



State Environment Impact Assessment Authority, M.P.
(Ministry of Environment, Forest and Climate Change, Government of India)

Environmental Planning & Coordination Organization

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Bhopal - 462016

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No.: 3981 /SEIAA do
Date: 14.01.2020

To,

Mr. Suresh Chotrani, Partner
M/s SARC Infrastructure and Technology
Near Bawarchi Restaurant, Hoshangabad Road,
Bhopal (M.P.) - 462026

Sub:- Case No 5757/2018: Environmental Clearance for proposed project Pacific Business Centre of M/s SARC Infrastructure and Technology at khasra NO. 378/1 Village Bawadia Kala, Tehsil – Huzur, Distt. - Bhopal (M.P.) Total Land area- 16390.35 sq.m. Total Built up Area – 61334.56 sq.m. by M/s SARC Infrastructure and Technology through Partner, Mr. Suresh Chotrani, Near Bawarchi Restaurant, Hoshangabad Road, Bhopal (M.P.) - 462026 E-mail sarcinfra@yahoo.com Telephone No. 0755- 3245301, 9827055439 Env't. Consultant: In situ enviro care, Bhopal

Ref: Your application dtd. 29.09.2018 received in SEIAA office on 03.10.2018.

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 14th September 2006 and its amendment, on the basis of the mandatory documents enclosed with the application viz., Form I, Form IA, Conceptual Plan, drawings and subsequently submission of EIA 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. SARC has proposed to develop a business centre having office space, hotels, retails & fun n food facilities at Khasra No. 378/1 at Village-Bawadia, Tehsil- Huzur & District Bhopal. The Proponent is M/s SARC Infrastructure and Technology through Mr. Suresh Chotrani, Partner, Near Bawarchi Restaurant, Hoshangabad Road, Bhopal (M.P.)
- ii. As per the approval of T & CP Bhopal (S. No. 01/L.P. 53/ Nagrani/ GKA/2007 dated 22/03/2007) the total land area is 16,390.35 sq.m at Village-Bawadia, Tehsil-Huzur & District Bhopal (M.P.) The total built up area proposed by PP is 61334.56 sq.m The project comes under 8 (a) category (B) of schedule of EIA Notification, 2006 as the total construction is between 20,000 sq.m. & 1,50,000 sq.m
- iii. There are no wildlife sanctuaries, national parks, elephant corridors or archaeological monuments within the project area. The nearest forest patches are Bhopal RF which is 9.1 km in SW direction and Van Vihar National park which 8.1 km in NW direction from the project site.

- iv. The Environmental Impact Assessment Notification dated 14th September 2006 as amended to date, states that all project under Item 8(a) shall be appraised as Category B and requires environment clearance from State Environment Impact Assessment Authority. However the project is a case of violation on account of not securing prior environment clearance before starting the construction activities at site. The construction work was started at site and before the application was submitted to MPSEIAA for grant of prior environmental clearance.
- v. Regarding land documents PP has submitted Khasra Panchsala 2014-15 according to which land ownership is in the name of M/s SARC Infrastructure and Technology through Partner, Shri Jayesh Duggal S/o Late shri V.M. Duggal. PP has also submitted partnership deed (dtd.25.07.2008) which is executed between M/s SARC Infrastructure and Technology and eighteen members.
- vi. The main source of water supply will be Municipal Water Supply. The total water requirement is approx. 225.5 KLD. PP has submitted NOC (vide letter, dated 23.05.2015) for supply of fresh water from Municipal Corporation, Bhopal.
- vii. Total waste water generation from the project will be 170 KLD. The wastewater will be treated in the STP capacity 170 KLD provided within the complex and the treated wastewater 153 KLD will be reused for flushing; horticulture; DG cooling & recreational purposes and rest is discharged into the sewer in rainy season. PP has been obtained NOC from Bhopal Municipal Corporation vide letter dated 23.05.2015
- viii. The solid waste generated from project will be mainly domestic as well as agricultural waste and the quantity of the waste will be 1.86 TPD (1.02 TPD Biodegradable and 0.84 TPD Non-biodegradable). Solid Waste disposal permission has been obtained from Municipal Corporation, Bhopal vide letter no. S.164/SW/2015 dated 02/07/2015.
- ix. For Firefighting PP has proposed External fire hydrant system, hose pipes, pumps with control panel, overhead tanks, first aid, fire extinguishers, sand buckets, Manual and automatic fire alarm, main security room etc. In addition of these following provision has been also made for firefighting:-
 - The D. G. Set proposed is kept ideal for Fire lift & Fire pumps.
 - It is assumed that maximum 02 Fire pump will be start in case of fire at any flat. Thus, maximum fire pump power consumption capacity = 22 KW (For 900 L/min capacity).
 - Total power requirement will be = 25.75 KW. Total No. of Lift: 1 No. Connected load of all Fire Lift = 12 KW x 1 = 12 KW.
 - Total minimum power requirement for fire emergency will be = 37.75 KW. Proposed Capacity of D. G. Set will be = 125 kVA & which is adequate for any emergency
 PP has also obtained fire fighting NOC issued on 14.11.13 from Municipal Corporation Bhopal.
- x. After the completion of the project and rainwater harvesting structures, there will be total ground water recharge would be 12090.839 m³/annum. The harvested water will be used for artificial recharge and will not be stored. A network of 02 no. percolation wells has been proposed for artificial recharge of ground water.
- xi. The maximum height of the building is 18 m. PP has proposed to provide 12 m road width, Front MOS 7.50.0 m and side / rear MOS 6.0 m.
- xii. PP has proposed total parking area for 652 ECS (stilt parking- 193, open- 28 ECS and Basement- 431 ECS).

