ROURKELA
SMART CITY LTD.

ROURKELA SMART CITY LTD.
(A SPV OF GOVERNMENT OF ODISHA, RMC & RDA)

Letter No. RSCL/3338/2021 **Date.** 31.05.2021

To,

The Director, Regional Office of MoEF&CC, Bhubaneswar
The Member Secretary, SEIAA, Bhubaneswar
The Member Secretary, SPCB, Bhubaneswar
The Regional officer, SPCB, Rourkela

Sub: Submission of Six-monthly Compliance reports for the projects ''Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)" and

Ref: SEIAA office letter no. 199/SEIAA, dated 27.01.2021

Sir,

With reference to the subject cited above, please find enclosed herewith the Six-monthly Compliance reports of the project ''Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)"under the Smart City Mission Plan of Rourkela Smart City Limited near hockey chowk at Rourkela.

This is for favour of your kind information and necessary action.

Yours Faithfully,

Chief Executive Officer
Rourkela Smart City Limited
Rourkela

: Uditnagar, Rourkela- 769012, Sundargarh, Odisha ☎ : (0661)- 2500 388/2500 239
: rourkelascl@gmail.com : www.rmc.nic.in CIN : U749990R2016PLC026168

Compliance to the conditions stipulated in the grant of Environmental Clearance pertaining to the Project "Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)" of Rourkela Smart City Limited up to 1st June 2021

Sl. No.	EC Conditions	Compliance
General Conditions of Clearance: -		
1.	These stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981. The Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and the EIA Notification, 2006.Consent to Establish / Operate for the project shall be obtained from the State Pollution Control Board.	Consent to Establish is obtained from Odisha State Pollution Control Board under Air & Water Act vide consent order no. 5905/IND-II-CTE-6489, dated 08.04.2021 Copy of CTE Granted is enclosed as Appendix – I.
2.	The project proponent shall ensure that the guidelines for building and construction projects issued vide this Ministry's OM NO.19-2/2013-IA.III dated 9th June 2015, are to be followed to ensure sustainable environmental management.	Noted and being complied.
3.	The approval of the Competent Authority shall be obtained in regard to structural safety of buildings against earthquakes, adequacy of fire fighting equipment as per National Building Code including protection measures from lightening.	Noted. The Structural design and drawings are vetted by IIT Roorkee. Please refer Appendix-XV
4.	The project proponent shall obtain all necessary clearance/Permission from all concerned agencies including Rourkela Municipal Corporation (RMC) before commencement of work.	Noted and being complied.
5.	Provisions shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures which shall be removed after the completion of	Transit houses for construction labours have been constructed. Fuel for cooking, adequate drinking water is being provided. Temporary wash areas have been constructed for labourers and good hygienic conditions are being maintained. Co-friendly toilets have been provided for employees/ construction labours at site. Conventional sanitation facilities have also been constructed and have been connected to mobile septic tanks, which are cleared. First aid facilities are available at the

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	the project.	site.
6.	A First Aid Room in the project both during construction and operations project.	First Aid room is provided at the project site
7.	The Company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.	Not applicable
8.	As per the MoEF&CC, Govt. of India Office Memorandum F.No.22-65/2017-IA.III dated 1st May 2018, the project proponent is required to prepare and implement Corporate Environment Responsibility (CER) Plan. As per para 6(II) of the said O.M. appropriate funds shall be earmarked for the activities such as infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support, and awareness to local farmers to increase yield of crop and fodder, rainwater harvesting, soil moisture conservation works, avenue plantation, plantation in community areas etc. The activities proposed under CER shall be restricted to the affected area around the project. The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.	Not applicable
9.	A copy of Environmental Clearance letter shall be display on the website of the Odisha State Pollution Control Board. The EC letter shall also be displayed at the Regional office, District Industries	Complied. Copy of EC was submitted to The General Manager, District Industries Centre, Rourkela, The Member Secretary, SPCB, Bhubaneswar, The Tahasildar, Rourkela,

	Centre and Collector's Office/Tehsildar's office for 30 days.	The Regional Officer, SPCB, Rourkela Vide our letter no 2628/RSCL/2021, dated 15.02.2021. Please refer Appendix-II
10.	Officials from the Regional Office of MoEF&CC, Bhubaneswar/SPCB, Odisha who could be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection.	Noted and agreed
11.	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, Odisha.	Noted and agreed
12.	The SEIAA, Odisha reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Noted and agreed
13.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act,1980 and the Wildlife (Protection) Act,1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	Not applicable.
14.	The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the SEIAA,	Complied. Newspaper advertisement details: **Newspaper** — **Language** — **Date** New Indian Express — English — 20.02.2021 Dharitri — Odiya — 20.02.2021 Copy of the advertisement was submitted to SEIAA/MoEF&CC, Regional Office, Bhubaneswar/ vide our letter RSCL/2877/2021 dated 26.03.2021. Please refer Appendix-III

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	Odisha. The advertisement shall be made within Seven days from the date of receipt of the Clearance letter and a copy of the same shall be forwarded to the Regional Office of MoEF&CC, Bhubaneswar.	
15.	A copy of the clearance letter shall be sent to concerned Panchayat, Zilla Parisad / Municipal Corporation, Urban Local Body, and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Ssuggestions/ representations were not received while processing the proposal.
16.	The project proponent shall submit/upload six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF&CC, Govt. of India, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely, SPM, RSPM, SO2, NOx (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 project sites in the public domain.	The compliance of stipulated Environmental Conditions will be uploaded in the RMC site. The criteria pollutant levels are display at the project site. Incremental pollution loads on the ambient air quality is being closely monitored and monitoring test reports are enclosed as Appendix- IV
17.	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	Complied. Copy of Form V was submitted to the office of The Member secretary, SPCB, Bhubaneswar, The Regional Officer, SPCB, Rourkela and e-mail To The Director, Regional Office of MoEF&CC, Bhubaneswar vide our letter no RSCL/3044/2021, dated 12.04.2021. Please refer Appendix-V

	company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF&CC, Govt. of India by e-mail.	
Specific Conditions:		
(A)	**Natural Drainage**	
18.	The natural drain system shall not be tampered with. No construction shall be taken up which may obstruct the natural natural drainage through the site. Check dams and other Sustainable Urban Drainage Systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rainwater.	Noted
19.	The permission from competent authority will be obtained to discharge the excess storm water to drain if any.	Noted. Please refer to the request letter to RMC for permission to discharge the excess storm water to drainis attached in Appendix-VI
(B)	**Water Budget and Rainwater Harvesting**	
20.	No ground water shall be extracted for the project work at any stage during the construction phase without obtaining the permission from the Water Resources Department, Govt. of Odisha/CGWB.	Noted.
21.	For meeting the freshwater requirement up to maximum 84 KLD from ground water source necessary prior permission has to be obtained from the Water Resources Department, Govt. OF Odisha/CGWB, failing which no ground water is allowed to be tapped.	We have obtained permission for PHED office for supply of 84 KLD freshwater. Copy of permission from PHED for supply of water is enclosed as Appendix – VII
22.	A certificate shall be obtained from the local body supplying water to this project, separately for ground water and surface water sources to ensure that there is no impact on other users of the locality.	Permission from supply of water is obtained from PHED vide letter no. 1004, dated 07.02.2020 Copy of permission from PHED for supply of water is enclosed as Appendix – VII.
23.	The freshwater usage, water recycling and rainwater harvesting shall be measured to monitor the water balance as projected. The	Noted

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	record shall be submitted to the Regional Office, MoEF&CC and SEIAA, Odisha along with six monthly Monitoring reports.	
24.	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.	Provision of dual plumbing is made for the project.
25.	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.	Noted. The necessary devices shall be utilized for efficient water usage.
26.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	Water demand during construction is reduced by use of pre-mixed concrete, curing agents and other best practices
27.	Any ground water abstraction shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering. The proponent shall also obtain permission from Water Resources Department, Govt. of Odisha for drawal of ground water.	Not required as Permission from supply of water is obtained from PHED vide letter no. 1002, dated 07.02.2020 Copy of permission from PHED for supply of water is enclosed as Appendix – VII.
28.	A complete plan for rainwater harvesting at the proposed site shall be drawn up and implemented. Roof top rain harvesting shall be adopted for the proposed Buildings. The complete rainwater harvesting plan shall be submitted to SEIAA within one month from this date. The proposal shall implement rainwater harvesting pits/structure for artificial ground water recharge and shall be installed as per CGWB guidelines.	Rainwater harvesting for roof runoff and surface runoff shall be implemented as per the proposal submitted and proper maintenance will be provided for all RWH pits. The Rainwater harvesting plan is attached. Please refer Appendix-VIII
(C)	**Solid Waste**	
29.	The provisions of the Solid Waste	The solid and Plastic waste generated shall be

	(Management) Rules, 2016, E-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.	properly collected, segregated, and disposed on regular frequency.
30.	Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Disposal of muck including excavated material during construction phase is not creating any adverse effects on the neighbouring communities. Necessary precautions for general safety and health aspects of neighbouring communities are being taken care of.
31.	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials. Wet garbage shall be composted in Organic Waste Converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from the project will be sent to dumping site.	The separate wet & dry bin has been proposed and the cost for the same has been considered in the cost estimates. All the collected waste shall be handover to Rourkela Municipal Corporation's Solid Waste dept. for managing & treating the waste.
32.	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the solid waste generated from project shall be obtained.	Noted and please refer to the request letter to RMC for permission to discharge the excess storm water to drainAppendix-IX
(D)	**Sewage Treatment Plant**	
33.	In house STP of 80KLD capacity shall be installed before start of the operation phase of the building. Treatment of 100% grey water by decentralized treatment should be done. Treated wastewater from STP of 80 KLD capacity shall be recycled /reused to the maximum extent possible. Discharge of unused treated wastewater shall conform to the norms and standards of the Odisha State Pollution Control Board.	Noted and will be installed and shall be made functional before the completion of Building Complex.

