## PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 04<sup>TH</sup> FEBRUARY, 2021

The SEAC met on 04<sup>th</sup> February, 2021 at 03:00 PM 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.

Sri. B. P. Singh
 Dr D. Swain
 Sri. J. K. Mahapatra
 Prof. (Dr.) B.K. Satpathy
 Er. K.R. Acharya
 Member
 Member
 Member
 Member
 Member
 Member
 Member
 Member

#### A. CONSIDERATION OF MINOR MINERAL PROPOSALS (COMPLIANCE RECEIVED):

The committee verified 12 nos. of minor mineral proposals (compliance received) on the basis of MoEF&CC, Govt. of India OM no. F. No. L-I 1011/175/2018-IA-II (M), dated 12.12.2018. The case-wise proceedings and observations of the committee are detailed in Table as per **Annexure – A**. The proposals of following categories are:

Total no. of	Type of proposals	No. of proposal	Decisions of the committee
proposals			
	Stone Quarries and other (05)	05	The committee considered the proposals as B2 category and recommended for Environmental Clearance.
12	River Sand (07)	05	The committee considered the proposals as B2 category and recommended for Environmental Clearance.
		02	Decision to be taken after discussion with concerned Tahasildar

### B. <u>CHECKLIST FOR CONSIDERATION OF ENVIRONMENTAL CLEARANCE FOR BUILDING AND CONSTRUCTION PROJECTS</u>:

A discussion was held on 03.12.2020 on Environmental Clearance of Building and Construction projects under the chairmanship of Chief Secretary, Odisha. The SEIAA, Odisha has to prepare a checklist for submission of Environmental Clearance applications for Building and Construction projects as per the minutes of the discussion. The SEIAA, Odisha has prepared a checklist and forwarded the same to SEAC for views. The SEAC finalized the checklist incorporating certain points as **Annexure-B**. The SEAC recommended that the SEIAA, Odisha may consider to implement the checklist as finalized by the SEAC for appraisal of Building and Construction projects.

#### C. CONSIDERATION OF CATEGORY B PROPOSALS (COMPLIANCE RECEIVED):

- I) PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR KURLUBHATA DECORATIVE STONE MINES OVER AN AREA 17.676 HA AT VILLAGE-KURLUBHATA, TAHASIL-TITLAGARH, DIST-BALANGIR OF M/S KAMODGIRI POLYSPIN PVT. LTD EXTENSION OF EC.
  - This proposal is for Extension of validity of Environmental Clearance for Kurlubhata Decorative stone Mines over an area 17.676 ha at village-Kurlubhata, Tahasil-Titlagarh, Dist-Balangir of M/S Kamodgiri Polyspin Pvt. Ltd.
  - 2. Environmental Clearance was granted by the State Environmental Impact Assessment (SEIAA), Odisha vide Letter no. 3185/SEIAA/5132/1789-NCM-2017dt.24.06.2017 for a period of 5 years.
  - 3. The Kurlubhata Decorative stone Mines over an area 17.676 ha at village-Kurlubhata, Tahasil-Titlagarh, Dist-Balangir, Odisha was executed in favour of M/S Kamodgiri Polyspin Pvt. Ltd, on 20.07.2000 for a period of 10 Years.
  - 4. Mining Plan was approved on 29.06.2016 by Directorate of Mines, Govt. of Odisha which was valid up to 30.03.2020 vide letter No. 3185/SEIAA/5132/1789-NCM/01-2017.
  - 5. The Mines obtained Consent to Operate via ref.No.974/III CON (OPERATE)/79/2018-19 on dt.26.02.2020.
  - 6. The lessee has applied for renewal, which has ultimate extended up to 19.07.2030, under Rule-8A, OMMC Rules 2016, vide letter No. 3572/IV(DS) SM-18/2019/SM, Bhubaneswar, dated-07.05.2020.
  - 7. The Mining Scheme along with Progressive Mine Closure Plan is submitted to Joint Directorate of Mines, Govt. of Odisha, which is valid up to 2020-25.
  - 8. Though we have obtained the EC on 24.6.2017 from SEIAA, but due to non-renewal of mining lease, the mining operation could not be carried out from 24.06.2017 to till date.
  - 9. The entire Mining Lease area of 17.676 hectares comprises of non-forest land.
  - 10. There is no sensitive ecological habitat like National Parks, Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant reserves within 10 km radius of ML area. No Schedule I species are found within the study area.
  - 11. The Environment consultant **M/s Envomin Consultant (Pvt.) Ltd.**, Bhubaneswar along with the proponent has made a briefing on the proposal before the Committee on 30.09,2020.
  - 12. The SEAC in its meeting held on Dt: 30.09.2020 decided to take decision on the proposal after receipt of the following information / documents from the proponent.
  - 13. The project proponent has furnished compliances as desired by the committee vide Ref no: KPPL/20-21-SEAC-02 dated 12.11.2020 and same has been verified as follows:

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of the SEAC
(i)	Certified copy of half yearly	The compliance of EC	Certified copy of half-
	condition wise compliance	conditions along with	yearly compliance
	Report on Environmental	receipt letter of the	report to EC

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of the SEAC
	Clearance conditions submitted to MoEF&CC, Regional Office, Bhubaneswar	MoEF&CC, Regional Office, Bhubaneswar is attached as Annexure -1	conditions of MoEF&CC, Govt. of India has not been furnished.
(ii)	Copy of approved Lease deed valid upto 2030	The copy of approved lease deed is attached as Annexure - 2	
(iii)	Copy of approved Mining Plan for lease period including scheme of mines for 5 years progressive mine closure plan and final mine closure plan	mining with PMCP is valid 31.03.2025 is attached as	
(iv)	Document of execution of lease deed	The copy of lease deed executed on 23.09.2020 is attached as Annexure-4.	
(v)	Details of past year-wise production	The mining work has not been resumed till date due to lack of renewal of mining lease. Accordingly, the past year production figure is nil.	

- 14. The SEAC observed that though the proponent has furnished hard copy of compliance report, but same has not yet been uploaded in the online system. Moreover, the proponent has also not submitted certified copy of MoEF&CC, Govt. of India half-yearly EC conditions compliance report.
- 15. The SEAC in its meeting held on Dt: 02.12.2020 decided to take decision on the proposal after the proponent upload the compliance in online system as well as submit the certified copy of MoEF&CC, Govt. of India half-yearly EC conditions compliance report.
- 16. Now project proponent has submitted letter from MoEF&CC i.e., Letter no: 109-634/EPE/157 dated 25.01.2021 that the project has not been started due to want of statutory clearance and the status of compliance to conditions can be verified only after commencement of the mining operation. The project proponent has also uploaded the compliance as sought by the SEAC in its meeting held on 02.12.2020 in online system.

Considering the information / documents furnished by the proponent, the SEAC recommended for extension of validity of EC for a period upto the expiry of lease period.

- II) PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR PROPOSED HOUSING PROJECT (RESIDENTIAL USE TYPE) OF OVER AN AREA 33,621.35 SQ.MTS (BUILT-UP AREA) OF M/S UTKAL BUILDERS LIMITED AT PATRAPADA, BHUBANESWAR, DIST- KHORDHA OF SRI SHARAD BAID (EC).
  - 1. This is a proposal for Environmental Clearance of M/s. Utkal Builders Limited for Proposed Housing Project (Residential Use Type) of over an area 33,621.35 m<sup>2</sup> at Patrapada, Bhubaneswar, Dist-Khordha of Sri Sharad Baid.

- M/s Utkal Builders Ltd. has proposed for Development of Private Housing Project in area of 2.191 Acres of land in Plot No.: 336/2120, 336/3046, 336/3035, 336/2764, 336, 336/3221, 334/2272 Khata No- 703/362, 703/1499, 703/1496, 703/1222, 703/2256, 703/1720, 703/559, Near NH-16 Road, at Mouza -Patrapada, Bhubaneswar, Odisha-751019
- 3. The Proposal is for Environmental Clearance for proposed Construction of B+S+17 Storied Residential Building & LB+UB+G+3 Club building. The site co-ordinates are as follows: Latitude- 20° 14' 44.81" N & Longitude 85° 46' 32.78". The project site is well connected with National Highway-16 (Jharpokharia-Chennai Road). The nearest railway station is Bhubaneswar Railway station at a distance of approx 10.6 Km in South West direction. The nearest airport is Biju Pattnaik Airport Bhubaneswar at a distance of approx. 13.4 Km in South-West direction from project site. The site is located adjacent to the local landmarks, Haridaspur Mosque, Jagannath Temple, Pahala Etc. There is no structure or encroachments on the site. The site is easily accessible from NH-05 Road. The site is located adjacent to the local landmarks such as Arya School of Management & Information Technology, Aspire training academy, DDHB Phase-I Masjid etc.
- 4. **Meteorology:** The maximum temperature is about  $36.0^{\circ}$  C and the minimum temperature is  $16.0^{\circ}$  C felt in the area. The average annual rainfall in the area is 1326.16 mm.

5.	The detailed	Area Statemer	ıt is pr	rovided l	below in	Table:
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SI.	Particulars	Area (in m²)
No.		
1	Plot Area	8866.66 m <sup>2</sup>
2	Total Built up area	33621.35 m <sup>2</sup>
3	Total FAR Area	24382.82 m <sup>2</sup>
4	Kissam of land	Gharabari
5	Ground Coverage	3015 m <sup>2</sup> (34 % of plot area)
6	Built Up Area (Residential)	26726.55 m <sup>2</sup>
7	Built Up Area (Commercial)	6046.76 m <sup>2</sup>
8	FAR	2.74
9	Maximum height of building	59 m
10	Road & Paved Area	2483 m <sup>2</sup>

#### 6. Requirement for the project:

- a) Water requirement: Fresh make up water is 103.0 m³/day will be required for the project which will be sourced from Ground water. Waste water of 131.4 KLD will be treated in a STP of 140 KLD capacity, which includes primary, secondary and tertiary treatment. After treatment the treated water will be discharge to the Near Drain.
- b) Power requirement: The daily power requirement for the proposed building is preliminarily assessed as 1188 KW (Solar System- 66.3 KW (5.5%) & CESU – 1121.7 KW). In order to meet emergency power requirements during the grid failure, there is provision of 2 nos. of DG set having 500 KVA capacities for power back up in the proposed Building Project.

- 7. **Rain Water Harvesting:** Rain Water will be harvested through 6 nos. of recharging pits.
- Firefighting Installations: Firefighting system will be installed as per recommendation of the Firefighting Officer, Odisha and as per the guideline of NBC (part-4).
- 9. **Green Belt Development:** Green belt will be developed over an area of 1,793.52 sqm which is 20.23 % of the plot area; by using the local species like Neem, Karang, Golden Champa, Bakul, Bela, Bottle Palm, Cheekoo, Guava etc.
- 10. Solid Waste Management: From the residential complex solid waste will be generated @ 0.45 kg/person/day, which will be about 337.5 kg/day. The generated solid waste from the residential complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate coloured dustbins. Proper waste management practices will be adopted during the collection, storing and disposal of the generated solid waste.

Waste generated from Commercial people will be @ 0.15 kg/capita/day, which will be about 165.0 kg/day. The waste generated from floating population in residents will be @ 0.15 kg/day, which will be 12 kg/day. Solid waste from sweeping and Dry Garbage containing non-biodegradable wastes like polythene bags, metal, ceramic Waste, glass etc. shall be stored in separate garbage bin and send to approved recyclers. Around 47.8 kg/day of STP sludge will be generated.

Solid Waste from Residential Population	337.5 kg/day
Solid Waste from Commercial Population	165.0 kg/day
Solid Waste from Floating Population	12.0 kg/day
STP Sludge	65.59 kg/day
Total Solid Waste Generation	580.09 kg/day

- 11. **Parking Area -** Parking space allotted is 8776.49 sqm. Total parking space equivalent to 259 (ECS) is provided out of which 128 ECS is for residential complex and 131 ECS is for commercial complex.
- 12. The estimated project cost is `40 Cr. and Environment Management Cost `2.2 lakhs.
- 13. Total Population- Residential, Floating/visitors 830 nos. and Commercial, Floating/visitors 1100 nos.
- 14. The project proponent along with the environment consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar** made a detailed presentation before the SEAC.
- 15. The SEAC in its meeting held on Dt: 17.07.2020 decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by visit of Sub-Committee of SEAC to the proposed site.

