseline data was collected for the winter season i.e. October to December 2020 in the 10 km study area.
9. **Location and Connectivity** - The area under discussion is featured in Survey of India Topo Sheet No-73H/9 and is bounded between the Latitude -20°47'49.07" N to 20°47'58.23" N, Longitude-85° 36' 46.34" E to 85° 36'55.38" E. The lease area is located at a distance of 1.93 km from village Baruan and at a distance of 15.5 kms from Kamakhyanagar, 14 kms from the District Headquarters Dhenkanal and 105.0 kms from the State Capital Bhubaneswar. Dhenkanal Railway station is the nearest railway station located at a distance of 14 kms from the lease area. Nearest Road Bridge is at a distance of 8.2 km from the mining lease area. The lease area is connected to the village – Baruan at distance of 2.46 km. SH – 20 is at 45km and the nearest major district road is at distance of 7.5 km. NH- 42 is the nearest National Highway which is at a distance of 13 km.
10. **Reserves and Production** - The total geological reserve has been estimated as 190200 Cum. Similarly, the mineable reserve of river bed sand is worked out to be 92135 Cum. The project has been proposed for a total production of 80125 Cum of Sand from this Quarry. During the plan period maximum of 16025 Cum of sand will be produced per annum by Open Cast Manual mining method. Excavation & loading of sand into the dumpers and trucks/tractors will be done manually.
11. **Replenishment study** - As per the replenishment study, Mineable area is 25593 Sq.m. Estimated Annual replenishment Volume is 1791.51 m³ or 2866.41 Tonnes. However, the Mineable Reserve as per approved Mining Plan is 92135 m³. The Annual proposed production is 16025 cum. Since the mining is not done yet estimated Replenishment reserve pre monsoon period is 29943.8 m³. The excavation may be replenished in one to two years during the subsequent flood/rainy season due to irregular monsoon in the State of Odisha.
12. **Water Requirement** – The total water requirement will be 2.5 KLD for different purposes like Domestic, Dust suppression and plantation purposes.
13. **Power Requirement** - No use of electric power as the operation will be done in day time. However solar lights will be used for day to day living purposes.
14. **Employment Potential** - Total number of employees will be around 13 in the mine.

15. **Greenbelt plantation** will be by planting 50 saplings of suitable species per annum by the lessee in vicinity of the river bank, haulage roads and near village.
16. **Project Cost** - The project cost is estimated to be Rs. 40.0 lakhs and there is a budgetary provision of Rs.2.5 lakhs as capital cost and Rs.6.0 Lakhs as recurring cost towards environmental protection measures.
17. The project proponent along with the consultant **M/s Right source Industrial Solutions Pvt. Ltd.** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Right source Industrial Solutions Pvt. Ltd.**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** in addition to the following specific conditions.

- i) Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - B**.
- ii) Regular replenishment study to be conducted and report to be submitted.
- iii) Provision of Bio-toilet shall be made at the site.
- iv) 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.
- v) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made
- vi) NOC from concerned authority for usage of approach road shall be obtained and maintained by lessee.
- vii) Construction of bathing ghats including the dress changing room shall be carried out by lessee in consultation to district administration.

ITEM NO. 13

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BRAHMANI RIVER SAND QUARRY, JATIA OF TAHASILDAR, PARJANG OVER A MINING LEASE AREA OF 14.94 ACRES/6.046 HA. LOCATED IN VILLAGE- JATIA, TAHASIL- PARJANG IN DISTRICT- DHENKANAL OF TAHASILDAR, PARJANG – EC

1. The proposal is for Environmental Clearance for Brahmani River Sand Quarry, Jatia of Tahasildar, Parjang over a mining lease area of 14.94 acres/6.046 Ha. located in village- Jatia, Tahasil- Parjang in District- Dhenkanal of Tahasildar, Parjang.
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. This is a sand mining project Jatia Sand Mine at Brahmani River over an area of 14.94 acres/ 6. 046.Hectares, Khata no- 206, Plot no-2684/3531, 2684/3535, Kisam : Nadi, Jatia Village, Parjang Tahasil, Dhenkanal District, Odisha.
4. The Tahasildar of Parjang issued letter to get approved mining plan and obtaining Environmental clearance vide letter no.494, Dt.13/02/2020 after district collector, Dhenkanal

approval of New Sand Mine leases and Successful Bidder name will be selected after auction.