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	Necessary measures should be taken to mitigate the odour problem from STP. The sewage treatment plant shall be made functional before the completion of Building Complex.	
34.	Excess treated water shall be discharged to the drain only after getting the permission from the concerned authority. The proponent shall renovate the existing drain to accommodate the discharge and maintain it perennially. To this effect the proponent has to give a legal affidavit before going for construction activity.	Noted and please refer to the request letter to RMC for permission to discharge the excess storm water to drain Appendix-IX. The existing drain is renovated to accommodate the discharge and ensured to maintain it perennially. Photographs of renovation of existing drain are attached in Appendix-X.
35.	Separate large recharge pits shall be constructed inside the project area to accommodate the rainwater in case the housing project period and the CDP of the Govt. does not synchronize with reference to construction of road and drain.	Not applicable as the project is not Housing project. However, provision of recharge pits is there for ground water recharge.
36.	The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the SEIAA, Odisha before the project is commissioned for operation. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.	STP will be certified by an independent expert and a report in this regard will be submitted to the SEIAA, Odisha before the project is commissioned for operation. Noted and ensured to conduct periodical monitoring of water quality of treated sewage and implement necessary measures to mitigate the odour problem from STP.
37.	Approval of the competent authority shall be obtained for discharging treated effluent/untreated effluents into the public sewer/disposal /drainage systems along with the final disposal points for each.	Noted and will be obtained
38.	No sewage or untreated effluent water would be discharged through storm water drains.	Noted and ensured
39.	The sewerage disposal system of the project shall be kept in proper	Noted and ensured

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	working condition at all times.	
40.	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.	The sludge generated from STP shall be utilized as manure in green belt development area and gardens inside the premises.
(E)	**Energy Conservation**	
41.	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. All buildings shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.	Noted. Energy conservation measures are adopted starting from the operation phase to commissioning.
42.	Energy conservation measures like installation of CFLs / LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs, TFL and LED shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.	Energy conservation measures are adoptedand the project is planned to achieveGRIHA IV rating.
43.	As proposed, solar energy shall be installed to meet electricity generation equivalent to 5% of the demand load or as per the state level/ local building bye-law's	Noted. Use of solar panels shall be considered to the maximum extent possible.

	requirement, whichever is higher. Requirement of ECBC 2017 shall have to be followed and compliance report thereon be furnished.	
44.	Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.	Noted and being taken care of after completion of construction work.
45.	Use of environment friendly materials like bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, compressed earth blocks, and other environment friendly materials. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September 1999 and amended as on 27th August 2003 and 25th January 2016. Ready mixed concrete must be used in building construction.	Noted and Fly ash bricks, AACs- sourced from nearby areas, are being used as building material.
46.	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project shall be submitted.	Noted and please refer to the request letter to WESCO, Rourkela for permission to supply power is attached in Appendix-XI
(F)	**Air Quality Management and Noise Management**	
47.	Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the	Construction site has been adequately barricaded and all the pollution prevention measures have been implemented to prevent dust pollution.

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	building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution. Wet jet shall be provided for grinding and stone cutting. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.	
48.	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask	Construction and demolition debris shall be used for filling low laying areas within the project premises. 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 are provided with dust mask.
49.	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.	Noted and will be implemented.
50.	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall	Acoustically enclosed D.G Sets will be installed with acoustical enclosures and adequate stack height has been provided at the project site which conforms to the rules made under E (P) A 1986

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	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.	prescribed for air & noise emissions standards.
51.	For indoor air quality the ventilation provisions as per National Building Code of India shall be provided.	Noted and will be implemented
52.	Ambient noise levels shall be limited to 55 dBA during day and 45 dBA during night within the residential area. 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 made during construction phase, so as to the stipulated standards by CPCB / SPCB.	To reduce noise level, movement of construction vehicles is carried out during non-peak hours and construction machinery with lesser noise and vibration parameters shall be used. Dust suppression, proper vehicle maintenance, etc to ensure control of dust and noise. Noise monitoring is being closely monitored and monitoring test reports are enclosed as Appendix- IV
(G)	**Green Cover**	
53.	Green belt & avenue plantation of trees over the area of 11483.1m^2(22.21% of the net plot area) shall be done using native tree species/shrubs improving greenery & keeping in view aesthetics conditions in the whole complex. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Professional landscape architects should be engaged to design the green layout to provide for multi-tier plantation and green fencing all around, mitigation various environmental pollutants like dust, noise, emissions etc. A minimum of 1 tree for every 80m^2 of land should be planted and maintained.	Noted and will be done in due course of time.
54.	Rainwater from open spaces shall be collected and reused for landscaping and other purposes. Roof top rainwater harvesting shall be adopted for the proposed	Rainwater harvesting for roof runoff and surface runoff shall be implemented. Please refer to rainwater harvesting proposal in Appendix -VIII

	Buildings. Rainwater harvesting at the proposed site shall be implemented. Before recharging harvesting run-off, pre-treatment must be done to remove suspended matter, oil, and grease.	
(H)	**Topsoil Preservation and Reuse**	
55.	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.	Topsoil excavated during construction is being stockpiled in designated areas within the premises of the project site and will used for landscape development and plantation
(I)	**Traffic & Transportation**	
56.	Comprehensive mobility plan, as per Ministry of Urban Development best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria. • Hierarchy of roads with proper segregation of vehicular and pedestrian traffic. • Traffic calming measures. • Proper design of entry and exit points. • Parking norms as per local regulation	Noted and will be prepared
57.	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 01 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 01	Detailed traffic management and traffic decongestion plan have been carried and attached in Appendix-XII

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	Kms radius of the site.	
58.	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.	Vehicles with valid "pollution under Control" certificate are allowed to enter to the site. Vehicles are checked periodically
59.	A dedicated entry/exit and parking shall be provided for commercial activities.	Separate entry and exit point to the project has been provided with 10 (ten) meter wide bituminous road to avoid traffic congestion. Sufficient parking space has been provided inside the premises at the area earmarked for parking.
60.	Barricades shall be provided around project boundary.	The project boundary is properly barricaded.
61.	Speed of the vehicles shall be restricted upto 15 kmph by erecting speed bumps at regular intervals at project site and proper signage shall be provided for guided vehicular movement and speed restrictions.	Speed of the vehicles is restricted upto 15 kmph and proper signage are provided for guided vehicular movement and speed restrictions.
62.	Parking shall be prohibited on the access road to the proposed project site.	Noted and no vehicles are parked on the access road to the proposed project site.
63.	Footpath shall be seamless with sufficient width.	Noted and will be provided
64.	No vehicles shall be allowed to stop and stand in front of the gate on main access.	Noted and ensured that no vehicles are allowed to stop and stand in front of the gate on main access
65.	A buffer of minimum 10 m shall be maintained between the entry/exit gate and the road to avoid traffic congestion.	Noted and will be implemented
66.	The Traffic Management Plan prepared by the proponent shall be duly validated and certified by the State Concerned Competent Authority and shall have also their consent before implementation.	Noted and will be duly validated and certified from the State Concerned Competent Authority and shall have also their consent before implementation.
(J)	**Environmental Management Plan**	
67.	An Environmental Management Plan (EMP) shall be prepared and implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and	Noted. A copy of EMP is enclosed in Appendix-XIII A dedicated Environment Monitoring Cell with defined functions and responsibility will be put in place to implement the EMP and the letter for the formation of Environment Cell is given in Appendix-XIV

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	responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rainwater Harvesting, Energy efficiency and conservation, water efficiency and conservation, solid waste management, renewable energy etc. are kept operational and meet the required standards. The environmental cell shall also keep the record of environment monitoring and those related to the environment infrastructure.	
68.	The year wise funds earmarked for environmental protection measures shall be kept in separate account and should be spent accordingly and not to be diverted for any other purpose. Year-wise progress of implementation of action plan for EMP and expenditure shall be reported to the SEIAA, Odisha, Regional Office, MoEF&CC, Govt. of India, SPCB, Bhubaneswar along with the half yearly compliance report	The funds earmarked for the environment protection measures shall be judiciously utilized and shall not be diverted for any other purposes.
69.	It shall be mandatory for the project management to submit six (06) monthly compliance reports on post environmental monitoring in respect of the stipulated terms and conditions in this Environmental Clearance to the State Environment Impact Assessment Authority (SEIAA), Odisha, SPCB &Regional Office of the Ministry of Environmental &Forest, Odisha in hard and soft copies on 1st June and 1st December of each calendar year and the same will be uploaded in the website of the MoEF&CC.	Compliance is carried out as per requirement.

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APPENDIX-I

Tel : 2564033/2563924
EPABX : 2561909/2562847
E-mail: paribesh1@ospcboard.org
Web site : www.ospcboard.org

OFFICE OF THE
STATE POLLUTION CONTROL BOARD, ODISHA

Parivesh Bhawan, A/118, Nilakantha Nagar, Unit-VIII,
Bhubaneswar - 751 012

Through Online/
By Speed Post

No. 5905 /IND-II-CTE- 6489 Date 08-04-2021

CONSENT TO ESTABLISH ORDER

In consideration of the online application no. **3121749** for obtaining Consent to Establish of **rOURkela One of M/s Rourkela Smart City Limited,** the State Pollution Control Board is pleased to convey its Consent to Establish under Section 25 of Water (Prevention & Control of Pollution) Act, 1974 and under Section 21 of Air (Prevention & Control of Pollution) Act, 1981 for **proposed rOURkela One project comprising of Command-and-Control Centre, Auditorium, Convention Hall, Tribal Museum and Open-air Theatre with total built up area of 26956.71 m^2. meter along with installation of DG sets of capacities 2x625KVA+ 1x750KVA+ 1x 600KVA for power back with project cost of ₹ 116.76 Crores, over total land area of Ac.8.43 dec, At-Mouza: RTU/41, Tahasil: Rourkela, near Panposh, Hockey Chowk, Rourkela** (Plot Nos. & Khata Nos. as mentioned in application form) in the district of **Sundargarh** with the following conditions:

GENERAL CONDITIONS:

1. This Consent to Establish is valid for the construction project as mentioned in the application form and for a period of five years from the date of issue of this letter. If the proponent fails to do substantial physical progress of the project within five years then a renewal of this Consent to Establish shall be sought by the proponent.
2. The Project has to apply for grant of Consent to Operate under section 25 / 26 of Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the occupancy and obtain Consent to Operate from this Board.
3. This Consent to Establish is subject to statutory and other clearances from Govt. of Odisha and / or Govt. of India, as and when applicable.

SPECIAL CONDITIONS:

A. GENERAL CONDITIONS:

1. The proponent shall carry out construction activity as per Environmental Clearance granted by SEIAA, Odisha vide No. 227/SEIAA, dated 01.02.2021.
2. The proponent shall earmark the Greenbelt / Green area, Solid and other waste storage area, STP area etc. as per the approved building plan by putting display board at the time

of construction work of the project to secure such land for environmental point of view without diverting the same for other purpose. Same shall be verified at the time of construction work by Regional Officer and/or Head Office of SPCB. Any violation of this condition shall attract legal action and/or withdrawal of Consent to Establish for the project.

