



**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**(Issued by the State Environment Impact Assessment**  
**Authority(SEIAA), Madhya Pradesh)**

To,

The Collector

COLLECTOR, DISTRICT ADMINISTRATION, GWALIOR, MADHYA  
 PRADESH

Collector, District Administration, Gwalior, Madhya Pradesh. -474001

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

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC)  
 in respect of project submitted to the SEIAA vide proposal number  
 SIA/MP/MIS/224389/2021 dated 14 Sep 2021. The particulars of the environmental  
 clearance granted to the project are as below.

- |   |   |
|---|---|
| 1. EC Identification No.                      | <b>EC22B038MP129821</b>   |
| 2. File No.                                   | 8678/2021   |
| 3. Project Type                               | New   |
| 4. Category                                   | B2  |
| 5. Project/Activity including<br>Schedule No. | 8(a) Building and Construction projects   |
| 6. Name of Project                            | Proposed New Township Thatipur<br>(Government Works) Gwalior under<br>Redensification Scheme of GoMP by<br>Collector, District Administration, Gwalior,<br>Madhya Pradesh |
| 7. Name of Company/Organization               | COLLECTOR, DISTRICT<br>ADMINISTRATION, GWALIOR, MADHYA<br>PRADESH   |
| 8. Location of Project                        | Madhya Pradesh  |
| 9. TOR Date                                   | N/A   |

The project details along with terms and conditions are appended herewith from page  
 no 2 onwards.

Date: 22/01/2022

(e-signed)  
**Shriman Shukla**  
**Member Secretary**  
**SEIAA - (Madhya Pradesh)**

*Note: A valid environmental clearance shall be one that has EC identification  
 number & E-Sign generated from PARIVESH. Please quote identification  
 number in all future correspondence.*

*This is a computer generated cover page.*



**Ref: Proposal No. SIA/MP/MIS/224389/2021, Case No 8678/2021:** Prior Environmental clearance for Proposed "New Township Thatipur (Government Works) Gwalior under Redensification Scheme of GoMP" at Khasra No. 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226/1, 227, 228, 229, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254/1, 256/1, 257, 258/1, 259/1, 260/1, 265/1, 266, 267/1, 268/1, 269/1, 270/1 village- Mehra District-Gwalior (MP) Total Plot Area : 105842.38 sq.m. and Built up area 58468.66 sq.m by Collector, District Administration, Gwalior, (M.P.) - 474001 Email: thatipurGwalior01@gmail.com Mob No.:08962843694. Env't. Consultant: ENVISOLVE LLP

With reference to above the proposal has been appraised as per prescribed procedure & provisions under the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated 14<sup>th</sup> September 2006 and its amendment, on the basis of the mandatory documents enclosed with the application viz., Form -2, Form IA, Conceptual Plan, drawings and subsequently submission of EMP report, PPT& the additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) and State Environment Impact Assessment Authority (SEIAA) constituted by the competent Authority.

- i. The project is proposed for development of New Township Thatipur (Government Works) Gwalior under Re-densification Scheme of GoMP by Collector, District Administration, Gwalior, Madhya Pradesh. The project includes Total no. of Govt. Quarters – 798 Govt. Higher Secondary School-1 No. Govt. office Complex-1 No. Community Center- 1 No. Temple Complex- 1 No.
- ii. As per the T & CP Gwalior (vide letter dtd 23.05.21) the total land area is 1,05,842 sq.m.. The total built up area proposed by PP is 58,468.66 sq.m. The project comes under 8(a) category (B) of schedule of EIA Notification, 2006 because total construction is between 20,000 sq.mt. & 1,50,000 sq.mt. and plot area is less than 50 ha.
- iii. It is noted that for this proposed project, 20 structures including F type housing and PWD offices will be demolished in Phase-1. Demolition work will be contracted to third party for whom tenders are floated and generated C&D will be disposed off as per the prevailing rules in consultation with the municipal corporation.
- iv. The case was discussed in SEAC meetings 520<sup>th</sup> meeting dated 13/10/2021, 525<sup>th</sup> dated 10-11-21 and 534<sup>th</sup> dtd. 15.12.21 and is recommended for grant of prior EC subject special conditions.
- v. PP has submitted copy of Khasra Panchsala 2020-21. As per the Khasra Panchsala the project land is Govt land.
- vi. **Summary of the project:**