xiii. The power requirement for the commercial project is 4765 KW which will be supplied by Madhya Pradesh State Electricity Board (MPSEB). There is a provision of eight no. of DG sets (2 DGs of 1010 kVA, 2 DGs of 500 kVA, 2 DGs of 625 kVA & 2 DGs of 250 kVA) will be installed within the project periphery. The DG set will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion. For energy conservation measures PP has proposed as follows:-

- Passive solar refers to the use of Sun's energy for the heating and cooling of living spaces.
- The orientation of the building will be done in such manner that most of glazed areas will face north and east.
- Lesser opening will be provided on the west facing walls.
- Landscape and greens areas will be so spaced to cool the surrounding environment, which will reduce energy consumption.
- Using electronic ballast for discharge lamps.
- Use of Solar backed LED landscape lights instead of par lamps.;
- Solar lighting will be provided in open areas.
- Use of T5 lamps instead of normal fluorescent lamps in basement.

xiv. PP has proposed suitable total 3041.26 sq. m area shall be developed as green area which will be around 18.56 % under tree plantation within the residential plots along the roads. . 75 Nos trees already planted and remaining is under planning.

xv. As per SEAC recommendation PP has submitted the remediation plan and natural community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation in the tune of suggested guidelines by the committee, with the supported by documentary proofs, such as bills, CA audit, certificates, photographs, prescribed various undertakings. The remediation plan is as given below:

Environmental Factors/Attributes	Remedial Plan/ Augmentation Plan/ Remarks	Remedial Cost		Environmental Management Plan	EMP Cost		REMARKS
		Capital Cost	Recurring Cost		Capital Cost	Recurring Cost (per annum)	
Land use as per Approved Master Plan by TNCP, Bhopal	Broken land is as per master plan approved by T&CP (enclosed land use area breakup & Undertaking NO VIOLATION	-	-	Project cost comprising land and machinery cost	2,25,00,000	9,87,120	T & CP Letter No. 01/L.P. 53/ Nagrani/ GKA/2007 dated 22/03/2007
Baseline Environmental Quality	All the parameters are in the comfort zone in one season EIA study Monitoring data from 2010-19 is pending @ 9000/ year *9 Years (2	--	135000 (amount may be proposed for additional plantation)	-	-	15000	PP has done EIA study. All baseline data results are found satisfactory.

