

EIC clearance

Item No. 174.07



STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY PUNJAB
Ministry of Environment, Forest & Climate Change, Government of India
O/o Directorate of Environment & Climate Change
MGSIPA Complex, Sector 26,
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No. SEIAA/M.S./2020/3435 Registered/E-mail

Date: 05/11/2020

To

Sh. Rajesh Sharma, (Coo),
M/s QuarkCity India Pvt. Ltd,
A-40A, Focal Point Industrial Area,
Phase VIII B, Mohali (Punjab),
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Subject: Environmental Clearance under EIA notification dated 14.09.2006 for establishment of the project namely "QuarkCity" located at Plot Nos. A-40A & A-45, Focal Point Industrial Area, Phase VIII B, Mohali (Punjab) by M/s QuarkCity India Pvt. Ltd. (Proposal No. SIA/PB/MIS/31373/2017).

This is in reference to your online Proposal No. SIA/PB/MIS/31373/2017 for obtaining Environmental Clearance under the EIA notification dated 14.09.2006 for establishment of the project namely "Quark City" located at Plot Nos. A-40A & A-45, Focal Point Industrial Area, Phase VIII B, Mohali (Punjab) by M/s Quark City India Pvt. Ltd. The proposal has been appraised as per procedure prescribed under the provisions of EIA Notification dated 14.09.2006 on the basis of the mandatory documents enclosed with the application viz., Form-1, 1A, EIA Report and the additional clarifications furnished in response to the observations of the SEAC. The salient features of the project are as under: -

S.No.	Particulars	Details
1)	Name & Location of the project	"QuarkCity" located at Plot Nos. A-40A & A-45, Focal Point Industrial Area, Phase VIII B, Mohali (Punjab)
	Nature of project	Expansion
	Activity as per schedule appended to EIA Notification, 2006.	8(b): Township and Area Development Projects
	Category as per EIA Notification, 2006	Category B1
2)	Total Cost of the project	Rs. 1500 Crores

3)	Total Plot Area, Built-up Area, and Green area	Sr.No.	Description	Area			
		1.	Plot area	207602.123 sq.m. (or 51.30 acres)			
		2.	Built-up area	7,47,088.902 sq.m			
		3.	Green area	45,200 sq.m			
4)	Land use pattern as per the master plan	The project site falls in Industry and Warehouse Zone as per Master Plan of SAS Nagar.					
5)	Population (when fully operational)	Total:38852; (Residential: 4990 and Floating: 33862)					
6)	Water Requirement & source during Operation Phase	Break up of water requirement		Source			
		Fresh Water: 1785 KLD Flushing Water:766 KLD		Groundwater Treated wastewater from STP and WWTP			
7)	Disposal Arrangement of Wastewater in Operation Phase	Total wastewater generated will be 2170 KLD out of which 1404 KLD (grey water) will be treated in WWTP of existing 750, 150 & 32 KLD capacity and Proposed 500 KLD capacity and remaining wastewater 766 KLD (black water which includes 572 KLD existing wastewater generation) will be treated in existing STPs of 800 KLD, 100 KLD , 150 KLD and 48 KLD Reuse of treated wastewater available at outlet of STP of 2127 KLD after considering evaporation losses @ 2% in 2170 KLD and discharge of surplus treated wastewater is given as under:					
		Season	Flushing (KLD)	Green Area (KLD)	Make up water for HVAC cooling tower	Sewer (KLD)	Total (KLD)
		Summer	766	249	620	492	2127
		Winter	766	81	0	1280	2127
		Monsoon	766	23	620	718	2127
8)	Rainwater recharging detail	6433.1 m ³ /hr of rainwater will be collected in 6 existing & 7 proposed rainwater recharging pits. Hence, total of 13 recharging pits shall be provided.					
9)	Parking proposed	8025 ECS					
10)	Solid waste generation and its disposal	a) 8,769 kg/day b) Solid waste is being duly segregated (at source by providing bins) into Bio- degradable, non-biodegradable components and hazardous waste. c) A separate area is earmarked for the segregation of solid waste.					