S No.	Item	Details
1.	Name & Location of the project	New Township Thatipur (Government Works) Gwalior under Re-densification Scheme of GoMP by Collector, District Administration, Gwalior, Madhya Pradesh.
2.	Geological Location	Latitude 26°12'40.98"N Longitude 78°12'23.64"E
3	Total Plot Area	105842.38 sq.m.
4	Total Built up Area	58468.66 sq.m.
5	Ground coverage	Permissible Ground coverage @30% =24991.67 sq. m. Proposed Ground coverage @21.44% =17864.62 sq. m.
	Height of Buildings	24.0 m

	Front M.O.S	12.0 m
	Side/Rear	9.0 m
6	Total units proposed in the project	E Type – 30 (4 BHK), NGO Type.(2 BHK) – 16, F Type (2 BHK) – 80, G Type (2 BHK) – 288, H Type (1 BHK) – 240, I Type (1 BHK) - 144 Total- 798
		Govt. Higher Secondary School -1 No.
		Govt. Offices Complex 1 No.
		Community Centre- 1 No.
		Temple Complex -1 No.
<b>Environment Impact and Its Management</b>		
7	Water Requirement	Total water requirement- 711 KLD Fresh Water: 419 KLD The Source of water supply is Municipal Corporation Gwalior. PP has obtained NOC (dtd. 25.08.21) from GMC for water supply.
8	Total Sewage Waste Water Generation & Effluent utilization	Waste Water Generation 565 KLD STP capacity 670 KLD Treated water: 508.5 KLD Flushing: 230 KLD Landscape: 62 KLD The Sewage treatment will be done in the STP of capacity 670 KLD. Proponent will provide the STP to treat the discharge up to tertiary level. Total treated water available: 508 KLD Treated water will be used for flushing (230 KLD), green area (62 KLD) and remaining will be disposed of to the sewer line.
9	Air Quality Mitigation Measures	<ul style="list-style-type: none"> <li>Water sprinkling on main haul roads in the project area will be done.</li> <li>The duration of stockpiling of excavated mud will be used as backfill material for the open cut trenches for road development.</li> <li>Temporary tin sheets of sufficient height (3m) will be erected around the site of dust generation or all around the project site as barrier for dust control.</li> <li>Tree plantations around the project boundary will be initiated at the early stages</li> <li>All vehicles carrying raw materials will be instructed to cover with tarpaulin / plastic sheet, unloading and loading activity will be stopped during windy period.</li> </ul>
10	Rainwater harvesting	6 number of rainwater harvesting pits provided at the site for ground water recharging as per the CGWB norms. The rainwater harvesting pits will be provided to apartment blocks, so that the roof water can be directly sent to nearest Rainwater harvesting pit. The excess water if any from the rainwater harvesting pits is diverted to storm water drains.
11	Solid Waste Generation	About 3552 kg/day solid waste will be generated in the project. The biodegradable (2486 kg/day) waste will be converted into manure by mechanical composting and the non-biodegradable waste generated (1066 kg/day) will be handed over to the common municipal waste landfill site. PP has submitted letter dtd. 24.08.21 issued by GMC for disposal of solid waste. E-Waste (@0.18 kg/person/year) 1134 Kg/Year Sent to Authorized recyclers. Used Oil from DG Sets 250 litres/year Sold to authorized recyclers
12	Noise Mitigation Measures	Reduction in noise levels, where ever possible the noise generating equipment will be kept away from the human habitation. Temporary tin sheets of sufficient height (3m)

