PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 06TH JUNE, 2022

The SEAC met on 06th June, 2022 at 11:30 AM through video conferencing in google meet under the Chairmanship of Sri B.P. Singh. The following members were present in the meeting.

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

The following issues were discussed and decision taken:

A. CONSIDERATION OF COUNTRY LIQUOR PROPOSALS (NEW) – 07nos

The committee verified the compliance furnished along with documents and checklist of 07 nos. of country liquor proposals. The case-wise proceedings and observations of the Committee are detailed in Table as per **Annexure - A**. The recommendations of the committee are as follows:

No. of proposal	Recommendation of the committee
02	The committee considered the proposals as B2 category as these units are generating waste water less than 100 KLD and recommended for Environmental Clearance.
05	The Committee decided to take decision on the proposal after receipt of documents / clarification from the proponent.

B. CONSIDERATION OF OLD PROPOSALS (COMPLIANCE RECEIVED):

ITEM NO. 01

PROPOSAL FOR ENVIRONMENTAL CLEARANCE OF M/S LA DEVELOPERS FOR RESIDENTIAL & COMMERCIAL PROJECT OVER A BUILT-UP AREA 56147.44 SQR LOCATED AT MOUZA- NAYAPALLI & MADHUSUDAN NAGAR, DISTRICT-KHURDA, BHUBANESWAR OF SRI DILIP KUMAR MOTWANI – EC.

1. M/s LA Developers proposes to construct a Residential cum Commercial project located at 1392, 1393, 1398, 1398/3312 & 3313, 1396/3382, 1394/4908/ & 4909, 1394/4966 & 4967, 1341/2127 & 2128 & 2129, 897,897/1822, 898, 899, 900, 901/1740 & 1776, 902/1777, 902/1754, 902/1971, 902, 903, 903/1755, 904/1736, 904/1976, 904/1972, 904/1837, 904/1909, 911,911/1495 &1970, 911/1495, 912/1727, 893/1906, 896, 895 of Mouza- Nayapalli & Madhusudan Nagar, District Khurda, Bhubaneswar, Odisha on a land measuring 2.90 acres or 11756.34 m^2.

2. The nearest Railway Station is Bhubaneswar Railway Station 2.6 km (SE) away from the project site and Biju Patnaik International Airport is at a distance of approx. 3.2 km in SW direction from the project site.
3. The project falls under category “B” or activity 8 (a) - Building and construction projects under EIA Notification dated 14th September 2006 as amended from time to time.
4. The site is coming under development plan of Bhubneshwar Development Authority. The project having total 15 floors (LB+UB+G+14). The maximum height of the building will be 44.51 m.
5. The total plot area is 11756.34 sqm. Net Plot Area is 9590.78 sqm.
6. The permissible ground coverage will be 3836.31 sqm (39.99%) and proposed Ground Coverage will be 3053.66 (31.83%).
7. The permissible FAR will be 57544.68 sqm (@ 6 of plot area) and proposed FAR will be 40798.37 (4.253).
8. The Non-FAR for the project will be 15349.07 sqm.
9. Total Built up area for the project will be 56147.44 sqm.
10. The total population of project after operation of the project will be 1587 persons.
11. **Water Requirement:** The total water requirement will be Ground water met through Bore well which is approx. 170 KLD, out of which total domestic water requirement is 140 KLD. The total domestic water will be 140KLD, out of which fresh water requirement is approx. 104 KLD & flushing water will 57 KLD.
12. **Waste water details:** The project will generate approx. 140 KLD of wastewater. The wastewater will be treated in an onsite STP of 170 KLD capacity. The treated water (126 KLD @ 90% of total waste water) will be reused for flushing (57 KLD), horticulture (10 KLD). Surplus treated water during dry season (59KLD), monsoon season (68 KLD) and winter season (65KLD) will be discharged to external sewer with the requisite permission.
13. Total 16 Rain Water Harvesting (RWH) pit at different locations will be constructed.
14. **Parking Requirement:** Total parking area requirement will be 12377.09 m^2. And Total Parking i.e. 438 ECS will be provided.
15. **Power Requirement:** The power supply will be supplied by State Electricity Board. The requirement load for the project will be approx. 1247 kVA.
16. **Power Backup:** There is provision of 2 Nos. of DG sets of total 1500 kVA (2x 750 kVA) capacity for power back up out of which one DG set of 750 KVA will be kept as standby. Silent DG sets (Radiator cooled). Separate generator yard will be constructed for the residential block.
17. The total solid waste generation will be 675 kg/day.
18. Total green area measures 2416.08 m^2 i.e. 25.16% of the net plot area.
19. Total Project cost is ` 99.156 Crores including land and development cost.

20. The Environment consultant **M/s Grass Roots Research & Creation India (P) Ltd** along with the proponent has made a presentation on the proposal before the Committee on 18.02.2022.

21. The SEAC in its meeting held on dated 18.02.2022 decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of the sub-committee of SEAC.

i) Land document with kissam of the land (Sabik and Hal) and conversion of land to Gaharabari from Revenue Authority before start of the construction work.

ii) Layout of internal drainage map and their fallout to external public drain.

iii) Copy of permission of the concerned authority of the drain / sewer to discharge the treated water from project to the nearby drain including the ownership of the land/ ROW of the land between the project boundary and the public drain. In case of sewer, the schedule of operation of the same from the appropriate authority be submitted

iv) Parking in terms of space and ECS for 4 wheelers, 2 wheelers including bicycles be calculated separately for dwellers & visitors (floating population) and commercial indicating the norm as well and showing it in the layout map & be submitted. Separate entry and exit gates for residential and commercial to be submitted in layout. Parking for 438 ECS has been stated to be provisioned as against 795 ECS as per MOEF&CC, Govt. of India guide norm as mentioned by PP. The difference be explained.

v) Copy of Traffic Study be submitted and it should cover all sensitive intersecting traffic points.

vi) Break up of greenbelt of plot area in terms of plantation and landscape. Revisit the detail calculation of 25% green belt in terms of norm of MoEF&CC, Govt. of India with dimension continuous around the boundary showing in the layout map be submitted.

vii) Recommendations of Fire Safety Deptt. with peripheral road fir movement of fire fighting vehicles and fire control measures

viii) Plan with detail calculation of solar power consumption vis- a- vis the generation and as percentage of total power demand be submitted.

ix) Procedure to be undertaken to reduce noise level within limit during construction phase so that it is not affected to nearby vicinity and employees.

x) Procedure for regular monitoring of quality of treated water to be discharged to the drain.

xi) Physio-chemical analysis of ground water to be submitted.

xii) Copy of letter from PHED Deptt. for refusing to provide water supply to project site and also copy of refusal letter of WATCO for water supply to the project. Quality of ground water (physico- chemical analysis/ parameters), if used, be submitted. NOC from CGWA & permission from Water Resources Department, Government of Odisha need to be submitted for use/ drawl of ground water. Quantity of rain water to be harvested vis- a- vis the norm of CGWA be confirmed as against the proposed drawl of ground water

xiii) Layout map for commercial and residential complex.

xiv) Copy of letter of in-principal approval of building plan by BMC.

xv) Internal drain map.

xvi) Use of Compost converter for treatment of Sewarage solid waste

xvii) STP and ETP process details with technology adopted and post monitoring schedules

xviii) Copy of Airport Authority Clearance for height of the building.

xix) Stack height and position justification.

xx) In view of various options of Water supply provision, WTP is to be shown in the layout plan.

xxi) Provision of Lift, Light, Ventilation, and Fire Safety from the lowest basement to the terrace roof for Health and Safety of the Dwellers to be incorporated in the layout plan.

xxii) Provision of numbers with the capacity of Over Head Tank for Fresh Water for Drinking and Bathing purpose and Treated STP Waste Water exclusively for Toilet Flush with Dual Plumbing System to be incorporated in the Project.

xxiii) Submission of list of measure Electrical equipment like Transformer, DG, Lifts and other Electrical Appliances, Fixtures, Instruments and Devices likely to be installed in the Project along with its Star Rating as per BEE, Ministry of Power, Govt. of India, New Delhi as per the provision of Energy Conservation Act - 2003.