16. The project proponent has furnished compliances as desired by the committee and same has been verified by the committee on 02.12.2020 as follows:

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent
(i)	Distance from NH and approach road to NH	The proposed building project site is on the National Highway-16 and the distance of approach road (i.e. Service road to the project site is 30 mtr.). The Google map showing distance of service road to project site is attached in Annexure-1.
(ii)	Distance of municipal drain from the proposed site	The municipal drain from the proposed site is adjacent to the plot i.e. way to Sisu Vihar 30' ft wide road as per the drainage plan vetted by BMC. BMC has already vetted the proposed drainage plan vide their letter no. 4584, dated 12.02.2020. BMC letter & drawing is attached in Annexure-2.
(iii)	Distance from Eco-Sensitive Zone of Chandaka Dampada Sanctuary. A certificate of concerned DFO to this effect is to be submitted	The proposed project site is outside the Chandaka-Dampara Eco-Sensitive Zone boundary and the distance of Chandaka Damapada Sanctuary is 11.23 km from project site. The Eco-Sensitive Zone map is enclosed in Annexure- 3A and Google map showing distance of Chandaka Damapada Sanctuary is enclosed in Annexure-3B.
(iv)	Calculation of stack height of DG set is to be provided with sketch of the installation of the DG set at location ( not to scale )	For required backup power, 2 nos. of DG Sets are proposed. The exhaust shall be terminated as per pollution norms laid by CPCB. Since our DG Sets location are along the compound wall i.e 28.4 m away from building line, therefore the stack height of the DG Sets of minimum 6 mtr and maximum 8 mtr is sufficient.  Detail proposal for DG Sets is attached in Annexure-4.
(v)	Adequacy of parking space in commercial portion to be justified	As per BDA Norms, the parking area required for commercial complex is 50%. Accordingly the parking space required for commercial area is 2955.38 sqm which is equivalent to 135 ECS and the parking area provided in the commercial area is 3818.61 sqm which is equivalent to 174 ECS. So the ECS provided in the commercial area is 174 ECS which is sufficient for commercial area.
(vi)	Entry and exit of residential portion and commercial portion shall be shown clearly in the building plan without any overlap	As per the building plan, two separate entry & exit are provided in the residential and commercial building. The building plan showing entry/exit of residential & commercial building is attached in Annexure-5.
(vii)	Proposal for PHED water supply in future	We have already applied to PHED for supply of municipal water to our building but PHED supply water is not available in this area. If PHED water supply is available in the area in

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent
1101		future we definitely use this water. PHED NoC is attached in Annexure-6.
(viii)	Soil testing report of the area to be submitted and measures taken if it is in low lying areas / flood prone area	The proposed project site is not coming under the low lying area or flood prone area. Soil Testing has been conducted for testing the strength of the soil. The Soil testing report is attached in Annexure-7.
(ix)	Detailed solid waste management other than organic waste	Total solid waste generation in the proposed building project is 580 kg/day. Detail solid waste proposal is given in Annexure-8.
(x)	Detailed e-waste management	Electronic wastes like Television, Monitor, Key Board, Printer, Desktop, Laptop, Telephone, Mobile etc may be generated during the Operation Phase. These wastes contain both precious metals and toxic substances, which if handled properly can result in resource recovery. Various types of above mentioned electrical and electronic wastes generated in the building will be collected separately for transportation to the authorized collection Centre approved by the State Pollution Control Board
(xi)	Land schedule and kissam of land	Total Land Area of proposed project is 8866.66 sqm (2.190 Acres) and the Kissam of land is Gharabadi. Detail Land documents with kissam of land are attached in Annexure-9.
(xii)	Construction and demolition waste management	The proposed project site is new construction, there is no demolition waste generated in the site.  During construction phase, waste generated from construction is used in back filling & Road sub way Construction. 100% construction materials will be used in site. No waste will be disposed in outside the premises.
(xiii)	Detailed revised water balance both for commercial and residential purpose	Total Fresh Water Requirement of the proposed project is 103.0 KLD and the waste water generated for the proposed is 131.4 KLD. 125 KLD of treated water will be available after treatment in STP. Detail Water Balance during Non-monsoon & monsoon season is given in Annexure- 10.
(xiv)	Copy of application submitted to CGWA for permission for drawal of ground water	We are already applied to Central Ground Water Authority vide application no. 21-4/2514/OR/INF/2020, dated 07/07/2020. CGWA Application copy is attached in Annexure-11.
(xv)	Status of building approval by BDA. Copy of approval letter along with approved building plan if approved by the BDA	Bhubaneswar Municipal Corporation (BMC) has provisionally approved the Building Plan vide letter no. 35225, dated 12.12.2019. BMC provisionally letter is attached in Annexure-12.

	SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	
(	xvi)	Copy of drainage plan vetted by the Planning Member, BDA	BMC has already vetted the proposed drainage plan vide their letter no. 4584, dated 12.02.2020. BMC letter & drawing is attached in Annexure-2.	

- 17. The SEAC in its meeting held on Dt: 02.12.2020 decided to take decision on the proposal after a detailed site visit by the Sub-Committee of SEAC.
- 18. The sub-Committee of SEAC visited the project site on dated 17.12.2020 and following observations and recommendations were made:
  - (i) Main Gates (both entry & exist) on commercial complex side facing service road of NH (south side) need to be widened with requisite width having pedestrian path ways also.
  - (ii) There exists a HT tower proximate to the boundary on south side (commercial complex side). As such, clearances need to be obtained from Electrical Inspectorate, Govt of Odisha.
  - (iii) Both entry & Exit gates of residential complex side need to have identified/ ear marked pedestrian path ways of requisite width.
  - (iv) Area / stretch under green belt need to be increased by relocating the water storage/ sumps suitably.
  - (v) STP needs to be shifted from habitation side (East side) and relocated to drain side suitably.
  - (vi) Exact proposed drainage plan alongside the boundary for discharge of treated waste water (if any) to be shown and necessary ROW for use of the land connecting the Housing drain with BMC drain need to be obtained including permission to take the load of treated waste water to be discharging from the housing project (if any) from the concerned Authority.
    - The Project will not be made operative till such time the proposed drain is made operational.
  - (vii) Drain for surface water / run off water overflow need to be provided by the proponent and channelizing the same to rain harvesting facility and recharging thereafter.
  - (viii) To maintain the desired stack height, DG set need to be installed on raised platforms (sketch with dimension of the installation set up & stack height to be submitted).
  - (ix) Since municipality water supply is available, no borewell is allowed. However, to meet the emergency situation, one borewell may be permitted subject to NOC from CGWA & permission form WR Deptt, Govt of Odisha.
    - A borewell was found inside the premises needs to be abandoned immediately. For construction purposes, proponent shall make alternative arrangement to meet the water requirement.
  - (x) Provision of Rainwater harvesting & recharging pits thereof appears to be inadequate and needs to be re-worked out.

- (xi) A revised layout incorporating the suggestions of SEAC sub-committee be prepared by the proponent and submitted to SEAC for compliance.
  - Site elevation & grading must be done suitably to avoid any kind of water logging.
- 19. The SEAC in its meeting held on Dt: 06.01.2021 decided to take decision after receipt of certain information / documents as sought by the sub-committee of SEAC.
- 20. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

SI.	Information Sought by	Compliance furnished by the	Views of the SEAC
<b>No.</b> (i)	Main Gates (both entry & exist) on commercial complex side facing	As per advice of SEAC, we are widening the main gate entry by 500 mm, this space will	Specific condition to be stipulated in EC.
	service road of NH (south side) need to be widened with requisite width having pedestrian path ways also	accommodate 6.5 m wide road for vehicles and 1.2m for pedestrian pathway. Attaching herewith the Layout indicating the pedestrian entry / exit gates along with all entry & exit gates. (Annexure - 1)	
(ii)	There exists a HT tower proximate to the boundary on south side (commercial complex side). As such, clearances need to be obtained from Electrical Inspectorate, Govt of Odisha	Attaching herewith the drawing showing the distance of HT line from the building (Annexure - 2A) & the BMC guideline (Annexure - 2B) for this. As per the attached drawing the HT line is horizontally 15 m. Away from the main commercial building. As per ODA-2020 guidelines, in clause no. 29 the HT line should be at a distance of minimum 2m. From any habitable building. Hence, we have a very high safe distance from HT line.	Specific condition to be stipulated in EC.
(iii)	Both entry & Exit gates of residential complex side need to have identified/ear marked pedestrian path ways of requisite width	Attaching herewith the Layout indicating the pedestrian entry / exit gates along with all entry & exit gates. For residential complex, we have ear marked pedestrian pathway of 1.2 m & 6m wide road for vehicle movement. (Annexure - 1)	Specific condition to be stipulated in EC.
(iv)	Area / stretch under green belt need to be increased by relocating the water storage/ sumps suitably	As per advice of SEAC, the underground water reservoir / storage tank of suitable capacity has been relocated in basement area & the area originally ear marked for water storage is being taken up for development of	Specific condition to be stipulated in EC.

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of the SEAC
		greenbelt development considering the species, spacing & hire and key system of plantation. (Annexure - 3)	
(v)	STP needs to be shifted from habitation side (East side) and relocated to drain side suitably	Similarly the STP has been shifted from habitation side (east side) to western side i.e. the road side to facilitate the development of green belt. With these relocations, our project will achieve 22.09 % of green belt in the above plot of land. (Annexure - 4)	Specific condition to be stipulated in EC.
(vi)	Exact proposed drainage plan alongside the boundary for discharge of treated waste water (if any) to be shown and necessary ROW for use of the land connecting the Housing drain with BMC drain need to be obtained including permission to take the load of treated waste water to be discharging from the housing project (if any) from the concerned Authority The Project will not be made operative till such time the proposed drain is made operational	Our above said proposed project has been vetted by drainage division BMC for discharge of excess storm water to the BMC drain, They shall develop an ETP (Effluent Treatment Plant) within our proposed project premises at our own cost for use of nonsewage waste water. Surplus treated water from ETP of approx. quantity 15 KLD will be discharged into the drain under construction in front of the project during monsoon period. Similarly, excess runoff water during rainy season will also be discharged into the same drain. We have taken up with BMC to develop a suitable open drain with RCC cover on the side of the project to facilitate discharge of waste water during the rainy season. We are committed to cooperate with BMC authority for development of open drain in front and side of the project. (attaching application to BMC in (Annexure - 5)	Specific condition to be stipulated in EC together suitably with the information sought by the SEAC and corresponding compliance furnished by the proponent.
(vii)	Drain for surface water / run off water overflow need to be provided by the proponent and channelizing the same to rain harvesting facility and recharging thereafter	The open drain within the project area shall be adequately designed to take the load of treated non-sewerage waste water and run off water for connecting it to the open drain of BMC. The rain water shall be	Specific condition to be stipulated in EC.

SI.	Information Sought by	Compliance furnished by the	Views of the SEAC
No.	SEAC	collected from the roof top by pipeline to the chambers constructed on the ground, which shall be further connected to the rain water harvesting pits to facilitate percolation through the underground water through filter media.	
(viii)	To maintain the desired stack height, DG set need to be installed on raised platforms (sketch with dimension of the installation set up & stack height to be submitted)	The 2 nos. Of DG sets would be installed on the raised platform & the vent will be channelized along the outer wall of the project building for discharge of vent gas at 3 m height above the roof of the building. The adequate care will be taken by steel structures for passing of fire tenders below the vent pipes. These will facilitate proper disposal of vent gases. (Annexure - 6).	Specific condition to be stipulated in EC.
(ix)	Since municipality water supply is available, no borewell is allowed. However, to meet the emergency situation, one borewell may be permitted subject to NOC from CGWA & permission form WR Deptt, Govt of Odisha A borewell was found inside the premises needs to be abandoned immediately. For construction purposes, proponent shall make alternative arrangement to meet the water requirement	We have approached WATCO government of Odisha for providing pipe water supply to our project. As per your direction we will be abandoning the old existing bore well and use water tanker for construction. However, till the connection of WATCO drinking water to the project, we may be allowed to dig 2 nos. 8" dia bore well on north & south side to provide adequate water to	Specific condition to be stipulated in EC.  The compliance needs to be put in form of a legal affidavit.
(x)	Provision of Rainwater harvesting & recharging pits thereof appears to be inadequate and needs to be re-worked out	As per your direction we have reworked the requirement of rainwater harvesting pits and recharging pits, considering the cloud burst and heavy down pour experienced by Bhubaneswar city since past few years. Accordingly,	Specific condition to be stipulated in EC.

