

**PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL  
COMMITTEE, ODISHA HELD ON 01<sup>st</sup> JUNE, 2018**

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The SEAC met on 01<sup>st</sup> June, 2018 at 11:00 AM in the Conference Hall of Odisha State Pollution Control Board, Bhubaneswar under the Chairmanship of Dr. B.K. Patnaik. The following members were present in the meeting.

- |                      |   |          |
|----------------------|---|----------|
| 1. Dr. B. K. Patnaik | - | Chairman |
| 2. Sri B.C. Prusty   | - | Member   |
| 3. Dr. D. K. Rout    | - | Member   |
| 4. Sri S. Behera     | - | Member   |
| 5. Dr. S. C. Nayak   | - | Member   |
| 6. Dr. R.C. Mohanty  | - | Member   |
| 7. Sri A. C. Mohanty | - | Member   |
| 8. Dr. D. Swain      | - | Member   |

The agenda-wise proceedings and recommendations of the committee are detailed below:

**ITEM NO. 01 :**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR PROPOSED FOURTEEN BLOCKS OF (S+4) STORIED RESIDENTIAL APARTMENT BUILDING AND TWO STORIED CLUB CUM SOCIETY BUILDING AT PAIKARAPUR, BHUBANESWAR WITH TOTAL BUILT UP AREA 70174.51 M<sup>2</sup> OF M/S TRIDENT PROPERTIES PVT. LTD. (EC)**

1. The project involves construction of Fourteen Blocks of (S+4) Storied Residential Apartment & Two Storied Club-Cum-Society Building (500 dwelling units, LIG & EWS-166) with a total built up area of 70174.51 m<sup>2</sup> in total plot area of 42711.57 m<sup>2</sup> at village Paikarapur, Tehsil Bhubaneswar, District Khurda (Odisha) by M/s Trident Properties Pvt. Ltd.
2. The project site is permitted for residential use as per approved Master Plan of the area. Planning/building permission was obtained from Bhubaneswar Development Authority.
3. The said project/activity is covered under category B of item 8 (a) of Schedule to the EIA Notification, 2006, and requires prior EC from the SEIAA in Odisha based on the appraisal by SEAC.
4. The proposed site is located at Paikarapur Village, Bhubaneswar, Odisha. The Geographical coordinate of the project site is: Latitude - 20° 15' 40.20" N & Longitude - 85° 44' 53.19" E. The proposed project site is coming in Plot No. 1808,1809, 1810, 1811, 1812, 1813, 1814, 1815, 1817, 1818, 1819,1820, 1784, 1786, 1787 & 933 of Paikarapur Village, Dist- Khurda, Odisha.
5. The Building details of the project are as follows:

Area details	Area in m <sup>2</sup>
Plot Area	42711.57
Stilt Parking Area	18638.85
Open Area (3.06 %)	1310.34

Area details	Area in m <sup>2</sup>
<b>Total Parking Area provided</b>	<b>19949.19</b>
Ground Coverage (40.34 %)	17230.68
Total Green Area (22.74 %)	9715.93
Road Area (28.12 %)	12013.56
Swimming Pool Area (0.49 %)	211.20
MSW Site (0.35 %)	151.0
Sewage Treatment Plant (0.77 %)	330.71
Open Area (4.09 %)	1748.15
<b>Total Built up Area (Proposed)</b>	<b>70174.51</b>
FAR	1.64

## 6. Requirement for the project:

### (i) Area requirement:

For this project– 42711.57 sqm of land is required, which has already been acquired.

### (ii) Power requirement:

The daily power requirement for the proposed complex is preliminarily assessed as **4607 KW**. Source from CESU of Odisha State Electricity Board. In order to meet emergency power requirements during the grid failure, there is provision of 5 nos. of DG sets of (1x125 KVA + 1x15 KVA + 1x200KVA + 1x40 KVA + 1 x45 KVA) capacities for power back up in the Residential Building Project.

For energy conservation, there will be 90 nos. of Solar Lighting poles (@72 Watt) has been proposed for Street & common area solar lighting, so Energy conservation by using Solar Street Lighting = 90 x 72 = 6480 watt = 6.5 KW. Energy conservation by using Solar lighting for common area = 210 KW

Total Energy Conservation = (210 + 6.5) KW = 216.5 KW

Total Energy saving = 216.5/4607 = 0.0469 x 100 = **4.69 %**

### (iii) Water requirement:

Fresh make up of 304.1 m<sup>3</sup>/day will be required for the project which will be sourced from Ground water/PHED Supply. Waste water of 364.92 KLD will be treated in a STP of 500 KLD capacity, which includes primary, secondary and tertiary treatment. After treatment the treated water will be discharge to the drain.

Rain Water will be harvested through 22 nos. of recharging pits.

### (iv) Fire fighting Installations:

Fire fighting system will be installed as per recommendation of the Fire fighting Officer, Odisha and as per the guideline of NBC (part-4).

(v) **Green Belt Development:**

Green belt will be developed over an area of 9715.93 sqm which is 22.74 % of the plot area; by using the local species like Coconut, Mango, Nageswar, Neem, Ashok, Polanga, Jamu, Bela, Pijilu, Kaniara, Tagar, Hena, etc.

(vi) **Solid Waste Management:**

From the residential complex solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.4 kg/capita/day, which will be about 3270 x 0.4 = 1308.0 kg/day. The generated solid waste from the residential complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate coloured bins. Proper waste management practices will be adopted during the collection, storing and disposal of the generated solid waste.

Waste generated from road sweeping will be @ 0.1 kg/capita/day, which will be about 3270 x 0.1 = 327.0 kg/day. Solid waste from sweeping and Dry Garbage containing non biodegradable wastes like polythene bags, metal, ceramic Waste, glass etc. shall be stored in separate garbage bin and send to approved agency for final disposal. The biodegradable waste will be converted to manure by an organic waste convertor, which will be used for landscaping.

Sl. No.	Category	Counts (heads)	Waste generated
1.	Residents	3270 @ 0.4 kg/day	1308.0 kg/day
2.	Road sweeping	3270 @ 0.1 kg/day	327.0 kg/day
3.	STP sludge		183.0 kg/day
<b>Total Solid Waste Generated</b>			<b>1818.0 kg/day</b>

(vii) **Estimated Project Cost:**

Total Capital Cost = ₹ 90 Crores.

Environment Management Cost = ₹ 110 Lakhs.