3. Single use plastics shall not be used for any short of activity.
4. The proponent shall obtain permission from concerned authority for discharge of excess treated water to outside drain / nallah and the same shall be submitted to the Board at the time of application for grant of Consent to Operate.
5. The proponent shall submit Six Monthly Progress Report every year (i.e. June and December) of construction activity of the project to the Board (at Head Office and Regional Office) for record and verification.
6. The proponent shall obtain permission from Department of Water Resources, Govt. of Odisha for drawl of ground/ surface water.
7. The unit shall obtain NOC from CGWA if the unit will use ground water as prerequisite for getting Consent to Operate of State Pollution Control Board, Odisha.
8. The proponent shall implement the pollution control measures and safeguards as proposed in the Environment Management Plan (EMP) of Project Report.
9. Solar or other Renewable Energy shall be installed to meet electricity generation equivalent to 5% of the demand load.
10. A green belt of adequate width and density preferably with local species along the periphery of the project area shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 20% of the total land area shall be under permanent green cover. The proponent shall ensure the maintenance of green belt throughout the year and for all time to come. It is advised that they may engage professionals in this field for creation and maintenance of the green belt. An action plan for this purpose shall be prepared and shall be submitted accordingly.
11. Adequate drinking water and sanitary facilities shall be provided for construction workers at the site. Provision shall be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase shall be ensured.
12. All vehicles carrying construction materials to the site shall be covered to avoid spreading of dust. Vehicles hired for bringing construction material at site shall be in good condition and shall have valid Pollution Under Check (PUC) certificate and to conform to applicable air and noise emission standards and shall be operated only during non-peaking hours.
13. The project shall use fly ash bricks and other construction materials made out of fly ash in construction.
14. The civil construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the civil construction may carried out with other bricks with prior intimation to the concerned Regional Office of SPC Board. A statement indicating use of fly ash bricks during construction period shall be submitted to the Board quarterly for record.
15. Use of glass shall be reduced by upto 40% to reduce the electricity consumption and load on air conditioning. If necessary, high quality double glass with special reflective coating in windows will be used.

16. Noise shall be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the project shall be restricted to the permissible levels to comply with the prevalent regulations.

17. The proponent shall comply to the provisions of E-waste (Management) Rules, 2016 and shall handover E-waste to authorized collection centers / register dismantlers / recyclers for proper disposal of E-waste.

18. Separate collection bin shall be provided inside the campus for collection of E- waste.

19. The construction and demolition wastes to be generated from the proposed project shall be disposed of in accordance with the provision under "Construction & Demolition Wastes Management Rules 2016".

20. All the plastic waste generated from the premises during construction and commissioning shall be collected and sent for co-processing to the nearby cement kilns.

21. Municipal Solid Waste shall be disposed off as per the Solid Waste Management Rules, 2016 and amendment thereafter.

22. The Board may impose further condition or modify the conditions are stipulated in this order during installation and / or at the time of obtaining consent to operate and may revoke this order in case the stipulated conditions are not implemented and / or information is found to have been suppressed / wrongly furnished in the application form.

B. WATER POLLUTION:

23. The unit shall install STP as per the design parameter and specification submitted along with Consent to Establish application. Under no circumstances, the unit shall change the design parameter / specification of STP as proposed in Consent to Establish application during the installation of STP. Adequacy of STP to be verified at the time of Consent to Operate based on the design parameters / specification submitted along with the Consent to Establish application.

24. Treated wastewater shall be reused for flushing and gardening purpose.

25. The proponent shall keep a provision for establishment of separate STP for kitchen waste water.

26. Water sprinkling facility shall be provided inside the premises.

27. Treated effluent shall be reused maximum extent and surplus treated water if any shall be discharged to existing sewerage line of Rourkela Smart City.

28. Water Sprinkling shall be carried out in stock piles and haulage roads in the construction area to suppress fugitive emission.

29. Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.

30. Fixtures for showers, toilet flushing and drinking shall be of low flow either by use of aerators or pressure reducing devices or sensor based control.

31. Garland drain for storm water shall be constructed around the project area, structure and road and the drain shall be connected with rainwater harvesting system and the treated water shall be used for irrigation purpose inside the stadium premises.

32. Rain water harvesting structure shall be developed inside premises and maximum efforts shall be made to reuse harvested rain water with a definite plan and programme to reduce drawl of fresh water from the local water bodies/ground water source as well as to recharge the ground water. Rain water harvesting structure shall be included from the construction stage itself. A scheme in this regard shall be submitted to the Board.

33. The project shall achieve Zero Liquid Discharge (ZLD) concept. Under no circumstances the project proponent shall discharge the waste water to outside the project premises.

34. The safe disposal of wastewater and solid wastes generated from washing of painting equipments during the construction phase shall be ensured.

C. AIR POLLUTION:

35. Online noise monitoring system shall be installed inside the premises to monitor the noise.

36. Mechanical road sweeper shall be deployed to clean the road.

37. The diesel generator sets to be used during construction phase shall be low Sulphur diesel type and shall conform to Environment (Protection) Rules prescribed for air and noise emission standards.

38. All vehicles carrying construction materials to the site shall be covered to avoid spreading of dust.

39. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase shall be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets shall be equal to the height needed for the combined capacity of all proposed DG sets. Only low sulphur diesel will be used. The location of the DG sets may be decided in consultation with State Pollution Control Board.

40. The height of the stack attached to the D.G set shall confirm to the following:

    $H = h + 0.2\sqrt{KVA}$ (Where, h = Height of the building where it is installed in meter KVA = Capacity of D.G Set and H = Height of the stack in meter above ground level).

41. The proponent shall take adequate measures to prevent noise during loading and unloading of the construction materials in night.

42. The proponent shall also take adequate measures during construction phase to prevent noise and dust pollution to surrounding area.

D. SOLID WASTE:

43. Organic waste of generated garbage shall be composted and rest shall be disposed with Municipal solid waste.

44. Dry bin and wet bin provision shall be provided for collection of municipal solid waste.

45. Intermediate storage area of adequate capacity for temporary storage of Municipal Solid Waste (MSW) shall be developed inside the premises before handing over the MSW to the approved agency for final disposal.

46. The proponent shall explore to establish Mechanized Waste Convertor having polycrack method and other similar method for processing of Municipal Solid Waste generated from the complex under covered shed to produce valuable products like oil, water, gas, carbon, metal, glass etc.

47. The solid waste generated from the complex shall be segregated as biodegradable and non-biodegradable. This shall be collected in separate coloured beans. Proper waste management practices shall be adopted during the collection, storing and disposal of the generated solid waste.

48. Bio-degradable solid waste shall be sent to the organic waste converter for preparation of manure. Non-biodegradable wastes like polythene bags, metal, ceramic Waste, glass etc. shall be stored in separate garbage bin and will be sent to approved agency for final disposal.

49. All required sanitary and hygienic measures shall be in place before starting construction activities and to be maintained throughout the construction phase.

50. All the top soil excavated during construction activities shall be stored for use in horticulture / landscape development within the project site.

51. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

52. Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they shall not leach into the ground water.

53. The Project proponent shall dispose off hazardous waste materials such as tarry products, lead containing products, paints & pigments residues, broken fluorescent and mercury lamps during construction and operational phase as per Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and amended thereafter.

8/4/2024

Chief Env. Engineer

To

The Chief Executive Officer,
rOURkela One of M/s Rourkela Smart City Limited,
RMC, City Library Building, Uditnagar,
Rourkela, District - Sundargarh.

Memo No. 5906 **/Date** 08-04-2021 /

Copy forwarded to:

1. The Collector & District Magistrate, Sundargarh.
2. The District Industries Centre, Sundargarh.
3. Consent to Operate Cell, SPC Board, Bhubaneswar.
4. Regional Officer, SPC Board, Rourkela.
5. Copy to Guard file.

Sr. Env. Engineer-L-I

APPENDIX-II

286

ROURKELA SMART CITY LTD.

ROURKELA SMART CITY LTD.
(A SPV OF GOVERNMENT OF ODISHA, RMC & RDA)

Letter No. 2628/RSCL/2021 **Date.** 15/02/2021

To,

The General Manager, District Industries Centre, Rourkela
The Member Secretary, State Pollution Control Board, Bhubaneswar
The Tahasildar, Rourkela
The Regional officer, State Pollution Control, Board, Rourkela

Sub: Environmental Clearance for the project "Construction of Rourkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)"

Ref: SEIAA office letter no. 199/SEIAA, dated 27.01.2021

Sir,

With reference to the subject cited above, I am to inform that the Rourkela Smart City Limited has taken up a project namely "Construction of Rourkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)" under the Smart City Mission Plan near Hockey Chowk at Rourkela. Environmental Clearance has granted for the project by State Environment Impact Assessment Authority, Odisha vide letter no. 199/SEIAA, dated 27.01.2021.

It is therefore requested to upload the same in your website as mentioned in the General Conditions of Clearance, clause no. 9 of SEIAA letter.

Yours Faithfully,

Chief Executive Officer
Rourkela Smart City Limited
Rourkela

Encl: As above

REGIONAL INDUSTRIES CENTRE ROURKELA 19/02/2021

Uditnagar, Rourkela -769012, Sundergarh, Odisha (0661) 2500 388 / (0661) 2500 239

283

ROURKELA SMART CITY LTD.

ROURKELA SMART CITY LTD.

(A SPV OF GOVERNMENT OF ODISHA, RMC & RDA)

Letter No. 2628/RSCL/2021 **Date.** 15/02/2021

To,

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The Member Secretary, State Pollution Control Board, Bhubaneswar
The Tahasildar, Rourkela
The Regional officer, State Pollution Control, Board, Rourkela

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It is therefore requested to upload the same in your website as mentioned in the General Conditions of Clearance, clause no. 9 of SEIAA letter.

Yours Faithfully,

Encl: As above

Chief Executive Officer
Rourkela Smart City Limited
Rourkela

OFFICE OF THE TEHSILDAR
Receive No
Manas
19-02-2021
ROURKELA

Uditnagar, Rourkela -769012, Sundergarh, Odisha (0661) 2500 388 / (0661) 2500 239

287

ROURKELA SMART CITY LTD.

ROURKELA SMART CITY LTD.