SI.	Information Sought by	Compliance furnished by the	Views of the SEAC
No.	SEAC	proponent	
		we have revised the number of rain water harvesting pit from 4 nos. of total 130 cum to 5 nos. total 175 cum. capacities. (Annexure - 8)	
(xi)	A revised layout incorporating the above suggestions of SEAC sub-committee be prepared by the proponent and submitted to SEAC for compliance. Site elevation & grading must be done suitably to avoid any kind of water logging		Specific condition to be stipulated in EC.

Considering the information / documents furnished by the proponent and presentation made by the consultant M/s Centre for Envotech & Management Consultancy Pvt. Ltd., Bhubaneswar on behalf of the project proponent, the SEAC recommended for grant of Environmental Clearance for the project valid for a period of 7 years with stipulated conditions as per Annexure – C.

The sub-committee of SEAC will visit the site after 6 months of issue of EC to verify the commitment given in the affidavit.

# III) PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF SPRINGVILLE GREENS PVT.LTD. FOR EXPANSION OF RESIDENTIAL BUILDING COMPLEX "SPRING VILLE GREENS" AT MOUZA- BIJIPUR, BHUBANESWAR OF SRI. SURESH KUMAR SUREKA – AMENDEMENT OF EC.

- This is a proposal for Amendment of Environmental Clearance of M/s Springville Greens Pvt. Ltd for expansion of Residential Building Complex "Springville Greens" At Mouza-Bijipur, Bhubaneswar of Sri. Suresh Kumar Sureka.
- 2. The project falls under Category "B", Project or Activity 8(a) Building Construction; Category B2 under Expansion project as per schedule of EIA Notification dated 14th Sep, 2006, as amended from time to time.
- 3. M/S. Spring Ville Greens LLP have Proposed Expansion of Residential Building Complex "Springville Greens" At Mouza Bijipur, Bhubaneswar, Odisha. [ for construction of 13 blocks of S+14 multistoried (MIG) Residential buildings, 16 blocks of

- G+4 storey (EWS) Residential buildings, one G+1 storey Society cum club building, One G+3 storey Commercial building and one Basement Parking].
- 4. The site is coming under developmental Plan of Bhubaneswar Municipal Corporation. The building plan has approved by Bhubaneswar Development Authority vide letter no. 29331, Dt.31st October 2016. EC obtained for 3 Block- of (S+12,S+13 & S+14) Storied, Seven Blocks of S+14 multistoried and One Block of G+4 Storied (for EWS), One Block of S+2 Storied Club-cum-Society Building with built-up area of 104545.10 sq.mt. Vide SEIAA letter No SEIAA/No-7077/SEIAA dated 30.07.2019.
- 5. The Revised building plan approved by BDA Vide letter No. –30092/BDA, Bhubaneswar, Dt. 12.12.2019. In revised building plan, total built-up area will increase from 104545.10 m² to 108149.210 m². Ground Coverage will decrease from 12580.90 m² (29.4% of Plot Area) to 10919.931 m² (25.350% of Plot Area), Max building height will increase from 44.85 mt. to 44.95 mt. and Dwelling units will increase from earlier proposed 1036 units to 1048 units.
- 6. Connectivity: M/s Spring Ville Greens LLP. has proposed to construct Residential Building with club. Project is located at nearer to Tamando Police station, surrounding area is developed area. The proposed site comes under BDA (Bhubaneswar Development Authority) and land use zone of the proposed site is residential Use Zone as per land use plan of BDA land use plan. Site is located in Mouza Bijipur adjacent to AH-45 (CHENNAI -KOLKATA). The nearest airport is Biju pattanaik Airport which is 6.7 km away from the project site towards W direction. Retang Railway junction is 3.82 km away from the project site towards West direction. Bhubaneswar Railway station is 10.45 km away from the project site towards N-E direction.
- 7. **Power Requirement:** The daily power requirement for the proposed project is assessed as 5218 KW (6139 KVA at 0.85 P.F). The power will be entirely supplied through CESU. There is provision of Power backup for the residential project will be through DG sets of total capacity 1870 KVA (3 X 600 KVA + 1 X 70 KVA) silent DG Set (Radiator Cooled) for residential area. Separate generator yard will be constructed for housing DG sets.
- 8. Water Requirement: During construction stage daily requirement of water will avg. 60 KLD which will be sourced from surface water through water tankers. During operation stage total water requirement will be about 726.4 KLD out of which 453.5 KLD (daily fresh water requirement will be sourced from PHED/Ground water.) Approximately, 645 KLD of wastewater will be generated during the operational phase from domestic uses and other uses. The wastewater will be treated in a Proposed STP (MBBR) Capacity = 645 KLD Considering 5% buffer 680 KLD. (Separate for Phase-1, 2 & EWS) 3 nos. of STP having capacity of 680 KL (310 KLD, 240 KLD & 120 KLD) provided within the complex generating 580 KLD of recoverable treated waste water from STP. Out of which 390.4KLD (will be re-used for flushing 272.4 KLD, Gardening-60 KLD & 20 KLD for cooling water make-up & 8 KLD for car washing etc.) within the project. During dry season there will be 190 KLD treated waste water discharged into municipal sewer and 250 KLD will become surplus in monsoon season.
- 9. **Solid Waste Generation and Management:** The solid waste generated from the project shall be mainly domestic waste and estimated quantity of the waste shall be approx.3123 kg per day @ 0.500 kg per capita per day for residential population(@ 0.20

- kg per capita per day for visitors, Staff & club area. Landscape wastes @ 0.2 kg/acre/day will be disposed in project premises).
- 10. **Green Belt:** The green area will be developed approx. 20 % of the plot area (8616.128 sqm). The biodiversity in the area will increase due to the proposed green areas.
- 11. **Parking:** Proposed total area of car parking (including commercial & EWS parking) 22500.876 M<sup>2</sup>
- 12. The project cost is INR ` 184 Cr [180 Cr (Existing /EC Granted) + ` 4 Cr (Expansion)].
- 13. The Environment consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee.
- 14. The SEAC in its meeting held on Dt: 11.11.2020 decided to take decision on the proposal after receipt of the certain information / documents from the proponent.
- 15. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of the SEAC
(i)	Detailed EC compliance report duly certified by MoEF&CC, Regional Office, Bhubaneswar	Six monthly EC compliance report (Oct'2019 to March 2020) submitted but not certified by MoEF&CC, Regional Office, Bhubaneswar. Letter from MoEF Regional Office for site inspection is attached as Annexure 1 & 1A	EC compliance report duly certified by MoEF&CC, Regional Office, Bhubaneswar has to be furnished.
(ii)	A comparative statement for existing and proposed expansion in tabulated form w.r.t change in floors, greenbelt, design, drainage plan, renewable energy details, parking, water consumption, waste water generation and its management, solid waste generation etc. Show the reduced the green coverage area in the plan/map and indicate the use of it. Indicate constructional features with details constructed as per revised building plan including the construction made w.r.t environmental features. Quantification of the same as per EC granted and the basis thereof as well as per	Comparative statement for existing and proposed expansion had been submitted. Attached as Annexure – 2 (A-G).	They have to submit a comparative statement in one page indicating all the features of existing and proposed expansion.

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of the SEAC
	proposed/revised EC sought with quantification, basis of the same including parking in terms of ECS		
(iii)	Details of construction status (percentage wise) of existing project as per Environmental Clearance granted and proposed project	Only club and community hall is being taken which is 2.41% of EC granted.	Details of construction status (percentage wise) of existing project as per Environmental Clearance granted and proposed project has to be furnished.
(iv)	Copy of approval letter of BDA along with building plan for expansion project	Attached as Annexure - 3	Complied.
(v)	Copy of approval for safety and structural stability from appropriate authority of building for expansion	Attached as Annexure - 4	Complied
(vi)	Details and plant layout showing location of drainage changed due to expansion. Also capacity of drain for disposal of proposed discharge from BMC	Revised drainage layout submitted along with previous plan. As number of units increased by 12, no significant changes in drainage capacity.  Attached as Annexure – 2 (C&F).	Complied
(vii)	Details and plant layout showing location of greenbelt changed due to expansion	Previous landscape area – 8607.72Sqm. Landscape area provided for expansion 8616.128m².i.e. 20% of total area is green belt area is proposed and 538nos of trees will be planted. Green belt plan is attached as Annexure – 2 (B&E).	Complied
(viii)	Details and plant Layout showing location of rainwater harvesting recharging pits and quantity to be harvested taking into consideration the erratic rainfall pattern in the area	Attached as Annexure - 5	Complied
(ix)	Fire-fighting measures	Compliance as per NBC part 4 – 2016 & recommendation vide memo no. 5379 dated 29.03.2019 issued by Director General, Fire	Complied

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent	Views of the SEAC
1101		services, Cuttack has been incorporated in Fire fighting measures with NOC from Fire Officer attached as Annexure - 6	
(x)	Certificate from DFO concerned that the site is not situated in eco-sensitive zone of Chandaka- Dampara wildlife sanctuary	Attached as Annexure - 7	Complied
(xi)	NOC from Airport Authority of India for increase the height of the towers	Max. height of block is 44.95mt and maximum permissible height from Airport Authority of India is 84.1mt. Attached as Annexure - 8	Complied
(xii)	Adequacy of parking in view of increased dwelling unit	Total area of parking requirement as per new BDA by law is 22500 sqmt for MIG (25%) which was earlier 26626 sqmt (30%). Parking plan and layout attached as Annexure - 9	Complied
(xiii)	To indicate the quantity of water to be drawn from PHED and ground water and the letter for PHED/ BMC their inability to supply the full requirement of water	Presently there is no scope of supply of water from BMC/PHED. Letter from PHED and application to CGWB submitted as Annexure 10 & 11.	Complied
(xiv)	Status of NOC/permission letter from CGWA/WR Deptt, Govt. of Odisha respectively for drawl of ground water	Attached as Annexure - 11	Complied
(xv)	Permission from BMC to take additional load of waste water due to the proposed expansion	Required necessary permission shall be obtained to accommodate addition waste water while constructing drainage channel to discharge waste water. BDA NOC attached as Annexure 12	Specific condition to be stipulated in EC
(xvi)	Justification why it will be not considered as a "violation"	Only club building is under construction as per EC grant, which is only 2.41% of total sanction area with no changes in layout plan – hence may please be exempted from consideration of violation.	

After detailed discussion, the SEAC decided to take decision on the proposal after receipt of the following from the proponent followed by a site visit of sub-committee of SEAC.