		will be erected around the noise generating activity or all around the project site as barrier for minimizing the noise travel to surrounding areas															
13	Energy Requirements & Saving	<p>The total power requirement will be 2653 KW(approx) which will be met by Madhya Pradesh Paschim Kshetra Vidyut Vitran Company Ltd .DG set of 30 KVA in 16 no, 62.5KVA in 1 &amp; 100 KVA will be installed as stand-by arrangements. For energy conservation use of CFL, LED or tube lights. Gadgets like Fridge, ACs, fans etc. of star rated will be encouraged to be used. Solar water heater is proposed in the project and LED lights will be used in the common areas.</p> <p>Thermal Characteristics of the Building Envelope</p> <table><tr><th>S.No.</th><th>Proposed with U &amp; R Values</th><th>'R' Values (in Sq m. Deg C/ Watts )</th><th>'U' Values (in Watts/ Sq m. Deg C)</th><th>Solar Heat Gain Factor</th></tr><tr><td>01</td><td>WALL Brick wall (230 mm thick), both side thick sand cement plaster (12-18mm) with insulation</td><td>3.52</td><td>0.28</td><td>0.30</td></tr><tr><td>02</td><td>ROOF 200 mm RCC slab with mud phuska &amp; clay tiles with 75 mm insulation</td><td>1.22</td><td>0.81</td><td>0.45</td></tr></table>	S.No.	Proposed with U & R Values	'R' Values (in Sq m. Deg C/ Watts )	'U' Values (in Watts/ Sq m. Deg C)	Solar Heat Gain Factor	01	WALL Brick wall (230 mm thick), both side thick sand cement plaster (12-18mm) with insulation	3.52	0.28	0.30	02	ROOF 200 mm RCC slab with mud phuska & clay tiles with 75 mm insulation	1.22	0.81	0.45
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14	Parking space	Open parking-276 Stilt parking-411 Basement parking- 0 Total-687.															
15	Proposed Green Area	<p>i. Total 1,000 trees shall be planted in the area of 8848.00 m<sup>2</sup> (10.62 % of total plot area ) within the project site &amp; addition plantation of 10,000 trees as prescribed by the SEAC committee through Miyawaki technique in the minimum 2.00 ha through the consultation with DFO. For which proposed Rupees 60 lacs in the EMP.</p> <p>ii. There are total 698 no. of trees (vide letter no 4036 dated 27.09.2021) in which 72 trees will be transplanted for which PP has floated a tender &amp; 68 trees will be felled down through the permission of DFO, Gwalior.</p>															
16	Fire Fighting Measures	PP has proposed to provide External Wet riser system, Internal fire hydrants strategically located to cover maximum area, Fire pump, Sprinkler pump, Jockey pump, Sprinklers system, External yard hydrants, Portable fire extinguishers CO <sup>2</sup> type fire extinguishers, Fire Alarm system. etc. as per NBC 2005															
17	Proposed CER Budget and Activity	PP has proposed Rs 2,00,000/- (Rupees Two Lacs only) towards the animal wildlife health and habitat development at Gwalior Zoo in consultation with In-charge of Gwalior Zoo.															
18	Estimated Project	INR 200 crores															

<b>Cost</b> EMP cost of the project	PP has proposed Rs. 1000 Lacs as capital and Rs. 109 Lacs as recurring cost for this project.
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Based on the information submitted at Para i to vi above and others, the State Level Environment Impact Assessment Authority (SEIAA) considered the case in its 699<sup>th</sup> meeting held on 29.12.2021 and decided to accept the recommendations of 534<sup>th</sup> SEAC meeting held on dated 15.12.2021.

Hence, Prior Environmental Clearance is accorded under the provisions of EIA Notification dtd. 14<sup>th</sup> September 2006 & its amendments to the proposed "New Township Thatipur (Government Works) Gwalior under Re-densification Scheme of GoMP" at Khasra No. 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226/1, 227, 228, 229, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254/1, 256/1, 257, 258/1, 259/1, 260/1, 265/1, 266, 267/1, 268/1, 269/1, 270/1 village- Mehra District-Gwalior (MP) Total Plot Area : 105842.38 sq.m. and Built up area 58468.66 sq.m by Collector, District Administration, Gwalior, (M.P.) - 474001 subject to the compliance of the Standard Conditions and the following additional Specific Conditions as recommended by SEIAA & SEAC in its meetings.