(A SPV OF GOVERNMENT OF ODISHA, RMC & RDA)

Letter No. 2628/RSCL/2021 Date. 15/02/2021

To,

The General Manager, District Industries Centre, Rourkela
The Member Secretary, State Pollution Control Board, Bhubaneswar
The Tahasildar, Rourkela
The Regional officer, State Pollution Control, Board, Rourkela

Sub: Environmental Clearance for the project "Construction of Rourkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)"

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Yours Faithfully,

Encl: As above

Chief Executive Officer
Rourkela Smart City Limited
Rourkela

State Pollution Control Board (Odisha) RECEIVED No..... Date 15/2/2021 Regional Office, Rourkela

Uditnagar, Rourkela -769012, Sundergarh, Odisha (0661) 2500 388 / (0661) 2500 239

290

ROURKELA SMART CITY LTD.

ROURKELA SMART CITY LTD.

(A SPV OF GOVERNMENT OF ODISHA, RMC & RDA)

Letter No. 2628/2854/2021 Date. 15/02/2021

To,

The General Manager, District Industries Centre, Rourkela
The Member Secretary, State Pollution Control Board, Bhubaneswar
The Tahasildar, Rourkela
The Regional officer, State Pollution Control, Board, Rourkela

Sub: Environmental Clearance for the project "Construction of Rourkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)"

Ref: SEIAA office letter no. 199/SEIAA, dated 27.01.2021

Sir,

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It is therefore requested to upload the same in your website as mentioned in the General Conditions of Clearance, clause no. 9 of SEIAA letter.

Yours Faithfully,

Encl: As above

Chief Executive Officer
Rourkela Smart City Limited
Rourkela

Received 23/2/2021

No.....
RECEIVED
23 FEB 2021
S.P.C.B. BOARD
BHUBANESWAR

Uditnagar, Rourkela -769012, Sundergarh, Odisha (0661) 2500 366 / (0661) 2600 239
rourkelascl@gmail.com www.rmc.nic.in CIN: U749900R2016PLC026168

APPENDIX-III

ROURKELA
SMART CITY LTD.

ROURKELA SMART CITY LTD.

(A SPV OF GOVERNMENT OF ODISHA, RMC & RDA)

Letter No. RSCL/2877/2021 **Date.** 26·03·2021

To,

The Director, Regional Office of MoEF&CC, Bhubaneswar
The Member Secretary, SEIAA, Bhubaneswar

Sub: Environmental Clearance for the project "Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)"

Sir,

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The information regarding grant of Environmental Clearance has been published in the Odiya daily Dharitri (all Odisha edition) and National daily New Indian Express (Copy enclosed) in compliance of point no.14 of General Conditions of clearance of the letter no.199, dated 27.01.2021 of SEIAA.

This is for favour of your kind information and necessary action.

Yours Faithfully,

26/3/21

General Manger (E&T)
Rourkela Smart City Limited
Rourkela

GOVT OF INDIA
MoEF & CC, Eastern
Bhubaneswar-751023
30 MAR 2021
RECEIVED

: Uditnagar, Rourkela - 769012, Sundargarh, Odisha ☎ : (0661) - 2500 388 / 2500 239
CIN : U74900OR2016PLC026168

ROURKELA
SMART CITY LTD.

ROURKELA SMART CITY LTD.

(A SPV OF GOVERNMENT OF ODISHA, RMC & RDA)

Letter No. RSCL/2877/2021 **Date.** 26.03.2021

To,

The Director, Regional Office of MoEF&CC, Bhubaneswar
The Member Secretary, SEIAA, Bhubaneswar

Sub: Environmental Clearance for the project "Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)"

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This is for favour of your kind information and necessary action.

Yours Faithfully,

26/3/21

General Manger (E&T)
Rourkela Smart City Limited
Rourkela

ENVIRONMENT IMPACT ASSESSMENT AUTHORITY ORISSA BBSR No. DT. 30/03/2021 30/03/2021

: Uditnagar, Rourkela - 769012, Sundargarh, Odisha ☎ : (0661) - 2500 388 / 2500 239
CIN : U74999OR2016PLC026168

Oly badminton qualification period extended till June 15

TOKYO 2020

The Tokyo Olympics badminton qualification period was on Friday extended by nearly two months to June 15 after the postponement of three important tournaments due to Covid-19 related restrictions. The qualification period was earlier to end on April 25.

BIO-BUBBLE NOT A CHOICE BUT NECESSITY: WV

ASHOK VENUGOPAL @Chennai

FORMER India player and Indian women's cricket team coach WV Raman is happy that cricket is back in the country. He also feels that the decision to let spectators watch the England series in Chennai from the stands will have a positive bearing in the future. The former India opener bats for pink-ball cricket and welcomes the move to rotate players in order to prevent burnout. In an exclusive chat with the newspaper, he says that Virat Kohli is following Sachin Tendulkar's footsteps and believes that Rohit Sharma will be a success in red-ball cricket too. Excerpts...

We will be playing a day and night pink-ball Test, how significant will it be?
I'm sure India will be keen to do well in the D/N game because the possibility of Tests being played under lights and with the pink ball is getting stronger with every passing year.

Will women be able to adjust to the bio-bubble?
Under the circumstances, it is not a matter of choice as much as it is a necessity. The girls have had the experience of being in a bio-bubble leading up to and during the T20 Challenge in the UAE during IPL. Besides, they are keen to get on to the field. In order to play, they have to be prepared to cope with the regulations and protocols.

How do you find the talent pool of spinners in India?
The emergence of Washington Sundar as an all-rounder will, no doubt, give extra flexibility to the team management, but behind the scenes, moves have been made to focus on developing talented spinners in the country from the time I was in the National Cricket Academy (NCA). So, we will see a lot of young spinners coming through on a regular basis.

Muttiah Muralitharan had said R Ashwin has the potential to break his highest Test wickets record or come close to picking up 600 wickets. What Ashwin needs to do?
I am glad for Ashwin that Muralitharan feels that way and I sincerely hope that Ashwin achieves that milestone. But as to what Ashwin needs to do is something that Murali, (Shane) Warne or (Anil) Kumble will be better placed to tell you.

Everyone expects Virat Kohli to score a ton every time he steps out. How much has Kohli improved as a captain and his ability to keep breaking records?
Kohli is doing what Tendulkar did right through his career — of living up to the expectations of the most encouraging and also the most demanding Indian public. He has done well so far in delivering both as a captain and a batsman, of course. Records are broken incidentally as the likes of Kohli and Tendulkar were focusing on excelling each and every time they went out to play for India.

Rohit Sharma is a prolific batsman in white ball cricket. What does he need to do to have the same amount of success in red-ball cricket?
He has not done badly at all in Test cricket. Perhaps we expect too much from him keeping in mind his stupendous success in white-ball cricket. As he plays more of Test cricket, he will make up for whatever opportunities he has missed out on thus far. Of this, I am certain because he is a top-quality player.

Tamil Nadu won the Syed Mushtaq Ali T20s. What helped them win the title?
The cricketers of TN have always possessed the skill sets to do well in the shorter formats of the game. In fact, I would go to the extent of saying they enjoy playing white ball cricket. Therefore, it is not surprising that they are a formidable lot in those formats.

Full interview: newindianexpress.com

Shape retention will be better: SG on pink balls

FIROZ MIRZA @Chennai

PINK balls, which will be used for the second-ever day/night Test in India beginning at the refurbished stadium in Ahmedabad on February 24, are expected to retain their shape for a longer period. Sanspareils Greenlands (SG), the manufacturer, has made the improvisation to ensure the need to change the balls during the contest doesn't arise.

"These are the same set of balls used for the inaugural D/N Test at Kolkata in 2019. Feedback was positive then. Everybody was happy with it. Shape retention (of the balls), however, will be better this time," Paras Anand, SG's marketing and sales director, said.

As many as 36 balls have been supplied to the Board of Control for Cricket in India (BCCI) for the match. Six dozens of balls were supplied ahead of the Kolkata Test. Both India and Bangladesh received the balls only after the first Test of the series in Indore. But Virat Kohli and Co along with their English counterparts received pink balls for training even before the ongoing Test series which began in Chennai on February 5.

"We have given the balls in bulk to the BCCI in January. The balls in turn were distributed to both the teams for training, which is why a few of them including Hardik Pandya were seen practising with them after the second Test in Chennai," added Anand.

Test specialist Cheteshwar Pujara had spoken on issues related to sighting of the pink ball under lights after the Kolkata Test, but Anand asserted the problem is not specific to SG pink balls.

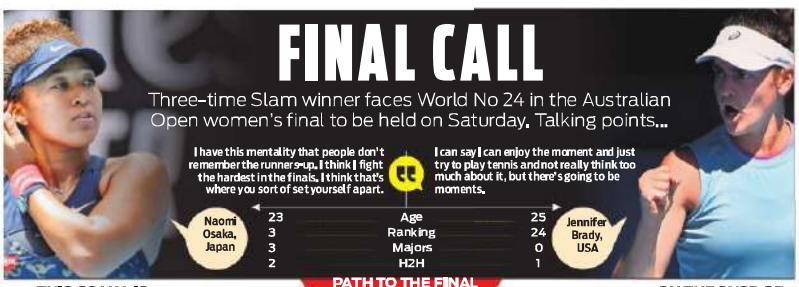
"Batsmen have to adjust especially during the twilight. The more they play, the more they will get used to of it."

He, though, played down the dew factor saying bowlers confront it in every format and know better how to deal with it. There are also doubts whether the players will get will reverse swing but Anand believed it all depends on the teams and how they shine the old ball.

Full story: newindianexpress.com

FINAL CALL

Three-time Slam winner faces World No 24 in the Australian Open women's final to be held on Saturday. Talking points...



THIS OSAKA IS PRESSURE-PROOF

One of the main reasons why Osaka has advanced to her second Melbourne final (she won in 2019) is her ability in playing the pressure points. What sets her out from the rest is she doesn't get flustered, even if she is behind the ball. She believes in herself, her methods and it has yielded her maximum results. Her saving two match points while defeating Garbine Muguruza in the fourth rough is a case in point.

PATH TO THE FINAL

1ST RD
2ND RD
3RD RD
4TH RD
Q'FINAL
SEMIFINAL

ON THE CUSP OF WINNER'S CIRCLE

When dozens of players were forced into hard quarantine in the middle of January, a few complained. Brady did not. She focused on the positives and carried on doing the things that she knew was within her control. The end result has been a run to her maiden final. Even if the highest seed she has faced is Karolina Muchova (No 25), she has looked largely untroubled, losing only two sets in the six matches so far.