- a) Detailed EC compliance report duly certified by MoEF&CC, Regional Office, Bhubaneswar.
- b) A comparative statement in one / two pages for existing and proposed expansion in tabulated form w.r.t change in floors, greenbelt, design, drainage plan, renewable energy details, parking, water consumption, waste water generation and its management, solid waste generation etc. Show the reduced the green coverage area in the plan/map and indicate the use of it. Indicate constructional features with details constructed as per revised building plan including the construction made w.r.t environmental features. Quantification of the same as per EC granted and the basis thereof as well as per proposed/revised EC sought with quantification, basis of the same including parking in terms of ECS.
- c) Details of construction status (percentage wise) of existing project as per Environmental Clearance granted and proposed project
- IV) PROPOSAL OF ENVIRONMENTAL CLEARANCE FOR BHAGABANPUR DECORATIVE STONE MINES OVER AN AREA OF 24.225 HA AT VILLAGE-BHAGABANPUR, TAHASIL-KUKUDAKHANDI, DISTRICT-GANJAM OF M/S. ILIYAS GRANITES (IN CLUSTER APPROACH TOTAL AREA-28.333 HA) EC
  - 1. The proposal is for Environmental Clearance for Bhagabanpur Decorative Stone Mines over an area of 24.225 ha at village Bhagabanpur, Tahasil Kukudakhandi, District-Ganjam of M/s. Iliyas Granites (in cluster approach total area-28.333 ha).
  - 2. The project falls under item category 'B' 1(a)-Mining of Minerals in the Schedule of EIA Notification, 2006 & Subsequent amendments thereof. There are three other mines are located within the 500 m radius of this mine, and total area of the mines leases in cluster is more than 25 ha.
  - 3. ToR was issued for the project vide letter no. 127/SEAC-96 dated 03.03.2018.
  - 4. The mining lease area was granted for 20 years period vide letter no. 900, dated 01.02.2016. The mining plan has been approved vide letter no11565/DM Dated 19.12.2016. by Director of Mines Odisha, Bhubaneswar.
  - 5. Location & Connectivity The mine located in village Bhagabanpur, Tahasil Kukudakhandi, District Ganjam, Odisha is a part of Survey of India Toposheet bearing No.74A/11 is bounded by the latitudes from 19°20'06.5" N to 19°20'30"N & longitudes from 84°42"54.0" E to 84°43'14.50"E on Plot No 7, 8, Khata No.-215. Lease area is accessible from Berhampur city of Ganjam District at a distance of 5.5 Km. Nearest railway station is located at Berhampur at a distance of 9.5 km. NH 217 at 5.5km from lease area. Ramagurha RF at 0.81km. SH-17 is at 3.5km.
  - 6. **Reserves & Method of Mining** Total Reserves is 2268990 cum. Mining is proposed to be carried out by opencast semi mechanized method with deployment of machines like Excavator, Line Offset, compressor, jack-hammer, wire ropes and drill rod etc. The height of the benches will be 3mtr and width will be 6mtr and overall slope angle will be 45°.

7. Volume of year wise production of decorative stone is computed based on tabulated geo-mining parameters. The proposed year wise Quarry production schedule for decorative stone is as follows:

#### **Summary Proposal for Year wise Excavation**

Year	Total Volume of	Waste Volume @	Present non- saleable stone	Vol of Sale St	eable Dec	corative
	Excavation m <sup>3</sup>	35%: m <sup>3</sup>	volume: m³	Khanda @01 %	Block @14%	Total @15 %
1 <sup>st</sup> Year	13020	2557	6510	130	1823	1953
2 <sup>nd</sup> Year	16660	5381	8330	167	2332	2499
3 <sup>rd</sup> Year	19880	6958	9940	199	2783	2982
4 <sup>th</sup> Year	22260	7791	11130	223	3116	3339
5 <sup>th</sup> Year	25900	9065	12950	259	3626	3885
Total	97720	37202	48860	978	13680	14658

- 8. The ultimate mineable area will be 11.962 ha. Total 0.803 ha area will be converted in to greenbelt. Total 0.750 hectares has been allocated for waste dumping. This will be temporary dump. The life of mine will be 137 years which is the sum of 5 years of the plan period and the next 132 years beyond the plan period which exceeds the lease period of 20 years. There is no Top Soil present in the ML area.
- 9. **Greenbelt:** Total Green belt will be developed over 0.803 ha, at end of plan period with 13000nos of saplings planted within the plan period.
- 10. **Water Requirement** Total Water Requirement for different purposes like domestic, Dust suppression, plantation purposes is 4.5KLD sourced from bore well.
- 11. Power Requirement Total Electricity required is will be sourced from state Grid.
- 12. **Employment Potential** A total of 27 persons will be employed in the mine out of which most of the unskilled & semi-skilled labour is sourced from local villages.
- 13. Baseline data collection was in period March 2018 May 2018.
- 14. Public Hearing was conducted on dated 06-08-2019.
- 15. **Cost of Project -** Capital Cost of the project is estimated to be Rs.85 lakhs.
- 16. The Environment consultant **M/s P&M Solution, Noida -201301 U.P** along with the proponent has made a presentation on the proposal before the Committee.
- 17. The SEAC in its meeting held on Dt: 13.11.2021 decided to take decision on the proposal after receipt of certain information / documents from the proponent.
- 18. The project proponent has furnished compliances as desired by the committee and same has been verified as follows:

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent
(i)	Borewells to be installed instead of	Bore wells will be installed
	hand pumps	
(ii)	Details of waste management with	Approx. 32,202 cu.m. (in- situ) of 38,643
	composition. Details of waste	cu.m. swollen (swell factor of 1.2) waste/
	management along with	rejects likely to be generated during plan

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent
	engineering estimation of utilisation	period. 50 % of these waste/rejects will be utilized con-currently for construction and maintenance of road in the lease area and will be disposed of as minor mineral other than decorative stone with the permission of the competent authority. Remaining waste will be confined to be dumped on the demarcated area towards west over 0.587 ha at an average of 4m height maintaining the overall slope of the dump at 220.
(iii)	Distance of village road from lease area	Mahuri –Kalua road is at approx. 90 m from mine site.
(iv)	Detailed report on measures to be undertaken for Environment protection	Report on measures to be undertaken for Environment protection has been attached as Annexure I
(v)	Maintenance of Biodiversity Register	Biodiversity Register will be maintained.
(vi)	Trees uprooted in mining area shall be transplanted in safety zone	Trees uprooted in mining area will be transplanted in safety zone
(vii)	NOC from village panchayat for using village/public road for transportation and maintenance of it	Gram Panchayat NOC for the same has been attached as Annexure- II.
(viii)	Plantation in approach road to be undertaken	Approx. 60 saplings will be planted along both side of approach road of approx. 90m.
(ix)	Details of surface runoff to be managed to ensure zero discharge in monsoon period	Details submitted in compliance report.
(x)	Highlight the environment issues /concern raised as per MOM of Public Hearing and Action plan is proposed in physical terms with the frame to be submitted	Public hearing was conducted on dated 06/08/2018. Most of the villagers were concerned about employment generation. Villagers also said to take adequate pollution control measures in the mines for pollution control. Details submitted in compliance report.
(xi)	Settling pond design details to be submitted to ensure prevention of overflow during monsoon	Garland drain along with settling tank will be maintained in the boundary side to prevent siltation of low lying areas and in rush of water into the mine. The size of the drain will be 2600 m x 2.0 m x 1.5 m. The settling tank will be 6 in number of size 30 m in length, 7.5 m in width and 3m in depth separated into two chambers. The size of the sump will be 50 m x 40 m x 3m. The total capacity of the storage is 17,850 m <sup>3</sup> .

Considering the information / documents furnished by the proponent and presentation made by the consultant M/s P&M Solution, Noida -201301 - U.P on behalf of the project proponent, the SEAC recommended for grant of Environmental Clearance with stipulated conditions as per **Annexure** - **D**.

- V) PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S CREATIVE CULTIVATION PVT. LTD FOR PROPOSED "RESIDENTIAL DEVELOPMENT" AT GOVINDPUR, BHUBANESWAR, DIST KHORDHA, WITH TOTAL BUILT-UP AREA 147950.159 M<sup>2</sup> (EC)
  - The Proposed project is "Residential Development" located at Plot 518, 519, 549, 554/1155, 554/1102/1157, 550, 552/1159, 553, 551, 585/1154, 587, 586/1144, 590, 589, 600, 588, 588/991, 602/1169, 601/990, 601, 604/1004/1170, 604/1004/1170, 605/1177, village- Govindpur, Tehsil- Jatni, District- Khordha, Bhubaneswar, Odisha-754136 developed by M/s Creative Cultivation Pvt. Ltd.
  - 2. The Total Plot Area is 60927.186 m², total net plot area of the project will be 59470.37 m², area for Future Development will be 17967.858 m² and area for Present Development will be 41502.508 m². The built-up area of the project will be 147950.159 m².
  - 3. Since, the built-up area of the project is less than 1,50,000 m<sup>2</sup>. Hence, it falls under Activity 8(a), Category B as per Schedule of EIA Notification, 2006 and its subsequent amendments.
  - 4. The maximum no. of floors will be B+S+14. The maximum height of the building will be 44.95 m. Total 5 no. of towers (1162 DU), 1 EWS unit (224 DU), 1 unit of clubhouse have been proposed. The total population of the residential complex will be 7616 consisting of Residents- 7126; Clubhouse Visitors- 125; Staff- 15 and Visitors- 350.
  - 5. The geographical co-ordinate of the project site is: Latitude 20°11'34.00"N & Longitude 85°42'0.63" E which falls under Topo sheet No- 73H/11, 73H/12, 73H/15 and 73H/16. The project site is located at National Highway NH- 5 at a distance of approx 1.89 Km in North North West direction and NH 224 is at 5.89 km. The nearest railway station is Khordha Road Railway station at a distance of approx. 4.78 Km. The nearest airport is Biju Patnaik Airport at a distance of approx. 13.50 Km from project site. Nearest canal is Daya Canal 3.87 km. Nearest Nala is Gangua Nala adjacent to project boundary. Nearest lake near Chhanaghar 2.74 km. to the project site. Nearest forest is Ratnapur protective forest at 4.26km from project site.
  - 6. Meteorology: The maximum temperature is about 36.0 0C and the minimum temperature is 16.0 0C felt in the area. The average annual rainfall in the area is 1718.06 mm.

#### 7. The building details of the project:

Particulars	Unit	Details
Plot Area	m <sup>2</sup>	60927.186
Area under road widening	m <sup>2</sup>	1456.820
Net area for development	m <sup>2</sup>	59470.366
Area for Future Development	m <sup>2</sup>	17967.858
Area for Present Development	m <sup>2</sup>	41502.508
Ground Coverage		

Particulars	Unit	Details
Ground Coverage (Proposed)	m <sup>2</sup>	9583.05
FAR Area		
FAR proposed Residential (a)	m <sup>2</sup>	109059.48
FAR proposed EWS Tower (b)	m <sup>2</sup>	11436.65
Society Block Area	m <sup>2</sup>	938.32
Total Proposed FAR (a+b)- A	m <sup>2</sup>	121434.5
NON-FAR AREA		
Non-FAR Area (Mumty and machine room etc.)	m <sup>2</sup>	1315.71
Stilt Area (Excluding common areas)	m <sup>2</sup>	7717.37
Total Non-FAR- B	m <sup>2</sup>	9033.08
Basement Area- C	m <sup>2</sup>	17482.6
Built-up Area (A+B+C)	m <sup>2</sup>	147950.1
Green Area	m <sup>2</sup>	7729.5
Road Area & Open Area	m <sup>2</sup>	24189.96

- 8. Water Requirement: The total water requirement of the project during occupational stage is 1231 KLD, out of that the fresh water requirement is 650 KLD will be sourced from Ground Water and the recycled water from S.T.P is 581 KLD. The total sewage water generated is 868 KLD. It is proposed to treat the sewage in STP of capacity of 885 KLD. The treated waste water is used for Flushing, & Gardening and remaining will be used for irrigation purposes in nearby areas.
- 9. Power requirement: The daily power requirement for the proposed complex is 4698 KW (CESU). In order to meet emergency power requirements during the grid failure, there is provision of 6 nos. of DG sets having 2X500 KVA, 1X200 KVA, 1X250 KVA, 2X625 KVA capacities for power back up in the Residential Building Project. DG sets will be kept in acoustically treated room on the surface of residential colony. To avoid the emissions stack height of 4.5 m for 2x500 kVA, 3.2 m for 1x250 kVA, 2.8 m for 1x200 kVA & 5.1 m for 2x625 kVA above roof level will be provided to reduce the air emissions meeting all the norms prescribed by CPCB.
- 10. **Rain Water Harvesting** is proposed which will be harvested through 2 no. of recharging pits and 4 Rain water collection tanks (660 cum).
- 11. Solid Waste Management: From the residential complex solid waste in form of food waste from kitchen and miscellaneous waste will be generated which will be about 3281 kg/day. The generated solid waste from the residential complex will be segregated as biodegradable and non-biodegradable. Biodegradable Waste 1969 kg/day will be treated in In-house Organic Waste Convertor and Non Bio degradable waste 656 kg/day and plastic waste 656 kg/day will be sent to Authorized Vendors as per SWM Rules 2016. Used Oil of approx. 40 litre/month will be collected in leak-proof containers at isolated places and then it will be given to approved recycler. E-Waste of