**A. Specific Conditions as recommended by SEIAA**

1. The fresh water supply arrangement should be met through Municipal Corporation and there should no extraction of ground water.
2. The inlet and outlet point of natural drain system should be maintained with adequate size of channel for ensuring unrestricted flow of water.
3. **Disposal of waste water**
  - a. Sewage shall be treated in the STP based on MBBR Technology with tertiary treatment i.e. Ultra Filtration. The Treated effluent from STP shall be recycled /reused for flushing. DG cooling, Gardening and HVAC.
  - b. PP should ensure linkage with municipal sewer line for disposal of extra treated waste water.
4. **Solid Waste Management:**
  - a. Separate wet and dry bins must be provided at the ground level for facilitating segregation of waste.
  - b. The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
  - c. Wet Garbage shall be composted in Organic waste convertor. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The Inert waste from the project will be sent to dumping site.
  - d. Ensure linkage with Municipal Corporation for final disposal of MSW.
5. **Traffic management:-**
  - (a) PP should ensure road width, front MOS and side / rear as per MPBVR 2012.
  - (b) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site shall be avoided.
  - (c) No public space including the service road shall be used or blocked for the parking and the trained staff shall be deployed to guide the visitors for parking.
6. **For firefighting:-**
  - (a) PP should ensure connectivity to the fire station from the project site and provide necessary fire fighting equipments for fire hazards.

- (b) As per MPBVR, 2012 rule 42 (3) PP should submit necessary drawings and details to the Authority (Nagar Nigam, Gwalior) incorporating all the fire fighting measures recommended in National Building Code Part – IV point no. 3.4.6.1. The occupancy permit shall be issued by Nagar Nigam only after ensuring that all fire fighting measures are physically in place.
- (c) Dedicated power back up system shall be provided in the case of power failure & emergency of fire water pumps.
- (d) Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises

**7. For Rain Water Harvesting, and Ground water recharge:-**

- a. PP should ensure the rain water harvesting with 06 no. of recharging pits and these pits should be connected laterally to consume the surplus runoff. In addition, PP should provide recharging trenches. The base of the trenches should be Kachha with pebbles.
  - b. The storm water from roof – top, paved surfaces and landscaped surfaces should be properly channelized to the rain water harvesting sumps through efficient storm water network as proposed. The budget should be included in EMP plan for storm water management.
8. PP should ensure to provide car parking 687 ECS (Open parking-276, Stilt parking- 411 ) as proposed. The area earmarked for the parking shall be used for parking only. No other activity shall be permitted in this area.

**9. For Energy Conservation PP should Ensure :-**

- a. Energy Saving by Using Led Lamps And Solar Power Plant as proposed.
- b. Use of LED lights in the common areas, landscape areas, signage's, entry gates and boundary compound walls etc.
- c. Solar lights provide for common amenities like Street lighting & Garden lighting.
- d. PP should ensure installation of photovoltaic cells (solar energy) for lighting in common areas, LED light fixtures, and other energy efficient equipments.

**10. Green belt :-**

- a. PP should ensure total 1,000 trees shall be planted in the area of 8848.00 m<sup>2</sup> (10.62 % of total plot area) within the project site & addition plantation of 10,000 trees as prescribed by the SEAC committee through Miyawaki technique in the minimum 2.00 ha through the consultation with DFO. For which proposed Rupees 60 lacs in the EMP.
  - b. There are total 698 no. of trees (vide letter no 4036 dated 27.09.2021) in which 72 trees will be transplanted for which PP has floated a tender & 68 trees will be felled down through the permission of DFO, Gwalior.
  - c. PP should ensure plantation should be done at site along the road, around open space area, parking area and other amenities. Trees of indigenous local varieties like Neem, Peepal, Kadam, Karanj, Kachnaar, Saltree, Gulmohar etc, should be planted.
  - d. The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.
11. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated: 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
12. PP should ensure to implement Rs 2,00,000/- (Rupees Two Lacs only) towards the animal wildlife health and habitat development at Gwalior Zoo in consultation with In-charge of Gwalior Zoo.

13. PP should ensure to submit half yearly compliance report with photographs of plantation in MP-SEIAA. If PP is failed to upload or submit two consecutive half yearly compliance reports of EC conditions to concerned authority (SEIAA and Regional Office, MoEF&CC, Gol, Bhopal) than prior environmental clearance issued to PP will automatically be treated as cancelled/ revoked as per OM No. 930/SEIAA/2019 dated 30.05.2019 issued by MPSEIAA.