22. The project proponent was requested vide letter no. 228 (2)/ SEAC–(Misc)-28, dated 03.03.2022 to submit the information / documents as sought by the SEAC at para 21 above. But, they have not yet furnished the same

23. The proposed site was visited by the sub-committee of SEAC on 22.03.2022. Following are the observations of the sub-committee and proponent needs to submit relevant documents as below:

    a) Certificate of Structural Stability from appropriate authority as it is situated adjacent to the big drain.
    b) Water resources department permission as commercial unit is a part of the project
    c) Provision of compost converter and how other solid wastes shall be managed with documentary proof of any agreement done for the same.
    d) Traffic study from a reputed institute
    e) Technology to be adopted for sewerage, waste water treatment and provision of Bio waste converter if any (details) to be given
    f) Revenue map of land superimposing the project site and plot plan starting the entry areas.
    g) Kisam and ROR of land
    h) Internal drain map showing fall out to existing drain.
    i) Permission from BMC for discharging excess treated water.
    j) **All points mentioned in proceeding**

24. The SEAC in its meeting held on dated 12.04.2022 decided to take decision on the proposal after receipt of information / documents as requested vide letter no: 228 (2)/ SEAC–(Misc)-28, dated 03.03.2022 and as sought by the Sub-Committee of SEAC at para 23 above.

25. The project proponent has furnished the compliance as requested vide letter no**: 228 (2)/ SEAC–(Misc)-28, dated 03.03.2022** and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
1.	Land document with kissam of the land (Sabik and Hal) and conversion of land to	Copy of Land documents with kissam of the land (Sabik and Hal) and

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
	Gaharabari from Revenue Authority before start of the construction work.	conversion of land to Gaharabari is attached as **Annexure-I**.
2.	Layout of internal drainage map and their fallout to external public drain.	Layout of internal drainage map and their Fallout to external public drain is attached as **Annexure-II**.
3.	Copy of permission of the concerned authority of the drain / sewer to discharge the treated water from project to the nearby drain including the ownership of the land/ ROW of the land between the project boundary and the public drain. In case of sewer, the schedule of operation of the same from the appropriate authority be submitted.	We will discharge the surplus treated water to existing drain which is adjacent to the site and we are in progress to obtain the permission for the same. We will submit the copy of permission within a month. A copy of undertaking for the same is attached as **Annexure-III**.
4.	Parking in terms of space and ECS for 4 wheelers, 2 wheelers including bicycles be calculated separately for dwellers & visitors (floating population) and commercial indicating the norm as well and showing it in the layout map & be submitted. Separate entry and exit gates for residential and commercial to be submitted in layout. Parking for 438 ECS has been stated to be provisioned as against 795 ECS as per MOEF&CC, Govt. of India guide norm as mentioned by PP. The difference be explained.	Revised parking Calculations: 2 wheelers parking = 65.77 or 66 ECS i.e. 132 Nos. 4 wheelers parking = 363ECS i.e. 363 Nos. Bicycle parking =8.77 or 9 ECS i.e. 27 Nos. Total Proposed ECS=66+363+9=438 ECS 10% of the proposed parking will be visitor parking i.e 44 ECS. Hence, revised parking including 4 wheelers, 2 wheelers, bicycle and visitors Parking will be 482 ECS. There was typographical mistake mentioning 795 ECS. Please consider 482 ECS as per Bhubaneswar Building by laws. Revised traffic Plan showing separate entry and exit is attached as **Annexure-IV**.
5.	Copy of Traffic Study be submitted and it should cover all sensitive intersecting traffic points.	Copy of Traffic Study Report with all sensitive intersecting traffic points is attached as **Annexure-V**.
6.	Break up of greenbelt of plot area in terms of plantation and landscape. Revisit the detail calculation of 25% green belt in terms of norm of MoEF&CC, Govt. of India with dimension continuous around the boundary showing in the layout map be submitted	Total green is proposed to be 2416.08 m2 (25.15% of net plot area) which will include Plantation area = 1,932.54 m2 (20.15%) + Lawn area = 479.53 m2 (5%). No. of trees required = 1 tree/80 sqm. of net plot area = 9,590.78/80 = 119.88 say 120 nos.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		Total no. of trees proposed = 150 nos. Copy of Layout Plan is attached as **Annexure-VI.**
7.	Recommendations of Fire Safety Deptt. with peripheral road fir movement of fire fighting vehicles and fire control measures	Copy of Fire Recommendation is attached as **Annexure-VII**.
8.	Plan with detail calculation of solar power consumption vis- a- vis the generation and as percentage of total power demand be submitted.	The requirement load = 1247 kVA = 997.6 KW Required Solar Power As per guidelines = 104 kW i.e. more than 5% Required No of Solar Panel@395watt =264 Nos. Undertaking for solar is attached as **Annexure-VIII**. Plan for Solar Power installation is attached as **Annexure-IX**.
9.	Procedure to be undertaken to reduce noise level within limit during construction phase so that it is not affected to nearby vicinity and employees.	The average sound level recorded at the project site is found to be 63.2 dBA in day time; this was due to residential and commercial activities near the project site and traffic movement on the highway as well as adjacent roads near the project. However, the sound level was found to be well within the acceptable range (65–55 dBA). Following Mitigation Measures to be adopted to reduce noise level during construction Phase- • Regular maintenance of construction machinery. • The site will be enclosed with 5m high barricade wall at the periphery. As per National Building Code (NBC) 2005, barrier blocks reduce external LA10 noise level to at least 60-70dB (A) at any point 1.0 m from inward looking façade. • The DG sets will be acoustically enclosed
10.	Procedure for regular monitoring of quality of treated water to be discharged to the drain.	In general, the grab samples to be collected for physical, chemical tests and microbiological tests (sampling, procedures described in 'Standard Methods for the Examination of Water and Wastewater (APHA)'). The representative sample will be taken in a washed clean plastic

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		bottle. The collected sample require on the spot analysis for parameters such as DO, pH and residual chlorine. When the samples are taken, the containers will be preserved immediately in a suitable ice box till they are taken to a laboratory and preserved in the refrigerator there till they are taken up for analysis. 2 to 3 litres of grab sample would be enough to perform all the tests and repeat some tests, if required. All samples will be immediately transported to the laboratory for analysis.
11.	Physio-chemical analysis of ground water to be submitted.	Physio-chemical analysis Reports of ground water is attached as **Annexure-X**.
12.	Copy of letter from PHED Deptt. for refusing to provide water supply to project site and also copy of refusal letter of WATCO for water supply to the project. Quality of ground water (physico- chemical analysis/ parameters), if used, be submitted. NOC from CGWA & permission from Water Resources Department, Government of Odisha need to be submitted for use/ drawl of ground water. Quantity of rain water to be harvested vis- a- vis the norm of CGWA be confirmed as against the proposed drawl of ground water	We are in progress to obtain permission from PHED Deptt. & WATCO for water supply to project site. An undertaking regarding the same is attached as **Annexure-III.** If the concerned authority will refuse to supply the municipal water then only we will use ground water as we have received NOC from CGWA vide letter No. CGWA/NOC/INF/ORIG/2021/13792 dated 24.11.2021. Copy of the same is attached as **Annexure-XI**. Physio-chemical analysis Reports of ground water is attached as **Annexure-X**. We are in progress to obtain permission from Water Resources Department, Government of Odisha, undertaking regarding the same is attached as **Annexure-III**. We will collect 343 cum or KLD storm water in 16 RWH pits to recharge the ground water. Detailed calculations with RWH pit diagram are attached as **Annexure-XII**.
13.	Layout map for commercial and residential complex.	Layout of commercial & residential complex is attached as **Annexure-XIII**.
14.	Copy of letter of in-principal approval of building plan by BMC.	We have applied to Bhubaneswar Municipal Corporation for Building

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		plan approval and we have correspondence letter from BMC for submission of EIDP fee vide letter no. 17961 dated 23.03.2022. We also have submitted the demand draft to BMC as EIDP fee. Copy of the same is attached as **Annexure-XIV**.
15.	Internal drain map.	Copy of Internal drain map is attached as **Annexure-XV.**
16.	Use of Compost converter for treatment of Sewerage solid waste	The bio degradable waste including sewerage solid waste will be treated in in house Organic Waste Converter and the compost will be used as manure Detailed calculation of organic waste converter is attached as **Annexure – XVI.**
17.	STP and ETP process details with technology adopted and post monitoring schedules	As this is a residential project along with some necessary commercial facilities so that we will installed STP only. There will no provision of ETP. The STP will be MBBR based technology. Details of STP along with technology adopted is attached as **Annexure-XVII**.
18.	Copy of Airport Authority Clearance for height of the building.	Copy of Airport Authority Clearance for height of the building is attached as **Annexure-XVIII**.
19.	Stack height and position justification.	DG Stack calculations are attached as **Annexure-XIX**. DG set and DG stack will be installed in SE direction as per wind pattern.
20.	In view of various options of Water supply provision, WTP is to be shown in the layout plan.	15 cum/h water generation W. T. P will be Provided in our project. Undertaking regarding the same is attached as **Annexure-III**.
21.	Provision of Lift, Light, Ventilation, and Fire Safety from the lowest basement to the terrace roof for Health and Safety of the Dwellers to be incorporated in the layout plan.	Provision of Lift, Light, Ventilation, and Fire Safety from the lowest basement to the terrace roof for Health and Safety of the Dwellers are provided in layout plan. Copy of Basement Plans is attached as **Annexure-XX**.
22.	Provision of numbers with the capacity of Over Head Tank for Fresh Water for Drinking and Bathing purpose and Treated STP Waste Water exclusively for Toilet Flush with Dual Plumbing System to be incorporated in the Project.	**For Block-A** 1 No. of Domestic Over Head Tank of 20 cum Capacity. 1 No. of Flushing Over Head Tank of