- approx. 2 kg/month will be collected and given to approved recyclers. Battery waste will also be sent to Authorized Vendors of CPCB.
- 12. Total Parking provisions for the project after expansion will be 1080 ECS. The green area of the project will be 7729.50 m<sup>2</sup>.
- 13. The total project cost is `213.905 Crores.
- 14. The project proponent along with the consultant **M/s Perfect Enviro Solutions Pvt. Ltd.**, (New Delhi) 110085 made a detailed presentation on the proposal.
- 15. The SEAC decided to take decision on the proposal after the proponent submits certain information/ documents followed by the site visit of the Sub-Committee of SEAC.
- 16. The project proponent has furnished compliances as desired by the committee vide letter no. Nil dated 07.11. 2020 and same has been verified by the Committee on 02.12.2020 as follows:

SI. No.	Information Sought by SEAC	Compliance furnished by the proponent
(i)	Greenbelt area is proposed to be 18.6%. Revise plant layout for green belt (continuous and increase in percentage minimum to 20%) excluding land scape is to be submitted	The Landscape area is revised from 7729.5 m2 to 8300.50 m2 i.e. 20% of net plot area. Revised Plant Layout for Green Belt along with Land Use is attached as Annexure-2
(ii)	Revised ECS calculation taking into consideration total no. of residents and floating visitors is to be submitted	Total parking provision – 1393 ECS (Residents-1274+Visitors-119)
(iii)	DG set stack height details including location and its effect w.r.t. sound and emission and wind direction in that area	DG will be placed at the farther most NE of the project site as possible. Above the proposed DG location we have the site Entry / Exit and portion of site given for road extension 30 m high DG stack is proposed and the distance from the nearest Tower will be 33.3 m away.
(iv)	Reduction in no. of DG sets and is location in revised layout	Earlier we have proposed DG Set of capacity 2x500 kVA, lx 200 kVA, 3x250 kVA, 2x625 kVA Now, we have reduced the no. of DG and new No. of DG Set proposed are 2x1250 Kva. The DG Load Matrix is attached as Annexure 3.
(v)	Status of permission from CGWA and Water Resources Department, Govt. of Odisha for ground water drawal	Water supply is not made available in that area. Hence permission from CGWA shall be taken.
(vi)	NOC from drainage department for discharge of treated water to	It is expected that after the completion of the project, the occupancy will be 20% in

SI.	Information Sought by SEAC	Compliance furnished by the
No.	readymade municipality drain	the first 3 years, 50% in 5 Years, 80% in 7
	provided near proposed location	years and 100% by 10 years. So in such a case the NOC from the
		drainage department will not be required
		till the occupancy rate is 50%as
		wastewater generation will be less as there will be less no. of occupants.
		Therefore, no excess treated water will be
		discharged to the municipality drain. After
		50% occupancy there will be generation of Excess treated water, therefore
		permission from the drainage department
		will be acquired at that time to discharge
		treated wastewater from STP to the drain.  A detailed water management showing
		treated water requirement & treated water
		available for reuse at occupancy load of 20% 50% 80% & 100% is attached as
		Annexure 4.
(vii)	Detailed calculation for generation	The water balance and Management for
	of waste water and its management during monsoon and	Monsoon Season is attached as Annexure 5A & for Non-monsoon
	non-monsoon period separately	Season is attached as <b>Annexure 5B.</b>
(viii)	Breakup percentage of power	We have proposed Solar Panels on
	requirement by CESU and Renewable Solar energy (5%) with	terrace to generate 5% of total consumption of Electrical energy and it
	detailed plan	will be given back grid and an equal
(ix)	Details of Solid Waste	amount of energy can be gained on grid  The total Solid waste generation from the
(17)	Management i.e. copy of	proposed project will be 3281 Kg/day. The
	agreement with agency collecting	Biodegradable waste generation will be
	solid waste (non-biodegradable) from the premises	1969 Kg/day which will be treated in Organic Waste Convertor and manure will
	The state of the s	be reused for landscaping purposes at the
		project site.
		The Non-biodegradable waste will be
		given to the approved recycler. The
		agreement for Non-biodegradable waste recycles shall be done when the project
		becomes operational.
(x)	Details of traffic study conducted for this project	Traffic study report is enclosed as Annexure 6.
(xi)	Details of Nala adjacent to the	Gangua Nala is located adjacent to the
	project site	project site. The Gangua Nala is originating from
		Khurdha which is at a distance of 8.37 Km
		SW and merging into Daya river which is
		at a distance of 10.14 Km SE from the project site.
		There is a level difference of 2m from the

SI.	Information Sought by SEAC	Compliance furnished by the
No.		proponent
		Gangua Nala (21 m) to the nearest road level (23 m).
(xii)	Kissam of land and land schedule of the proposed project site	The proposed project site Land is Homestead land. The Kissam of land detail superimposed over the project site layout is attached as <b>Annexure 7.</b>

- 17. The SEAC in its meeting held on Dt: 02.12.2020 decided to take decision on the proposal after a site visit by the sub-committee of SEAC.
- 18. The sub-Committee of SEAC visited the project site on dated 20.01.2021 and following observations and recommendations were made:
  - i) The layout plan map of the proposed residential development complex was shown by the Architect & Environment Consultant of the proponent to the Sub-committee at the site. The layout plan was found not to be in conformity with environment norm and building norms as well, viz:
    - a) Green belt area is 18.6% of the total proposed area has been undertaken to revise to 20%. But, alongside the boundary, mechanical parking has been provided in stead of green belt. Accordingly, both parking and green belt to be re-located and green belt (tree cover) 20% to be clearly shown.
    - b) Similarly, location of STP could not be shown in the map to the committee. Besides, the proposed STP capacity approved to be inadequate and was advised to re-work with buffer design capacity. Drain contour with dimension /stretch also could not be shown to the committee.
    - c) The Architech/Environment consultant stated that the treated excess waste water will be discharged to the nala, a branch of "Gangua nala" just adjacent to their plot. Therefore, in this context, the following need to be complied by the project proponent.
      - (i) The said nala and the boundary to be shown in the map showing the lateral distance between the two and the discharge point.
      - (ii) Permission / NOC from the concerned Authority of the nala to take the additional coad of wastewater of the project for full occupancy and right of way, if necessary, for use by the proponent for the total distance between the nala and their boundary.
      - (iii) Construction of embankment for the stretch adjacent to their boundary with stone patching of the nala and perennial maintenance of the same.
      - (iv) The quantum of STP treated water to be discharged to nala shall be reduced aiming zero discharge tree area in non-monsoon season frequent irrigation of more trees to be planted in green belt. Accordingly, revised water balance for non-monsoon period shall be submitted.
      - (v) Entry and exit gate shall have marked / laid Padestia path of adequate width.

- (vi) Distance between towers and internal road width shall be increased / maintained as per BDA norm. A copy of BDA norm in context shall be furnished.
- (vii) The location of the DG set with respect to wind direction and the proposed towers alongwith nearby infrastructures land neither be shown nor explained to the committee. Layout with installation diagram to be shown for DG set stacks.
- (viii) Similar is the case with respect to rain water harvesting and recharging pits vis-à-vis the quantity of water to be used and the water to be charged against the prescribed norm.
- (ix) ECS including for four wheelers and two wheelers to be re-worked out and indicated both for residents and floating population.
- (x) Proposal with detail plan for solar power/ renewable power to be worked out vis-s-vis the total power consumption.
- (xi) Details of internal road, paved area, pedestrian path ways with dimension to be shown in the layout plan map as per revised BDA norms.
- (xii) Traffic study to be re-submitted from a domain expert from an Institute of repute, considering at least 10 years ahead.
- (xiii) A petroleum pipeline is laid between the public road and the plot boundary. This need to be shown in the map with lateral distance and the norm of minimum distance to be indicated for this as per Oil Safety Board, Govt. of India.
- (xiv) A complete fresh revised layout plan map with dimension and to scale to be resubmitted incorporating / recasting all the relevant environment features and the features indicated above as discussed and intimated to the Environment Consultant and Architect at the site.

After detailed discussion, the SEAC decided to take decision on the proposal after the proponent submits detailed information / documents as desired by the sub-committee of SEAC.

- VI) PROPOSAL OF ENVIRONMENTAL CLEARANCE OF M/S. FALCON REAL ESTATE PVT. LTD. FOR EXPANSION OF PROPOSED CONSTRUCTION PROJECT "FALCON CREST" MULTI-STORIED RESIDENTIAL COMPLEX COMPRISING OF ONE BLOCK OF INTEGRATED (B+G+16), AND ONE BLOCK OF (B+G) STORIED CLUB-CUM-SOCIETY BUILDING PROPOSED OVER PLOT NO. 800,803 & 829, KHATA NO. 223 & 83, OVER AN AREA 3.352AC OR 13565SQ.M AT MOUZA- SHYAMPUR, DIST- KHORDA OF SRI PARTHAJEET PATNAIK EC
  - This is a proposal for Environmental Clearance of M/s. Falcon Real Estate Pvt. Ltd. for Expansion of proposed construction project "Falcon Crest" Multi-storied Residential complex comprising of one block of integrated (B+G+16), and one block of (B+G) storied Club-Cum-Society Building proposed over plot no. 800,803 & 829, khata no. 223 & 83,

- over an area 3.352Ac or 13565sq.m at Mouza- Shyampur, Dist- Khorda of Sri Parthajeet Patnaik.
- 2. The project falls under Category "B", Project or Activity 8(a) Building Construction; Category B2 under Expansion project as per schedule of EIA Notification dated 14th Sep, 2006, as amended from time to time.
- 3. The site is coming under developmental Plan of Bhubaneswar Municipal Corporation. A conditional Approval letter was received from the Bhubaneswar Development Authority for One block of (B+G+16) multistoried Residential Apartment Building and one block of B+G+1 storied Club-Cum-Society Building plan vide letter no. 525/BDA, Bhubaneswar, Dt. 7.01.2016. The copy of BDA approval letter is enclosed as Annexure-VIII. According to Airport NOC, we will again request to BDA for approval of One block of (B+G+13) multistoried Residential Apartment Building and one block of B+G+1 storied Club-Cum-Society Building plan.
- 4. The proposed project has obtained Environmental Clearance (EC) for 1 Block- of (B+G+12, G+1 & EWS (B+G+4) Storied, Building with built-up area of 38515 sq.mt SEIAA/No-1-NCP/2015 dated 9/02/2018. At present 50% of total built up area completed as per Previous EC.
- 5. In revised building plan, total built-up area will increase from 38515 m² to 44213.04 m², ground coverage will be 3537.94 m², Max building height will increase from earlier proposed 40.95 mt. to 44.1 mt., Dwelling units will decrease from earlier proposed 286 units to 217 units.
- 6. M/s Falcon Real Estate Pvt. Ltd. has proposed to construct Residential Building with club. Project is located at nearer to Sum Hospital, surrounding area is developed area. The proposed site comes under BDA (Bhubaneswar Development Authority) and land use zone of the proposed site is residential Use Zone as per land use plan of BDA land use plan. Site is located in Mouza-Sampur.
- 7. **Connectivity:** The nearest airport is Biju Patnaik Airport which is at 7.53 km Bhubaneswar railway station is at 10.4 km & Mancheswar railway station is 13.1 km away from the project site.
- 8. Power Requirement: The total demand load is estimated at 2047 KW. Power will be supplied by CESU. There is provision of Power backup for the residential project will be through DG sets of total capacity 2239 KVA (1 No. 1250 KVA+ 1 No. 1010 KVA) silent DG Set (Radiator Cooled) for residential area. Separate generator yard will be constructed for housing DG sets.
- 9. Water Requirement: During construction stage daily requirement of water will avg. 60 KLD which will be sourced from surface water through water tankers. During operation stage total water requirement will be about 260 KLD out of which 148 KLD (daily fresh water requirement will be sourced from PHED/Ground water.) Approximately, 193 KLD of wastewater will be generated during the operational phase from domestic uses and other uses. The wastewater will be treated in a (Proposed STP (MBBR) Capacity = 200 KLD Considering 5% buffer 193 KLD. provided within the complex generating 174 KLD of recoverable treated waste water from STP. Out of which 66KLD (will be re-used for flushing 272.4 KLD, Gardening-24 KLD & 21.4 KLD for road washing etc) within the