Case No. 5757/2018

Issued vide letter no. dated

Case No.: To be quoted in registered cases for correspondence

	Air, 2 noise , 1 water)						
B) Ground Water	No new ground bore well is done for construction purpose. NO VIOLATION			Not applicable, till date no bore well for ground water tapping is proposed.			For operational phase builder has applied to CGWA for backup water supply from Bore well.
D) Air	Water sprinkling had been done as per terms & condition of the work order agreements (3 water tankers/day)	-	-	Construction period = 3 years, Working Day = 600 day Per day water requirement = 12000 KLD (3 Tanker @ 250/ tanker)		4,50,000.00	All bills submitted
f) Noise & Vibration	Site was fully barricaded at the time of construction All modern and new machinery was used at site. Total RMC had been used.	-	-	All machines and new machinery will be used on site			Bills submitted in hard copies.
g) Socio economy & Health	-	-	-	-	-		Done in EIA study
g.a. Occupational Health checkup for 15 Workers	Initial Medical Examination (IME) for 15 workers Deployed on site.	-	135000 (amount may be proposed for plantation)	Initial Medical Examination (IME) for 15 workers	-	15000	Total Calculated value for occupational health and checkup, PPE's and Worker's Shelter have been covered under remedial cost.
g.b. Personal Protection Equipment's	Helmet & other PPE's has been Provided to the workers (15X 1200X 3)	-	54000 (amount may be proposed for plantation)	Helmet, Jackets ,hand gloves & Boots will be Provide to 15 Workers	18000	5000	
g. c. Shelter and Sanitation for 15 workers	Temporary shelter & Mobile toilet has been provided to the workers. Initially it was not there. Installed	-	25000 (amount may be proposed for plantation)	Provision of Temporary shelter & Mobile toilet will be extended in numbers during the time of construction	-	-	

	after 1.5 year of construction			for 15 workers			
Tree Felling	--			No tree felling is proposed.			No tree felling is done.
Tree plantation	Total 250 trees planted & development of landscaping area	755000	-	landscaping development	-	60000	All remedial cost will be utilized for left over plantation & further development of additional landscaping.
Environment policy	Policy is part of Terms & Condition of mutual Agreement	-	-	-	-	-	Policy is part of Terms & Condition of mutual Agreement
Ground Water Classification	NOT APPLICABLE	-	-	NOT APPLICABLE	-	Applied	For operational phase builder has applied for CGWA permission for backup water supply from Borewell.
Source of water , Water Requirement ,use of treated waste Water	Water demand fulfill by the daily basis tankers. 170 KLD STP has been installed under 31% construction done till date. Dual plumbing is done and operational	-	-	Source of Waste Water is from Municipal Corporation. 170 KLD STP has been installed under 31% construction done till date.	2350000	235000	Already obtained Municipal Water supply permission vide letter no. 1217/PM/JNNURM/W S/2015 dated 23/05/2015
Rain Water Harvesting	1 No. Rain water harvesting pit has been constructed for the 31% of construction	--	100000 (amount may be proposed for plantation	Total 2 nos. of pits are proposed on site for operation phase	55000	5500	--
Solid Waste Generation Treatment	Currently stacked within the premises will be	168000	-	Solid Waste will be revised in proposed boundary wall	--	16800	MSW NOC is attached with hard copy reply. Vide letter

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	revised in proposed boundary wall, stone pitching & retaining walls on site			& stone pitching to reduce RCC work on site			no. 169/SWA.V. /15 dated 02/07/2015
Energy conservation & Energy Efficiency (LED bulb & Solar System)	Solar light proposed upto 10 KW.	500000	--	Provisional of the solar panels for streets lighting & common areas and LED light for commercial unit	--	50000	We have proposed Solar Power of 10 KW.
Parking & Roads	Approach road already exists sufficient space excises for Parking	-	-	A+B Block Parking Area - 21,854.24 Sq.mt., Open parking - 700 Sq.mt., Total Parking Area = 22,554.24 Sq.mt. and Road & Paved Area - 5879.68 Sq.mt.	--	--	All adequate parking facilities have been provided as per T&CP norms.
Transportation of materials for construction	Till date 31% construction have been done. Some miscellaneous transportation work had not been done in appropriate manner.	-	1,00,000 (amount may be proposed for plantation) (only 31% construction has been completed till date)	Storage hall/service yard will be for materials stacking during further 69% construction.	--	--	Some miscellaneous transportation work had not been done in appropriate manner. Hence PP is proposing some rounded amount in remediation cost.
Disaster Management Plan	-	-	-	Centralized control room with ERP system	--	--	All fire & safety facilities have been provided for the 31% constructed area.
a) Fire	Machines were equipped with their fire extinguishing equipments. Till date on 31% construction have been	-	-	Fire fighting organizing and arrangement: External fire hydrant system, hose pipes, pumps with control panel, overhead tanks, first	6741000	1,34,820	All fire & safety facilities have been provided for the 31% constructed area.