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
		15 cum Capacity. 1 No. of Over Head Fire Fighting Tank of 5 cum Capacity **For Block-B** 2 No. of Domestic Over Head Tank of 20 cum Capacity. 2 No. of Flushing Over Head Tank of 10 cum Capacity. Capacity of Over Head Fire Fighting Tank=5 cum Copy of Dual Plumbing Plan is attached as **Annexure-XXI**
23.	Submission of list of measure Electrical equipment like Transformer, DG, Lifts and other Electrical Appliances, Fixtures, Instruments and Devices likely to be installed in the Project along with its Star Rating as per BEE, Ministry of Power, Govt. of India, New Delhi as per the provision of Energy Conservation Act - 2003.	All Electrical equipment like Transformer, DG, Lifts and other Electrical Appliances, Fixtures, Instruments and Devices will with 3 star rating will be installed at project site.

26. The SEAC in its meeting held on dated 21.05.2022 decided to take decision on the proposal after receipt of the information / documents as sought by the Sub-Committee of SEAC at para 23 above.

27. The project proponent has furnished the compliance as sought by the Sub-Committee of SEAC at para 23 above and the SEAC verified the same as follows:

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
a)	Certificate of Structural Stability from appropriate authority as it is situated adjacent to the big drain	Copy of structural stability is enclosed as **Appendix-I**.
b)	Water resources department permission as commercial unit is a part of the project	We have requested Superintending Engineer of Water Corporation of Odisha Limited (WATCO) for the supply of 104KLD fresh water for drinking and domestic purposes. Copy of acknowledgement of request letter is attached as **Appendix-II**.
c)	Provision of compost converter and how other solid wastes shall be managed with documentary proof of any agreement done for the same	The bio degradable waste including sewerage solid waste will be treated in house Organic Waste Converter and the compost will be used as manure. Details of Compost convertor and other solid waste management are attached as **Appendix -III**.

Sl. No.	Information Sought by SEAC	Compliance furnished by the proponent
d)	Traffic study from a reputed institute	Copy of Traffic Study Report from the reputed institute is attached as **Appendix -IV.**
e)	Technology to be adopted for sewerage, waste water treatment and provision of Bio waste converter if any (details) to be given	We will be adopted MBBR Technology for sewerage and waste water treatment. Details of Sewage treatment Technology is attached as **Appendix -V.** Details of Bio waste convertor are attached as **Appendix -III**.
f)	Revenue map of land superimposing the project site and plot plan starting the entry areas	Revenue map of land superimposing the project site and plot plan starting the entry areas is attached as **Appendix -VI.**
g)	Kisam and ROR of land	Kisam of land is Homestead. Copy of Land Documents showing Kisam & ROR details are attached as **Appendix - VII.**
h)	Internal drain map showing fall out to existing drain	Copy of Internal drain map is attached as **Appendix-VIII.**
i)	Permission from BMC for discharging excess treated water	We are in progress to obtain the permission for discharging excess treated water from BMC. We will submit the copy of permission within a month. Undertaking for the same is enclosed as **Appendix-IX.**
j)	All points mentioned in proceeding	Previously submitted reply w.r.t. Proceedings mentioned is enclosed as **Appendix-X**.

Considering the information furnished and the presentation made by the consultant, **M/s Grass Roots Research & Creation India (P) Ltd. Noida** along with the project proponent, the SEAC recommended for grant of Environmental Clearance valid for 10 years with stipulated conditions as per **Annexure – B** in addition to the following specific conditions**.**

i) **The Proponent, before implementation of the project, shall convert the land to Gharabari and shall take the ownership of the land if not already taken.**

ii) The Proponent, before implementation of the project, shall obtain permission/NOC from Executive Engg (PHD) and / or from the appropriate authority for disposal of excess STP treated water to the nearest drain. Also, in case of the connecting drain passing through others land (Govt. or Private land), the Proponent shall obtain the permission/ possession as the case may be.

iii) The proponent shall use solar energy at least to the tune of 5% of total power requirement as proposed.

iv) Trees located within the project area shall be transplanted in green belt along boundary.

v) Use of STP treated water shall be increased by planting more trees in green belt, car & floor washing and discharge to drain should be reduced.

vi) As proposed 3 tier green belt/tree cover over minimum 20% of the land area should be maintained meticulously.

vii) The project proponent shall obtain NOC from CGWA, Approval of Water Resource Department, Govt. Of Odisha for use of ground water.

viii) Water Treatment Plant (WTP) shall be provided if ground water is not potable. Adequate Number and Capacity of Over Head Tank for Fresh Water and treated Water shall be made. Rain Water harvesting pits should be refreshed periodically and its number be increased for greater ground water recharge.

ix) Permission of Drainage Division and Sewerage Board/WATCO shall be obtained for Discharge of excess STP treated water.

x) The proponent shall implement the Pollution Control Measures and safeguards as proposed in the Environment Management Plan (EMP) of project report.

xi) The proponent shall Comply to the provision of structural stability certificate as per the bye- law of the Development Authority.

xii) When the public water supply will be available adjacent to/ in the vicinity of the proposed project in future, the PP shall avail it following due procedure of the Govt if the concerned authority agrees and dispense with the drawl of ground water except one borewell for emergency purpose. The PP shall take up suitably for the purpose with the concerned authority of the Government.

xiii) Separate Entry and Exit Gate for Residential and Commercial building shall be implemented

xiv) 40% parking for commercial and 30% parking for residential and 10% of total parking for visitors shall be maintained minimum with separate area for residential and commercial parking

xv) **All compliances submitted/ committed by PP(s) shall be strictly adhered to them in addition to all the conditions/ specific conditions of EC**

ITEM NO. 02

PROPOSAL FOR CONSTRUCTION OF PROPOSED FIVE BLOCKS OF (S+10) AND THREE BLOCKS OF (S+9) STOREYED APARTMENT BLOCKS AND ONE STOREYED (G+2) CLUB CUM SOCIETY BUILDING WITH BUILT UP AREA 42746.84 M^2 AT KESURA, BHUBANESWAR BY M/S STATE BANK OF INDIA STAFF ASSOCIATION (S.B.I.S.A.) (EC).

1. The proposed site of State Bank of India Staff Association (S.B.I.S.A.) is located at Kesura, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is: Latitude - 20° 16' 27.03" N & Longitude - 85° 52' 35.63" E. BDA has provisionally approved the Building Plan vide letter no. MBP1B-0005/15/BDA, Bhubaneswar, Dated 06.07.2015. The project site is well connected with National Highway NH-203. The nearest railway station is Bhubaneswar Railway station at a distance of approx. 3.5 Km in South West direction. The nearest airport is Biju Patnaik Airport at a distance of approx. 7.1 Km in South West direction from project site. The maximum temperature is about 41.0^o C and the minimum temperature is 20.0^o C felt in the area. The area receives rainfall from the south-west monsoon. The average annual rainfall in the area is 1452.62 mm. Total Plot Area is 17711.43 m^2 and total Built up Area 42711.84 m^2. Total landscape Area is 3542.28 m^2 (20 %). Total parking area is 10375.0 m^2. The daily

power requirement for the proposed complex is preliminarily assessed as 1870.4 KW source from CESU of Odisha State Electricity Board. In order to meet emergency power requirements during the grid failure, there is provision of two nos. of DG sets having 500 KVA capacities for power back up in the Residential Building Project. Fresh make up of 151.6 m^3/day will be required for the project which will be sourced from Ground Water.