		<p>d) Biodegradable waste of existing buildings is being composted by vermicomposting, while mechanical composter has also been proposed for the future buildings. Bio-methanation plant of 4,000 kg/day will also be looked into in order to process the biodegradable solid waste generated from the project.</p> <p>e) A shed area of total 678.74 square feet, sufficient to accommodate four vermi beds about 20'.4" x 5'.10" x 3'.3", 24'.9" x 7'.6" x 3'.3", 20'.0" x 7'.6" x 3'.3" & 20'.4" x 6'.0" x 3'.3" has been provided.</p> <p>f) Non-biodegradable or dry waste is being handed over to authorized waste pickers</p> <p>g) Domestic hazardous waste is being disposed off to authorized vendors as per Solid Waste Management Rules, 2016.</p>
11)	Hazardous Waste & E- Waste	Used oil from DG sets will be sold to registered recyclers and E-waste will be disposed of as per the E-waste (Management) Amendment Rules 2018.
12)	Energy Requirements & Saving	<p>a) 30 MW from PSPCL.</p> <p>b) Total 3 DG Sets of 1650 KVA each are already provided for backup of existing buildings and 13 DG Sets of 1250 KVA each are proposed for future buildings for emergency purposes.</p> <p>Energy Saving measures: Solar panel with power generation capacity of 200 KW will be installed on the rooftop area @ 18,730 sqm of the building, within 12 months.</p>

The case was considered by the SEAC in its 188th meeting held on 04.03.2020 wherein, the Committee observed that the project proponent has provided adequate and satisfactory clarifications to the observations raised by it. Therefore, the Committee awarded 'Silver Grading' to the project proposal and decided to forward the case to the SEIAA with the recommendation to grant environmental clearance to the project under EIA notification dated 14.09.2006 for establishment of the project subject to certain conditions in addition to the proposed measures.

Thereafter, the case was considered by the SEIAA in its 174th meeting held on 31.10.2020. The SEIAA observed that the case stands recommended by SEAC and the Committee awarded 'Silver Grading' to the project proposal. The Authority looked into all the aspects of the project proposal in detail and was satisfied with the same.

Therefore, the Authority decided to accept the recommendations of SEAC and grant Environmental Clearance for the expansion of Integrated Township namely "Quark City" having a built-up area of 7,47,088.902 sqm in total land area of 207602.123 sqm (or 51.30 acres) located at Plot Nos. A-40A & A-45, Focal Point Industrial Area, Phase VIII B, Mohali (Punjab) as per the details mentioned in the Form 1, 1A, EMP & subsequent presentation /clarifications made by the project proponent and his consultant with, proposed measures and with the conditions as recommended by SEAC & certain amendments therein & agreed by the project proponent:

Accordingly, SEIAA, Punjab hereby accords Environmental Clearance for the above project under the provisions of EIA Notification dated 14.09.2006 and its subsequent amendments, subject to proposed measures and strict compliance of terms and conditions as follows:

Special conditions

- i) No industry covered under Category "A" and "B" falling in the Schedule appended to the EIA notification, 2006 (as amended from time to time) shall be allowed to be established except category under 8 (a) and 8(b) in Integrated Township namely "Quark City" located at Plot Nos. A-40A & A-45, Focal Point Industrial Area, Phase VIII B, Mohali. However, other industries (not covered in the EIA notification, 2006), although categorized as Orange, Green and White as per the PPCB classification are allowed to be established.
- ii) Orange, Green and White category of industries such as Information Technology, Business processes outsourcing, Computer software development; Knowledge Park; Assembly and repair of computer hardware and electronic equipment; Printing, publishing and allied industries; Packing of dried foodstuff; Warehouse except for storage of chemicals and hazardous storage, etc., are allowed to be set up as per the layout plan approved by the GMADA. Further, no red category of industry shall be allowed to be established.
- iii) Each individual industry or project will obtain mandatory permissions like Consent to Establish, Consent to Operate and Hazardous Waste authorization under the pollution control laws from the Punjab Pollution Control Board.
- iv) No water-intensive industries shall be allowed to establish and plots will be allotted to those Industries which will achieve Zero Liquid Discharge.
- v) High Air Polluting industry like cement grinding units, Induction (more than 500 kgs/ heat)/ Cupola furnaces/ Reheating Rolling Mills, Brick Kilns, Salla Plants, etc. shall not be allowed to be established.
- vi) All DG sets shall be equipped with canopies.
- vii) The project proponent shall provide Piezometers at the project site as per the CGWA guidelines.
- viii) The individual industry/plot holder shall not install any groundwater abstraction structure without permission from the CGWA or competent authority.
- ix) In case of future requirements, no groundwater will be abstracted by "Quark City" without obtaining NOC from competent authority.