	done			aid, fire extinguishers, sand buckets, Manual and automatic fire alarm, main security room etc.			
		14,23,000/-	5,49,000/-		91,64,000/-	987120/-	
	Total Capital cost for Remedial Plan	Say	14.23 Lacs	Total capital cost for EMP	Say	91.64 Lacs.	
	Total Recurring cost for Remedial Plan	Say	5.49 Lacs	Total Recurring Cost for EMP	Say	09.87 Lacs.	
		Total	19.72 Lacs				

xvi. PP has proposed Rs. 91.64 Lakhs in the EMP as capital cost and recurring cost is Rs. 9.87 Lakhs /Year. Rs. 19.72 Lakhs is proposed as remediation cost for this project. PP has submitted bank guarantee of INR Rs. 19.72 Lakhs towards Remediation Plan as recommended by SEAC which may send to MPPCB.

xvii. Under CER activities PP has proposed as follows:-

Corporate Environment Responsibility (CER) Budget Allocation as per OM F.No.22-65/2017-IA.III dated 1 st May 2018 by MoEF&CC		
CER activities as per notifications	Implementation area	Proposed Budget for CER
Infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, electrification including solar power, solid waste management facilities, avenue plantation etc.	Govt. Primary School Barkhedi Kala Bhopal.	PP has proposed 2% of the project cost (INR 2.25 Crores – Land and Machinery cost) which is approx. 4.50 lakh.

Based on the information submitted at Para i to xviii above and others, the State Level Environment Impact Assessment Authority (SEIAA) considered the case in its 591st meeting held on 20.12.2019 and decided to accept the recommendations of 399th SEAC meeting held on dtd. 30.10.19

Hence, Environmental Clearance is accorded under the provisions of EIA notification dtd. 14th September 2006 and its amendments to the Proposed Building Construction Project Pacific Business Centre of M/s SARC Infrastructure and Technology at khasra NO. 378/1 Village Bawadia Kala, Tehsil – Huzur, Distt. - Bhopal (M.P.) Total Land area-16390.35 sq.m. Total Built up Area – 61334.56 sq.m. by M/s SARC Infrastructure and Technology through Partner, Mr. Suresh Chotrani, Near Bawarchi Restaurant, Hoshangabad Road, Bhopal (M.P.) - 462026 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 entire demand of water should be met through Municipal Corporation, Bhopal, there should be 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. PP should ensure disposal of waste water arrangement should be done in such a manner that water supply sources are not impaired.
 - b. PP should ensure linkage with municipal sewer line for disposal of extra treated waste water.
4. **Solid Waste Management:**
 - a. Ensure linkage with Municipal Corporation for final disposal of MSW.
 - b. Adequate measures should be taken to prevent odour emanating from solid waste handling & processing.
5. PP should ensure building height, road width, front MOS and side / rear as per approved layout of T & CP.
6. **For firefighting:-**
 - a. PP should ensure distance of fire station approachable from the project site.
 - b. As per MPBVR, 2012 rule 42 (3) PP should submit necessary drawings and details to the Authority (Nagar Nigam, Bhopal) incorporating all the fire fighting measures recommended in National Building Code 2005. The occupancy permit shall be issued by Nagar Nigam only after ensuring that all fire fighting measures are physically in place. (as per NOC dtd. 14.11.13)
7. **For Rain Water Harvesting, and Storm water management:-**
 - a. PP should ensure the rain water harvesting with 02 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 total parking area for 652 ECS (stilt parking- 193, open- 28 ECS and Basement- 431 ECS).
9. **Green belt :-**
 - a. PP should ensure plantation in an area of, 3041.26 sq.m of area is dedicated for the landscaping purposes by planting 250 trees.
 - b. As a green belt and landscaped area with regular maintenance and also explore the possibility to plant trees of indigenous local varieties like Neem, Peepal, Kadam, Karanj, Kachnaar, Saltree, Gulmohar etc.
 - c. The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised if possible so as to provide protection against particulates and noise.
10. PP should ensure to complete the activities listed under ecological remediation, Natural resource augmentation & community resource augmentation for a total amount of Rs. 19.72 Lakh.

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 for which budgetary allocation (2% of project cost Rs. INR 2.25 Crores Land and Machinery cost) approx. 4.50 lakh has been made. PP should ensure to implement the CER activities in consultation with district administration.
12. PP shall carry out the works assigned under ecological damage, natural resource augmentation and community resource augmentation within a period of six months and submitted to same in MPSEIAA.
13. PP should ensure to submit half yearly compliance report and CSR activity 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, and 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, 2013, 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.