- project. During dry season there will be 62 KLD treated waste water discharged into municipal sewer and 86 KLD will become surplus in monsoon season.
- 10. Solid waste Generation and Management: The solid waste generated from the project shall be mainly domestic waste and estimated quantity of the waste shall be approx.365.032 kg per day @ 0.500 kg per capita per day for residential population (@ 0.20 kg per capita per day for visitors, Staff & club area. Landscape wastes @ 0.2 kg/acre/day will be disposed in project premises).
- 11. **Green Belt:** The green area will be developed approx. 22 % of the plot area (2959 sqm). The biodiversity in the area will increase due to the proposed green areas.
- 12. **Parking:** Proposed total area of parking (including club area) 9014.29 m<sup>2</sup>
- 13. The project cost is `INR 45 Cr [ ` 36 Cr (Existing /EC Granted) + ` 9 Cr (Expansion)]
- 14. The Environment consultant **M/s Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar** along with the proponent has made a presentation on the proposal before the Committee.
- 15. The SEAC in its meeting held on Dt: 18.11.2020 decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit by Sub-committee of SEAC.
- 16. The project proponent has furnished compliances as desired by the committee on dated 29.12.2020 and same has been verified as follows:

SI. No	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
(i)	Detailed EC condition compliance report duly certified by MoEF&CC, Regional Office, Bhubaneswar	March-2020 attached as Annexure-1	Certified copy of MoEF&CC, Regional Office, Bhubaneswar to EC condition compliance
		Letter from MoEF Regional Office for site inspection as attached as <b>Annexure-1A</b> .	report has not been furnished.
(ii)	A comparative statement for existing and proposed expansion in tabulated form w.r.t change in floors, greenbelt, design, drainage plan, renewable energy, parking, water consumption, waste water generation, solid waste generation etc.	Attached as <b>Annexure-2</b>	Furnished
(iii)	Details of construction status (percentage wise) of existing project as per Environmental	Attached as <b>Annexure-3</b>	Details of construction status (percentage

SI.	Information Sought by	Compliance furnished by the	Views of SEAC
No	SEAC Clearance granted and proposed project	proponent	wise) of existing project as per Environmental Clearance granted and proposed project has not been furnished. The information furnished by the proponent does not reveal the actual construction status of existing as well as proposed project.
(iv)	Copy of approval letter of BDA along with building plan for expansion project	Attached as <b>Annexure-4</b>	Copy of in principle approval submitted.
(v)	Copy of approval for safety and structural stability of building for expansion from appropriate authority	Attached as <b>Annexure-5</b>	Safety and structural stability certificate furnished.
(vi)	Details and plant layout showing location of drainage changed due to expansion	As per previous EC, location of STP was in basement area.  No change in drainage plan only STP size changed as no of dwelling units and population changed.  Drainage plan of project site given in <b>Annexure-6</b>	A4 size map furnished. They have to furnish map in A1 size.
(vii)	Details and plant layout showing location of greenbelt changed due to expansion	Previous Landscaped area provided was 5121.38 Sqm.  Landscaped area reduced to 2959 sqm due to following points:  a) Road width increased from 6.0 mtrs to 7.5 mtrs as per new BDA regulations.  b) Club foot print increased. c) A large gate structure proposed. d) Covered transformer	A4 size map furnished. They have to furnish map in A1 size.

SI.	Information Sought by	Compliance furnished by the	Views of SEAC
No	SEAC	proponent	
		yard proposed.	
		<ul> <li>e) Increase in paved area due to addition of pedestrian path.</li> </ul>	
		f) Creation of Play field for residents in place of EWS block. Greenbelt Plan –Attached as Annexure-7.	
(viii)	Details and plant Layout showing location of rain harvesting recharging pits and quantity to be harvested taking into consideration the erratic rainfall pattern in the area	Layout plan showing location of rain harvesting recharging pits and quantity to be harvested taking into consideration the erratic rainfall pattern in the area attached as <b>Annexure-8</b>	A4 size map furnished. They have to furnish map in A1 size.
(ix)	Whether EWS unit is mandatory or optional? Reason for removal of EWS units from the	Previously EWS unit was shown inside campus as EWS block.	
	project	As per proposed expansion	
		a) Construction of EWS unit is not mandatory.	
		b) Govt has provision to deposit shelter fee instead of constructing EWS unit and these fees will be used by Govt. for developing EWS units.	
		c) We have already paid the fee as per Govt. Norms.	
		d) Letter from BDA for deposits of Shelter fee in lieu of Provision of EWS Housing – letter no. 8861/BDA, Bhubaneswar, Dated 29.03.2018. Attached as <b>Annexure-9</b> .	
		e) Submission of Shelter fee attached as Annexure-9A.	
(x)	Certificate from	Letter from DFO –	Letter from DFO
	concerned DFO if the project is coming within Eco-sensitive zone of Chandaka Dampara	attached as Annexure-10	to contact ORSAC, BBSR to conduct DGPS survey has been

SI.	Information Sought by	Compliance furnished by the	Views of SEAC
No	SEAC	proponent	
(vi)	Sanctuary or not	Details of Solar energy	furnished. They have to furnish certificate from concerned DFO if the project is coming within Eco-sensitive zone of Chandaka Dampara Sanctuary or not
(xi)	Details of Solar energy to be used in project with percentage of total power	given in <b>Annexure-11</b>	
(xii)	NoC from the Air Port Authority of India (AAI) for raising of building height	NOC from the Air Port Authority of India (AAI) attached as Annexure-12	Furnished
(xiii)	Indicate the ground coverage as per the existing EC with expansion the change in ground coverage be shown in the Map with Figure	As per previous EC: Ground Coverage was 3315.37 sqm  As per Proposed Expansion for EC: Revised Ground coverage proposed is 3537.94 sqm, i.e. increase of 222.67 Sqm. Details enclosed in compliance report.	Furnished
(xiv)	Indicate the Constructional features as per the revised building plan including the construction made w.r.t environment features	Details enclosed in compliance report.	Furnished
(xv)	Quantification of the same (indicated above) as per EC granted and the basis there of as well as per proposed revised EC sought with quantification, basis of the same including parking in terms of ECS also	Details of parking area required for Previous EC and proposed Expansion are given in <b>Annexure-1</b> (Comparison Statement).	Furnished
(xvi)	To indicate the quantity of water to be drawn from PHED and ground water and the letter from PHED/BMC their inability to supply the full	NOC from PHED-regarding the water supply to the proposed expansion project as attached as <b>Annexure-13</b> .	Furnished

SI. No	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
	requirement of water	рторолюн	
(xvii)	Status of NOC/Permission letter from CGWA/WR Deptt, Govt. of Odisha respectively for drawl of ground water	NOC/Permission letter from CGWA- attached as Annexure-14.	Furnished
[xviii)	Permission from BMC to take additional load of waste water due to the proposed expansion	They have applied to BMC for NOC and subsequently they have approved and requested us to pay additional fees, which was deposited by them. They are processing final NOC letter and we will deposit as soon as possible.	
(xix)	Justification why it will not be considered as a "violation".	<ul> <li>a) They have proposed some additions to the previous EC, which was mostly increase on one floor and removal of EWS block for the benefit of residents only.</li> <li>b) The increase in basement area proposed was not yet being constructed.</li> <li>c) The addition of one extra floor in block-1 was also not constructed till date.</li> <li>d) They have proposed increase in club area and addition of gate house and transformer yard. All these are not yet been constructed.</li> <li>e) The decrease in green area was majorly due to increase</li> </ul>	This has to be considered only after receipt of details of construction status (percentage wise) of existing project as per Environmental Clearance granted and proposed project from the proponent.
		in road width and paved area which were also mandatory as per new BDA guidelines.  f) All the constructions they have made was as per previous EC and we are not deviating any were till date. They have applied for revised EC before we construct any additional	

SI. No	Information Sought by SEAC	Compliance furnished by the proponent	Views of SEAC
		proposed part so this proposal should not be considered as Violation.	

- 17. The SEAC in its meeting held on Dt: 06.01.2021 decided to take decision on the proposal after receipt of following information /documents followed by a site visit to the proposed site by the sub-Committee of SEAC.
  - (i) Certified copy of MoEF&CC, Regional Office, Bhubaneswar to EC condition compliance report as the compliance furnished by the proponent has not been certified by the MoEF&CC.
  - (ii) Details of construction status (percentage wise) of existing project as per Environmental Clearance granted and proposed project as the information furnished by the proponent does not reveal the actual construction status of existing as well as proposed project.
  - (iii) Plant layout map in A4 size showing location of drainage changed due to expansion has been furnished. They have to furnish plant layout map in A1 size.
  - (iv) Details and plant layout showing location of greenbelt changed due to expansion in A4 size has been furnished. They have to furnish the same in A1 size.
  - (v) Details and plant Layout showing location of rain harvesting recharging pits and quantity to be harvested taking into consideration the erratic rainfall pattern in the area in A4 size has been furnished. They have to furnish the same in A1 size.
  - (vi) Letter from DFO to contact ORSAC, BBSR to conduct DGPS survey has been furnished. They have to furnish certificate from concerned DFO if the project is coming within Eco-sensitive zone of Chandaka-Dampara Sanctuary or not
  - (vii) Permission from BMC to take additional load of waste water due to the proposed expansion shall be submitted.
- 18. The sub-Committee of SEAC visited the project site on dated 20.01.2021 and following observations and recommendations were made:
  - A comparative matrix of salient and important features for the existing (for which EC was granted) and proposed expansion was submitted by the project proponent to the sub-committee.
  - ii) The following were discussed and sought for compliance by the project proponent:
    - a) A technical brief write-up with justification from the BDA approved structural engineer that the existing approved plan can take the load of additional proposed floor without threat to safety of the building and human life.
    - b) Numerical value of BDA norms to be indicated wherever the same is mentioned in the matrix submitted to the sub-committee.

- ii) The following were discussed and sought for compliance by the project proponent:
  - a) A technical brief write-up with justification from the BDA approved structural engineer that the existing approved plan can take the load of additional proposed floor without threat to safety of the building and human life.
  - b) Numerical value of BDA norms to be indicated wherever the same is mentioned in the matrix submitted to the sub-committee.
  - c) Instead of two bore-wells for ground water, only one may be allowed as a "standby" source of water since PHED / Municipality water supply is available.
  - d) Since there is additional land of 40 kl for treatment on STP, the design capacity of STP need to be re-worked out with atleast 20% buffer capacity and confirmed.
  - e) Provision of 1% of total power required for the project has been made through solar PV system. The sub-committee desired to increase it adequately to 5% and submit a revised plan for the same.
  - f) The proponent need to submit the quantity of rain water to be harvested and re-charged vis-à-vis the water consumed against the norm of CGWA.
  - g) The sub-committee observed that no construction has been made beyond the existing EC condition and hence, no violation.

After detailed discussion, the SEAC decided to take decision on the proposal after the proponent submits detailed information / documents as desired by the sub-committee of SEAC and additional information as sought earlier.