7. The application for seeking EC was submitted to SEAC/SEIAA on 13<sup>th</sup> November, 2014. The proposal was considered by the SEAC in its meetings held on 23<sup>rd</sup> December, 2014, 23<sup>rd</sup> February, 2015, 30<sup>th</sup> July, 2015, 19<sup>th</sup>-20<sup>th</sup> April, 2016, 19<sup>th</sup> July, 2016 & 17<sup>th</sup> January, 2017.
8. The SEAC in its meeting held on 17.01.2017, noted that the boundary wall was already completed with storm water drain and also piling below ground, and recommended the project for grant of Environmental Clearance after compliance to conditions applicable on violation projects as per MoEF&CC, Govt. of India OM dated 12.12.2012 and 27.06.2013.
9. The SEIAA, vide letter dated 10th March, 2017 directed the proponent for suspension of construction at site and follow procedure as per MoEF&CC, Govt. of India OM dated 12.12.2012 and 27.06.2013.
10. The proponent subsequently submitted the proposal to MoEF&CC, Govt. of India on 09.04.2017 as violation case as per MoEF&CC, Govt. of India Notification S.O. 804 (E) dated 14.03.2017.

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11. The proponent made a detailed presentation before the Expert Appraisal Committee (Violation) on 16.01.2018. The Expert Appraisal Committee (EAC), after detailed deliberations on the proposal in terms of the provisions of the MoEF&CC Notification dated 14<sup>th</sup> March, 2017, confirmed the case to be of violation of the EIA Notification, 2006 and recommended the following:-
- (a) The State Government / SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate or occupancy certificate to be issued till the project is granted EC.
  - (b) Grant of Terms of Reference for undertaking EIA and preparation of Environment Management Plan (EMP) along with public hearing.
  - (c) The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.
12. The MoEF&CC, Govt. of India (Impact Assessment Division) had issued ToR vide letter no. 23-24/2017-IA-III, dated 06.03.2018 for undertaking EIA and preparation of Environment Management Plan (EMP).
13. The MoEF&CC, Govt. of India vide letter no. 23-24/2017-IA-III, dated 06.03.2018 had also requested to the Secretary, F&E Department, Govt. of Odisha to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986 for violation of the EIA Notification, 2006.
14. Based on ToR issued by MoEF&CC, Govt. of India, the proponent with the help of consultant had prepared draft EIA/EMP report and submitted the same to State Pollution Control Board, Odisha on 17.03.2018 for Public Hearing.
15. The MoEF&CC, Govt. of India had issued Office Memorandum No. Z-11013/22/2017-IA-II (M), dated 16.03.2018, which stipulates that the violation case for Category B project will be considered by the respective SEIAA/SEAC only & Public Hearing is not required for building project.
16. The project proponent has re-applied to SEIAA, Odisha on 06.04.2018 along with draft EIA/EMP report prepared as per Terms of Reference (ToR) issued by the MoEF&CC, Govt. of India. The SEIAA, Odisha forwarded the proposal for appraisal as per MoEF&CC, Govt. of India Notification S.O. 804 (E) dated 14.03.2017.
17. The proponent along with the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., N-5/305, IRC Village, Bhubaneswar, Odisha** made a detailed presentation before the committee on the EIA/EMP report prepared as per Terms of Reference (ToR) issued by the MoEF&CC, Govt. of India.
18. The proponent along with the consultant had presented the following compliances to the ToR points of MoEF&CC, Govt. of India.

Sl. No.	ToR Points Raised	Compliance furnished by the proponent
1.	Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment	Ambient Air Quality, Soil Quality, Ground Water quality & Surface Water quality has been carried out on February 2018 which indicates there is no damage so no remediation is required. The details of AAQ, Water Quality (Ground & Surface), Soil Quality has been furnished.
2.	Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.	The land required is 42711.57 m <sup>2</sup> of Homestead type & suitable for housing. The construction work is yet to be started hence no economic benefit has been accrued. Based on the ecologic assessment it can be confirmed that there is no damage, hence no remediation plan is required. Since no remediation is required no separate plan in EMP is required.
3.	The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.	

19. The committee observed the following:

- (a) The proponent has applied for Environmental Clearance for violation case in a separate new online file in which they have not uploaded the EIA/EMP report prepared as per Terms of Reference (ToR) issued by the MoEF&CC, Govt. of India. However, they have circulated hard copy of the EIA/EMP report to the Members.
- (b) The Director (Env.)-cum-Special Secretary to Govt., F&E Deptt., Govt. of Odisha had requested to the Collector and District Magistrate, Khordha vide letter no. ENV-I-31/2018/8061, dated 09.04.2018 to take legal action against the project proponent under the provision of section 19 of the Environment (Protection) Act, 1986 for violation of the EIA Notification, 2006.
- (c) The Collector and District Magistrate, Khordha has initiated legal proceeding against the project proponent vide Environment Misc. Case No. 06/2018 as communicated to the proponent vide PR No. 290, dated 27.04.2018.
- (d) The proponent has only constructed boundary wall, storm water drain and also piling below ground without obtaining Environmental Clearance.



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- (e) Since substantial construction work of the project has not been carried out by the project proponent, there is no ecological damage to the environment.
- (f) The proposal was earlier recommended by the SEAC for grant of Environmental Clearance.

Considering the informations furnished and the presentation made by the consultant, the SEAC decided to take decision on the proposal after the proponent complies to the following:

- (i) The proponent shall withdraw the present online application and apply for Environmental Clearance in the same online application of MoEF&CC, Govt. of India as category-B project by uploading the EIA/EMP report prepared as per Terms of Reference (ToR) issued by the MoEF&CC, Govt. of India. The proponent shall also furnish hard copy of the EIA/EMP report.

**ITEM NO. 02 :**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR COMMERCIAL BUILDING PROJECT AT RUDRAPUR, BHUBANESWAR WITH TOTAL BUILT UP AREA 27920.59 M<sup>2</sup> OF M/S OORJITA PROJECT PVT. LTD. (EC)**

1. The project involves construction of Multi storied Commercial Development (B+LG+G+3) Floors and Proposed (S+4) Commercial Building with a total built up area of 27920.59 m<sup>2</sup> in total plot area of 11217.82 m<sup>2</sup> at village Rudrapur, Tehsil Bhubaneswar, District Khordha, Odisha by M/s Oorjita Projects Private Limited.
2. The project site is permitted for residential use as per approved Master Plan of the area. Planning / building permission was obtained from Bhubaneswar Development Authority on 7<sup>th</sup> December, 2013.
3. The said project / activity is covered under category B of item 8 (a) of Schedule to the EIA Notification, 2006, and requires prior EC from the SEIAA in Odisha based on the appraisal by SEAC.
4. The proposed site is located at Rudrapur, Bhubaneswar, Odisha. The Geographical co-ordinate of the project site is: Latitude - 20° 19' 22.93" N & Longitude - 85° 52' 53.35" E.
5. The building details of the project are as follows:

Area details	Area in m <sup>2</sup>
<b>Plot Area</b>	<b>11217.82</b>
Basement Parking Area	4115.61
Lower Ground Floor Parking	3848.57
Stilt Parking	135.78
Open Area (15.4 %)	1725.82
<b>Total Parking Area provided</b>	<b>9825.78</b>
Ground Coverage (42.6 %)	4782.54
Total Green Area (20 %)	2243.56
Road Area (22 %)	2467.92
Total Building FAR	19631.36
<b>Total Built up Area</b>	<b>27920.59</b>



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Area details	Area in m <sup>2</sup>
(Including Parking)	
FAR	1.75

**6. Requirement for the project:**

**(i) Power requirement:**

The daily power requirement for the proposed complex is preliminarily assessed as **2219.2 KW** source from CESU of Odisha State Electricity Board. In order to meet emergency power requirements during the grid failure, there is provision of 3 nos. of DG sets having 750 KVA capacities for power back up in the Commercial Building Project.