5. The mining plan was approved by Joint Director of Geology, Zonal Survey, Dhenkanal, Odisha vide Letter No. 470/DZ/29.04.2020.
6. Terms of Reference (TOR), was issued by SEIAA, Odisha, vide proposal Letter Ref. No. ToRF.No. 10255/SEIAA dated: 17.12.2020.
7. Public Hearing was conducted on 23.09.2021 at 11.00 AM at BhagabatGruha, Jatia (Khata No.24, Plot No.696, Area Ac. 0.02, Kissam - Gharbari, Dhenkanal District. Major issues of PH are construction of separate road for movement of trucks and provision for repair and maintenance of village roads. Strictly follow sand mining guidelines, apprehension of road accident, narrow village road, maintain adequate distance from the bank of river, etc.
8. The baseline data was collected for the winter season i.e. October to December 2020 in the 10 km study area.
9. **Location and Connectivity** - The area under discussion is featured in Survey of India Topo Sheet No-73H/5 and is bounded between the Latitude -20° 53' 48.64" N to 20° 53' 54.90" N, Longitude-85° 15' 07.49" E to 85° 15' 24.62" E. The lease area is located at a distance of 1.1 km from village Jatia and at a distance of 7.0 kms from Parjang, 30.0 kms from the District Headquarters Dhenkanal and 90.0 kms from the State Capital Bhubaneswar. East Coast Railway station, Talcher is the nearest railway station located at a distance of 4.5 kms from the lease area. Nearest Road Bridge is at a distance of 2.5 km from the mining lease area. Kaccha road connecting to the lease area with the village – Jatia is at distance of 1.0 km. SH -63 is the nearest major district road is at distance of 18.0 km. NH-200 is the nearest National Highway which is at a distance of 2.5 km.
10. **Reserves and Production** - The total geological reserve has been estimated as 169120 m³. Similarly, the mineable reserve of river bed sand is worked out to be 66610 m³. The project has been proposed for a total production of 65500 m³ of Sand from this Quarry. During the plan period maximum of 13100 cum of sand will be produced per annum by Open Cast Manual mining method. Excavation & loading of sand into the dumpers and trucks/tractors will be done manually.
11. **Replenishment study** - As per the replenishment study, Movable area is 39649 Sq.m. Pre-Monsoon and Post-Monsoon Standard Elevation are 56.42 and 56.45 respectively. Difference in Elevation is 0.03. Estimated Annual replenishment Volume is 1189.47 m³ or 1903.15 Tonnes. However, the Movable Reserve as per approved Mining Plan is 66610 m³ at highest mRL 56.0. The Annual proposed production is 13100 cum. Since the mining is not done yet estimated Replenishment reserve pre monsoon period is 17842.05 m³. The excavation may be replenished in one to two years during the subsequent flood/rainy season due to irregular monsoon in the State of Odisha.
12. **Water Requirement** – The total water requirement will be 2.5 KLD for different purposes like Domestic, Dust suppression and plantation purposes.
13. **Power Requirement** - No use of electric power as the operation will be done in day time.

However solar lights will be used for day to day living purposes.

14. **Employment Potential** - Total number of employees will be around 12 in the mine.
15. **Greenbelt plantation** will be by planting 50 saplings of suitable species per annum by the lessee in vicinity of the river bank, haulage roads and near village.
16. **Project Cost** - The project cost is estimated to be Rs. 10.0 lakhs and there is a budgetary provision of Rs.2.5 lakhs as capital cost and Rs.6.0 Lakhs as recurring cost towards environmental protection measures.
17. The project proponent along with the consultant **M/s Right source Industrial Solutions Pvt. Ltd.** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Right source Industrial Solutions Pvt. Ltd.**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** in addition to the following specific conditions.

- i) Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - B**.
- ii) Regular replenishment study to be conducted and report to be submitted.
- iii) Provision of Bio-toilet shall be made at the site.
- iv) 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.
- v) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made
- vi) NOC from concerned authority for usage of approach road shall be obtained and maintained by lessee.
- vii) Construction of bathing ghats including the dress changing room shall be carried out by lessee in consultation to district administration

ITEM NO. 14

PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR GORADIA, SAND QUARRY OVER AN OVER AREA OF 6.07 HA AT BRAHMANI RIVER, GORADIA VILLAGE, KAMAKHYANAGAR TAHASIL, DHENKANAL DISTRICT OF TAHASILDAR KAMAKHYANAGAR - EC