**B. Specific Conditions as recommended by SEAC**

**I Statutory Compliance**

- i. 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.
- ii. The approval of the Competent Authority shall be obtained for structural safety of building due to earthquakes, adequacy of firefighting equipment etc as per National Building code including protection measures from lightening etc.
- iii. The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.
- iv. The project proponent shall obtain the necessary permission for drawl of ground water/surface water required for the project from the competent authority.
- v. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- vii. The provisions for the solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- viii. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power Strictly.
- ix. The project area shall be secure through boundary wall and excavated top soil shall not be used in filling of low lying area. The top soil shall be used for greenery development.

**II. Air quality monitoring and preservation**

- i. Notification GSR 94(E) dated: 25/1/2018 MoEF& CC regarding Mandatory implementation of Dust Mitigation Measures for Construction and Demolition Activities for project requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released covering upwind and downwind directions during the construction period.
- iv. 18 Diesel power generating sets 30 kVA \* 16 nos. , 62.5 kVA\* 1 nos & 100 kVA\* 01 nos. proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- v. 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 wills all around the site plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, Murram and other construction materials prone to causing dust polluting at the site as well as taking out debris from the site.
- vi. Sand, Murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.

- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surface and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (are 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.
- x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xi. The gaseous emission from DG sets 30 kVA \* 16 nos. , 62.5 kVA\* 1 nos & 100 kVA\* 01 nos. 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.
- xii. For indoor air quality, the ventilation provisions as per National Building Code of India shall be provided.

### **III Water quality monitoring and preservation**

- i. 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.
- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii. The total water requirement during operation phase is 711 KLD out of which 419 KLD is fresh water requirement and 480 KLD will be the total recycled water generated, out of which 230 KLD recycled water will be used for flushing and 62KLD water will be used for horticulture.
- iv. 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 along with six monthly Monitoring reports.
- v. 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 separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be previous. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as previous surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. 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.
- ix. 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.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law construction on rain water harvesting should be followed. If local by-law provision is not available, adequate provisions for storage and recharge should be followed as per the Ministry of Urban Development Model Building bylaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water

- recharging as per the CGWB norms.
- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meter of built up area and storage capacity of minimum one day of total fire water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
  - xiii. The total recharge capacity of these pits about 379.62 m<sup>3</sup>/hr. Mesh will be provided at the roof so that leaves or any other solid waste/debris will be prevented from entering the pit.
  - xiv. The RWH will be initially done only from the roof top. Runoff from green and other open areas will be done only after permission from CGWB.
  - xv. All recharge should be limited to shallow aquifer.
  - xvi. No ground water shall be used during construction phase of the project.
  - xvii. 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.
  - xviii. The quality 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 recorded shall be submitted to the Regional Office, MoEF& CC along with six monthly Monitoring report.
  - xix. Sewage shall be treated in the MBBR based STP (Capacity - 670 KLD). The treated effluent from STP shall be recycled/re-used for flushing. AC makes up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
  - xx. The waste water generated from the project shall be treated in STP of 670 KLD capacity (based on MBBR based technology) and then reused for various purposes. No water body or drainage channels are getting affected in the study area because of this project.
  - xxi. No sewage or untreated effluent water would be discharged through storm water drains.
  - xxii. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problems from STP.
  - xxiii. Sludge from the onsite sewage treatment including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Control Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

#### IV. Noise monitoring and prevention

- i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone 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 monitoring 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.
- ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- iii. Acoustic enclosures for DG sets, noise barriers for ground run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

#### V Energy Conservation measures

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Building in the State which have notified their own ECBC, shall comply with the State ECBC.
- ii. Outdoor and common area lighting shall be LED.

- iii. 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.
- iv. Energy conservation measures like installation of 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.
- v. Solar, wind or other Renewable Energy shall be installed in meet electricity generation equivalent to 1% of the demand load or as per the state level/local building bye-law's requirement, whichever is higher.
- vi. 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.