SRI B.P. SINGH CHAIRMAN, SEAC

SRI. J. K. MOHAPATRA MEMBER, SEAC (DR.) D. SWAIN MEMBER, SEAC

PROF.(DR.) B.K. SATPATHY MEMBER, SEAC ER. K.R. ACHARYA MEMBER, SEAC

DR. K.C.S PANIGRAHI MEMBER, SEAC

APPROVED

CHAIRMAN, SEAC

Proceedings of State Level Expert Appraisal Committee meeting held on 04.02.2021

Environmental Scientist, SEAC

## CHECK LIST FOR BUILDING & CONSTRUCTION PROJECTS FOR OBTAINING ENVIRONMENTAL CLEARANCE

(To be submitted over the seal and signature of the project proponent)

1.	Date of filing online application & auto generated Proposal No.	:	
2.	Scrutiny fees payment Treasury Challan		
	or e-receipt details	•	
3.	Name & address of the Project	:	
	proponent / Applicant (Contact address,		
	Contact number, WhatsApp no., email id,		
	Fax no)		
	,		
4.	Details of accredited Environmental	:	
	Consultant Organization		
i)	Name	:	
ii)	Registered Address	:	
iii)	Contact Number	:	
iv)	Email ID	:	
v)	NABET Accreditation No	:	
vi)	Accreditation Valid upto	:	
vii)	Whether accreditation certificate of	:	
	Environmental Consultant Organization		
	furnished (Yes / No), if yes, Annexure /		
	Page No.		
5.	Whether new /expansion or modification	:	
	of existing Project		
6.	Name of the Project	:	
7.	Location of Project	:	
	i) District	:	
	ii) Development Authority Area		
	iii) Municipal Corporation / Municipality	:	
	/ NAC		
	iv) Village /Mouza, Post, GP, Block,	:	
	Tahasil, PS, OLA Constitution	<u> </u>	
	v) Co-ordinates of the site (Latitude	:	
0	and Longitude) & Toposheet No.	-	
8.	Land Schedule and project area	:	
	Khata No/Plot No/Kisam/ area in acres	:	
9.	Total project / Plot area and built-up area in sqmtr. (Basement and super		
	built up / floor measurement)		
10.	Whether the entire project area is non	-	
10.	forest land (Yes /No)	-	
11.	Ownership of land	:	
12.	Whether land documents furnished?	:	
12.	(Yes / No), if yes, Annexure/Page No.	•	
13.	Whether, location of the nearest wetland		
10.	/ water bodies / Nala is mentioned? Yes		
	/ No / NA, if yes, Page No.		
14.	Whether, EC compliance report	-	
• • •	furnished from MoEF&CC, Regional		
	Office, Bhubaneswar (for expansion /		
	modernization) Yes/No/NA, if yes,		
	Annexure / Page No.		

projects, whether silent relevant of and building comper the existing the proposed exhas been submitany) in the remasshown? Yes / No.  16. Whether current location map fur yes, Annexure / F.  17. Whether, current proposed project No / NA, if yes, A.  18. Whether concept Yes / No / NA if No.  19. Whether land reincluding performshed? Yes / No / NA, if No.  20. Whether the location area (National Sanctuary), Critically Polle Archeological site.  21. Whether Certific Wildlife Warden / not located within Zone / Eco-Seformished? Yes /  22. Whether copy of Authority of Indiation height furnished?  23. Whether execut project including in the surrounding No), if yes, EMP  24. Whether studies impacts of the parea have been if Yes, page No in Yes, pa	projects / modification or a comparative matrix environment parameter instructional features as EC conditions vis-à-vis expansion / modification itted with deviations (if earks column has been b/NA, if yes, Page No. It satellite image and rnished? Yes/No/NA, if Page No. It photographs of the est site furnished? Yes / Annexure / Page No. It satellite image and rnished? Yes / Annexure / Page No. It site furnished? Yes / Annexure / Page No. It site plan furnished? It yes, Annexure / Page		
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impacts of the parea have been of the parea have been of the per guidelines for guidelines for the per guidelines	tive summary of the the relevant features ings furnished? (Yes /	:	
per guidelines fur 26. Whether natural studied and proponic Natural Drainage	project on surrounding carried out (Yes / No)? in EMP.		
studied and proposition Natural Drainage	e environmental data as rnished? Yes / No /NA	:	
1	drainage of plot area		
i) Water corproposed? if y  ii) Water balance non-monsoon			

	page no. of EMP	
	iii) Source of water (Ground Water / Municipal Supply / River Water)	
	iv) if ground water, permission of CGWA (page no.) and Water Resources Department (page no.)	
	v) if municipal supply, permission of Water Resources Department (WRD) / Municipal Corporation (page no.)	
	vi) if river water permission of Water Resources Department (WRD)	
	vii) Whether treatment of ground water/Surface water / MP by Raw Water Treatment Plant (WTP) proposed for correction of pH , removal of high TSS / TDS (Yes/No/NA).	
28.	Whether provision of STP for waste water treatment has been included in the project (Yes / No)? if yes, capacity of STP vis-à-vis the quantity of waste water to be treated	
	(i) recycling and release of treated waste water (both during Monsoon & Non-monsoon period)	
	a) For flushing through dual plumbing	
	<ul><li>b) For gardening &amp; watering of trees</li><li>c) For vehicle / car washing / AC make</li></ul>	
	up water / any other end use	
	d) Discharge to drain (if any) (Quantity & basis to be indicated in all the above cases)	
	(ii) disposal of sludge	
29.	Whether permission / NOC from competent authority has been obtained for discharge of excess treated waste water to the Municipal drain / nearest nala / water body (Yes / No.). If yes, page No.	
30.	Quantity of rain water harvested / recharged vis-à-vis total fresh water use against the norm of CGWA be mentioned.	
31.	Quantity of fresh water, treated waste water recycling, rainwater harvesting and recharging shall be measured and recorded to monitor water balance. Management of this is mentioned. Management of this is mentioned (page No.)	

32.	Untreated / treated waste water drain and run off / storm water drains are separately provided (Yes / No). If yes, detail layout / contour of the drain is shown at (page No.)	
33.	Whether details of drain layout showing discharge points to an existing drain / nallah furnished? (Yes/No), if yes Page No.	
34.	Management of periodical monitoring of quality of treated waste water and fresh water if used from ground water source or river is in place. (Yes/No). If yes, pg. No.	
35.	Whether attempts towards Zero Discharge Furnished. if yes, page no. in EMP.	
36.	Whether any alteration in the natural slope and drainage pattern of the surrounding is to be done (Yes/No)? if yes, page no.	
37.	Whether ground water study report of the surrounding areas including potential availability of ground water at the site, and likely impact thereon of the project has been attached (Yes/No)? if yes, page no.	
38.	Whether, Piezometer will be installed for ground water monitoring as a compliance to the necessary condition of CGWA (Yes / No)? If no, why?	
39.	Whether Solid waste management during construction, post construction and operation phase, as per the provision of CPCB/SCPB guidelines, has been enclosed (Yes/No)? if yes, page no.	
40.	Whether, Organic Waste Converter as per the norm will be in place (Yes / NO)?, If no, what is the other alternative arrangement.	
41.	Whether air quality and noise level monitoring during construction and operation phase has been programmed (Yes/No)? if yes, page no.	
42.	Whether Energy Conservation Plan furnished as per BEE guidelines? Yes / No / NA	
43.	Total demand load and proposed percentage of renewable energy with detail plan (page No in EMP).	
44.	Whether minimizing power consumption, and promoting use of renewable source have been programmed (Yes/No)? if yes, page no.	

45.	Whether traffic circulation system and connectivity inside the project premises and leaving adequate parking area as per the norm in terms of space and ECS (both for 4-wheelers & two-wheelers) for residents and floating population have been attended to (Yes / NO)? If yes, page No.  Whether Traffic Density Study Report	
	for a detailed traffic management and traffic decongestion duly validated by State Urban Development / PWD / Competent Authority has been furnished? (Yes/ No), If yes, page No.	
47.	Provision of internal road, paving and pedestrian pathways have been made as per the norm. Details with layout is available at Page No.	
48.	List of existing trees in the site.	
49.	<ul><li>a) If trees are existing in the site, plan for de-routing and re-routing the same in green belt coverage?</li><li>b) If tree cutting is inevitable, whether</li></ul>	
	tree cutting permission from appropriate authority has been obtained? Yes / No / NA. No. of plants (with species) to be planted against the cutting of the plant to be mentioned as per the norm for the same.	
50.	Whether there is adequate provision for green belt/tree cover (Yes/No). If yes, mention the percentage of area dedicated to be kept under tree cover as per the norm (excluding landscaping) showing the same in the lay out map around the periphery of the boundary with lateral width with hierarchy of plants / trees and elsewhere inside the project site.	
51.	Whether landscape plan has been furnished? Yes / No / NA, if yes, Annexure / Page No.	
52.	Whether, details of Plastic Waste and E-Waste Management furnished? (Yes / No), if yes, page no.	
53.	Whether firefighting plan / evacuation and Disaster Management Plan Furnished Indicating the fire corridor in the layout map? Yes / No, if yes (page No.)	

54.	Whether there is adequate disaster/risk	
	assessment, and whether plan for	
	management of risk have been carried	
	out (Yes/No)? if yes, page no.	
55.	Whether Corporate Environmental	
	Responsibility Plant furnished. Yes / No /	
	NA, if yes, Annexure / Page No.	
56.	Whether there is any provision for socio	
	economic impact analysis and CSR	
	activities (Yes/No)? if yes, page no.	
57.	DG set capacity and number for power	
	backup with emission within CPCB	
	guideline.	
58.	Location of DG set in reference to wind	
	direction, location of proposed towers and	
	surrounding neighboring infrastructures	
	(page No).	
59.	Whether DG set stack height has been	
	calculated as per CPCB guidelines and	
	statutory compliance required as per	
	standard EC condition for building	
	project as per MoEF&CC showing the	
	installation drawing of the stack /	
	exhaust pipe obtained (Yes/NO), If yes,	
	page No.	
60.	A separate environment cell for perennial	
	environment management shall be set up.	
	The detail organogram is available at	
0.1	Page No.	
61.	Any other related parameters which may	
	have specific impact on local	
	environment-list out all such relevant	
	issues, and safeguard /mitigation	
	measures proposed in the project.	

Certified that the information furnished above are true to the best of my knowledge

Signature of Applicant (Project Proponent) with seal

#### **Encl: Documents:**

- 1. Form-I duly filled.
- 2. Form-1A.
- 3. Conceptual Plan/Environment Management Plan (EMP).
- 4. Executive summary of the project including the relevant features in two pages including soft copy in Word format.
- 5. Copy of accreditation certificate of Environmental Consultant Organization.
- 6. Copy of the approval letter from Development Authority for the proposed FAR area and building plan.
- 7. Copy of CGWA/WRD borewell permission, in case ground water extraction is proposed.
- 8. Full scape toposheet (1:50,000 scale) showing all features and depicting Project site.
- 9. Certificate from the Chief Wildlife Warden / concerned DFO that the project is not located within notified Eco-Sensitive Zone / Eco-Sensitive Zone (default), as applicable.
- 10. Certificate from the Concerned DFO / Tahasildar about non-involvement of any forest land in the Project area, on the basis of verification of DLC report and other records of forest lands.
- 11. Copy of permission from Airport Authority of India (AAI) for the building height (as applicable)
- 12. Copy of land document and land conversion document, if required
- 13. Building and ancillary facility lay out plan (STP, Rain Water harvesting, DG sets, stack, etc.)
  - a) Sketch map, capacity, etc., of STP, Rain Water harvesting, DG sets, stack, etc.
  - b) Water supply and drainage plan.
  - c) Schematic map of STP along with its location on layout map.
  - d) Rain water harvesting scheme, with location of RWH ponds and recharging pits with design and drawing against the norm of MoEF&CC, Govt. of India and CPCB.
  - e) Landscape plan.
  - f) Traffic Management plan.
  - g) Firefighting plan / Evacuation plan.

(All the building plans/layout maps should be submitted in A1 size paper along with signature of the proponent/authorized signatory and project name as in Form 1 & 1A.)

14. Any other information required, as applicable.

#### NOTE:

The above check list is indicative, but not exhaustive. The project proposal will undergo due appraisal procedure including presentation and site visit (as & if necessary).

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR PROPOSED HOUSING PROJECT (RESIDENTIAL USE TYPE) OF OVER AN AREA 33,621.35 SQ.MTS (BUILT-UP AREA) OF M/S UTKAL BUILDERS LIMITED AT PATRAPADA, BHUBANESWAR, DIST- KHORDHA OF SRI SHARAD BAID (EC).