The proposed capacity of STP is 200 KLD. Total Capital Cost is ` 120 Lakhs. The **Consultant M/s Centre for Envotech & Management Consultancy Pvt. Limited, Bhubaneswar** made a detailed presentation on behalf of the project proponent on 20.02.2016. T**he SEAC opined to take decision on the proposal after a field visit by the sub-committee.**

2. The site was visited by the sub-committee on dated 11.03.2016. The sub-committee opined that the proposal for discharge of storm water and treated sewerage water is not convincing due to certain reasons. The proponent was requested to clarify the above reasons. They have clarified the reasons and the SEAC verified the same as follows:

Sl. No.	Clarification sought by the sub-committee	Compliance furnished by the proponent	Views of the SEAC
1.	The existing sewerage line is for a specific capacity. It may hardly accommodate the proposed quantum of treated sewerage water. Therefore, storm water disposal through existing sewerage line should not be attempted and the proponent is to propose the arrangement for disposal of storm water for the project site.	The existing sewerage line laid out for the other State Bank of India Staff Association Cooperative Ltd. building, nearby, may not be sufficient to accommodate the additional sewage as well as storm water from the proposed building.	Since the clarification given by the proponent is a deviation from the original application and project report, the unit has to obtain permission from Bhubaneswar Municipal Corporation and / or Concerned Authority and approved layout plan of sewerage system and discharge system and resubmit the proposal with necessary modification .
2.	The members of the society of existing housing complex have to allow the project proponent to use their sewerage line. In view of such arrangement, the project proponent is to submit a MoU/commitment letter from the old society.	The members of the existing housing complex are not consenting to allow additional sewage water through their existing underground pipeline. Hence, it has been decided by the State Bank of India Staff Association Cooperative Ltd. to laid new underground line to carry treated sewage and storm water with due permission from the local authority, so that it can discharge to Gangua Nallah.	
3.	A layout of the sewerage of the existing system sewerage may be submitted only with above	Sri Ganga Prasad Pattnaik, Chief Executive, State Bank of India Staff Association Co-operative Ltd. has submitted an undertaking that	

Sl. No.	Clarification sought by the sub-committee	Compliance furnished by the proponent	Views of the SEAC
	compliance.	new underground line of required capacity will be laid from the proposed site to Gangua Nallah before completion of the project. They have furnished the layout of the sewerage of the existing system.	

3. The SEAC in its meeting held on 01.09.2016, decided to take decision on the proposal after receipt of the above information / documents from the proponent.
4. The proponent was requested to obtained permission from Bhubaneswar Municipal Corporation and / or concerned authority and also approve layout plan of proposed sewerage system and discharge system and resubmit the proposal with necessary modification.
5. In the meantime, the copy of the letter received from Planning Member, BDA in which they have intimated to the proponent that the external infrastructure development plan i.e. drainage and sewerage disposal plan submitted by the proponent is under scrutiny by the Chief Engineer-cum-Engineer Member, BDA.
6. The SEAC in its meeting held on 09.06.2017 decided to take decision on the proposal after the proponent obtained permission from Bhubaneswar Municipal Corporation and / or concerned authority and also approve layout plan of proposed sewerage system and discharge system and resubmit the proposal with necessary modification.
7. The proponent has intimated the following:
   (i) The external infrastructure development plan i.e. drainage and sewerage disposal plan submitted by us is under scrutiny by the Chief Engineer-cum-Engineer Member, BDA.
   (ii) Approval of the drainage and sewerage disposal plan it will take long time and the project is pending for more than one and half year.
8. The proponent has requested to grant conditional Environmental Clearance for aforesaid construction project. They have assured that before completion of the project, they will submit the approved Drainage and Sewerage disposal plan to SEAC/ SEIAA and furnished an undertaking to this effect.
9. The SEAC in its meeting held on 12.01.2018, opined that the Environmental Clearance will be considered after the proponent submits the approval of the drainage and sewerage disposal plan by the competent authority.
10. The proponent has furnished Gram Panchayat NoC letter along with approved drainage and sewerage disposal plan for construction of new drainage line.
11. The MoEF & CC, Govt. of India notification vide S.O. 5733 (E), 14th Nov, 2018 stipulates that local bodies such as Municipalities, Development Authorities, District Panchayats as shall stipulate environmental conditions while granting building

permission in respect of building or construction projects with built-up area >20,000 m^2 to 50,000 m^2 and industrial sheds, educational institutions, hospitals and hostels for educational institutions 20,000 m^2upto 1,50,000 m^2.

12. The MoEF & CC, Govt. of India notification vide S.O. 5736 (E), 15th Nov, 2018, exempted Environmental Clearance for building and construction project < 50, 000 m^2 and industrial sheds, educational institutions, hospitals and hostels for educational institutions < 1,50,000 m^2.
13. The SEAC in its meeting held on 03.12.2018 opined that Environmental Clearance is not required for this project as per the MoEF & CC, Govt. of India notification vide S.O. 5736 (E), 15th Nov, 2018 as the total builtup area is< 50, 000 m^2 . Hence, proposal was returned to SEIAA.
14. Moreover, the Hon'ble NGT, Principal Bench, New Delhi in O.A. No. 1017/2018, dated 03.12.2018 has stayed the above notifications of MoEF&CC, Govt. of India.
15. The SEAC in its meeting held on dated 13.12.2018 recommended that the SEIAA, Odisha may consider to request the MoEF&CC, Govt. of India regarding the operational part of the above notifications of MoEF&CC, Govt. of India in view of directions of Hon'ble NGT, Principal Bench, New Delhi before taking a decision on the proposals under the above category.
16. During the last meeting of SEIAA held on 05.04.2019, the authority had decided to send the building and construction projects under above category to SEAC, Odisha for appraisal as per the OM No. 3-150/2017-IA-III dated 03.04.2018. This decision of SEIAA, Odisha was communicated by the SEIAA office to SEAC office vide letter no. 6621/SEIAA, dated 17.04.2019.
17. The SEAC decided to appraise building and construction projects of above category as per above decision of the SEIAA, Odisha.
18. The SEAC observed that the information / documents furnished by the proponent as per para-10 is not adequate to consider the proposal for grant of Environmental Clearance.
19. The SEAC in its meeting held on 27.04.2019, decided to take decision on the proposal after the proponent submits the approval of the drainage and sewerage disposal plan by the competent authority such as Bhubaneswar Development Authority (BDA).
20. The proponent has not submitted any approval of the drainage and sewerage disposal plan by the competent authority such as Bhubaneswar Development Authority (BDA) through online system.
21. The SEAC observed that this is a case more than four years and also data provided is more than four years old and also the proponent has not able to comply the same within the time frame in online system.

After detailed discussion, the SEAC decided to return the proposal to SEIAA, Odisha with a request to delist the proposal and ask the proponent to apply afresh with all required documents.

C. APPRAISAL OF DISTRICT SURVEY REPORTS (DSRs) OF DISTRICTS –RAYAGADA, SUNDARGARH, BALANGIR, SUBARNAPUR, ANGUL, NUAPADA AND JAJPUR:

i) The need for District Survey Report (DSR) have been necessitated by Ministry of Environment, Forest and Climate Change (MoEF&CC) vide their Notification No. S.O. 141 (E), dated 15th January 2016. The notification was addressed to bring certain amendments with respect to the EIA notification 2006 and in order to have a better control over the legislation. District level committees have been introduced in the system. As a part of this notification, preparation of District Survey Reports has been introduced.

ii) The MoEF&CC in compliance of the Hon'ble Supreme Court's and NGT'S order has prepared "Sustainable Sand Mining Guidelines (SSMG), 2016" in consultation with State governments, detailing the provisions on Environmental Clearance (EC) for cluster, creation of District Environment Impact Assessment Authority, preparation of District survey report and proper monitoring of minor mineral.

iii) Subsequently, Ministry of Environment, Forest and Climate Change has published Notification No. 3611 (E), dt. 25th July, 2018 regarding inclusion of the "Minerals Other than Sand" and format for preparation of the DSR has been specified. The notification stated about the objective of DSR i.e. "Identification of areas of aggradations or deposition where mining can be allowed; and identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining in that area".

iv) Enforcement & Monitoring Guidelines for Sand Mining (EMGSM) January 2020 has been published modifying Sustainable sand Mining Guidelines, 2016 by MoEF & CC for effective enforcement of regulatory provisions and their monitoring. The EMGSM 2020 directed the states to carry out river audits, put detailed survey reports of all mining areas online and in the public domain, conduct replenishment studies of river beds, constantly monitor mining with drones, aerial surveys, ground surveys and set up dedicated task forces at district levels. The guidelines also push for online sales and purchase of sand and other riverbed materials to make the process transparent. They propose night surveillance of mining activity through night- vision drones.

v) The Hon'ble NGT in O. A. No. 360/2015- NGT Bar Association Vrs. Virender Singh (State of Gujarat) & O. A. No. 173/2018 - Sudarshan Das Vrs. State of West Bengal & Ors issued the following directions to the States:

- As the DEIAA is not functioning as a consequence of the decision of the Tribunal in Satendra Pandey (supra) case, the DSR shall be prepared through consultants accredited by the National Accreditation Board of Education and Training/ Quality Control Council of India in terms of O.M. of MoEF&CC, Govt. of India dated 16.03.2010.
- The DSR so prepared shall be submitted to the District Magistrate who shall verify the DSR only in respect of the relevant facts pertaining to the physical and geographical features of the district which shall be distinct from the scientific findings based on the parameters prescribed in the SSMMG- 2016. After such verification, the District Magistrate shall forward the DSR for examination and evaluation by the State Expert Appraisal Committee (SEAC) having regarding to

the fact.