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 buildings due to earthquakes, adequacy of firefighting equipment, etc. as per National Building Code including protection measures from lightning, etc.
- iii) The project proponent shall obtain forest clearance under the provisions of the Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

- iv) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- v) The project proponent shall obtain Consent to Establish / Operate under the provisions of the Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.
- vi) The project proponent shall obtain the necessary permission for drawl of ground water/ surface water required for the project from the competent authority.
- vii) 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.
- viii) 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.
- ix) The provisions of the Solid Waste (Management) Rules, 2016, E-Waste (Management) Rules, 2016, Construction & Demolition Waste Rules, 2016 and the Plastics Waste (Management) Rules, 2016 shall be followed.
- x) The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xi) The project site shall confirm to the suitability as prescribed under the provisions laid down under the master plan of respective city/ town. For that, the project proponent shall either to submit the NOC/ land use conformity certificate from Deptt. of Town and Country Planning or other concerned Authority under whom jurisdiction, the site falls.
- xii) Besides above, the project proponent shall also comply with siting criteria / guidelines, standard operating practices, code of practice and guidelines if any prescribed by the SPCB/CPCB/MoEF&CC for such type of projects.
- xiii) The project proponent shall get the layout plans approved from the Competent Authority for the activities / establishments to be set up at project site in consonance of the project proposal for which this environment clearance is applied.

II. Air quality monitoring and preservation

- i) Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- 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 (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.

- iv) Diesel power generating sets 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 walls all around the site (at least 3m height or 1/3rd of the building height and maximum upto 10m). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi) No Excavation of soil shall be carried out without adequate dust mitigation measures in place.
- vii) No loose soil or sand or construction & demolition waste or any other construction material that causes dust shall be left uncovered.
- viii) No uncovered vehicles carrying construction material and waste shall be permitted
- ix) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- x) Grinding and Cutting of building material in open area shall be prohibited. Wet jet shall be provided for grinding and stone cutting.
- xi) Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- xii) All construction and demolition debris shall be stored at the site within earmarked area and road side storage of construction material and waste shall be prohibited. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- xiii) 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.
- xiv) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- xv) For indoor air quality the ventilation provisions as per National Building Code of India.
- xvi) Roads leading to or at construction site must be paved and blacktopped (i.e. metallic road)

- xvii) Dust Mitigation measures shall be displayed prominently at the construction site for easy public viewing.
- xviii) Construction and Demolition Waste Processing and Disposal site shall be identified and required dust mitigation measure be notified at the site.

III. Water quality monitoring and preservation

- i) The natural drain system should be maintained for ensuring unrestricted flow of water.
- ii) 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.
- iii) Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iv) The total water requirement for the project including the demand for swimming pool and landscaping in the summer season will be 3420 KLD, out of which 2551 KLD shall be met through groundwater and remaining through recycling of treated wastewater. Total freshwater use shall not exceed the proposed requirement as provided in the project details.
- v) a) The total wastewater generation from the project will be 2170 KLD, which will be treated in WWTP of capacity 750, 150, 32 (existing) & 500 KLD (additional proposed) and STP of capacity 800, 100, 150 & 48 KLD (Existing), within the project premises. However, 2127 KLD treated wastewater will be available at the outlet of STPs after considering evaporation losses. As proposed, reuse of treated wastewater and discharge of surplus treated wastewater shall be as under: -