For energy conservation, there will be 60 nos. of Solar Lighting poles (@72 Watt) has been proposed for Street & common area solar lighting, so Energy conservation by using Solar Street Lighting =  $60 \times 72 = 4200 \text{ watt} = 4.2 \text{ KW}$ .

Energy conservation by using Solar lighting for common area = 115 KW

Total Energy Conservation =  $(115 + 4.2) \text{ KW} = 119.2 \text{ KW}$

Total Energy saving =  $119.2/2219.2 = 0.0537 \times 100 = 5.37 \%$

**(ii) Water requirement:**

Fresh make up of 166.7 m<sup>3</sup>/day will be required for the project which will be sourced from Ground water. Waste water of 200.08 KLD will be treated in a STP of 250 KLD capacity, which includes primary, secondary and tertiary treatment. After treatment the treated water will be discharge to the drain.

Rain Water will be harvested through 20 nos. of recharging pits.

**(iii) Fire fighting Installations:**

Firefighting system will be installed as per recommendation of the Fire fighting Officer, Odisha and as per the guideline of NBC (part-4).

**(iv) Green Belt Development:**

Green belt will be developed over an area of 2243.56 sqm which is 20 % of the plot area; by using the local species like Coconut, Mango, Nageswar, Neem, Ashok, Polanga, Jamu, Bela, Pijilu, Kaniara, Tagar, Hena, etc.

**(v) Solid Waste Management:**

From the commercial complex solid waste in form of food waste from kitchen and miscellaneous waste will be generated @ 0.15 kg/capita/day, which will be about  $6772 \times 0.15 = 1051.8 \text{ kg/day}$ . The generated solid waste from the residential complex will be segregated as biodegradable and non-biodegradable. This will be collected in separate coloured beans. Proper waste management practices will be adopted during the collection, storing and disposal of the generated solid waste.



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S. No.	Category	Counts (heads)	Waste generated
1.	Residents	6772 @ 0.15 kg/day	1051.8 kg/day
2.	STP sludge		87.6 kg/day
Total Solid Waste Generated			1139.4 kg/day

(vi) **Estimated Project Cost:**

Total Capital Cost = ₹ 40 Crores

Environment Management Cost = ₹ 105 Lakhs

7. Subsequent to permission from BDA, construction was taken up and completed without obtaining prior Environmental Clearance. While submission of the proposal for regularization of minor deviations to the approved plan and addition of a small building admeasuring 1000 m<sup>2</sup>, BDA directed the project proponent to obtain the Environmental Clearance vide their letter dated 7<sup>th</sup> January, 2016.
8. The application for seeking Environmental Clearance was submitted to SEAC/SEIAA on 8<sup>th</sup> January, 2016. SEIAA, based on communication from SEAC, informed the project proponent vide letter dated 21<sup>st</sup> July, 2016, about 90% completion of the project without obtaining prior Environmental Clearance and thus violation of the EIA Notification, 2006. SEIAA also issued directions u/s 5 of the Environment (Protection) Act, 1986 to suspend construction activities till the Environmental Clearance is obtained. Also, the State Government was directed to initiate credible action by invoking powers under section 19 of the said Act for taking necessary legal action the reported violation. In compliance of the same, case has been filed in the court of J.M.F.C. (O), Bhubaneswar 2(C) C.C. No.1/2017 by the District Administration for violation of the Environment (Protection) Act, 1986.
9. The proposal was then considered by the SEAC in its meeting held on 17<sup>th</sup> January, 2017, wherein it was recommended for grant of Environmental Clearance for a period of 7 years with certain stipulated conditions. Finally, SEIAA asked the project proponent to submit the proposal to MoEF&CC, Govt. of India in pursuance of the Notification dated 14<sup>th</sup> March, 2017.
10. The proponent made a detailed presentation before the EAC (violation) on 16.01.2018. The EAC, after detailed deliberations on the proposal in terms of the provisions of the MoEF&CC, Govt. of India Notification dated 14<sup>th</sup> March, 2017, confirmed the case to be of violation of the EIA Notification, 2006 and recommended for the following:-
  - (i) The State Government / SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate or occupancy certificate to be issued till the project is granted Environmental Clearance.
  - (ii) Grant of Terms of Reference for undertaking EIA and preparation of Environment Management Plan (EMP) along with public hearing.
  - (iii) The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation



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plan with the SPCB prior to the grant of Environmental Clearance. The quantum shall be recommended by the EAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the EAC and approval of the regulatory authority.

11. The MoEF&CC, Govt. of India (Impact Assessment Division) had issued ToR vide letter no. 23-25/2017-IA-III, dated 09.03.2018 for undertaking EIA and preparation of Environment Management Plan (EMP).
12. The MoEF&CC, Govt. of India vide letter no. 23-25/2017-IA-III, dated 09.03.2018 had also requested to the Secretary, F&E Department, Govt. of Odisha to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986 for violation of the EIA Notification, 2006.
13. Based on ToR issued by MoEF&CC, Govt. of India, the proponent with the help of consultant had prepared draft EIA/EMP report and submitted the same to State Pollution Control Board, Odisha on 17.03.2018 for Public Hearing.
14. The MoEF&CC, Govt. of India had issued Office Memorandum No. Z-11013/22/2017-IA-II (M), dated 16.03.2018, which stipulates that the violation case for Category B project will be considered by the respective SEIAA/SEAC only & Public Hearing is not required for building project.
15. The project proponent has re-applied to SEIAA, Odisha on 06.04.2018 along with draft EIA/EMP report prepared as per Terms of Reference (ToR) issued by the MoEF&CC, Govt. of India. The SEIAA, Odisha forwarded the proposal for appraisal as per MoEF&CC, Govt. of India Notification S.O. 804 (E) dated 14.03.2017.
16. The proponent along with the consultant **M/s Centre for Envotech & Management Consultancy Pvt. Ltd., N-5/305, IRC Village, Bhubaneswar, Odisha** made a detailed presentation before the committee on the EIA/EMP report prepared as per Terms of Reference (ToR) issued by the MoEF&CC, Govt. of India.
17. The proponent along with the consultant had presented the following compliances to the ToR points of MoEF&CC, Govt. of India.