- The SEAC after appraisal of the report shall forward it to the SEIAA for consideration and approval if it meets all scientific/technical requirements.
- While preparing the DSR, the MoEF&CC, Govt. of India Accredited Agency/Consultant shall scrupulously follow the procedure and the parameters laid down under the SSMMG-2016 and EMGSM - 2020 read in sync with each other."

vi) The following decisions were taken in the 2nd meeting held on 04.12.2021 at 4:00 PM under the Chairmanship of the Chief Secretary, Odisha in the matter of "Sustainable Sand Mining" related to O. A. No. 360/2015- NGT Bar Association Vrs. Virender Singh (State of Gujarat) & O. A. No. 173/2018 -Sudarshan Das Vrs. State of West Bengal & Ors.

- Since the DSR for all the 30 districts have been prepared recently, during the next round of preparation, the same shall be prepared by NABET (National Accreditation Board for Education and Training) / QCI (Quality Control Council of India).
- The DSRs that have been prepared will be examined by DEIAA and will be sent to SEIAA for appraisal by SEAC and final approval by SEIAA till new DSRs are prepared.

vii) The order of the Hon'ble NGT clearly specifies that DSR to be prepared by the MoEF&CC, Govt. of India Accredited Agency/Consultant and sent to the SEIAA by the technical appraisal by the SEAC.

viii) The SEAC opined that the order of the Hon'ble NGT is silent about the applicability of preparation of DSR by NABET Accredited Consultants for all the minor minerals or only for sand mines as the matter dealt in Hon'ble NGT Order is related to Sand Mines only. The **SEIAA, Odisha may consider to seek legal views and / or clarification from MoEF&CC, Govt. of India in this regard to come to a conclusion**. Accordingly, the SEIAA may take decision on minor mineral cases other than sands without sending to SEAC for appraisal.

ix) Since, the DSRs of Rayagada, Sundargarh, Balangir, Subarnapur, Angul, Nuapada and Jajpur Districts are not prepared by NABET/ QCI accredited consultant/ agency, SEAC is not authorized to make appraisal of the same as per para - v above.

x) **However, the SEAC opined that the SEIAA, Odisha may decide if such DSRs as received from Rayagada, Sundargarh, Balangir, Subarnapur, Angul, Nuapada and Jajpur will be considered for implementation even when the same has not been prepared by the NABET Accredited Consultants. However, If decided to consider for implementation, the following may be incorporated district wise as observed by the SEAC**.

DISTRICT SURVEY REPORT (DSR) OF RAYAGADA DISTRICT:

- No potential of minerals given. Mere mention of deposits is only given. The reserve (proven, probable), quality or grades, location details etc are missing in many minerals except leased out sand mines currently under operation (Annex-I) and auctioned but not executed sand mines (Annex II).

- In both Annex I and Annex II, the actual potential of sand and mineable sand could be worked out after carrying out Replenishment study by a professional.
- Production details of Sand only given and not for any other minerals.
- Mining area under land utilization is vacant.
- No details of sand deposited in last 3 years given as no proper replenishment study has been made.
- Replenishment study needs to be a part of DSR specially in case of sand mining.
- Report is sketchy and needs to be prepared by a professional so that the potential of minerals in the district could be visualized well.
- In absence of depth of sand bed in sand mining how 60% mineable sand recommended (Annex-III) is not clear. Replenishment study needs to be carried out and finalized to find the correct mineable sand. Further basis of 60% is also to be clarified.
- Overall report needs major modifications

DISTRICT SURVEY REPORT (DSR) OF BALANGIR DISTRICT:

- It has been prepared in two volumes, one for sand and the other for other minor minerals.
- As stated, DSR prepared is an interim report to meet the mineral requirement of the district for growth of infrastructure and industry.
- It is mentioned that the report is based on geological study carried out during field observations.
- It appears that the report has been prepared by DEIAA?DEAC, however there is no signature of members of DEIAA/ DEAC on the report.
- Report provides Revenue earned and Production data of minor minerals for 3 years namely 2016-17,2017-18 and 2018-19.
- The report has not been prepared by MOEF accredited consultant.
- The report is based on general observations of field functionaries, hence appear ocular in estimation.
- There are scopes for improvement by using scientific survey technology like Drone/areal photographs, Satellite imagery and computerized analysis with field ground trothing.
- Optimum sand resource utilization with improvement in river health is not objective of report.
- Attention towards mine closure for improvement in land utilization pattern is lacking.

DISTRICT SURVEY REPORT (DSR) OF SUNDERGARH DISTRICT:

- Details of existing mining leases of only two minor minerals, namely, Sand and Stone have been received.

- In case of Sand, it is 114 nos of leases from 15 Tahasils and 57 leases in case of Stone Quarries from 13 Tahasils of the district. The details submitted contain statistical information of the existing Sand mines/ Stone Quarries, viz: Name of the river/ Stone Quarry, details of lessee, area & period of mining lease, validity of mining period, status, EC status from SEIAA, land schedule with latitude and longitude etc.
- The above information had been submitted in tabular form and prepared by Mr. Zinu Sh Sathua (RQP), Zeotech Mining Solution, Bhubaneswar and approved by District Authority.
- No other geological information/ geotechnical analysis etc., that are essential in terms of guidelines of MOEF and Cc / Govt. for systematic & Scientific appraisal of natural minor mineral resources including Sand and Stone covered in the DSR.

- To illustrate, for example, essential minimum information and study findings for appraisal of DSR, say, in case of Sand are:
  - General profile of the river.
  - Identification of aggregation or depositions.
  - Identification of areas of erosion and proximate to Infrastructures and Installations where mining need to be prohibited.
  - Annual rate of Replenishment through Replenishment study as provided in 2020 MOEF and CC guidelines and Notification (s).
  - Locational aspects with reference to embankment and bridge, flow rate and flow direction, safety zone etc.
  - Process of deposition and sediments in the river.
  - Production and Revenue/ Royalty received and utilization of sand.
  - Rain fall
  - Methodology as being adopted in operation of mining plan, viz: surface area, depth of mining, geological reserve, mineable reserve and extractable reserve etc.

  Similarly, prescribed methodology needs to be followed exhaustively for stone and other minor minerals in the district like Moorum, Brick Earth etc., as available.

DISTRICT SURVEY REPORT (DSR) OF JAJPUR DISTRICT:

- DSR prepared for Jajpur Dist. compliant to MOEF guidelines for Minor minerals, notably for river sand, road metal and Khondolite. A detailed reserve of respective resources and lease granted thereof has been endorsed.
- It cited at environment parameters, sustainability and impact thereof to aggregate at conclusion of lease grant on weighing various stocks of minor minerals on volumetric assessment.
- In the broadest sense, sustainability refers to the problem of allocating scarce resources over the very long term. It is linked, but not identical, to the concept of intergenerational equity, which requires some kind of 'fairness' in such allocations between generations.[4] The Brundtland Report (UNWCED 1987) established a

conceptual basis for sustainable development and produced what has become the most widely recognised definition of it as:

- "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. "

A stock-based approach to sustainability

- Such confusion can be resolved by applying the broadest concept of progress, namely wellbeing. This results in an overarching definition that is consistent with the literature and encompasses the range of narrower sustainability definitions already in circulation.
- In this view, current wellbeing is seen as reflecting a person's substantive freedom to lead a life they have reason to value, is supported by economic resources, such as income and also non-economic aspects of peoples' lives (such as what they do and what they can do, how they feel, and the natural environment they live in). Sustainability refers to maintaining or enhancing wellbeing across generations. It depends on whether stocks that matter for our lives are passed on to future generations, that matters to this DSR
    - environmental stocks — our natural resources and the eco-systems which include water, productive soil, forest cover, the atmosphere, minerals, ores and fossil fuels. In other words, all the natural resources that support life and other services to society; and

  Thus, the wellbeing of future generations depends on the flow derived from stocks passed on to them.