#### PART A - SPECIFIC CONDITIONS:

- Consent to Establish / Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.
- 3. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- 4. The project proponent shall ensure that the guidelines for building and construction projects issued vide this Ministry's OM NO.19-2/2013-IA.III dated 9th June, 2015, are followed to ensure sustainable environmental management.
- The proponent shall obtain prior clearance from the Standing Committee of the National Board for Wild Life if the project will be located within any Eco-Sensitive Zone of Wild Life Sanctuary.
- 6. There exists a HT tower proximate to the boundary on south side (commercial complex side). As such, clearances shall be obtained from Electrical Inspectorate, Govt of Odisha.
- 7. Area / stretch under green belt shall be increased by relocating the water storage/ sumps suitably.
- 8. Location of STP shall be shifted from habitation side (East side) and relocated to drain side suitably.
- 9. Exact proposed drainage plan alongside the boundary for discharge of treated waste water (if any) to be shown and necessary ROW for use of the land connecting the Housing drain with BMC drain need to be obtained including permission to take the load of treated waste water to be discharging from the housing project (if any) from the concerned Authority. The Project will not be made operative till such time the proposed drain is made operational.
- 10. Drain for surface water / run off water overflow shall be provided by the proponent and channelizing the same to rain harvesting facility and recharging thereafter.
- 11. To maintain the desired stack height, DG set shall be installed on raised platforms.
- 12. Since municipality water supply is available, no borewell is allowed. However, to meet the emergency situation, one borewell shall be permitted subject to NOC from CGWA & permission form WR Deptt, Govt of Odisha. A borewell was found inside the premises shall be abandoned immediately. For construction purposes, proponent shall make alternative arrangement to meet the water requirement

13. The site is required to be revisited by the sub-Committee of SEAC after six months of issue of Environmental Clearance order by SEIAA, Odisha to assess the status of implementation of commitment by the project proponent and conditions of Environmental Clearance order.

## **TOPOGRAPHY AND NATURAL DRAINAGE**

- 1. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape and other Sustainable Urban Drainage Systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- The permission from competent authority will be obtained to discharge the excess storm water to drain if any. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially.

# WATER REQUIREMENT, CONSERVATION, RAIN WATER HARVESTING, AND GROUND WATER RECHARGE

- 3. As proposed, fresh water requirement from ground water shall not exceed 103.0 m<sup>3</sup> per day.
- 4. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- 5. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC and SEIAA, Odisha along with six monthly Monitoring reports.
- 6. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- 7. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.
- 8. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- 9. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- 10. The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits of adequate nos. shall be provided.
- 11. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering. The proponent shall also obtain permission from Water Resources Department, Govt. of Odisha for drawl of water.

12. The proponent shall keep one bore well as standby domestic water source once municipal water supply is made available in the project area.

#### **SOLID WASTE MANAGEMENT**

- 13. The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- 14. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- 15. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from group housing project will be sent to dumping site.
- 16. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- 17. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the Municipal Solid Waste generated from project shall be obtained.

#### **SEWAGE TREATMENT PLANT**

- 18. Sewage shall be treated in STP of capacity 140 KLD. The treated effluent from STP shall be recycled/re-used for flushing and gardening.
- 19. Excess treated water shall be discharged to the drain only after getting the permission from the concerned authority. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially. To this effect the proponent has to give a legal affidavit before going for construction activity.
- 20. A certificate from the competent authority shall be obtained for discharging treated effluent/ untreated effluents into the Public sewer/disposal/drainage systems along with the final disposal point.
- 21. Separate large recharge pits shall be constructed inside the project area to accommodate the rainwater in case the housing project period and the CDP of the Govt. does not synchronize with reference to construction of road and drain.
- 22. No sewage or untreated effluent water would be discharged through storm water drains.
- 23. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the SEIAA, Odisha before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- 24. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health

- and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
- 25. The proponent shall obtain permission from the concerned authority to discharge the liquid waste to any drain i.e. the competent authority of the drain and "Nala" before commencement of any activity at the project site.

#### **ENERGY**

- 26. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- 27. Energy conservation measures like installation of CFLs / LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
- 28. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 5.5% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.
- 29. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
- 30. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- 31. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project shall be submitted.

## **AIR QUALITY AND NOISE**

32. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height).

Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

- 33. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- 34. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- 35. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- 36. For indoor air quality the ventilation provisions as per National Building Code of India shall be provided.
- 37. Ambient noise levels shall conform to residential standard both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

# GREEN COVER

38. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m² of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 1,793.52 sqm (20.23 %) of plot area shall be provided for green area development.

## **TOP SOIL PRESERVATION AND REUSE**

39. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

#### **TRANSPORT**

40. A comprehensive mobility plan, as per Ministry of Urban Development best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and

safety of users. The road system can be designed with these basic criteria.

- · Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
- Traffic calming measures
- · Proper design of entry and exit points.
- Parking norms as per local regulation
- 41. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project.
- 42. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- 43. Main Gates (both entry & exist) on commercial complex side facing service road of NH (south side) shall be widened with requisite width having pedestrian path ways also.
- 44. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
- 45. A dedicated entry/exit and parking shall be provided for commercial activities.
- 46. Barricades shall be provided around project boundary.
- 47. Speed of the vehicles shall be restricted upto 15 kmph by erecting speed bumps at regular intervals at project site and proper signage shall be provided for guided vehicular movement and speed restrictions.
- 48. Parking shall be prohibited on the access road to the proposed project site.
- 49. Footpath shall be seamless with sufficient width.
- 50. No vehicles shall be allowed to stop and stand in front of the gate on main access.
- 51. A buffer of minimum 10 m shall be maintained between the entry/exit gate and the road to avoid traffic congestion.
- 52. The Traffic Management Plan prepared by the proponent shall be duly validated and certified by the State Concerned Competent Authority and shall have also their consent before implementation.

#### **ENVIRONMENT MANAGEMENT PLAN**

53. An Environmental Management Plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable

energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.

## **OTHERS**

- 54. Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- 55. A First Aid Room shall be provided in the project both during construction and operations of the project.
- 56. The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.
- 57. As per the MoEF&CC, Govt. of India Office Memorandum F.No.22-65/2017-IA.III dated 1st May 2018, the project proponent is required to prepare and implement Corporate Environment Responsibility (CER) Plan. As per para 6(II) of the said O.M. appropriate funds shall be earmarked for the activities such as infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase yield of crop and fodder, rain water harvesting, soil moisture conservation works, avenue plantation, plantation in community areas etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.

## **PART B - GENERAL CONDITIONS**

- A copy of the Environmental Clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.
- The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to the SEIAA, Odisha and MoEF&CC, Govt. of India and its concerned Regional Office.
- 3. Officials from the Regional Office of MoEF&CC, Bhubaneswar who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection.
- 4. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, Odisha.
- 5. The SEIAA, Odisha reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

- 6. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.
- 7. These stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and the EIA Notification, 2006.
- 8. The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the SEIAA, Odisha. The advertisement shall be made within Seven days from the date of receipt of the Clearance letter and a copy of the same shall be forwarded to the Regional Office of MoEF&CC, Bhubaneswar.
- Any appeal against this 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.
- 10. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
- 11. The proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- 12. The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC, Govt. of India by E-mail.

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR BHAGABANPUR DECORATIVE STONE MINES OVER AN AREA OF 24.225 HA AT VILLAGE-BHAGABANPUR, TAHASIL-KUKUDAKHANDI, DISTRICT-GANJAM OF M/S. ILIYAS GRANITES (IN CLUSTER APPROACH TOTAL AREA-28.333 HA)— EC

## A. Specific Conditions

- 1. This EC for the proposal in the mine lease area of 24.225 ha. (total area under cluster 28.333 ha.) shall be operational after submission of an undertaking through affidavit to SEIAA, Odisha within 15 days of receipt of the EC letter for compliance of all the conditions prescribed herein.
- 2. Handling of dumped material is not allowed for any purpose except backfilling of the mined-out area. The estimated mineable reserves are about 22,68,990 m<sup>3</sup> and the life of mine is 9 years with the proposed production rate.
- 3. EC for the proposal shall be operational after getting necessary approval from the CGWA.
- Consent / NoC shall be obtained from the concerned village Sarpanch for use of village road for mineral transport. The said road shall also be maintained by the lessee.

#### **B.** Standard conditions

#### (I) Statutory compliance

- 1. 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.
- 2. The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
- 3. The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
- 4. This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project,
- 5. This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the project.

- 6. 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.
- 7. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.
- 8. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made thereunder in respect of lands which are not owned by it.
- 9. The Project Proponent shall follow the mitigation measures provided in MoEF&CC's Office Memorandum No. Z-I1013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
- A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- 12. State Pollution Control Board shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- 13. The Project Authorities should widely advertise about the grant of this EC letter by printing the same m at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board and web site of the Ministry of Environment, Forest and Climate Change (www.environmentclearance. nic.in). A copy of the advertisement may be forwarded to the concerned MoEF&CC Regional Office for compliance and record.
- 14. The Project Proponent shall inform the MoEF&CC/SEIAA, Odisha for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

## (II) Air quality monitoring and preservation

15. The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2; CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and

use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.

16. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from ah sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEF&CC/ Central Pollution Control Board.

# (III) Water quality monitoring and preservation

- 17. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEF&CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
- 18. Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- 19. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- 20. The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included

the same in monitoring plan. The parameters to be monitored shall include their water quality vis-a-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC / SEIAA, Odisha. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, SEIAA, Odisha, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.

- 21. Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1 /2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
- 22. The project proponent shall construct retaining wall and settling pond within the lease area. Further, check dams shall be constructed at strategic locations in which rain water passes in rainy season. Finally, the excess supernanted after sedimentation shall be allowed to spill away through stone pitch structure to the nearby valley.
- 23. De-silting of agricultural lands in buffer zone and beyond including nearby Nalas/rivers perennially periodically and perpetually caused due to wash up of minerals/OB/dumps shall be done as per SOP submitted. A legal affidavit shall be submitted within 6 months from the date of issue of Environmental Clearance to this effect with periodicity of de-silting.
- 24. Detail design of the existing retaining wall and the proposed for the expansion from a chartered Civil Engineer shall be submitted within 6 months from the date of issue of Environmental Clearance to ensure that no silt after wash up is escaped from the core / buffer zone of the mines.
- 25. An area of 3.40Ha shall be kept for public use as pond and road. Hence, remaining 52.956Ha shall be planted during life of the mine in a phased manner i.e. within a period of 20 years.
- 26. Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office, MoEF&CC annually.
- 27. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated in an ETP as proposed so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage

- through Oil and grease trap.
- 28. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board.

## (IV) Noise and vibration monitoring and prevention

- 29. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS quidelines.
- 30. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
- 31. The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The worker engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

# (V) Mining Plan

- 32. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.
- 33. The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change for record and verification.
- 34. The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-a-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be

submitted half-yearly to the MoEF&CC and its concerned Regional Office / SEIAA, Odisha.

## (VI) Land reclamation

- 35. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
- 36. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
- 37. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
- 38. The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
- 39. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC, Govt. of India, Bhubaneswar as well as SEIAA, Odisha.
- 40. Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and topsoil / OB / waste dumps to prevent runoff of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
- 41. Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the comers of the garland drains.
- 42. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of

the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

43. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

# (VII) <u>Transportation</u>

- 44. No Transportation of the minerals shall be allowed in case of roads passing through transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.
- 45. The Main haulage road within the mine lease should be provided with a permanent water arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.
- 46. Traffic management shall be done as per recommendation of Traffic Management Study Report.

## (VIII) Green Belt

- 47. The Project Proponent shall develop greenbelt in 7.5 m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
- 48. The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect

- shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
- 49. The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
- 50. The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.
- 51. And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

# (IX) Public hearing and human health issues

- 52. The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.
- 53. A commitment in form of an undertaking for periodical occupational health checkup of the employee and the local people shall be done through an occupational health expert as per the detailed action plan submitted with the proposal within 6 months from the date of issue of Environmental Clearance.
- 54. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.
- 55. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests

and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x I4 inches and of good quality).

- 56. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities, (c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.
- 57. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
- 58. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
- 59. 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 the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.
- 60. 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&CC, Govt. of India.

# (X) Corporate Environment Responsibility (CER)

- 61. The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by SEAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.
- 62. Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF&CC and its concerned Regional Office / SEIAA, Odisha.

# (XI) <u>Miscellaneous</u>

- 63. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
- 64. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- 65. The project proponent shall establish a solar power plant with 30KVA capacity within the lease area as proposed.
- 66. The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MoEF&CC & its concerned Regional Office, SEIAA, Odisha, Central Pollution Control Board and State Pollution Control Board.
- 67. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.
- 68. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
- 69. The project proponent shall augment infrastructure on drinking water, health care and education in nearby villages as per time bound action plan submitted.
- 70. The project proponent shall obtain permission from DGMS under 106(2b) to carry out blasting operation within the lease area.
- 71. The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
- 72. 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.