#### **VI Waste Management**

- i. Total waste 3552 Kg/day, this consist all types of wastes (as Organic waste 2486 Kg/day and non- organic waste 1066 Kg/day), Inert waste 355 Kg/day, E- waste 1134 Kg/Annum, and these all type of waste shall be treated/ disposed off as per provision made in the MSW Rules 2016.
- ii. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the MSW generated from project shall be obtained.
- iii. Disposal of muck during construction phase shall not create any adverse effect on the neighboring 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.
- iv. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste (0.4 ton/day) shall be segregated into wet garbage and inert materials.
- v. All non-biodegradable waste shall be handed over the authorized recyclers for which a written lie up must be done with the authorized recyclers.
- vi. 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.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction materials quantity. These include fly ash brick, hollow bricks, AACs, Fly Ash Lime Gypsum block, compressed earth blocks and other environmental friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25<sup>th</sup> January, 2016 Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the construction and Demolition Rules, 2016.
- x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.

#### **VII Green Cover**

- i. Total 1,000 trees shall be planted in the area of 8848.00 m<sup>2</sup> (10.62 % of total plot area) within the project site & addition plantation of 10,000 trees as prescribed by the committee through Miyawaki technique in the minimum 2.00 ha through the consultation with DFO. For which proposed Rupees 60 lacs in the EMP.

- ii. There are total 698 no. of trees (vide letter no 4036 dated 27.09.2021) in which 72 trees will be transplanted for which PP has floated a tender & 68 trees will be felled down through the permission of DFO, Gwalior.
- iii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should included 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.
- iv. Where the trees need to be cut with prior permission from the concerned local Authority, Compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- v. Topsoil should be stripped to depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stack plied appropriately in designated areas and reapplied during plantation of the proposed vegetations on site.

#### **VIII Transport**

- i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public and private network. Road should be designed with due consideration for environment and safety of users. The road system can be designed with these basic criteria.
  - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic
  - b. Traffic calming measures.
  - c. Proper design of entry and exit points
  - d. Parking norms as per local regulation
- ii. 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.
- iii. A detailed traffic management and traffic decongesting plan shall be drawn up to ensure that the current level of service of the road within a 05 Kms radius of the project as maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of the 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 and the PWD/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.

#### **IX Human health issues**

- i. 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.
- ii. For indoor air quality the ventilation provisions as per National Building Code of India.
- iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implementation.
- iv. Provision 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, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v. Occupational health surveillance of the workers shall be done on a regular basis.
- vi. A First Aid Room shall be provided in the project both during construction and operations of the project.

#### **X EMP & Corporation Environment Responsibility**

- i. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The Environmental policy should prescribe for standard operating procedures to have proper checks and balance and to bring into focus any

infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the Environmental/forest/wildlife norms/conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six monthly reports.

- ii. A separate Environmental Cell both at the project and company head quarter with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- iv. For Environment Management Plan PP has proposed Rs. 1000 Lacs as capital and Rs. 109 Lacs as recurring cost for this project.
- v. For this project PP has proposed Rs 2,00,000/- (Rupees Two Lacs only) towards the animal wildlife health and habitat development at Gwalior Zoo in consultation with In-charge of Gwalior Zoo under Corporate Environment Responsibility (CER).

#### **XI Miscellaneous**


- i. The project authorities must strictly adhere to the stipulation made by the MP Pollution Control Board and the State Government.
- ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the State Expert Appraisal Committee (SEAC)
- iii. No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- iv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any other Court of Law relating to the subject matter.

#### **Standard Conditions:**

1. All activities / mitigative measures proposed by PP in Environmental Impact Assessment (if applicable) and approved by SEAC must be ensured.
2. All activities / mitigative measures proposed by PP in Environmental Management Plan and approved by SEAC must be ensured.
3. Project Proponent has to strictly follow the direction/guidelines issued by MoEF, CPCB and other Govt. agencies from time to time.
4. The Ministry or any other competent authority may alter/modify the conditions or stipulate any further condition in the interest of environment protection.
5. The Environmental Clearance shall be valid for a period of seven years from the date of issue of this letter.
6. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