Sl. No.	ToR Points Raised	Compliance furnished by the proponent
1.	Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment	Ambient Air Quality, Soil Quality, Ground Water quality & Surface Water quality has been carried out on February 2018 which indicates there is no damage so no remediation is required. The details of AAQ, Water Quality (Ground & Surface), Soil Quality have been furnished.
2.	Preparation of EMP comprising remediation plan and natural and	The land required is 11217.82 m <sup>2</sup> . The construction work is still



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Sl. No.	ToR Points Raised	Compliance furnished by the proponent
	community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.	incomplete hence no economic benefit has been accrued. Based on the ecologic assessment it can be confirmed that there is no damage, hence no remediation plan is required. Since no remediation is required no separate plan in EMP is required.
3.	The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.	

18. The committee observed the following:

- (a) The proponent has applied for Environmental Clearance for violation case in a separate new online file in which they have not uploaded the EIA/EMP report prepared as per Terms of Reference (ToR) issued by the MoEF&CC, Govt. of India. However, they have circulated hard copy of the EIA/EMP report to the Members.
- (b) The Director (Env.)-cum-Special Secretary to Govt., F&E Deptt., Govt. of Odisha had requested to the Collector and District Magistrate, Khordha vide letter no. ENV-I-31/2018/7116, dated 28.03.2018 to take legal action against the project proponent under the provision of section 19 of the Environment (Protection) Act, 1986 for violation of the EIA Notification, 2006.
- (c) The case has already been filed in the court of J.M.F.C. (O), Bhubaneswar 2(C) C.C. No.1/2017 by the District Administration for violation of the Environment (Protection) Act, 1986.
- (d) The proposal was earlier recommended by the SEAC for grant of Environmental Clearance.

Considering the informations furnished and the presentation made by the consultant, the SEAC decided to take decision on the proposal after the proponent complies to the following:

- (ii) The proponent shall withdraw the present online application and apply for Environmental Clearance in the same online application of MoEF&CC, Govt. of India as category-B project by uploading the EIA/EMP report prepared as per Terms of Reference (ToR) issued by the MoEF&CC, Govt. of India. The proponent shall also furnish hard copy of the EIA/EMP report.

**ITEM NO. 03 :**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR DEVELOPMENT OF COMMON BIOMEDICAL WASTE TREATMENT AND DISPOSAL FACILITY AT ARAKHAPADA, PO-SERAGADA, DIST-GANJAM, ODISHA OF M/S MEDIAID MARKETING SERVICES (TOR).**

1. This is a proposal for development of an Integrated Common Bio-medical Waste Treatment facility including the Incinerator, autoclave, shredder and effluent treatment unit to handle 7 T of medical waste per day at - Arakhapada, Po- Seragada, Dist-Ganjam, Odisha.



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2. The site is bounded by the coordinates of 190 32' 13.33" N & 190 32' 10.57" N and 840 34' 03.05" E & 840 34' 03.97" E belonging to SOI Toposheet No. E45A10. The average topographic elevation of the area varies between 217 ft AMSL & 224 ft AMSL with average slope of the area towards NW direction. There is no eco-sensitive area within 10 km radius of the plant site. The nearest eco-sensitive area is Kotagarh Wild Life Sanctuary bounded by proposed Elephant reserve area at a distance of 17.3 km from the boundary of the Plant site.
3. The said project activity falls under category 'B' of item 7 (da) as per amendment of EIA notification 2006 dated 17<sup>th</sup> April, 2015 and requires prior Environmental Clearance from the SEIAA in Odisha based on the appraisal by SEAC.
4. The Central Pollution Control Board had made the guideline in September 2013 for "Common Bio-Medical Waste Treatment Facility (CBWTF)" in order to discourage the individual incineration facility by health care establishments and strengthening CBWTF system.
5. To redress this problem and provide the health care establishments with a solution to their waste disposal dilemma, Mediaid Marketing Services has taken initiative for Development of Common Bio-Medical Waste Treatment and Disposal Facilities for waste generated in Ganjam and other adjoining areas falling under radius of 150 K.M.
6. The total water requirement for the project is 9 KLD and shall be fetched from a bore well inside the plant premises. Total Power Load due to machineries would be 79.39 KWH, to be procured from the nearest Grid.
7. The waste water generated from all sources is estimated as 8 KLD, which will be treated in a combined effluent treatment plant followed by disinfection. The process flow of ETP is as follows:  
Hot Water Sump → Chemical Treatment → Sedimentation → Pressure Sand Filter → Activated Carbon Filter → Neutralization Tank → Scrubber → Hot Water Sump.
8. It is estimated that around 2.0 T of autoclavable waste and 5.0 T of incinerable waste will be generated. It is also estimated that about 5% of the total treated waste would have to be land filled and hence about 0.4 T of waste would have to be land filled. With the bulk density of 0.72 and compression ratio of 0.65% the annual volume of waste for land fill is estimated as 1.19 m<sup>3</sup>, which shall be stored in an impervious lined concrete pit of size 5m x 5m x 4 m.
9. M/s Mediaid had applied for Consent to Establish to the Regional Office, SPC Board, Berhampur. Consent to Establish was granted on 08/07/2015 vide order no. 1842/CTE – 662/2015. Based on the Consent to Establish, the proponent had gone with the construction and erection & commissioning of the plant as per the DPR and approached for Consent to Operate to the State Pollution Control Board, Odisha. The proponent was denied by OSPCB for Consent to Operate due to lack of Environmental Clearance. Since the project was completed without obtaining prior Environmental Clearance, this is a violation of the EIA Notification, 2006.
10. The proponent subsequently submitted the proposal to MoEF&CC, Govt. of India on 12.07.2017 as violation case as per MoEF&CC, Govt. of India Notification S.O. 804 (E) dated 14.03.2017.

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11. The MoEF&CC, Govt. of India had issued Office Memorandum No. Z-11013/22/2017-IA-II (M), dated 15.03.2018, which stipulates that all the proposals of category 'B' projects/activities pertaining to different sectors, received within six months only i.e. up to 13th September, 2017 on the MoEF&CC, Govt. of India portal, but yet not considered by the EAC of MoEF&CC, Govt. of India, shall be transferred online to the SEAC/SEIAs in the respective States/UTs.
12. This proposal was not considered by the EAC of MoEF&CC, Govt. of India. Hence, the MoEF&CC, Govt. of India had transferred the proposal to SEIAA, Odisha on 28.03.2018 for consideration as per MoEF&CC, Govt. of India Notification S.O. 804 (E) dated 14.03.2017.
13. The proponent along with the consultant **M/s Global Tech Enviro Experts Pvt. Ltd., Bhubaneswar, Odisha** made a detailed presentation before the SEAC.
14. The SEAC, after detailed deliberations on the proposal in terms of the provisions of the MoEF&CC, Govt. of India Notification dated 14<sup>th</sup> March, 2017, confirmed the case to be of violation of the EIA Notification, 2006 and recommended for the following:-
  - (i) The State Government / SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate or occupancy certificate to be issued till the project is granted Environmental Clearance.
  - (ii) Grant of Terms of Reference for undertaking EIA and preparation of Environment Management Plan (EMP) as enumerated in **Annexure-I**, along with public hearing.
  - (iii) The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of Environmental Clearance. The quantum shall be recommended by the SEAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the SEAC and approval of the regulatory authority.