MEDVEDEV DOWNS TSITSIPAS, SETS UP FINAL WITH DJOKO

Melbourne: RUSSIA'S Daniil Medvedev insisted the pressure was all on Novak Djokovic in the Australian Open final after he breezed past Stefanos Tsitsipas in the semis on Friday. Medvedev, now into his second Grand Slam decider on the back of a 20-match winning streak, said the world number one has "more things to lose" on Sunday. Djokovic, with 17 Major titles, has won all eight of his Australian Open finals and is looking to close the gap on the record of 20 Slam trophies held by Roger Federer and Rafael Nadal. "I like that I don't have a lot of pressure because he never lost in eight times that he was here in the final," said the 25-year-old World No 4.

IWTT conducts workshop

TANMAY DAS @Bhubaneswar

IN a bid to provide equal opportunity and proper infrastructure to differently-abled athletes the Chocolate Group in collaboration with Indian Wheelchair Tennis Tour (IWTT) is organising a three-day wheelchair tennis workshop at the Gurukul Tennis Resort, Mendhasal on the outskirts of the Capital City from Friday.

A total of 15 players joined the workshop where they were introduced to wheelchair tennis for the first time. The participants learnt about mobility techniques and hand-eye coordination with IWTT instructor H Madhusudhan assessing their range and flexibility.

"I never took interest in sports until I was faced an rail accident in 2008 where my both my knees were amputated. On those days I'd to face lot of trouble to rebuild myself. To get rid of the trauma and depression, I chose to play wheelchair tennis. It kept me involved and I got my smile back," said Madhusudhan, an international wheelchair player.

Sunil Jain, the founder of IWTT, said that currently wheelchair tennis is practiced in Karnataka, Tamil Nadu, Delhi, Punjab and Maharashtra. "Such workshop has a tremendous impact on self-confidence, social skills and happiness of the participants. We focus on introducing the sport to more persons with disabilities to help create a thriving community for wheelchair tennis players in India. Sport is going to change the mindsets about the abilities of persons with disabilities," said Jain who is a polio survivor.

EXPRESS READ

India boxers assured of 12 medals in Budva

NEW DELHI: Asian youth gold medallists Babyrojisana Chanu (51kg) and Vinka (60 kg) entered the semifinals of the 30th Adriatic Pearl tournament in Budva, Montenegro, assuring themselves of at least a bronze medal each. A total of 12 boxers will win bronze.

Football WC qualifiers postponed to June

KUALA LUMPUR: India's 2022 FIFA World Cup/2023 Asian Cup qualifying round matches, which were scheduled for next month, have been postponed to June due to coronavirus. The second round of matches have not been held since November 2019.

Skipper Kohli opens up on depression

NEW DELHI: India captain Virat Kohli has revealed that he battled depression during the tour of England in 2014 where he felt like the "loneliest guy in the world" after a string of failures in a podcast with former England player Mark Nicholas.

LEVEL UP

Ankita clinches first major title

SWAROOP SWAMINATHAN @Chennai

ONE of the most oft-asked questions in Indian women's tennis over the last six years or so has been 'who after Sania Mirza?' On Friday, Ankita Raina once again put her hands up to say she has all the right tools at her disposal to eventually occupy centrestage. Raina, with her partner, Kamilla Rakhimova, won her first ever WTA Tour level title, the Phillip Island Trophy. The unseeded pair beat Anna Blinkova and Anastasia Potapova 2-6, 6-4, 10-7.

For starters, her new doubles ranking is likely to be No 95, a career high. In an Olympic year, it's likely to come in handy.

Earlier this week, the 23-year-old also picked up her first Tour level singles main draw win. What's led to Raina's rapid improvement? "I wouldn't say it's just the last 18 months or two years," says India's Fed Cup coach, Ankita Bhambri. "She has worked on her game constantly."

Full story: newindianexpress.com

FOOTBALL ROUNDUP

Mohun Bagan prevail in Kolkata derby again

VASCO: ATK Mohun Bagan did the double over SC East Bengal with a 3-1 win in the Kolkata derby of ISL on Friday. Amid torrential rain, it was an emphatic performance which showed the gulf in class between the two teams in this season of the ISL. The Mariners remain top with 39 points from 18 games and more importantly have opened up a five point lead over Mumbai City FC in second spot. And they are definitely front-runners now for the league winners spot.

United beat Sociedad, Arsenal held in Europa

BERLIN: Bruno Fernandes scored twice as Manchester United took a big step toward the last 16 of the Europa League with a 4-0 "away" win over Spanish team Real Sociedad in Italy on Thursday. Portugal's Benfica had to host Arsenal in Rome, where Bukayo Saka's away goal put the Premier League side in a good position with a 1-1 draw. Tottenham defeated Austrian team Wolfsberg 4-1 in Budapest, Hungary. Germany's Hoffenheim was also affected by pandemic-related travel restrictions.

ଧରିତ୍ରୀ
DHARITRI
Bhubaneswar, Saturday, February 20/2021

୪୩୫ ପଏଣ୍ଟ ଖସିଲା ସେନ୍‌ସେକ୍ସ
ଭାରତୀୟ ପୁଞ୍ଜିବଜାରରେ ଗତ ୪ ସେସନ ହେବ ଲଗାତର ହ୍ରାସ ହେଉଛି। ଶୁକ୍ରବାର ବମ୍ବେ ଷ୍ଟକ୍ ଏକ୍ସଚେଞ୍ଜ(ବିଏସ୍ଇ) ସେନ୍‌ସେକ୍ସ ୪୦୦ ପଏଣ୍ଟ ନିମ୍ନରେ ରହିଛି। ବିଶ୍ୱ ସ୍ତରରେ ଶେୟାର ବଜାର କାରବାର ନିମ୍ନରେ ରହିବା ଯୋଗୁ ଏହା ଭାରତୀୟ ଶେୟାର ବଜାର ଉପରେ ପ୍ରଭାବ ପକାଇଛି। ଭାରତୀୟ ପୁଞ୍ଜିବଜାରରେ ଅଟୋମୋବାଇଲ ଏବଂ ବ୍ୟାଙ୍କିଙ୍ଗ୍ ଷ୍ଟକ୍ କାରବାର ବେଶୀ କ୍ଷତିଗ୍ରସ୍ତ ହୋଇଛି। ୩୦ ଶେୟାର ବିଶିଷ୍ଟ ସେନ୍‌ସେକ୍ସ ୪୩୫ ପଏଣ୍ଟ ବା ୦.୮୫% ନିମ୍ନରେ ରହି ୫୦,୮୯୦ ପଏଣ୍ଟ ସ୍ତରରେ କାରବାର ବନ୍ଦ ହୋଇଛି।

ସଂକ୍ଷେପରେ

ବ୍ଲୁ ଷ୍ଟାର ବ୍ୟବସାୟିକ ରେଫ୍ରିଜରେଶନର ବ୍ୟବସ୍ଥା ବିସ୍ତାର ଯୋଜନା

ଭୁବନେଶ୍ୱର,୧୯।୨: ଏୟାର କଣ୍ଡିଶନିଂ ଏବଂ ବ୍ୟବସାୟିକ ରେଫ୍ରିଜରେଶନର ପ୍ରମୁଖ କମ୍ପାନୀ ବ୍ଲୁ ଷ୍ଟାର ପକ୍ଷରୁ ବିଭିନ୍ନ ଯୋଜନା ଓ କାର୍ଯ୍ୟକ୍ରମ ହାତକୁ ନିଆଯାଇଛି। ଏ ସମ୍ପର୍କରେ ବ୍ଲୁ ଷ୍ଟାରର ପରିଚାଳନା ନିର୍ଦ୍ଦେଶକ ବି.ତ୍ୟାଗରାଜନ ସୂଚନା ଦେଇ କହିଛନ୍ତି ଯେ, ଫାର୍ମାସ୍ୟୁଟିକାଲ ଓ ହେଲ୍‌ଥ କେୟାର, ଏଗ୍ରିକଲଚର, ଡାଏରି, ଫୁଡ୍ ପ୍ରୋସେସିଂ ଏବଂ ହସ୍ପିଟାଲିଟି କ୍ଷେତ୍ରରେ କମ୍ପାନୀର ବ୍ୟବସାୟିକ ରେଫ୍ରିଜରେଶନର ଚାହିଦା କ୍ରମାଗତ ଭାବରେ ବୃଦ୍ଧି ପାଉଛି। ବିକାଶଶୀଳ ଦେଶଗୁଡ଼ିକ ସହିତ ତୁଳନା କରାଗଲେ ଭାରତରେ ବ୍ୟବସାୟିକ ରେଫ୍ରିଜରେଶନର ବ୍ୟବହାର ମାତ୍ର ୫% କମ୍ ରହିଛି, ଯାହାକି ଏହାକୁ ବଢାଇବାରେ ସହଯୋଗ ଓ ବୃଦ୍ଧି କରିବ। ଏହି ବ୍ୟବସ୍ଥାକୁ ବିସ୍ତାର କରିବା ଲାଗି ଯୋଜନା ରଖାଯାଇଛି ବୋଲି ସେ ମତ ଦେଉଛନ୍ତି।

ଆବ୍‌ସୋଲ୍ୟୁଟ ବାର୍ବେକ୍ୟୁରେ ସି ଫେଷ୍ଟ

ଭୁବନେଶ୍ୱର,୧୯।୨: ପ୍ରମୁଖ ବାର୍ବେକ୍ୟୁ ରେଷ୍ଟୁରାଣ୍ଟ ଶୃଙ୍ଖଳା ଆବ୍‌ସୋଲ୍ୟୁଟ ବାର୍ବେକ୍ୟୁ(ଏବିଏସ୍) ସି ଫୁଡ୍ ଫେଷ୍ଟିଭାଲ ଆୟୋଜନ କରୁଛି। ଏହା ଚଳିତ ମାସ ୧୯ରୁ ମାର୍ଚ୍ଚ ୫ ଯାଏ ଚାଲିବ। ସ୍ଥାନୀୟ ଚନ୍ଦକା ଇଣ୍ଡଷ୍ଟ୍ରିଆଲ ଇଷ୍ଟେଟ, ୯ ଇନ୍‌ଫୋସିଟି ଏଠାରେ ଏହି ଏକଜୋଟିକ୍ ବିସ୍ତାର ସି ଫେଷ୍ଟ ଅଣାଯାଇଛି। ସି ଫେଷ୍ଟ ଆଟ୍ ଏବିଏସ୍‌ରେ ସୁସ୍ୱାଦୁ ଖାଦ୍ୟଗୁଡିକର ଦୁନିଆକୁ ନେଇଯିବ। ସାମୁଦ୍ରିକ ଖାଦ୍ୟଗୁଡିକର ସ୍ୱତନ୍ତ୍ର ସ୍ୱାଦର ମଜା ଗ୍ରାହକ ଲାଭ କରିପାରିବେ। ଡେଜର୍ଟ ଏବଂ ମେନ୍ କୋର୍ସରେ ନିୟମିତ ଡିସ୍ ବ୍ୟତୀତ ବିଭିନ୍ନ ସ୍ଥାନର ସାମୁଦ୍ରିକ ଖାଦ୍ୟ ସହ ବାରାକୁଡା, କ୍ରିସ୍ପି ଫ୍ରାଏଡ୍ ଆଚୋପି, ସ୍ନାପର, ସାର୍କ, ଷ୍ଟିଙ୍ଗରେ, ଇଲ୍, ଡମେ ଡକ୍, ମାଲାବାର ଡାଗ୍ରା ମ୍ୟାକେରେଲ ଅନ୍ୟ ପ୍ରମୁଖ ଡିସ୍‌ର ସ୍ୱାଦ ଗ୍ରାହକ ନେଇପାରିବେ।