Sr. No.	Season	Flushing (KLD)	Green Area (KLD)	Make up water for cooling Tower (KLD)	Sewer (KLD)	Total (KLD)
1.	Summer	766	249	620	492	2127
2.	Winter	766	81	0	1280	2127
3.	Rainy	766	23	620	718	2127

- b) Storage tank of adequate capacity shall be provided for the storage of treated wastewater and all efforts shall be made to supply the same for construction purposes.
- c) During construction phase, the project proponent shall ensure that the waste water being generated from the labour quarters/toilets shall be treated and disposed in environment friendly manner. The project proponent shall also exercise the option of modular bio-toilets or will provide

proper and adequately design septic tanks for the treatment of such waste water and treated effluents shall be utilized for green area/plantation

- vi) The project proponent shall ensure safe drinking water supply to the habitants. Adequate treatment facility for drinking water shall be provided, if required.
- vii) 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.
- viii) A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- ix) At least 20% of the open spaces as required by the local building bye-Laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- x) Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- xi) The respective project proponent shall discourage the installation of R.O. plants in their projects in order to save the wastage in form of RO reject. However, in case the requirement of installing RO plant is utmost necessary then the rejected stream from the RO shall be separated and shall be utilized by storing the same within the particular component i.e. (Tower/Mall) or in a common place in the project premises.
- xii) The project proponent shall also adopt the new/innovating technologies like less water discharging taps (faucet with aerators)/urinals with electronic sensor system /water less urinals / twin flush cisterns/ sensor based alarming system for overhead water storage tanks and make it a part of the environmental management plans / building plans so as to reduce the water consumption/ground water abstraction in their Building Construction & Industrial projects.
- xiii) The project proponent will provide plumbing system for reuse of treated wastewater for flushing/ HVAC/ other purposes etc. and colour coding of different pipe lines carrying water/wastewater from different sources / treated wastewater as follows:

Sr. No.	Nature of the Stream	Color code
a)	Fresh water	Blue
b)	Untreated wastewater from Toilets/ urinal & from Kitchen	Black
c)	Untreated wastewater from Bathing/shower area, hand washing (Washbasin / sinks) and from Cloth Washing	Grey

d)	Reject water streams from RO plants & AC condensate (this is to be implemented wherever centralized AC system and common RO has been proposed in the Project). Further, in case of individual houses/establishment this proposal may also be implemented wherever possible.	White
e)	Treated wastewater (for reuse only for plantation purposes) from the STP treating black water	Green
f)	Treated wastewater (for reuse for flushing purposes or any other activity except plantation) from the STP treating grey water	Green with strips
g)	Storm water	Orange

- xiv) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xv) A rainwater harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built-up area and storage capacity of minimum one day of total freshwater requirement shall be provided. Thus, 13 nos of rainwater harvesting recharge pits (with dual-bore) shall be provided for groundwater recharging as per CGWA norms. In areas where groundwater recharge is not feasible, the rainwater should be harvested and stored for reuse. The groundwater shall not be withdrawn without approval from the Competent Authority.
- xvi) All recharge should be limited to shallow aquifer.
- xvii) No ground water shall be used during construction phase of the project. Only treated sewage/wastewater shall be used. A proper record in this regard should be maintained and available at site.
- xviii) 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.
- xix) 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.
- xx) Sewage shall be treated in the STP with tertiary treatment. STP shall be installed in a phased manner viz a viz in the module system designed in such a way so as to efficiently treat the wastewater with an increase in its quantity due to rise in occupancy. The treated effluent from STP shall be recycled/reused for flushing, AC make up water and gardening. No treated water shall be disposed of into the municipal storm water drain.
- xxi) No sewage or untreated effluent water would be discharged through storm water drains. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP)

shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on-site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by the Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