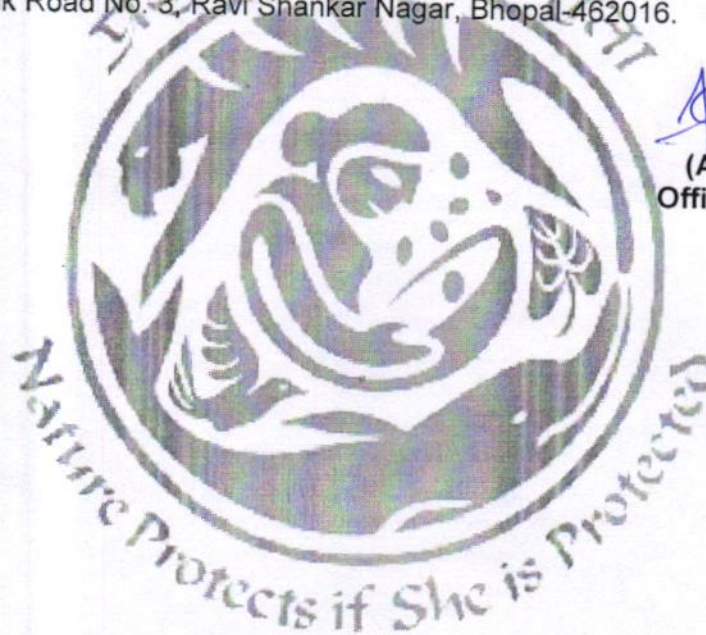
7. The Project Proponent has to upload soft copy of half yearly compliance report of the stipulated prior environmental clearance terms and conditions on 1st June and 1st December of each calendar year on MoEF & CC web portal - <http://www.environmentclearance.nic.in/> or <http://www.efclearance.nic.in/> and submit hard copy of compliance report of the stipulated prior environmental clearance terms and conditions to the Regulatory Authority also
8. The Regional Office, MoEF, Gol, Bhopal and MPPCB shall monitor compliance of the stipulated conditions. A complete set of documents including Environment Impact Assessment Report, Environmental Management Plan and other documents information should be given to Regional Office of the MoEF, Gol at Bhopal and MPPCB.
9. The Project Proponent shall inform to the Regional Office, MoEF, Gol, Bhopal and MP PCB regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
10. In the case of expansion or any change(s) in the scope of the project, the project shall again require prior Environmental Clearance as per EIA notification, 2006.
11. The SEIAA of M.P. 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.
12. The proponent 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 Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company and in the public domain.
13. 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 Regional Office of MoEF.
14. A copy of the environmental clearance shall be submitted by the Project Proponent to the Heads of the Local Bodies, Panchayat and municipal bodies as applicable in addition to the relevant officers of the Government who in turn has to display the same for 30 days from the date of receipt.
15. The Project Proponent shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at website of the State Level Environment Impact Assessment Authority (SEIAA) at [www.mpseiaa.nic.in](http://www.mpseiaa.nic.in) and a copy of the same shall be forwarded to the Regional Office, MoEF, Gol, Bhopal.

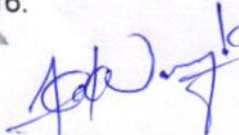
16. Any appeal against this prior environmental clearance shall lie with the Green Tribunal, if necessary, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

  
(Shriman Shukla)  
Member Secretary

Copy to:-

- (1). Principal Secretary, Department of Environment., Government of MP, Mantralaya Vallabh Bhawan, Bhopal.
- (2). Member Secretary, SEAC, Research and Development Wing Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony Bhopal-462016.
- (3). Member Secretary, Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal-462016.
- (4). The Collector, Distt- Gwalior -M.P.
- (5). The Commissioner, Municipal Corporation, Gwalior, MP
- (6). The Jt. Director, Town & Country Planning, GDA Building Ravi Nagar, Gwalior (M.P.)
- (7). Director, I.A. Division, Monitoring Cell, MoEF, Gol, Ministry of Environment & Forest Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110 003
- (8). Director (S), Regional office of the MOEF, (Western Region), Kendriya Paryavaran Bhawan, Link Road No. 3, Ravi Shankar Nagar, Bhopal-462016.
- (9). Guard file.



  
(Alok Nayak)  
Officer-in-Charge