ବ୍ୟାଙ୍କ ଲକର ନିୟମ କଡ଼ାକଡ଼ି ହେବ

ନୂଆଦିଲ୍ଲୀ,୧୯।୨

୬ ମାସରେ ନୂଆ ନିୟମ ଆଣିବାକୁ ଆର୍‌ବିଆଇକୁ ସୁପ୍ରିମକୋର୍ଟଙ୍କ ନିର୍ଦ୍ଦେଶ

ବ୍ୟାଙ୍କଗୁଡ଼ିକରେ ଲକର ସୁବିଧା ପରିଚାଳନା ସଂକ୍ରାନ୍ତ ନିୟମ କଡ଼ାକଡ଼ି ହେବାକୁ ଯାଉଛି। ଏ କ୍ଷେତ୍ରରେ ନୂଆ ନିୟମ ୬ ମାସରେ ଆଣିବା ଲାଗି ସୁପ୍ରିମକୋର୍ଟ ରିଜର୍ଭ ବ୍ୟାଙ୍କକୁ ଶୁକ୍ରବାର ନିର୍ଦ୍ଦେଶ ଦେଇଛନ୍ତି। ଜଷ୍ଟିସ ଏମ୍.ଏମ୍. ଶାନ୍ତନାଗୌଡାର ଏବଂ ଜଷ୍ଟିସ ବିନୀତ ସରଣଙ୍କୁ ନେଇ ଗଠିତ ଖଣ୍ଡପୀଠ କହିଛନ୍ତି, ଜଗତୀକରଣ ସହ ବ୍ୟାଙ୍କିଙ୍ଗ ପ୍ରତିଷ୍ଠାନଗୁଡିକ ସାଧାରଣ ଲୋକଙ୍କ ଜୀବନରେ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ଭୂମିକା ଗ୍ରହଣ କରୁଛନ୍ତି। ଦେଶ ମଧ୍ୟରେ ଉଭୟ ଘରୋଇ ଏବଂ ଅନ୍ତର୍ଜାତୀୟ ଟ୍ରାଞ୍ଜାକ୍ସନ ବହୁ ଗୁଣରେ ବଢିଛି। ଲୋକମାନେ ସେମାନଙ୍କ ଲିକ୍ୱିଡ ଆସେଟକୁ ଘରେ ରଖିବାକୁ ଏବେ ଚାହୁଁନାହାନ୍ତି। ଆମେ ବର୍ତ୍ତମାନ ଏକ କ୍ୟାଶ୍‌ଲେସ୍ ଅର୍ଥ ବ୍ୟବସ୍ଥା ଆଡକୁ ଗତି କରୁଛେ। ଖଣ୍ଡପୀଠ ପୁଣି କହିଛନ୍ତି, ବର୍ତ୍ତମାନ ବ୍ୟାଙ୍କ ସେବା ଚାହିଦା ବଢିଥିବା ବେଳେ ଲକର ଏକ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ସେବା ବିଭିନ୍ନ ବ୍ୟାଙ୍କ ପକ୍ଷରୁ ପ୍ରଦାନ କରାଯାଉଛି। ଏହି ସେବା ଉଭୟ ଦେଶବାସୀ ଏବଂ ବିଦେଶୀ ନାଗରିକ ଲାଭ କରିପାରିବେ। ଟେକ୍ନୋଲୋଜି ଅଗ୍ରଗତି କରୁଥିବାରୁ ବର୍ତ୍ତମାନ ଆମେ ଦ୍ୱୈତ ଚାବି ଦ୍ୱାରା ପରିଚାଳିତ ଲକରରୁ ଇଲେକ୍ଟ୍ରୋନିକ ଭାବେ ପରିଚାଳିତ ଲକର ବ୍ୟବହାର ଯାଏ ପହଞ୍ଚିଛେ। ଏଭଳି ସ୍ଥିତିରେ ଟେକ୍ନୋଲୋଜିର ଖରାପ ବ୍ୟବହାର ଦ୍ୱାରା ଲୋକଙ୍କ ଅଗୋଚରରେ ମଧ୍ୟ ଠକାମି ହେବାର ଆଶଙ୍କା ଉପୁଜିଛି। କିଛି ଅସୁବିଧା ହେଲେ ବ୍ୟାଙ୍କ ନିଜ ଉପରୁ ସମ୍ପୂର୍ଣ୍ଣ ଭାବେ ଦୋଷ ଖସାଇ ପାରିବେ ନାହିଁ। କାରଣ ଲୋକମାନେ ସେମାନଙ୍କ ଅର୍ଥକୁ ବ୍ୟାଙ୍କ ଭରସାରେ ଛାଡିଛନ୍ତି। ବ୍ୟାଙ୍କ ଖାଉଟି ସୁରକ୍ଷା ଆଇନକୁ ଅଣଦେଖା କରିପାରିବେ ନାହିଁ। ଠକେଇ ଘଟଣା ହେଲେ ଏହାଦ୍ୱାରା ନିବେଶକଙ୍କ ଭରସା ତୁଟିଯାଏ। ଏହାବାଦ ଏକ ଅଭିବୃଦ୍ଧିଶୀଳ ଅର୍ଥ ବ୍ୟବସ୍ଥା ଲାଗି ଏହା ଭଲ ନୁହେଁ। ଏଭଳି ବିଭିନ୍ନ ସ୍ଥିତିକୁ ବିଚାର କରି ଲକର ସୁବିଧା ଏବଂ ଜମା ପରିଚାଳନା କ୍ଷେତ୍ରରେ ବିହିତ ପଦକ୍ଷେପ ନେବାକୁ ଶୀର୍ଷ ଅଦାଲତ ଆର୍‌ବିଆଇକୁ ନିର୍ଦ୍ଦେଶ ଦେଇଛନ୍ତି। ଲକରରେ ଯଦି ଗ୍ରାହକଙ୍କୁ କିଛି କ୍ଷତି ସହିବାକୁ ପଡିବା ତେବେ ସେ ଦିଗରେ କ'ଣ କରାଯିବ ସେ ପ୍ରସଙ୍ଗକୁ ମଧ୍ୟ ସ୍ପଷ୍ଟ କରିବାକୁ କୁହାଯାଇଛି। କଲିକତା ବାସିନ୍ଦା ଅମିତାଭ ଦାସଗୁପ୍ତାଙ୍କ ଆବେଦନ ଉପରେ ସୁପ୍ରିମକୋର୍ଟ ଏଭଳି ନିର୍ଦ୍ଦେଶ ଜାରି କରିଛନ୍ତି।

ରିଲାଏନ୍ସ ଷ୍ଟୋରରେ ସାମ୍‌ସଙ୍ଗ ଗାଲାକ୍ସି ଏଫ୍ ୬୨

ଭୁବନେଶ୍ୱର,୧୯।୨

ରିଲାଏନ୍ସ ଡିଜିଟାଲ ଓ ମାଇଁ ଜିଓ ଷ୍ଟୋରରେ ନୂଆ ସାମ୍‌ସଙ୍ଗ ଗାଲାକ୍ସି ଏଫ୍ ୬୨ର ଅଫଲାଇନ ଶୁଭାରମ୍ଭ ପାଇଁ ସହଭାଗିତା ସ୍ଥାପନ କରିଛନ୍ତି। ଏହି ମଡେଲଟିକୁ ୨୨ ଫେବ୍ରୁୟାରୀରୁ ଆରମ୍ଭ କରାଯିବ। ଗ୍ରାହକମାନେ ଏହି ନୂଆ ସ୍ମାର୍ଟ ଫୋନ୍‌କୁ ରିଲାଏନ୍ସ ଡିଜିଟାଲ ଓ ମାଇଁ ଜିଓ ଷ୍ଟୋରରୁ ପାଇପାରିବେ। ରିଲାଏନ୍ସ ଡିଜିଟାଲର ବ୍ୟାପକ ନେଟ୍‌ୱର୍କମାଧ୍ୟମରେ ସାମ୍‌ସଙ୍ଗ ଗାଲାକ୍ସି ଏଫ୍ ୬୨ ସାରା ଦେଶରେ ଉପଲବ୍ଧ କରାଯିବ। ଏହି ନୂଆ ମଡେଲରେ ରହିଛି ୨.୭୩ ଗିଏଗହେର୍ଜ୍ ଅକ୍ଟା କୋର ପ୍ରୋସେସର,ସାମ୍‌ସଙ୍ଗ ଏକ୍ସିନୋସ୍ ୯୮୨୫ ସହିତ ୧୨୮ ଜିବି ଏକ୍ସପାଣ୍ଡେବଲ୍ ଷ୍ଟୋରେଜ୍ ଏବଂ ଏକ କଲର ସୁପର ଆମୋଲେଡ୍ ସ୍କ୍ରିନ୍ ରହିଛି। ସେହିଭଳି ୭୦୦୦ ଏମ୍ଏଏଚ୍ ବ୍ୟାଟେରି ଏବଂ ଫିଙ୍ଗରପ୍ରିଣ୍ଟ ସେନ୍ସର ଓ ଫେସ୍ ଅନ୍‌ଲକ୍ ଆଦିର ବିକଳ୍ପ ଏଥିରେ ରହିଛି। ୬୪ ଏମ୍‌ପି କ୍ୟାମେରା ସହିତ ଅଲଟ୍ରା ୱାଇଡ୍ ଓ ମାକ୍ରୋ ଫୁଟିଂର ସୁବିଧା ରହିଛି। ଏହି ମେଡେଲର ମୂଲ୍ୟ ୨୧,୪୯୯ ଟଙ୍କା, ୬ ଜିବି ରାମ୍ ସହିତ ଓ ୨୩,୪୯୯ଟଙ୍କା ରହିଥିବା କମ୍ପାନୀ ପକ୍ଷରୁ ସୂଚନା ରହିଛି।