- xxii) Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem 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, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
- xxiv) Softener shall be installed for treated wastewater to make it fit (TDS < 10 mg/l) for HVAC cooling and the cost of the same will be included in the Environment Management Plan.
- xxv) The wastewater generated from swimming pool(s) shall not be discharged and the same shall be reused within the premises for purposes such as horticulture, HVAC, etc

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 monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.
- 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. Buildings in the States 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 LEDs 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 to meet electricity generation equivalent to 1 % of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
 - vi) Solar power by utilizing at least 30% of the roof top area 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.
 - vii) As proposed, a solar plant of capacity 200 KW, shall be installed on the rooftop of the building, within 12 months. Also, solar lights in the common area will be installed for external lightening within a month time.

VI. Waste Management

- i) A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- ii) 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.
- iii) Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- iv) Bio methanation Plant of minimum capacity of 4,000 kg/day to treat biodegradable waste must be installed. As proposed, an amount of Rs 1.4 Crores shall be kept in the Environment Management Plan for the same.
- v) All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie 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 material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.

- viii) Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- 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) No tree can be felled/transplant unless exigencies demand. Where absolutely 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).
- ii) Minimum 5000 trees will be planted and maintained in the project site. Also, the Green area of 45,200 sqm. (i.e. more than the permissible green area requirement) shall be maintained on the designated sites and along the roadsides. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii) 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.
- iv) Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.
- v) The project proponent shall not use any chemical fertilizer /pesticides /insecticides and shall use only Herbal pesticides/insecticides and organic manure in the green area.
- vi) The green belt along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for residential land use.

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 networks. 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 decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- iv) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.

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 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv) Occupational health surveillance of the workers shall be done on a regular basis.
- v) A First Aid Room shall be provided in the project both during construction and operations of the project.

X. Corporate Environment Responsibility

- i) 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 project proponent shall adhere to the commitments made in the proposal for spending Rs. 375 Lakhs on CER activities mentioned as per details given below:

S. No.	Activities	Time plan							Total expenditure (In 7 years)
		1	2	3	4	5	6	7	

1.	Adoption of Village Badi Naggal								
	• Setting up of sewerage system.	35	30	20	-	-	-	-	85
	• Construction & maintenance of Village road	-	-	-	-	35	-	-	35
	• Maintenance of school building.	-	-	-	-	-	-	25	25
	• Digging of borewell and providing drinking water supply to the villagers.	-	-	-	-	-	-	10	10
	• Installation of solar panel on the govt. buildings in the village	-	-	-	-	-	25	-	25
	• Wastewater treatment of village pond (to be provided by the Department of Rural Developments and Panchayats, Govt. of Punjab), as per the design evolved by Punjab Pollution Control Board.	-	-	-	35	-	-	-	35
2.	Adoption of Village Choti Naggal								
	• Setting up of sewerage system.	-	35	10	-	-	-	-	45
	• Providing drinking water supply to the villagers.	-	-	-	-	-	-	10	10
	• Wastewater treatment of village pond as per the design evolved by Punjab Pollution Control Board.	-	-	35	-	-	-	-	35
3.	Wastewater treatment of village pond as per the design evolved by Punjab Pollution Control Board in Village Padol	-	-	-	-	35	-	-	35
4.	Wastewater treatment of village pond as per the design evolved by Punjab Pollution Control Board in Village Mullianpur	-	-	-	-	-	35	-	35

Total amount to be spent on CER	35	65	65	35	70	60	45	375
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*Note: - The amount to be spent on CER activities shall be proportionate to the amount spent on project & such activities shall run parallel to the project execution. All the activities must be completed with the completion of the project

- ii) 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 balances 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 report.
- iii) A separate Environmental Cell both at the project and company head quarter level, 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 the 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 accounts and not to be diverted for any other purpose. The project proponent shall spend a minimum amount of Rs 3385 Lacs towards the capital cost in the construction phase of the project including the environmental monitoring cost and shall spend a minimum amount of Rs 41 Lacs/annum towards recurring cost in operation phase of the project including the environmental monitoring cost. The entire cost of the environmental management plan will continue to be borne by the project proponent until the responsibility of the environmental management plan is transferred to the occupier/resident's society under proper MOU under intimation to SEIAA, Punjab. Year-wise progress of implementation of the action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

XI. Validity

- i) This environmental clearance will be valid for a period of seven years from the date of its issue or till the completion of the project, whichever is earlier.