1. The proposal is for Environmental Clearance for Goradia, Sand Quarry over an over area of 6.07 ha at Brahmani River, Goradia Village, Kamakhyanagar Tahasil, Dhenkanal District of Tahasildar Kamakhyanagar.
2. The project falls under category “B” or activity 1 (a) - Mining of Minerals under EIA Notification dated 14th September 2006 as amended from time to time.
3. This is a sand mining project Goradia Sand Mine at Brahmani River over an area of 15.0 acres/ 6.07. Hectares , Khata No.462, Plot No . 3125/3142, Kisam :Nadi, Goradia Village, Kamakhyanagar Tahasil, Dhenkanal District, Odisha.

4. The Tahasildar of Kamakhyanagar issued letter to get approved mining plan and obtaining Environmental clearance vide letter no.819, Dt.19/02/2020 after district collector, Dhenkanal approval of New Sand Mine leases and Successful Bidder name will be selected after auction.
5. The mining plan was approved by Joint Director of Geology, Zonal Survey, Dhenekanal, Odisha vide Letter No. 857/DZ/30.06.2020.
6. Terms of Reference (TOR), was issued by SEIAA, Odisha, vide proposal Letter Ref. No. ToRF. No. 661/SEIAA dated: 26.02.2021.
7. Public Hearing was conducted on 26.10.2021 at 11.00 AM at Bali Chaturai Harijan Sahi of Goradia Village, Dhenkanal District. Major issues of PH are Dust Suppression and water pollution control Afforestation Programme, Local Employment opportunities, Provision for repair and maintenance of village roads, Engagement of local tractors, Provision of royalty benefits for development of village temple, construction of river embankment or patching through stone boulders.
8. The baseline data was collected for the winter season i.e. October to December 2020 in the 10 km study area.
9. **Location and Connectivity** - The area under discussion is featured in Survey of India Topo Sheet No-73H/9 and is bounded between the Latitude -20° 49' 12.86" N to 20° 49' 21.52" N, Longitude-85° 39' 51.29" E to 85° 40' 03.28" E. The lease area is located at a distance of 0.98 km from village Goradia and at a distance of 16 kms from Kamakhyanagar, 20.0 kms from the District Headquarters Dhenkanal and 105.0 kms from the State Capital Bhubaneswar. Dhenkanal Railway station is the nearest railway station located at a distance of 18 kms from the lease area. Nearest Road Bridge is at a distance of 14 km from the mining lease area. Metal road connecting to the lease area and with the village – Goradia is at distance of 1.77 km. SH – 20 is the nearest State Highway at a distance of 39kms. Major district road is at distance of 13.0 km. NH-42 is the nearest National Highway which is at a distance of 18 km.
10. **Reserves and Production** - The total geological reserve has been estimated as 218520 m³. Similarly, the mineable reserve of river bed sand is worked out to be 115197 m³. The project has been proposed for a total production of 115150m³ of Sand from this Quarry. During the plan period maximum of 23030 m³ of sand will be produced per annum by Open Cast Manual mining method. Excavation & loading of sand into the dumpers and trucks/tractors will be done manually.
11. **Replenishment study** - As per the replenishment study, Movable area is 53332 Sq.m. Pre-Monsoon and Post-Monsoon Standard Elevation are 42.37 and 42.42 respectively. Difference in Elevation is 0.05. Estimated Annual replenishment Volume is 2666.6 m³ or 4266.56 Tonnes. However, the Movable Reserve as per approved Mining Plan is 115197 m³ at highest mRL 42. The Annual proposed production is 23030 cum. Since the mining is not done yet estimated Replenishment reserve pre monsoon period is 22399.44 m³. The excavation may be replenished in one to two years during the subsequent flood/rainy season due to irregular monsoon in the State of Odisha.

12. **Water Requirement** – The total water requirement will be 2.5 KLD for different purposes like Domestic, Dust suppression and plantation purposes.
13. **Power Requirement** - No use of electric power as the operation will be done in day time. However solar lights will be used for day to day living purposes.
14. **Employment Potential** - Total number of employees will be around 20 in the mine.
15. **Greenbelt plantation** will be by planting 50 saplings of suitable species per annum by the lessee in vicinity of the river bank, haulage roads and near village.
16. **Project Cost** - The project cost is estimated to be Rs. 40.0 lakhs and there is a budgetary provision of Rs.2.5 lakhs as capital cost and Rs.6.0 Lakhs as recurring cost towards environmental protection measures.
17. The project proponent along with the consultant **M/s Right source Industrial Solutions Pvt. Ltd.** made a detailed presentation on the proposal.