ବଜାଜ ପ୍ଲାଟିନା ଉପରେ ରିହାତି

ଭୁବନେଶ୍ୱର,୧୯।୨

ବଜାଜ ଅଟୋ ପକ୍ଷରୁ ନୂଆ ପ୍ଲାଟିନା ମଡେଲ ବର୍ତ୍ତମାନ ବଜାରରେ ଉପଲବ୍ଧ ହେଉଛି। ୧୦୦ ସିସି ଇଞ୍ଜିନ କ୍ଷମତା ସହ ଆସିଥିବା ଏହି ଯାନଟି ଗ୍ରାହକଙ୍କ ପରିବର୍ତ୍ତିତ ଚାହିଦାକୁ ନଜରରେ ରଖି ପ୍ରସ୍ତୁତ କରାଯାଇଛି। ଏହାର ଦାମ ୬୪,୬୩୬ ଟଙ୍କା ଥିବାବେଳେ ଅଫର ପ୍ରାଇସ୍‌ରେ ମଡେଲଟିକୁ କମ୍ପାନୀ ପକ୍ଷରୁ ୫୯,୯୯୯ ଟଙ୍କାରେ ଗ୍ରାହକଙ୍କୁ ପ୍ରଦାନ କରାଯାଉଛି। ଅଫରର ଲାଭ ଗ୍ରାହକ ଚଳିତ ମାସ ଶେଷ ଯାଏ ଉଠାଇ ପାରିବେ। ଗ୍ରାହକ ଏହି ମଡେଲଟିକୁ କଟକ ବାଦାମବାଡ଼ିସ୍ଥିତ ସୁରଜ ବଜାଜ ଡିଲରଶିପରୁ ଲାଭ କରିପାରିବେ। ଏହାବାଦ୍ ଆଠଗଡ଼, ଚୌଦ୍ୱାର, ଫୁଲନଖରା, ନିଆଳି, ସାଲେପୁର, ବଡ଼ମ୍ବା, ନରସିଂହପୁର ଭଳି ସ୍ଥାନରେ ଥିବା କମ୍ପାନୀର ଅଧିକୃତ ଡିଲରଶିପଗୁଡ଼ିକରେ ଗ୍ରାହକ ଏହି ମଡେଲ କିଣିବାର ସୁବିଧା ପାଇପାରିବେ। ପ୍ଲାଟିନା ମଡେଲ ଗ୍ରାହକଙ୍କ ଦ୍ୱାରା ବେଶ୍ ଆଦୃତି ଲାଭ କରିଛି। ଏହାର ପରିବର୍ତ୍ତିତ ରୂପକୁ କମ୍ପାନୀ ବଜାରରେ ପ୍ରବେଶ କରାଇଛି। ଏଥିରେ କମ୍ଫରଟେବ୍ ଫିଚର ଭାବେ ଅତୁଟ ଆରାମ ଏବଂ ଡିସ୍କ ବ୍ରେକର ସୁରକ୍ଷା ମିଳିପାରିବ। ସେହିଭଳି ଲମ୍ବା ଆଗ ସସ୍‌ପେନଶନ, ନାଇଟ୍ରକ୍ସ ପଛ ସସ୍‌ପେନଶନ, ଲମ୍ବା ଗଦିବାଲା ସିଟ୍, ଅନନ୍ୟ ହ୍ୟାଣ୍ଡ ଗାର୍ଡସ, ଚଉଡ଼ା ରବର ଫୁଟ୍ ପ୍ୟାଡ୍ସ, ଆରାମଦାୟକ ହ୍ୟାଣ୍ଡ ଗ୍ରାପ୍ସ, ସୁରକ୍ଷାତ୍ମକ ଟ୍ୟାଙ୍କ ପ୍ୟାଡ୍ ଭଳି ଫିଚର ଏହି ମଡେଲରେ ଗ୍ରାହକଙ୍କୁ ମିଳିପାରିବ। ସେହିଭଳି ଏକ୍ସଚେଞ୍ଜ ଏବଂ ଆକର୍ଷଣୀୟ ଫାଇନାନ୍ସ ସୁବିଧା ଗ୍ରାହକଙ୍କ ଲାଗି ଥିବା କମ୍ପାନୀ ପକ୍ଷରୁ ସୂଚନା ରହିଛି।

ଭୁବନେଶ୍ୱର ଅନ୍ତଃରାଷ୍ଟ୍ରୀୟ ବାଣିଜ୍ୟମେଳା ଆରମ୍ଭ

ଭୁବନେଶ୍ୱର,୧୯।୨

ଭୁବନେଶ୍ୱର ଅନ୍ତଃରାଷ୍ଟ୍ରୀୟ ବାଣିଜ୍ୟମେଳାର ୫ମ ସଂସ୍କରଣ ସ୍ଥାନୀୟ ଜନତା ମଇଦାନ ପରିସରରେ ଶୁକ୍ରବାରଠାରୁ ଶୁଭାରମ୍ଭ ହୋଇଛି। ଏହି ଅବସରରେ ମୁଖ୍ୟ ଅତିଥି ଭାବରେ କେନ୍ଦ୍ର ମନ୍ତ୍ରୀ ପ୍ରତାପ ଚନ୍ଦ୍ର ଷଡ଼ଙ୍ଗୀ ଯୋଗ ଦେଇ ଏହି ମେଳାକୁ ଉଦ୍‌ଘାଟନ କରିଥିଲେ। ଅନ୍ୟମାନଙ୍କ ମଧ୍ୟରେ ସାମାଜିକ କର୍ମୀ ମଧୁସୂଦନ ଦାସ, ସନ୍ଧ୍ୟାବତୀ ପ୍ରଧାନ, ରଶ୍ମିରଞ୍ଜନ କାନୁନ୍‌ଗୋ, ଲାବଣ୍ୟ ଦାସ, ସୌଦାମିନୀ ନାୟକ ଏବଂ ଇ ଡ୍ରାଇଭ'ର ଏମ୍‌ଡି କୈଳାସ ଚୌଧୁରୀ ପ୍ରମୁଖ ଉପସ୍ଥିତ ଥିଲେ। ଗ୍ରାହକଙ୍କ ଚାହିଦା ଓ ଆବଶ୍ୟକତା ପୂରଣ ସହିତ ଗୋଟିଏ ସ୍ଥାନରେ ସବୁ ପ୍ରକାର ଘରକରଣା ସାମଗ୍ରୀ ଓ ଆସବାପତ୍ର ଆଦିର ଗ୍ରାହକମାନଙ୍କୁ ଯୋଗାଇଦେବାର ଲକ୍ଷ୍ୟକୁ ନେଇ ଏହି ମେଳାର ଆୟୋଜନ କରାଯାଉଛି ବୋଲି ଆୟୋଜକଙ୍କ ପକ୍ଷରୁ କୁହାଯାଇଛି। ଦେଶ ଓ ରାଜ୍ୟର କଳାକୃତି ଓ ଆସବାବପତ୍ର ସହିତ ସବୁ ପ୍ରକାର ସାମଗ୍ରୀ ଗୋଟିଏ ସ୍ଥାନରେ ଗ୍ରାହକଙ୍କୁ ମିଳିବ। ଦେଶର ଅଭିବୃଦ୍ଧି ପାଇଁ ଏଭଳି ମେଳା ଓ କାର୍ଯ୍ୟକ୍ରମର ଆବଶ୍ୟକତା ରହିଛି ବୋଲି କେନ୍ଦ୍ର ମନ୍ତ୍ରୀ ତାଙ୍କ ଅଭିଭାଷଣରେ କହିଥିଲେ। ମେଳା ୧୯ ଫେବ୍ରୁୟାରୀରୁ ୧ ମାର୍ଚ୍ଚ ଯାଏ ଚାଲିବ। ଦିବା ୨.୩୦ ଘଟିକାରୁ ରାତ୍ର ୯.୩୦ ଘଟିକା ପର୍ଯ୍ୟନ୍ତ ମେଳା ଚାଲିବ ବୋଲି ମେଳା ଆୟୋଜକ ଗୁପ୍ତା ଇଭେଣ୍ଟ ମ୍ୟାନେଜମେଣ୍ଟର ପରିଚାଳନା ନିର୍ଦ୍ଦେଶକ ସୁଜିତ

ଗୁପ୍ତା ସୂଚନା ଦେଇଛନ୍ତି। ମେଳାରେ ୨୦ଟି ରାଜ୍ୟ ଓ ୬ଟି ଦେଶର ବ୍ୟବସାୟୀମାନେ ଅଂଶ ଗ୍ରହଣ କରିଛନ୍ତି। କୁଶଳୀ କାରିଗରମାନଙ୍କ ଦ୍ୱାରା ପ୍ରସ୍ତୁତ ବିଭିନ୍ନ ସାମଗ୍ରୀକୁ ଏଠାରେ ପ୍ରଦର୍ଶନ କରାଯାଉଛି। ଏଠାରେ ଗ୍ରାହକଙ୍କ ପାଇଁ ଫୁଡ୍ କୋର୍ଟ ଓ ସାଂସ୍କୃତିକ କାର୍ଯ୍ୟକ୍ରମର ବ୍ୟବସ୍ଥା କରାଯାଇଛି ବୋଲି ପାୟଲ ଆଚାର୍ଯ୍ୟ ଗୁପ୍ତା କହିଛନ୍ତି।

ରାଜ୍ୟ ଖବର

କୋଇଲା ଚୋରା ଚାଲାଣ ଧରିଲା ଏସ୍‌ଟିଏଫ୍

ଭୁବନେଶ୍ୱର,୧୯।୨(ବ୍ୟୁରୋ)