Substitutability between stocks has important implications for sustainability

- In seeking to improve and maintain wellbeing, trade-offs are necessary between or within environmental stocks. Accordingly, the substitutability of individual stocks must be considered in relation to the effects on future generations, which leads to different policy prescriptions according to two 'types' of sustainability.
- Although relevant to all stocks, substitutability has been linked in particular to environmental stocks as an argument for strong sustainability. Environmental stocks are argued to have limited substitutability — because their loss is irreversible or they are critical for future availability — requiring that they are preserved as far as practicable in their entirety. However, wellbeing could conceivably be maintained or even enhanced following irreversible loss of some stocks, or parts of stocks, provided it accompany the benefits of a trade-off at least offsetting the environmental losses.

River sand:

- River sand is mandated as reversible regenerative process and weighed by pit measurement post mining for replenishment in the env. Report. To avail sustainability tag for further mining, the entire mining reserve for the Dist. has been incorporated in a similar criterion.
- Greater understanding of sand formation, sediment transportation and replenishment of river bed sand is an important criteria for tentative assessment of mining reserve of minor minerals.
- Sand is formed by the process of sediment transport in river dependant on volume of flow, flow velocity and catchment characteristics of river. Sediment load and transport increases with catchment, and river regime.

- Jajpur district is located at Brahmani Baitarani basin, where delta of both the rivers originates. Due to the dendritic river regime velocity decreases and higher sediment deposits accrues.

Present scenario:

- At the point of assessment the free catchment of river Brahmani has been reduced due to construction of Dam at Rengali and Barrrage at Samal. The sediment loads which are predominant in the initial runoff at start of monsoon are obstructed at the regulated structures and only to be released at dams attaining FRL.
- Similar scenario occurs for river Baitarani also and future regulation may enhance by operation of Kanpur dam. Besides many tributaries catchments are also obstructed by medium irrigation and MI projects.
- The sand replenishment capability of rivers has been drastically reduced owing to above scenario. In the DSR the replenishment measurement is done by pit measurement method. This method may provide the volumetric data of sediment movement and is silent on grain size measurement which reduces gradually over time if extraction supercedes replenishment. The sand beds may turn as fine silt pits in long run if over exploitation is not controlled.

It is required for the grain size analysis and sediment load study of the river with authenticated data along with pit measurement for sand replenishment study. This may improve sustainability of the sand mining of the area.

Road Metal:

- Road metal quarries have been allocated for mining with details of reserve made on tape measurement.
- Lithologs with drilling data might have provided a clear reserve quantity. However, the use and mining volume have no control without proper data on DSR. It is required to have a control on mining methodology so as to have minimum wastage and maximum utilisation.
- Being non replenishable in nature the use of granite needs to be minimised to have a long duration availability.
- The effects on hydrogeology of the area due to mining need to be emphasised.

Khandolite:

- Used as decorative stone the minor mineral stock has been accessed and mining lease has been given.
- Lithologs with drilling data might have provided a clear reserve quantity. However, the use and mining volume have no control without proper data on DSR. It is required to have a control on mining methodology so as to have minimum wastage and maximum utilisation.
- Being non replenishable in nature the use of khondolite to be minimised to have a long duration availability.
- The effects on hydrogeology of the area due to mining need to be emphasised. Faults and fractures of these type strata are very good reserves for groundwater. The mining definitely may affect the surround area ground water table and reserve. It may require a detailed analysis prior to mining and remedial measure may be taken accordingly.

Suggestion:

River Sand:

- The preamble is “allowed extraction rate (sand mining) to be limited to replenishment rate.
- Replenishment rate to be assessed from river flow behaviour, velocity, volume of flow and silt load in the river, sediment transport of river apart from physical pit measurement method.
- Grain size measurement to be compared with previous year as on case of over exploitation grain size diameter reduces gradually over long run which could not be detected by conventional pit measurement method.
- DSR to highlight sensitive patches in riverine regime where sand mining to be prohibited.
- Technical investigation on effect of aquatic life (flora, fauna) due to sand mining to be done categorically for lean months flow.
- Deltas particularly are flood prone and natural sand dunes alteration would alter the flow regime and the flood effects due to mining need a advanced study.
- The genesis of DSR is to emphasize guiding principle of volume and location for sustainability.

Khandolite:

- Granted as non replenishable resources it needs a definite resource survey for entire region (District) and policy to be framed for percentage volume lease grant for mining maintaining the period of sustainability required.
- By nature khondolite stratas are stratified and are good reserve for ground water from hydrogeology point of view. The impact on hydrogeology of the area by mining activities needs to be evaluated and measure to address the issue need be emphasised.
- DSR to have a record of use of minor minerals so as to highlight the volume of resources extracted and volume used to minimise the losses of valuable resources.
- Typical mining methodology and transport model to be adopted to minimise the losses as far as practicable to maintain sustainability.
- Higher royalty on such decorative stones would minimise the exploitation.

Road Metal:

- Road metals are hard stones, granites and are non replenishable as require very long duration to be formed.
- A general volumetric analysis of the availability with detailed bore logs analysis is required for the entire District.
- Controlled mining to be emphasised to minimise the losses and maximise the use.
- District authorities may decide the lease grant volume depending the sustainability period of the resources as a policy matter.
- Hydrogeology and impact thereof due to mining activities need to be evaluated.

DISTRICT SURVEY REPORT (DSR) OF ANGUL DISTRICT:

- This DSR appears to be a compilation of data collected from Tahasildars of Angul, Atthamalik, Chendipada and Pallahada so far as mineral resources are concerned.
- Similarly data has been collected from concerned DFO's Forest Range Officer with respect to forest land (PF & RF) and DLC land of the district where minor minerals could be available.
- The information and data has been collected from RO, OSPCB Angul from their consent Administration list to know about the minor mineral availability of the district .
- Since this report is being claimed as an interim report I am not sure when the final DSR covering the above 6 financial years with updates for future use will be ready.
- Ideally all the 8 minor minerals like river sand, good earth for brick making, morrum, redstone for building, white stone for metal and bolder, black stone for chips, decorative stones and gem stone should have been surveyed within the District boundary for its inventorisation and future use.
- Year wise lease granted with effect from Fy 2016 to 2022 is not available in this report.
- The corresponding revenue generation from the minor mineral exploitation is also not mentioned.
- The projection of the minor mineral resources (Geological reserve & Mineable reserve) for at least 10 years should have been included in the report for grant of mining lease after approval of mining plan and Environment clearance by the appropriate Authority.
- Without the above information built in the DSR how mining leases are being determined, Auction, Mining plans are prepared and approved by Department Of Geology, Govt. Of Odisha and Environment clearance process is being initiated by respective tahasildar through SEIAA and SEAC For grant of Environment clearance.
- The basic foundation document like DSR is incomplete for grant of mining lease and subsequent exploitation of minor minerals to support development and revenue earning for the state.

Suggestion: -

- The details like Name, qualification, designation, experience, expertise, and competence of persons who prepared the basic report may be furnished for our appraisal.
- The method of identification of minor mineral deposits in all the Tehsils of the District Anugul may be furnished.
- The use of Survey equipment like chain and poll, theodolite, total station, GPS, or DGPS, Auger for sand and soil and Drill for Morrum and Stone in survey and assessment of deposits in the entire Districts may be furnished.
- Duration of a field study by the above Team may be furnished.

Conclusion:

The District survey report (Minor Mineral) is supposed to be a compendium of all possible Minor Minerals taking the Gram panchayat as the smallest unit for data capturing and Tahasil

as the main unit for grant of Mining lease. This report appears to be scratchy, incomplete and inadequate to support the Mining of Minor Minerals in the District to boost the production and revenue of the State Government.

DISTRICT SURVEY REPORT (DSR) OF SUBARNAPUR DISTRICT:

- District Subarnapur has two subdivisions and six Tahasils. A few natural resources have been identified in the district.
- Lead, Manganese, Bauxite and quartz are the important minerals of the district having significant spatial variability.
- Forest cover of the district is identified as 23294.61695 Ac.
- Landuse and land cover of the district shows that out of the total geographical area, 41,000 Ha is forest area and 191.658 is mining area.
- Surface and block wise ground water status have been presented.
- Details of the mining lease(both settled and unsettled) of the district have been presented.
- Details of the royalty received on account of different mineral resources(stone and morrum) and production for the last three years have been presented.
- DSR also provides a mineral map of the district.
- Details of LOI holders along with validity status(both settled and unsettled) have been provided.
- Total mineral reserve available in the district has been provided along with quality/grade and use of the minerals.
- Demand and supply of mineral during the last three years have been assessed and presented in DSR.
- Cluster of mining leases are also provided.
- Eco- sensitive areas of the district and impacts of mining on environment(air, water, landuse pattern , flora, fauna etc.) have been assessed and presented. However, the assessment could have been done using better methods.
- Remedial measures on the impacts of mining have been presented, but again in a very brief manner and without proper scientific basis.
- Reclamation of mined out area and the rules and regulations relating to reclamation have been mentioned briefly.
- Risk assessment and disaster management plans of the district have been presented along with occupational health issues of the district, and again in a crude manner.
- Plantation and greenbelt development of the district require detail assessment.