XII. Miscellaneous

- i) The project proponent before allowing any occupancy shall obtain completion and occupancy certificate from the Competent Authority and submit a copy of the same to the SEIAA, Punjab.
- ii) The project proponent shall comply with the conditions of CLU.
- iii) The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.

- iv) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- v) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- vi) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at Environment Clearance portal.
- vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- viii) The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x) 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 Expert Appraisal Committee.
- xi) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xii) 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.
- xiii) The SEIAA/Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv) The SEIAA/ Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv) The Regional Office of this Ministry and Punjab Pollution Control Board shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.
- xvi) 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.

- xvii) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Special conditions

- i) No industry covered under Category "A" and "B" falling in the Schedule appended to the EIA notification, 2006 (as amended from time to time) shall be allowed to established except category under 8 (a) and 8(b) in Integrated Township namely "Quark City" located at Plot Nos. A-40A & A-45, Focal Point Industrial Area, Phase VIIIB, Mohali. However, other industries (not covered in the EIA notification, 2006), although categorized as Orange, Green and White as per the PPCB classification are allowed to be established.
- ii) Orange, Green and White category of industries such as Information Technology, Business processes outsourcing, Computer software development; Knowledge Park; Assembly and repair of computer hardware and electronic equipment; Printing, publishing and allied industries; Packing of dried foodstuff; Warehouse except for storage of chemicals and hazardous storage, etc., are allowed to be set up as per the layout plan approved by the GMADA. Further, no red category of industry shall be allowed to be established.
- iii) Each individual industry or project will obtain mandatory permissions like Consent to Establish, Consent to Operate and Hazardous Waste authorization under the pollution control laws from the Punjab Pollution Control Board.
- iv) No water-intensive industries shall be allowed to establish and plots will be allotted to those Industries which will achieve Zero Liquid Discharge.
- v) High Air Polluting industry like cement grinding units, Induction (more than 500 kgs/heat)/ Cupola furnaces/ Reheating Rolling Mills, Brick Kilns, Salla Plants, etc. shall not be allowed to established.
- vi) All DG sets shall be equipped with canopies.
- vii) The project proponent shall provide Piezometers at the project site as per the CGWA guidelines.
- viii) The individual industry/plot holder shall not install any groundwater abstraction structure without permission from the CGWA or competent authority.
- ix) In case of future requirements, no groundwater will be abstracted by "Quark City" without obtaining NOC from competent authority.

de **Member Secretary**
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Endst. No. 3436-3444 E-mail

Date 05/11/2020

A copy of the above is forwarded to the following for information & further necessary action please.

1. The Secretary to Govt. of India, Ministry of Environment and Forest, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-office Complex, East Arjun Nagar, New Delhi.
3. The Chairman, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala.
4. The Chairman, Punjab State Power Corporation Ltd, the Mall, Patiala.
5. The Deputy Commissioner, SAS Nagar.
6. The Deputy Director General (C), Ministry of Environment, Forests & Climate Change, Northern Regional Office, Bays No. 24-25, Sector- 31-A, Chandigarh.
7. The Chief Town Planner, Department of Town & Country Planning, 6th Floor, PUDA Bhawan, Phase-8, Mohali.
8. The Joint Director, Ministry of Environment and Forest, Northern Regional Office, Bays No. 24-25, Sector-31-A, Chandigarh. The detail of the authorized Officer of the project proponent is as under:
 - a) Name of the applicant : Sh. Sh. Rajesh Sharma, Chief Operating Officer
 - b) Phone Number : 98729-10352
 - c) Email Id : rsharma@quarkcity.com
9. Monitoring Cell, Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, New Delhi - 110003.


Member Secretary