Considering the information / documents furnished by the proponent and presentation made by the consultant **M/s Right source Industrial Solutions Pvt. Ltd.**, the SEAC recommended for grant of Environmental Clearance for the proposal valid upto lease period with stipulated conditions as per **Annexure – A** in addition to the following specific conditions.

- i) Revised mining plan shall be prepared based on essential physical criteria as per Enforcement and Monitoring Guidelines for Sand Mining, January 2020 of MoEF&CC, Govt. of India enclosed as **Annexure - B**.
- ii) Regular replenishment study to be conducted and report to be submitted.
- iii) Provision of Bio-toilet shall be made at the site.
- iv) 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.
- v) Stone patching with plantation in between along the stretch of the bank associated with sand mining and necessary ramp construction shall be made
- vi) NOC from concerned authority for usage of approach road shall be obtained and maintained by lessee.
- vii) Construction of bathing ghats including the dress changing room shall be carried out by lessee in consultation to district administration


Secretary, SEAC

STANDARD ENVIRONMENTAL CLEARANCE CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR SAND MINING

Stipulated Conditions:

1. The project proponent should carry out River bed sand mining manually by engaging local laborers in force to check over exploitation of sand at the source.
2. Any change in the plan or quantity to be produced shall require prior approval of SEIAA.
3. There shall be a 'no working zone' to protect the embankment on both sides, road or rail bridge in the vicinity, if any, dam, weir, water intake structure of irrigation or drinking water project, or any cross drainage structure. 10 % of the width of river shall be left intact along the embankments on both sides as 'no mining zone'. Further, no mining shall be allowed within 200 m of any existing structures dam, weir, water intake structure of irrigation or drinking water project, or any cross drainage structure. In case of River Bridge, this no mining zone shall extend upto a minimum stretch of 200 meters from the bridge and it may extend upto 500 meters in sensitive locations. The lease area shall be accordingly curtailed to carve out the actual sand mining area within the leasehold. Exact map of the lease area, and the 'no mining zone' shall be drawn to scale, showing the DGPS coordinates of all corner points, and the location of the bridge, embankment, extraction route & other structures; and such map has to be submitted to SEIAA by the project proponent through the Tahasildar within three months of the date of issue of the EC. The quantum of sand allowed to be extracted will be worked out on the basis of the actual working area.
4. The lease area and the actual working area shall be demarcated on the ground by erecting durable masonry /concrete pillars by the project proponent.
5. The project proponent shall take prior statutory and regulatory clearance as required from the concerned authorities in respect of the project, before carrying out any operation.
6. Mining is not permissible within the water channel or stream flow area. No stream shall be diverted for the purpose of mining and no natural water course shall be obstructed. The mining or any ancillary activity shall not in any way disturb the flow pattern of the river water during the non monsoon period. There shall be no sand mining in the river during the rainy season or when there is flow of water in the river.
7. Sand mining operations shall not affect the existing sources for irrigation / drinking water / industrial purpose.
8. The natural sand dunes, if any, near or surrounding the lease area shall not be disturbed.
9. No transportation of the minerals shall ordinarily be allowed on any road passing through villages/habitations/forest land without prior explicit permission. Transportation

of minerals through existing rural roads can be allowed only by the concerned Govt. Department/BDO and only after required strengthening, such that the carrying capacity of road is increased to handle the sand 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. No movement on any road is allowed on existing village road network without appropriately increasing the carrying capacity of such roads. Project proponent shall ensure that the road may not be damaged due to transportation of the mineral and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and traffic density. Plying of sand extraction trucks may be allowed on roads / path ways passing close to schools, temples, hospitals and such other public places only with prior written permission of competent authority.