**ITEM NO. 04 :**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR DIGP, GROUP CENTRE AND RANGE HEADQUARTER OF CRPF AT GOSHALA, SAMBALPUR, ODISHA OVER BUILT-UP AREA OF 1,54,139.60 M<sup>2</sup> (EC).**

1. Central Reserve Police Force (CRPF), a Paramilitary Force under Ministry of Home Affairs, Govt. of India has proposed to develop a Group Centre and Range Headquarter at Goshala, Sambalpur, Odisha on an area of 6,96,059.30 m<sup>2</sup> (172.0 Acres) with total built up area 1,54,139.6 m<sup>2</sup>.
2. The Geographical Co-ordinates of the project site is Latitude : 83° 54' 11.26" E and Longitude : 21° 24' 40.48"N. The site is earmarked for group center use as per master plan of Sambalpur, 2021.
3. The project site is well connected to the road network. The nearest highway is NH-6 which is approximately 1.39 km away from the project site towards North West direction. The SH-54, SH-15 and SH-10 are approximately 5.75 km towards NW, 8.64 km towards SE



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and 9.17 km towards NE direction from the project site. The nearest Railway Station is Godbhaga Railway Station which is approximately 4.83 km from the project site towards West direction. The nearest Airport is Sambalpur Airport, which is approximately 21.01 km away from the project site towards North East direction.

4. CRPF has entrusted the planning and execution work to Central Public Works Department (CPWD), Ministry of Urban Development, Govt. of India. The main purpose of the project is to create a closed premise so as to provide support and reinforce the action against Naxal and other Antinational groups by way of:
  - Providing administrative support to the CRPF personnel on ground.
  - Providing residential facility to the CRPF personnel in the form of barracks and for personnel living with families in the form of quarters as per the latest norms of Government of India.
  - Providing secure and aesthetic ambience with greenery and landscaping.
5. A total of 1,571 dwelling units of various types (Type II, Type III, Type IV & V) have been proposed for housing CRPF personnel in addition to various administrative and service utilities. The total population estimated for the project is 11,738 persons comprising of fixed and floating population. The Estimated Development Cost of the project is approx. ₹ 313.03 Crores.
6. The EIA Notification dated 14<sup>th</sup> September, 2006 and amendments thereafter stipulates all Townships and Area development projects covering an area greater than or equal to 50 ha and or built up area greater than or equal to 1,50,000 m<sup>2</sup> are designated as category 8(b) projects and the same require EIA & EMP Reports to obtain prior environmental clearance from respective State Environmental Impact Assessment Authority (SEIAA). Also all projects under item 8(b) shall be appraised as Category B1 projects.
7. The proposed "DIGP, Group Centre and Range Headquarter of CRPF at Goshala, Sambalpur, Odisha" project falls under item 8(b) as per the EIA Notification dated 14<sup>th</sup> September, 2006 and amendments thereafter and requires Environmental Clearance from SEIAA, Odisha as category B1 project as the built up area is **1,54,139.60** m<sup>2</sup>. The SEAC, Odisha had issued Terms of Reference (ToR) for EIA study vide letter no. 419/SEAC-105, dated 14.07.2017.
8. The detailed area statement are provided in the table below:

Sl. No.	Particulars	Total (sq. m)
1	Total Plot area	9,53,216.79
1.1	Camp Area (to be left as it is)	2,57,157.49
1.2	Group Centre Area (Net Plot Area)	6,96,059.30
<b>Permissible</b>		
2	Ground Coverage (@30% of Net Plot Area)	2,08,817.79
3	FAR (@1.75)	12,18,103.775
4	Parking required	44,552.15
4.1	Residential Block (@25% of Built up Area)	28,505.75
4.2	Non-Residential Block (@40% of Built up	16,046.40

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Sl. No.	Particulars	Total (sq. m)
	Area)	
5	Green Area Required (@20% of Net Plot Area)	1,39,211.86
<b>Proposed</b>		
6	Ground Coverage (@ 6.9% Net Plot Area)	48,597.20
7	FAR (@	1,54,139.60
8	Built up area	1,54,139.60
9	Parking proposed (@29.22% of Built up Area)	45,047.00
9.1	Residential Block (@25% of Built up Area)	29000.00
9.2	Non-Residential Block (@40% of Built up Area)	16047.00
10	Green Area provided (@20% of Net Plot Area)	1,33,927.00

9. The total water requirements will be approx. 1608 KLD during operation phase out of which total fresh water requirement is 841.7 KLD. The source of water supply during construction phase will be private water tankers and during operational phase will be municipal water supply. It is expected that the project will generate approx. 1038 KLD of waste water. The waste water will be treated by an onsite STP of 1250 KLD capacity. Treated water will be brought through private water tankers and will be used for flushing and horticulture purpose. A total of 25 (twenty five) Rain Water Harvesting pits are proposed for artificial rain water recharge within the project premises.
10. The power supply shall be supplied by State Electricity Board. The estimated connected load for the proposed project will be 190 kVA for the first phase. At present, no DG power backup option is proposed. However, if the need arises the same may be considered in the future. During the operation phase, waste will comprise domestic waste.
11. The total solid waste generated from the project shall be mainly domestic waste and estimated quantity of the waste shall be approx. 4,565 kg per day (i.e. Municipal Solid Waste: 4415.65 kg/day, Bio-Medical waste: 7.5 kg/day and STP sludge: 142 kg/day).
12. A total landscape area of 1,33,927 m<sup>2</sup> has been proposed to be earmarked between peripheral green belt, avenue plantations & lawns within the project premises. A 20 bedded hospital will be constructed as a part of the proposed project activity.
13. The Consultant, **M/s Envirta Sustainable Solutions India Pvt. Ltd., Noida** on behalf of the project proponent made a detailed presentation on EIA/EMP report prepared as per Terms of Reference (ToR) before the SEAC.
14. The proponent clarified the queries of the members during the presentation as follows:

Sl. No.	Queries raised by the Members	Clarification made by the project proponent
1.	Minimum of 5% of the total power required should be	The total power requirement for the project is 190 KVA. The total roof top area available in the project is 48,597.2 m <sup>2</sup> out of which at least 400sqm area will be used for solar power