Observation:

i) On the assessment of the DSR, Subarnapur, it is observed that many of the important features such as sensitive areas and their geo-coordinates along with the regulations under which they have been notified as sensitive areas are not given.

ii) Environmental status of the district, air, water and land use-land cover could have been assessed and presented in a better manner.

iii) Information on mining of sand and other minerals are at the preliminary level.

iv) Change detection of the forest and mineral resources in different temporal and spatial scales of high resolution is essential and could be achieved using satellite data, which can be validated with ground trothing.

DISTRICT SURVEY REPORT (DSR) OF NUAPADA DISTRICT:

- No potential of minerals given. Mere mention of deposits is only given. The reserve (proven, probable), quality or grades, location details etc. are missing in many minerals.
- The actual potential of sand and mineable sand could be worked out after carrying out Replenishment study by a professional.
- Production details of Sand only given and not for any other minerals.
- Mining area under land utilization is vacant.
- No details of sand deposited in last 3 years given as no proper replenishment study has been made.
- Replenishment study needs to be a part of DSR specially in case of sand mining.
- Report is sketchy and needs to be prepared by a professional so that the potential of minerals in the district could be visualized well.
- Overall report needs major modifications

SECRETARY, SEAC

Approved

06.06.2022

CHAIRMAN, SEAC

TABLE **ANNEXURE- A**

DECISION ON COUNTRY LIQUOR PROPOSALS WHICH ARE GENERATING WASTE WATER LESS THAN 100 KLD IN THE SEAC MEETING HELD ON 06.06.2022

CONSIDERATION OF COUNTRY LIQUOR NEW PROPOSALS

Sl. No.	SEIAA File No.	Name and address of the Country liquor project.	Licenced production capacity in KLD (Approved capacity)	Production capacity in KLD applied for EC	Waste water generation (in KLD) as per approved capacity	Solid waste generation (in TPD) as per approved capacity	Observation of the SEAC based on Form-I, Prefeasibility Report and Checklist	Whether general condition apply	Recommendation of the SEAC
1.	SIA/OR/IND2/72240/2022	Sri Murarilal Jaiswal (License Holder) M/s. Ukhunda Main Out Still Shop At: Ukhunda, Tahasil – Jhumpura, Dist – Keonjhar.	0.540	0.540	1.57	0.28	1. Furnished filled in Form-I, pre-feasibility report and check list counter signed by Excise Superintendent. 2. Process flow sheet has been furnished. 3. Design and specification of O.S. (Pot) has been furnished. 4. Plant layout map indicating plant facilities, product and raw material storage area has been furnished. 5. **Copy of excise license of Competent Authority has been furnished,**	No	The SEAC decided to take decision on the proposal after receipt of the following information / documents: a) Copy of excise license beyond 31.03.2022.

Environmental Scientist, SEAC

Sl. No.	SEIAA File No.	Name and address of the Country liquor project.	Licenced production capacity in KLD (Approved capacity)	Production capacity in KLD applied for EC	Waste water generation (in KLD) as per approved capacity	Solid waste generation (in TPD) as per approved capacity	Observation of the SEAC based on Form-I, Prefeasibility Report and Checklist	Whether general condition apply	Recommendation of the SEAC
							which was valid upto 31.03.2022. 6. No forest land involved in project area. 7. There is no protected areas i.e. National Park, Sanctuary, Habitat for Migratory Birds, Tiger Reserve, Protected Monuments, Inter-State boundary and critically polluted area as identified by CPCB etc. located within 5 km radius of the project area. 8. Land documents furnished.		
2.	SIA/OR/IND2/72309/2022	Sri Pramod Kumar Jaiswal (License Holder) M/s. Bhadrasahi Main Out Still Shop At - Bhadrasahi Unit No. 20, Barbil,	1.08	1.08	3.15	0.562	1. Furnished filled in Form-I, pre-feasibility report and check list counter signed by Excise Superintendent. 2. Process flow sheet has been furnished. 3. Design and specification	No	The SEAC decided to take decision on the proposal after receipt of the following information / documents: a) Copy of

Environmental Scientist, SEAC

Sl. No.	SEIAA File No.	Name and address of the Country liquor project.	Licenced production capacity in KLD (Approved capacity)	Production capacity in KLD applied for EC	Waste water generation (in KLD) as per approved capacity	Solid waste generation (in TPD) as per approved capacity	Observation of the SEAC based on Form-I, Prefeasibility Report and Checklist	Whether general condition apply	Recommendation of the SEAC
		Dist – Keonjhar.					of O.S. (Pot) has been furnished. 4. Plant layout map indicating plant facilities, product and raw material storage area has been furnished. 5. **Copy of excise license of Competent Authority has been furnished, which is valid upto 31.03.2022**. 6. No forest land involved in project area. 7. There is no protected areas i.e. National Park, Sanctuary, Habitat for Migratory Birds, Tiger Reserve, Protected Monuments, Inter-State boundary and critically polluted area as identified by CPCB etc. located within 5 km radius of the project area.		excise license beyond 31.03.2022.

Environmental Scientist, SEAC

Sl. No.	SEIAA File No.	Name and address of the Country liquor project.	Licenced production capacity in KLD (Approved capacity)	Production capacity in KLD applied for EC	Waste water generation (in KLD) as per approved capacity	Solid waste generation (in TPD) as per approved capacity	Observation of the SEAC based on Form-I, Prefeasibility Report and Checklist	Whether general condition apply	Recommendation of the SEAC
							8. Land documents furnished.		
3.	SIA/OR/IND2/73364/2022	Sri Rabindra Nayak (License Holder) M/s. Rimuli Main Out Still Shop At: Rimuli, Champua, Dist – Keonjhar.	0.540	0.540	1.57	0.28	1. Furnished filled in Form-I, pre-feasibility report and check list counter signed by Excise Superintendent. 2. Process flow sheet has been furnished. 3. Design and specification of O.S. (Pot) has been furnished. 4. Plant layout map indicating plant facilities, product and raw material storage area has been furnished. 5. **Copy of excise license of Competent Authority has been furnished, which is valid upto 31.03.2022**. 6. No forest land involved in project area.	No	The SEAC decided to take decision on the proposal after receipt of the following information / documents: a) Copy of excise license beyond 31.03.2022.

Environmental Scientist, SEAC

Sl. No.	SEIAA File No.	Name and address of the Country liquor project.	Licenced production capacity in KLD (Approved capacity)	Production capacity in KLD applied for EC	Waste water generation (in KLD) as per approved capacity	Solid waste generation (in TPD) as per approved capacity	Observation of the SEAC based on Form-I, Prefeasibility Report and Checklist	Whether general condition apply	Recommendation of the SEAC
							7. There is no protected areas i.e. National Park, Sanctuary, Habitat for Migratory Birds, Tiger Reserve, Protected Monuments, Inter-State boundary and critically polluted area as identified by CPCB etc. located within 5 km radius of the project area. 8. Land documents furnished.		
4.	SIA/OR/IND2/73366/2022	Sri Jagadish Sahu (License Holder) M/s. Palaspanga Main Out Still Shop At: Palaspanga (Jamuposi), Keonjhar Sadar, Dist – Keonjhar.	0.540	0.540	1.57	0.28	1. Furnished filled in Form-I, pre-feasibility report and check list counter signed by Excise Superintendent. 2. Process flow sheet has been furnished. 3. Design and specification of O.S. (Pot) has been furnished. 4. Plant layout map indicating plant facilities,	No	The SEAC decided to take decision on the proposal after receipt of the following information / documents: a) Copy of excise license beyond 31.03.2022.

Environmental Scientist, SEAC

Sl. No.	SEIAA File No.	Name and address of the Country liquor project.	Licenced production capacity in KLD (Approved capacity)	Production capacity in KLD applied for EC	Waste water generation (in KLD) as per approved capacity	Solid waste generation (in TPD) as per approved capacity	Observation of the SEAC based on Form-I, Prefeasibility Report and Checklist	Whether general condition apply	Recommendation of the SEAC
							product and raw material storage area has been furnished. 5. **Copy of excise license of Competent Authority has been furnished, which is valid upto 31.03.2022**. 6. No forest land involved in project area. 7. There is no protected areas i.e. National Park, Sanctuary, Habitat for Migratory Birds, Tiger Reserve, Protected Monuments, Inter-State boundary and critically polluted area as identified by CPCB etc. located within 5 km radius of the project area. 8. Land documents furnished.		