10. Vehicles hired for transportation of sand 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.
11. The vehicles shall not be overloaded and shall be covered with Tarpaulin. The Tahasildar may collect an appropriate road maintenance levy from the lessee as part of the lease conditions on the basis of quantum of sand 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 sand trucks.
12. The project proponent shall take all precautionary measures against causing damage to flora and fauna of the locality. The PP shall plant and nurse to full establishment a minimum of 50 number of saplings of native tree species along the approach roads, river banks and in community areas in consultation with the Gram Panchayat.
13. Water spray should be made on the road/extraction paths to control dust emission during transportation of sand.
14. The Project Proponent shall undertake phased restoration, reclamation and rehabilitation of land affected by mining and completes this work before abandonment of mine.
15. Environmental Management Plan (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. Year wise progress of implementation of EMP shall be reported to the SEIAA, Odisha and OSPCB along with the compliance report.
16. The proponent shall take necessary measures to ensure that there is no adverse impact of the mining operations on the human habitation if any, existing nearby.
17. It shall be mandatory for the project management to submit quarterly compliance reports on the status of implementation of the above stipulated environmental safeguards to the SEIAA, Odisha / SPCB, Odisha/ Regional Office of the MoEF&CC, Bhubaneswar, in hard and soft copies on 1st day of January, April, July, October of each calendar year, failing which EC is liable to be revoked.

18. River Bank stabilization shall be made through stone patching. Plantation of adequate number native species on river banks and both sides of haulage roads shall be made.
19. Since NH200, Kuccha Road and temple are only at a distance of 800 mtr, 570 mtr and 500 mtr respectively, all traffic safety measures shall be taken to avoid any kind of accidents.
20. Bio - toilet provision shall be made.
21. As raised during public Hearing and committed by PP, Loknathpur Sasan village road shall not be used for transportation of sand.
22. Stone patching on river bank with plantation in-between and the ramp construction shall be done in consultation with and advice of concerned W.R.Deptt, Government of Odisha.
23. Necessary sprinkling on Haulage Road and Avenue plantation shall be done.
24. 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.
25. The conditions stipulated in the environmental clearance will be closely monitored on the ground by the lease granting authority, i.e. the Tahasildar, 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.
26. The concerned Regional Office of the MoEF&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&CC officer(s)/SPCB officer(s) by furnishing the requisite data / information / monitoring reports.
27. A copy of the clearance letter shall be sent by the proponent to concerned Gram Panchayat /Panchayat Samiti /Zilla Parisad /Municipal Corporation / Urban Local Body as the case may be.
28. Project proponent shall obtain Consent to Operate from the OSPCB 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 State Pollution Control Board.
29. The SEIAA, Odisha may revoke or suspend this 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.
30. The Project Proponent (lease holder) shall inform the SEIAA of any change in ownership of the mining lease. In case, there is any change in ownership or mining lease is transferred, then mining operation can be carried out only after transfer of EC as per provisions of the para 11 of EIA Notification, 2006, as amended from time to time.

31. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this environment clearance besides attracting penal provisions in the Environment (Protection) Act, 1986.
32. 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.
33. This Environmental Clearance (EC) is subject to orders/judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
34. 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 - B

ESSENTIAL PHYSICAL CRITERIA AS PER ENFORCEMENT AND MONITORING GUIDELINES FOR SAND MINING, JANUARY 2020 OF MOEF&CC, GOVT. OF INDIA

Sl. No.	Essential Criteria	Reference
1.	"No Mining Zone": 1/4th the part of the river width (excluding 3/4th the central part of the river width) on both sides of the river towards the river bank	4.1.1 (Para - e) Page - 16
2.	a) Distance between two clusters : ≥ 2.5 km b) Area of mining lease area in a cluster: ≤ 10 ha.	4.1.1 (Para - k) Page - 19
3.	Concave River Bank : No extraction of sand	
4.	No mining if a) Upstream: Lease is 1 km from major Bridge and high ways or $5(x)$ of the Bridge / public civil structure / water intakes point subject to lease is located at a minimum 250 meter distance. Where x = Span of the bridge. b) Downstream side: Lease is 1 km from the major bridge and Highways Or $10x$ of the bridge / public civil structure / water intake point Subject to lease is located at a minimum distance of 500 meter where x = span of the bridge	4.3 (Para - h) Page - 23
5.	Mining depth : ≤ 3 meter (maximum 3 meter)	4.3 (Para - m) Page - 24
6.	Mining distance from river bank: $1/4^{\text{th}}$ of the river width, But subject to not less than 7.5 meter	4.31 (Para - m) Page - 24
7.	Area for removal of minerals : $\leq 60\%$ of mine lease area	4.3 (Para - s) Page - 25
8.	Minable sand per ha. Available for actual mining : $\leq 60,000$ MT/Annum	
9.	Regular replenishment study and replenishment rate	