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Sl. No.	Queries raised by the Members	Clarification made by the project proponent
	done through solar power.	<p>generation</p> <p>As for generation of 1kW solar power approximate roof top area required is 10 m<sup>2</sup>, thus the solar power generation potential for the project would be 40kW which is greater than 5% of the total power requirement. This power will be used within the building where the roof top solar power units will be installed.</p> <p>Further, it is also proposed to get roof top solar panel installed on non-residential buildings through RESCO model, as per initiative of Govt. of India. If the proposal is approved, more power can be generated than the minimum required under the environmental norms</p>
2.	Alternative of site should have been mentioned	The site has been allotted by Government of Odisha after careful consideration of location and required facilities for CRPF and after due inputs from CRPF. The site has been also been chosen keeping in mind needs of paramilitary forces in the nearby area and considering various incidents happened in the recent past in this area
3.	The population mentioned on page 94 sub section 3.12.11.5 Availability of Residential Accommodation should be clarified upon	The section 3.12.11.5 Availability of Residential Accommodation should be read as: "The total population to be benefitted in this project has been worked out to 11,738. Out of this 7,541 will be benefitted by providing residential accommodation. The nearby people would be indirectly benefitted from the development of the group centre by employing them as providers of auxiliary services to the residents and in the group centre."
4.	Clarity on power back-up through should be given.	As of now, provision of power backup has not been finalized for the project. If in future power backup is added in the project, the proponent shall inform to the SEIAA.
5.	Waste generation from baffle firing range has not been included in the solid waste calculations of the project.	The waste generated for shells used for firing in baffle firing range has not been included in the report since the matter is related to providing information regarding firearms used by CRPF, such information cannot be put in public domain due to sensitivity of the information. Regarding the waste shells generated in the firing range, it is confirmed that the waste shells are taken back by ordinance factory who recycles them for reuse.
6.	A proper green belt should be created along the firing range for the purpose of creating sound barrier. Also it may be clarified whether Green Belt is provided all along the boundary wall of the	<p>The firing range proposed is a baffle firing range which will be an indoor firing range, proper acoustic enclosures will be provided to act as a sound barrier. The location of the firing range has also been proposed at a location which is far from the residential &amp; office quarters. Also a proper green area has been proposed and will be developed around the firing range.</p> <p>It is also confirmed that the Green Belt of minimum width of at least 3 m having trees of local species shall be provided</p>



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Sl. No.	Queries raised by the Members	Clarification made by the project proponent
	campus.	all along the boundary wall of the campus.
7.	The pollution impact due to vehicular movements and maintenance should be minimized.	There will be no vehicle allowed inside the CRPF's campus without a valid PUC certificate. Also green belt of 3m will be developed along the boundary of the campus and along the internal roads of the campus to minimize pollution due to vehicular movement.  Also in the MT workshop for repair of Govt. vehicles, oil traps will be installed to stop the oil spills to mix with water or percolate into the soil. Also the spent oil will be stored and will be disposed off through authorized recycler.

Considering the information furnished and presentation made by the **consultant M/s Envirta Sustainable Solutions India Pvt. Ltd., Noida** on behalf of the project proponent, the SEAC recommended for grant of environmental clearance for the project valid for a period of 7 years with stipulated conditions as per **Annexure – II**.

**ITEM NO. 05 :**

**PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR CONSTRUCTION OF DISTRICT HEAD QUARTER HOSPITAL WITH 100 BEDDED MOTHER CHILD HOSPITAL AT PLOT NO.3513, 3514, 3605, KHATA NO. 2523, SAMAGUDIA, KENDRAPARA, ODISHA OF OFFICE OF THE CHIEF DISTRICT MEDICAL OFFICER, KENDRAPARA WITH TOTAL BUILT UP AREA 25,699.90 M<sup>2</sup> (EC).**

1. The proposed project is for construction of District Head Quarter Hospital (500 Bed) with 100 Bed Mother Child Hospital which will cater to the healthcare demand of all income group of the district. The project is located at Vill. Samagudia, Kendrapara, Odisha. The project site is abutting a road of 6 m width that meets the NH – 5A at a distance of 1.3 km from the project site. The site is irregular shaped measuring 18,453.52 m<sup>2</sup> (4.56 acres) of land area. Total Built up area of the project is 25,699.90 m<sup>2</sup>. Total cost of the project will be around ₹ 110 crores.
2. The proposed site is located in outskirts of Kendrapara town at village Samagudia in Khata no. 2523 over plot No. 3513, 3514 & 3605. The area is located in Survey of India toposheet no. 73L/3. The entrance of the project will be from two sides. One end of site starts from Canal embankment which is at South side and the other end of site which is at North side is approachable by a RD road leading from Samagudia to Angulai.
3. The project got approval from Kendrapara Regional Improvement Trust (KRIT) vide letter no. BP-04/17/KRIT/132, dated 17.05.2017 for construction of District Headquarter Hospital.
4. The proposed project falls under item 8(a) as per the EIA Notification dated 14<sup>th</sup> September, 2006 and amendments thereafter and requires Environmental Clearance from SEIAA, Odisha as category B2 project as the built up area is **25,699.90 m<sup>2</sup>**. The SEAC, Odisha had issued Terms of Reference (ToR) for EIA study vide letter no. 419/SEAC-105, dated 14.07.2017.



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5. The total estimated maximum power demand for the project is 1212 KVA @ 0.8 pf and 1078KVA @ 0.9pf. Recommended transformer capacity is 2 no's 1000 KVA considering future loads. There is the proposal of installation of 2 sets of DG set for backup power supply. The total back up current required is 1807 KVA. 2 sets of 750 kVA DG will be installed for backup power. The height of the DG stack will be 22 m approximately (building height + 1.5m) as per the CPCB/ MoEF&CC, Govt. of India guidelines.
6. The recommended maximum per capita water supply levels for hospital shall be @ 450 liter / Patient / day as per NBC 2016. Total water requirement for the project will be 290 KLD out of which 180 KLD (60%) will be fresh water and 110 KLD (40%) will be treated water used for flushing purpose. Water will be sourced from the Municipal Water Supply. The waste water generated from the project will be 230 KLD and it will be treated through a STP of 250 KLD capacity.
7. There is the proposal of rain water harvesting within the project site. The rain water harvested from the project area will used for ground water recharge.
8. During the implementation of the project the biomedical waste generated from the project will be 2100 Kg (Approx.) will be disposed off as per provisions of Bio-medical Waste Management Rules, 2016 as amended from time to time. The Municipal Solid Waste shall be disposed off as per the Solid Waste Management Rules, 2016 and amendment thereafter.
9. The total plot area is 18,453.52 m<sup>2</sup> (4.56 acres), out of which 3700 m<sup>2</sup> (20% of the plot area) will be under green cover. Parking area will be provided over 7812 m<sup>2</sup>.
10. The consultant, **M/s Kalyani Laboratories Pvt. Ltd., Bhubaneswar** made a detailed presentation on behalf of the project proponent.