Environmental Scientist, SEAC

Sl. No.	SEIAA File No.	Name and address of the Country liquor project.	Licenced production capacity in KLD (Approved capacity)	Production capacity in KLD applied for EC	Waste water generation (in KLD) as per approved capacity	Solid waste generation (in TPD) as per approved capacity	Observation of the SEAC based on Form-I, Prefeasibility Report and Checklist	Whether general condition apply	Recommendation of the SEAC
5.	SIA/OR/IND2/73367/2022	Sri Jagadish Sahu (License Holder) M/s. Sankarpur Main Out Still Shop At: Sankarpur, Keonjhar Sadar, Dist – Keonjhar.	0.540	0.540	1.57	0.28	1. Furnished filled in Form-I, pre-feasibility report and check list counter signed by Excise Superintendent. 2. Process flow sheet has been furnished. 3. Design and specification of O.S. (Pot) has been furnished. 4. Plant layout map indicating plant facilities, product and raw material storage area has been furnished. 5. **Copy of excise license of Competent Authority has been furnished, which is valid upto 31.03.2022**. 6. No forest land involved in project area. 7. There is no protected areas i.e. National Park,	No	The SEAC decided to take decision on the proposal after receipt of the following information / documents: a) Copy of excise license beyond 31.03.2022.

Environmental Scientist, SEAC

Sl. No.	SEIAA File No.	Name and address of the Country liquor project.	Licenced production capacity in KLD (Approved capacity)	Production capacity in KLD applied for EC	Waste water generation (in KLD) as per approved capacity	Solid waste generation (in TPD) as per approved capacity	Observation of the SEAC based on Form-I, Prefeasibility Report and Checklist	Whether general condition apply	Recommendation of the SEAC
							Sanctuary, Habitat for Migratory Birds, Tiger Reserve, Protected Monuments, Inter-State boundary and critically polluted area as identified by CPCB etc. located within 5 km radius of the project area. 8. Land documents furnished.		
6.	SIA/OR/IND2/76011/2022	Sri Dillip Pradhan (License Holder) M/s. Jagamohanpur Main Out Still Shop At: Jagamohanpur, Telkoi, Dist – Keonjhar.	0.540	0.540	1.57	0.28	1. Furnished filled in Form-I, pre-feasibility report and check list counter signed by Excise Superintendent. 2. Process flow sheet has been furnished. 3. Design and specification of O.S. (Pot) has been furnished. 4. Plant layout map indicating plant facilities, product and raw material storage area has been	No	The SEAC considered the proposal as 'B2' category as the unit is generating waste water less than 100 KLD and recommended to grant Environmental Clearance for production of 0.540 KLD of county Liquor with modified conditions

Environmental Scientist, SEAC

Sl. No.	SEIAA File No.	Name and address of the Country liquor project.	Licenced production capacity in KLD (Approved capacity)	Production capacity in KLD applied for EC	Waste water generation (in KLD) as per approved capacity	Solid waste generation (in TPD) as per approved capacity	Observation of the SEAC based on Form-I, Prefeasibility Report and Checklist	Whether general condition apply	Recommendation of the SEAC
							furnished. 5. **Copy of excise license of Competent Authority has been furnished, which is valid upto 31.03.2023**. 6. No forest land involved in project area. 7. There is no protected areas i.e. National Park, Sanctuary, Habitat for Migratory Birds, Tiger Reserve, Protected Monuments, Inter-State boundary and critically polluted area as identified by CPCB etc. located within 5 km radius of the project area. 8. Land documents furnished.		as recommended in the SEAC meeting held on 19.06.2018.

Environmental Scientist, SEAC

Sl. No.	SEIAA File No.	Name and address of the Country liquor project.	Licenced production capacity in KLD (Approved capacity)	Production capacity in KLD applied for EC	Waste water generation (in KLD) as per approved capacity	Solid waste generation (in TPD) as per approved capacity	Observation of the SEAC based on Form-I, Prefeasibility Report and Checklist	Whether general condition apply	Recommendation of the SEAC
7.	SIA/OR/IND2/76300/2022	Sri Gopal Sahu (License Holder) M/s Jhumpura Main Out Still Shop. At – Bhaluka, Jhumpura, Dist – Keonjhar.	0.540	0.540	1.57	0.28	1. Furnished filled in Form-I, pre-feasibility report and check list counter signed by Excise Superintendent. 2. Process flow sheet has been furnished. 3. Design and specification of O.S. (Pot) has been furnished. 4. Plant layout map indicating plant facilities, product and raw material storage area has been furnished. 5. **Copy of excise license of Competent Authority has been furnished, which is valid upto 31.03.2023**. 6. No forest land involved in project area. 7. There is no protected areas i.e. National Park,	No	The SEAC considered the proposal as 'B2' category as the unit is generating waste water less than 100 KLD and recommended to grant Environmental Clearance for production of 0.540 KLD of county Liquor with modified conditions as recommended in the SEAC meeting held on 19.06.2018.

Environmental Scientist, SEAC

Sl. No.	SEIAA File No.	Name and address of the Country liquor project.	Licenced production capacity in KLD (Approved capacity)	Production capacity in KLD applied for EC	Waste water generation (in KLD) as per approved capacity	Solid waste generation (in TPD) as per approved capacity	Observation of the SEAC based on Form-I, Prefeasibility Report and Checklist	Whether general condition apply	Recommendation of the SEAC
							Sanctuary, Habitat for Migratory Birds, Tiger Reserve, Protected Monuments, Inter-State boundary and critically polluted area as identified by CPCB etc. located within 5 km radius of the project area. 8. Land documents furnished.		

06.06.2022

CHAIRMAN, SEAC

JNayak

Environmental Scientist, SEAC

ANNEXURE - B

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR M/S LA DEVELOPERS FOR RESIDENTIAL & COMMERCIAL PROJECT OVER A BUILT-UP AREA 56147.44 SQR LOCATED AT MOUZA- NAYAPALLI & MADHUSUDAN NAGAR, DISTRICT-KHURDA, BHUBANESWAR OF SRI DILIP KUMAR MOTWANI – EC

PART A - SPECIFIC CONDITIONS:

1. 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.
2. 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.
5. 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.

TOPOGRAPHY AND NATURAL DRAINAGE

6. 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.
7. 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.
8. Permission for construction of drain alongside the adjacent NH under construction for allowing the proponent to discharge the treated waste water as well excess runoff water during monsoon from NH Authority shall be obtained. The construction of drains shall be synchronized with the completion of the construction of the Housing Project.

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

9. As proposed, fresh water requirement from ground water shall not exceed 104 KLD.
10. 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.

11. 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.
12. 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.
13. 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.
14. 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.
15. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
16. 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 16 nos. shall be provided.
17. 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.
18. 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

19. The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
20. 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.
21. 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.
22. 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.
23. 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

24. Sewage shall be treated in STP of capacity 170 KLD. The treated effluent from STP shall be reused for flushing, horticulture & Filter backwash.
25. 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.
26. 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.
27. 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.
28. No sewage or untreated effluent water would be discharged through storm water drains.
29. 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.
30. 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.
31. 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

32. 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.
33. 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.

34. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 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.

35. 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.

36. 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.

37. 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

38. 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.

39. AII 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.

40. **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.**

41. 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.

42. For indoor air quality the ventilation provisions as per National Building Code of India shall be provided.

43. 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

44. No tree cutting/transplantation of existing trees has been proposed in the instant project. A minimum of 1 tree for every 80 m^2 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 approx. 2416.08 m^2 (25.15% of net plot area) shall be provided for green area development.

TOP SOIL PRESERVATION AND REUSE

45. 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

46. 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

47. 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.

48. 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.

49. 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.

50. A dedicated entry/exit and parking shall be provided for commercial activities.
51. Barricades shall be provided around project boundary.
52. 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.
53. Parking shall be prohibited on the access road to the proposed project site.
54. Footpath shall be seamless with sufficient width.
55. No vehicles shall be allowed to stop and stand in front of the gate on main access.
56. A buffer of minimum 10 m shall be maintained between the entry/exit gate and the road to avoid traffic congestion.
57. 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

58. 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

59. 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.
60. A First Aid Room shall be provided in the project both during construction and operations of the project.
61. The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.
62. 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(ll) 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

1. 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.
2. 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.
9. 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_2, NO_x (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 31st 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.

Environmental Scientist, SEAC