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. Diesel power generating sets as 4770 KVA (2 x 1010 kVA, 2 x 500 kVA, 2 x 625 kVA and 2 x 250 kVA) 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 4770 KVA (2 x 1010 kVA, 2 x 500 kVA, 2 x 625 kVA and 2 x 250 kVA) 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.

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 is 226 KLD out of which 73 KLD is fresh water requirement, 10.5 KLD for landscaping, 107.5 KLD for flushing, 10.5 KLD for domestic water requirement and 153KLD water will be treated by STP.
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be to monitor 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 fires 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. For rainwater harvesting, 02 percolation wells /recharge pits will be constructed for rain water harvesting which shall be having capacity of 17cum.
 - xiv. Mesh will be provided at the roof so that leaves or any other solid waste/debris will be prevented from entering the pit.
 - xv. 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. 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 - 170 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 170 KLD (20 % higher 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. Energy Conservation Techniques can be considered as Space Cooling: External shading prevents solar radiation from entering into the buildings and reduces the cooling load, results to better control of overheating and indoor temperatures. Space cooling load may be reduced by 30% due to proper shading.
- iv. Thermal insulation of buildings external walls and roof reduces the cooling load and improves indoor thermal comfort conditions by lowering heat gains through the building's envelope. Energy consumption in insulated buildings may be 5–30% less than in non-insulated buildings.
- v. Domestic hot water: Solar collectors reduce the annual energy consumption for domestic hot water production by lowering the load covered by electrical or thermal heating. Energy consumption in buildings with solar collectors may be 60–80% less than in buildings with electric heaters.
- vi. 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.
- vii. Energy conservation measures like installation of CFLs/LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.

VI. Waste Management

- i. Total waste generated 1.861TPD, out of which 0.481 TPD as solid waste, 1.02TPD comprises bio-degradable waste these 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 25th 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 3041.26 sq. m2 area shall be developed as green area which will be around 18.56 % under tree plantation within the residential plots along the roads.
- ii. Not tree can be felled/transplant unless exigencies demand. Where absolute necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (Planted).
- 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 stock piled 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.
- Hierarchy of roads with proper segregation of vehicular and pedestrian traffic
 - Traffic calming measures.
 - Proper design of entry and exit points
 - Parking norms as per local regulation
- 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

- 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.
- For indoor air quality the ventilation provisions as per National Building Code of India.
- Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implementation.
- 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.
- Occupational health surveillance of the workers shall be done on a regular basis.
- A First Aid Room shall be provided in the project both during construction and operations of the project.

X. Corporation Environment Responsibility

- 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.
- 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.
- iii. 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.
 - iv. 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.
 - v. PP has proposed Rs. 91.64 Lakhs in the EMP as capital cost and recurring cost is Rs. 9.87 Lakhs /Year for EMP of this project

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. 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.
- v. 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. All parameters listed in Environmental Monitoring Plan approved by SEAC must be monitored at approved locations and frequencies.
4. Project Proponent has to strictly follow the direction/guidelines issued by MoEF, CPCB and other Govt. agencies from time to time.
5. The Ministry or any other competent authority may alter/modify the conditions or stipulate any further condition in the interest of environment protection.

6. The Environmental Clearance shall be valid for a period of seven years from the date of issue of this letter.
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, GoI, 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, GoI at Bhopal and MPPCB.
9. The Project Proponent shall inform to the Regional Office, MoEF, GoI, 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. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained (as and when applicable), by the project proponent from the respective competent authorities.
13. 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, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company and in the public domain.
14. 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.
15. 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.

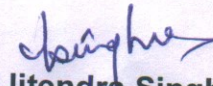
16. The Project Proponent shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy 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 and a copy of the same shall be forwarded to the Regional Office, MoEF, GoI, Bhopal.
17. 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.

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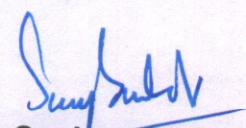
Dated

14.01.2020


(Jitendra Singh Raje)
Member Secretary

Copy to:-

1. Principal Secretary, Urban Development & Environment Deptt. 3rd Floor, Mantralaya Vallabh Bhawan, Bhopal.
2. 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, District Bhopal -M.P.
5. The Commissioner, Municipal Corporation, Bhopal, MP
6. The Jt. Director, Town & Country Planning, Paryavaran Parisar, E-5, Arera Colony, Bhopal, MP
7. Director, I.A. Division, Monitoring Cell, MoEF, GoI, 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.


(Dr. Sanjeev Sachdev)
Officer-in-Charge