Considering the information furnished by the proponent and the presentation made by the consultant, the SEAC decided to take decision on the proposal after receipt of the following from the proponent.

- (i) The proposed Hospital is 500 bedded hospital. But, the documents such as Form-I and Form-I A have been prepared for 100 bedded hospital. Revised documents such as Form-I and Form-I A have to be submitted for 500 bedded hospital.
- (ii) The entire land proposed for the project is "Gochar" land. The land allotment letter of the Tahasildar / District Collector is to be submitted. Copy of conversion of Gochar land if any has also to be submitted.
- (iii) Percentage of Solar Energy to be used for the project with detailed breakup is to be submitted.
- (iv) Details of Effluent Treatment Plant (ETP) and Sewage Treatment Plant (STP) with flow charts are to be submitted. The final discharge point of treated waste water is "Hatia Nallah". Impact on "Hatia Nallah" due to discharge of treated water to be assessed and mitigation measures is to be submitted.
- (v) Quantity of solid waste generation other than Bio-Medical Waste is to be estimated as per provisions of Solid Waste Management Rules, 2016 and amendment thereafter and proper management practice is to be submitted. Proposal for development of in-house system for management of Organic Solid Waste (i.e. Organic Converter) for use as organic manure is to be submitted.

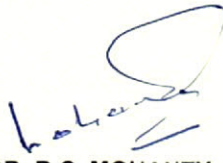


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- (vi) Quantity of Bio-Medical Waste generation and its management practice as per provisions of Bio-medical Waste Management Rules, 2016 as amended from time to time is to be submitted.
- (vii) Calculation made for rainwater harvesting is wrong one. This should be re-calculated as per CPCB guidelines and submitted.



**DR. B. K. PATNAIK**  
CHAIRMAN, SEAC



**DR. R.C. MOHANTY**  
MEMBER, SEAC



**SRI B.C. PRUSTY**  
MEMBER, SEAC



**DR. D. K. ROUT**  
MEMBER, SEAC



**SRI S. BEHERA**  
MEMBER, SEAC



**DR. S. C. NAYAK**  
MEMBER, SEAC



**SRI A. C. MOHANTY**  
MEMBER, SEAC



**DR. D. SWAIN**  
MEMBER, SEAC

**APPROVED**



**CHAIRMAN, SEAC**



**SECRETARY, SEAC**

**TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT FOR DEVELOPMENT OF COMMON BIOMEDICAL WASTE TREATMENT AND DISPOSAL FACILITY AT ARAKHAPADA, PO- SERAGADA, DIST-GANJAM, ODISHA OF M/S MEDIAID MARKETING SERVICES (TOR).**

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1. Executive summary of the project shall be prepared highlighting the objectives of the proposal, use of resources, justification, etc. In addition, it should provide EMP.
2. Justification for selecting the proposed capacity of the incineration and other facilities.
3. Establishment of the facility as per Bio-medical Waste Management Rules, 2016.
4. Land requirement for the facility including its break up for various purposes, its availability and optimization.
5. Details of proposed layout clearly demarcating various activities such as security,
6. Waste Storage Rooms, Waste Treatment Equipment Rooms/Areas, Treated Waste Storage Room, Pollution Control Devices like APCS and ETP, ash storage/disposal area, vehicle washing areas, and others such as admin area, worker's room, health centers, greenbelt, etc.
7. Details on collection and transportation of Bio Medical Waste from health care establishments. No. of vehicles and feature of vehicles, etc.
8. Details of waste storage facilities/rooms.
9. Details of the treatment equipment's capacity and make.
10. Details of the incineration system - a statement on the compliance to the CPCB guidelines for common bio medical waste incinerators in respect of waste feed cut-offs, operating parameters of combustion chambers, flue gas cleaning, ash handling, etc.
11. Details on fuel requirement for incineration.
12. Details on flue gas emissions discharge through stack and proposed pollution control technologies.
13. Details on residue/ash generation and management.
14. Details of waste heat utilization, if any.
15. Details of wastewater management.
16. Details of the proposed overall safety and health protection measures.
17. Details of source of water and power to the facility.
18. Details of the existing access road(s)/walkways to the designed operations in the site and its layout.
19. Location of the incineration facility and nearest habitats with distances from the facility to be demarcated on a toposheet (1: 50000 scale).
20. Land use map based on satellite imagery including location specific sensitivities such as national parks / wildlife sanctuary, villages, industries, etc.

21. Topography details.
22. Surface water quality of nearby water bodies.
23. Details of proposed groundwater monitoring wells, locations, frequency of monitoring, parameters, etc.
24. Action plan for the greenbelt development in accordance to CPCB published guidelines.
25. Details of pollution control technologies and online monitoring equipments.
26. Details of monitoring of pollutants at source -performance of the incinerator. including operating hours, fuel consumption, operating parameters (Combustion chamber - temperature, pressure, Stack temperature, total particulate matter, HCl, NOx as per Bio-medical Waste Management Rules, 2016.
27. Stack and fugitive emissions may be monitored for SPM, HCL & NO2 as per Bio-medical Waste Management Rules, 2016.
28. Specific programme to monitor safety and health protection of workers.
29. Details of Administrative and technical organizational structure.
30. EMP devised to mitigate the adverse impacts of the project should be provided along with item-wise cost of its implementation (Capital and recurring costs).
31. Details of the emergency preparedness plan and on-site & off-site disaster management plan and on-site & off-site disaster management plan.
32. Details of measures to be taken for control of air pollution including measures to control emission of Dioxin and Furan.
33. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
34. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
35. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.
36. Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.

**CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE OF DIGP, GROUP CENTRE AND RANGE HEADQUARTER OF CRPF AT GOSHALA, SAMBALPUR, ODISHA OVER BUILT-UP AREA OF 1,54,139.60 M<sup>2</sup> (EC).**

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**I. SPECIFIC CONDITIONS:**

**A. CONSTRUCTION PHASE:**

1. Construction site should be adequately barricaded before the construction begins.
2. 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.
3. As proposed, 25 nos. of rain water harvesting pits for artificial ground water recharge shall be installed as per CGWB guidelines.
4. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
5. Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
6. No ground water shall be extracted for the project work at any stage during the construction phase. If ground water will be used during construction phase, they shall obtain permission from the Water Resource Department.
7. Considering the peak water consumption of the occupants, the design of the water supply system and the sewage disposal system of the project should be based on the provisions of water consumption.
8. Provision shall be made for the housing of construction labourers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
9. A First-Aid room will be provided in the project site both during construction and operation of the project.
10. All the top soil excavated during construction activities should be stored separately for use in land filling, horticulture/landscape development within the project site.



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11. Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and will be disposed off taking the necessary precautions for general safety and health aspects of people only in approved sites with the approval of competent authority.
12. Construction spoils, including bituminous material and other hazardous materials should not be allowed to contaminate watercourses, ground water and dump sites by following safe dumping / disposal practice as per statutory rules and norms with necessary approval of the Odisha State Pollution Control Board.
13. The fuel for diesel generator sets to be used during construction phase shall use low sulfur diesel fuel and should conform to Environment (Protection) Rules 1986 prescribed for air emission and noise standards.
14. The diesel required for operating DG sets shall be stored in underground tanks and, if required, clearance from the Chief Controller of Explosives shall be taken.
15. Vehicles used for bringing construction materials to the site should be in good condition and should have a pollution check certificate, covered and conform to statutory air and noise emission standards and should be operated only during non-peak hours of the day.
16. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be taken to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/ OPCB.
17. Fly ash bricks should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and as amended thereafter.
18. Ready mixed concrete would be used in building construction.
19. Storm water control and its re-use should be as per CGWB and BIS standards for these applications.
20. Fixtures for showers, toilet flushing and drinking water should be of low flow type and restricted to requirements by use of aerators, avoiding wastage pressure reducing devices or sensor based controls.
21. Use of glass may be maximum upto 40% of total outer wall area to reduce the energy consumption and load on air-conditioning. If necessary, high quality double glass with special reflective coating may be used in the windows.



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22. Roof should meet the prescribed requirement as per Energy Conservation Building Code by using appropriate thermal insulation material.
23. Opaque wall should meet prescriptive requirements as per Energy Conservation Building Code.
24. The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of firefighting equipments etc. as per National Building Code of India, 2005 including protection measures from lightning etc.
25. Regular supervision of the above and other measures for monitoring should be in place all through the construction phase to avoid disturbances and pollution to the surroundings.
26. The construction and demolition wastes to be generated from the proposed project shall be disposed of in accordance with the provision under "Construction & Demolition Wastes Management Rules 2016".

**B. OPERATION PHASE:**

1. Fresh water requirement shall not exceed 841.7 m<sup>3</sup>/day.
2. 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 SEIAA, Odisha and the Regional Office, MoEF&CC along with six monthly Monitoring reports.
3. Solid waste management shall be collected, treated disposed in accordance with the Solid Waste (Management & Handling) Rules, 2016.
4. Solid waste shall be segregated into biodegradable, recyclable and inert. Biodegradable waste shall be composted indigenously in Organic Waste Converter and the other waste categories shall be disposed suitably.
5. Waste generation from baffle firing range shall not be mixed with the solid waste generated from the project.
6. Bio-Medical Waste generated from the Hospital shall be handled as per the provisions of Bio-medical Waste Management Rules, 2016 as amended from time to time.
7. No ground water shall be used during the operation phase. If ground water will be used during operation phase, they shall obtain permission from the Water Resources Department.

8. The proponent shall install STP of capacity 1250 KLD. Treated effluent from STP shall be recycled / reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of the Odisha State Pollution Control Board. Necessary measures should be taken to mitigate the odour problem from STP.
9. In no case there should be any discharge of treated effluent to outside of the project premises.
10. The STP sludge should not be dried nor incinerated within the project site and should be disposed off as per the norms of SPCB, Odisha.
11. The STP must treat all kinds of pollutants present in it and its capacity should take into account the entire load of sewage generated by the inhabitants.
12. The project proponent will ensure that under no circumstances, the environment is polluted due to non-functioning / under performance of sewerage disposal system of the project.
13. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time, the noise levels measured at the boundary of the sites shall be restricted to the permissible levels to comply with the prevalent regulations.
14. Green-belt & avenue plantation of trees over 20% of total area shall be done using native tree species / shrubs improving greenery & keeping in view aesthetics considerations in the whole complex. Professional landscape architects should be engaged to design the green layout to provide for multi-tier plantation and green fencing all around, mitigating various environmental pollutants like dust, noise, emissions etc. and pathway for joggers.
15. Weep holes in the compound walls shall be provided to ensure natural drainage of excessive rain water in the project area during the monsoon period after the harvesting operations. Care must be taken so that there is no water logging in the territory and drainage is 100%.
16. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Traffic congestion shall be avoided inside the project site. The area ear- marked for parking shall not be used for any other purpose. Alternate entry and exit must be provided to handle excess traffic and emergency situations.



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17. A report on the energy conservation measures confirming to energy conservation norms finalized by the Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R& U Factors etc. and submitted to the SEIAA, Odisha in three months' time before operation/ habitation.
18. The proponent shall use atleast 5% of non-conventional energy (solar energy).
19. Solar based electric power shall be provided to each flat for atleast two bulbs/light and one fan. Central lighting and street lighting shall also be based on solar power.
20. Provisions of solar hot water storage / supplies at the roof top may be made as per statutory norms of CPCB/MoEF&CC/SPCB, Odisha.
21. Energy conservation measures like installation of LED for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Discarded bulbs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid toxic contamination. Use of solar panels be adopted to the maximum extent possible, especially for street lights.
22. The building blocks should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.

## **II. GENERAL CONDITIONS:**

1. The project proponent shall comply with all the conditions stipulated in the building approval letter.
2. The applicant (Project proponent) will take necessary measures for prevention, control and mitigation of Air Pollution, Water Pollution, Noise Pollution and Land Pollution including solid waste management as mentioned by them in Form-1, Form-1A, and Environment Management Plan (EMP) in compliance with the prescribed statutory norms and standards.
3. The applicant will take statutory clearance/approval/permissions from the concerned authorities in respect of the project as and when required.
4. The applicant will submit half-yearly compliance report on post-environmental monitoring in respect of the stipulated terms and conditions in the Environmental Clearance to the State Environmental Impact Assessment Authority (SEIAA), Odisha, on 1st June and 1st December of each calendar year.



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5. The project proponent shall obtain Periodic Occupancy Renewal Certificate from the competent authority at an interval of 3 to 5 years as per the provisions of National Building Code (NBC) 2005.
6. The project proponent shall comply to all the conditions stipulated by the Fire Prevention Officer, Odisha.
7. The applicant will adopt the prescribed norms, and standards provided in the National Building Code of India, 2005.
8. 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.
9. 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.
10. Officials from the Regional Office of MoEF&CC, Bhubaneswar would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all entire document submitted to SEIAA, Odisha should be forwarded to the Regional Office of MOEF&CC, Bhubaneswar.
11. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, Odisha.
12. 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.
13. All other statutory clearances shall be obtained, as applicable by project proponents from the respective competent authorities.
14. These stipulations would be enforced among others under the provisions of 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 EIA Notification, 2006.



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15. The project proponent should 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 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 should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional Office of MoEF&CC, Govt. of India at Bhubaneswar.
16. 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 the proponent.
17. The proponents shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Offices of MoEF&CC, Bhubaneswar the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
18. 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.
19. The above mentioned stipulated conditions shall be complied in a time-bound manner. Failure to comply with any of the conditions mentioned above may result in cancellation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.



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