- ୨ଟ୍ରକ୍. ୪୦ ଟନ୍ କୋଇଲା ଜବତ: ୨ ଗିରଫ
- ଧରାହେବେ ମାଫିଆ, ଟ୍ରକ୍ ମାଲିକଙ୍କ ନାଁରେ ମାମଲା

ରାଜ୍ୟରେ ବେଧଡକ ଖଣିଜ ପଦାର୍ଥ ବେଆଇନ ଭାବେ ଚୋରା ଚାଲାଣ ଚାଲିଛି। ଏହାଦ୍ୱାରା ରାଜ୍ୟ ସରକାର ବିପୁଳ ରାଜସ୍ୱ ହରାଉଛନ୍ତି। ଶୁକ୍ରବାର ଢେଙ୍କାନାଳ ଜିଲ୍ଲା କାମାକ୍ଷାନଗର ଅଞ୍ଚଳରେ ଚଢ଼ାଉ କରି କ୍ରାଇମବ୍ରାଞ୍ଚର ସ୍ପେଶାଲ ଟାସ୍କ ଫୋର୍ସ(ଏସ୍‌ଟିଏଫ୍) ଦୁଇଟି ଟ୍ରକ ଭର୍ତ୍ତି କୋଇଲା ଜବତ କରିଛି। ଏହାର ଓଜନ ପ୍ରାୟ ୪୦ ଟନ୍ ହେବ। ଏହି ଘଟଣାରେ ଏସ୍‌ଟିଏଫ ୨ଜଣଙ୍କୁ ଗିରଫ କରିଥିବାବେଳେ ଏହି ର‍୍ୟାକେଟରେ ସମ୍ପୃକ୍ତ ମାଫିଆ ଓ ଅନ୍ୟମାନଙ୍କୁ ଧରିବାକୁ ଉଦ୍ୟମ ଚଳାଇଛି। ଏନେଇ କାମାକ୍ଷାନଗର ଥାନା ପୋଲିସ ଏକ ମାମଲା (ନଂ.୬୦/୨୧) ରୁଜୁ କରି ଘଟଣାର ଅଧିକ ତଦନ୍ତ କରୁଛି।

ସୂଚନା ଅନୁଯାୟୀ, ଢେଙ୍କାନାଳ-ଅନୁଗୋଳ ଅଞ୍ଚଳରେ ନିୟମିତ କୋଇଲା ଓ ଅନ୍ୟ ଖଣିଜପଦାର୍ଥ ଚୋରା ଚାଲାଣ କରାଯାଉଛି। ଏନେଇ ସୂଚନା ପାଇବା ପରେ ଏସ୍‌ଟିଏଫ୍ କିଛିଦିନ ହେବ ଏହା ଉପରେ ନଜର ରଖିଥିଲା। ଗୁରୁବାର ବିଳମ୍ବିତ ରାତିରେ ଖଣିମାଫିଆମାନେ ଦୁଇଟି ଟ୍ରକ୍ ନେଇ ଢେଙ୍କାନାଳ ଅଞ୍ଚଳରୁ କୋଇଲା ଲୋଡ୍ କରିଥିଲେ। ଶୁକ୍ରବାର ସକାଳେ ସେମାନେ କାମାକ୍ଷାନଗର ଦେଇ ଯାଉଥିବା ଏସ୍‌ଟିଏଫ୍ ଟିମ୍ ଏକ ବିଶ୍ୱସ୍ତ ସୂତ୍ରରୁ ଖବର ପାଇଥିଲା। ଏହାପରେ କାମାକ୍ଷାନଗରର ବିଭିନ୍ନ ଛକରେ ଏସ୍‌ଟିଏଫ୍ ଅଧିକାରୀମାନେ ଜଗି ରହିଥିଲେ। ୨ଟି କୋଇଲା ବୋଝେଇ ଟ୍ରକ୍ ପହଞ୍ଚିବାକ୍ଷଣି ତାହାକୁ ଅଟକାଇ ଯାଞ୍ଚ କରିଥିଲେ। ଡ୍ରାଇଭର ଦୁଇ କୋଇଲା ଚାଲାଣ ସଂକ୍ରାନ୍ତ କୌଣସି ବୈଧ କାଗଜପତ୍ର ଦେଖାଇପାରି ନ ଥିଲେ। ଏହାପରେ ସେମାନଙ୍କୁ ଗିରଫ କରାଯିବା ସହ ଟ୍ରକ୍ ମାଲିକ ଅରୁଣ ନାୟକଙ୍କ ବିରୋଧରେ ମାମଲା ରୁଜୁ କରାଯାଇଥିବା ସୂଚନା ମିଳିଛି।

ଭାଜପା ଅନୁସୂଚିତ ଜାତି ମୋର୍ଚ୍ଚାର ବହୁ ନେତାଙ୍କୁ ଭିନ୍ନ ଦାୟିତ୍ୱ

ଭୁବନେଶ୍ୱର, ୧୯।୨(ବ୍ୟୁରୋ)

୬ ରାଜ୍ୟ ଉପସଭାପତି, ୨ ସାଧାରଣ ସମ୍ପାଦକ, ୬ ସମ୍ପାଦକ

ଭାଜପା ରାଜ୍ୟ ସଭାପତି ସମୀର ମହାନ୍ତିଙ୍କ ଅନୁମୋଦନକ୍ରମେ ଅନୁସୂଚିତ ଜାତି ମୋର୍ଚ୍ଚା ରାଜ୍ୟ ସଭାପତି ବିନ୍ଦୁ ପ୍ରସାଦ ତରାଇ ଶୁକ୍ରବାର ଅନୁସୂଚିତ ଜାତି ମୋର୍ଚ୍ଚାର ବିଭିନ୍ନ ସଦସ୍ୟଙ୍କ ନାମ ତାଲିକା ଘୋଷଣା କରିଛନ୍ତି। ଅନୁସୂଚିତ ଜାତି ମୋର୍ଚ୍ଚା ରାଜ୍ୟ ଉପସଭାପତି ଭାବେ ବିଧାୟକ ସନାତନ ବିଜୁଳି, ଦୁର୍ଗା ତନ୍ତି, ମନିକର ଅର୍ଜ୍ୟା, ହେମନ୍ତ କୁମାର ମଲ୍ଲିକ, ରାମକିଶ ବିତାଲ, ଚନ୍ଦନ ସ୍ୱାଇଁଙ୍କୁ ଦାୟିତ୍ୱ ପ୍ରଦାନ କରାଯାଇଛି। ଅନୁସୂଚିତ ଜାତି ମୋର୍ଚ୍ଚା ରାଜ୍ୟ ସାଧାରଣ ସମ୍ପାଦକ ଭାବେ ବିଧାୟକ ମୁକେଶ ମହାଲିଙ୍ଗ ଓ ରାଘବ ମଲ୍ଲିକଙ୍କୁ ଦାୟିତ୍ୱ ଦିଆଯାଇଛି। ରାଜ୍ୟ ସମ୍ପାଦକ ଭାବେ କାର୍ତ୍ତିକ ଦାସ, ବିକାଶ କୁମାର ବେହେରା, ଗିରିଧାରୀ ଦାସ, ଶାନ୍ତିଲତା ସେଠୀ, ଈଶ୍ୱର ବାଗ, ଡି. ସଞ୍ଜୀବ କୁମାର, କୋଷାଧ୍ୟକ୍ଷ ଭାବେ ଜଗନ୍ନାଥ ବେହେରା ଏବଂ କାର୍ଯ୍ୟାଳୟ ସମ୍ପାଦକ ଭାବେ ସତ୍ୟ ନାରାୟଣ ସେଠୀଙ୍କୁ ଦାୟିତ୍ୱ ଦିଆଯାଇଛି।

ମୋର୍ଚ୍ଚାକୁ ଶକ୍ତିଶାଳୀ କରିବା ପାଇଁ ବିଭିନ୍ନ ବିଭାଗର ରାଜ୍ୟ ସଂଯୋଜକ ଭାବେ ପ୍ରମୁଖ ନେତାଙ୍କୁ ଦାୟିତ୍ୱ ଦିଆଯାଇଛି। ଅନୁସୂଚିତ ଜାତି ମୋର୍ଚ୍ଚା ରାଜ୍ୟ କାର୍ଯ୍ୟକାରିଣୀ ସଦସ୍ୟ ଭାବେ ଆଶୁତୋଷ ମଣ୍ଡଳ, ଲଳିତ ନଗର, ଚୌଧୁରୀ ଦୀପ, ଜନାର୍ଦ୍ଦନ ବେହେରା ପ୍ରମୁଖଙ୍କୁ ଦାୟିତ୍ୱ ଦିଆଯାଇଛି। ସ୍ଥାୟୀ ନିମନ୍ତ୍ରିତ ସଦସ୍ୟ ଭାବେ ବିରୋଧୀ ଦଳ ନେତା ପ୍ରଦିପ୍ତ କୁମାର ନାୟକ, ଉପନେତା ବିଷ୍ଣୁ ସେଠୀ, ବିଧାୟକ ନାଭରି ନାୟକଙ୍କ ସମେତ ପୂର୍ବତନ ବିଧାୟକ ବାଇଧର ମଲ୍ଲିକ୍, ଗୋବିନ୍ଦ ଦାସ, ଜାତୀୟ କାର୍ଯ୍ୟକାରିଣୀ ସଦସ୍ୟ ବସନ୍ତ କୁମାର ନାୟକ, ବିଶ୍ୱଜିତ୍ ଦତ୍ତାଙ୍କ ସମେତ ପ୍ରଭାରୀ ଦିଲୀପ୍ ମଲ୍ଲିକ୍, ଅଭିମନ୍ୟୁ ସେଠୀ, ଅମିୟ ମଲ୍ଲିକ୍, ପୂର୍ଣ୍ଣଚନ୍ଦ୍ର ମଲ୍ଲିକ୍ ପ୍ରମୁଖ ୧୯ ଜଣଙ୍କୁ ସ୍ଥାନ ଦିଆଯାଇଛି।

APPENDIX-IV

CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2008 & OHSAS 18001:2007 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha
Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization.
Empanelled with PCCF(Wildlife) &CWLW,Odisha
Enlisted in CIDC (established by the Planning Commission Govt. of India), NABL
MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Certificate No.: 6646

Report no. - CEMC/RSC/170521/A **Issued Date-17.05.2021**

AMBIENT AIR QUALITY MONITORING TEST REPORT

Client Name	**M/s Rourkela Smart City, Rourkela.**
Name of the Project	**Turnkey Execution of Costruction of Command Control Centre, Convention Hall & Auditorium and Tribal Museum in ABD Area At Rourkela.**
Name of Customer	**Engineering Projects (INDIA) Limited.**
Sampling Date	**25.04.2021**
Nature of Sampling	**Ambient Air Sample**
Sampling Location with Job Code	**Auditorium Building in ABD Area Near Hockey Chhak-CEMC/20-21/18A**
Instrument Used	**Respirable Dust Sampler, Fine Dust Sampler, CO Meter, Attachment Box**
Reference No.	**CEMC-1705202118A**

Sl. No.	Parameters	Result	Standard as per NAAQ	Methods of Analysis
1	Particulate Matter (PM_{10}) $\mu g/m^3$	68.8	100	**IS: 5182 (Part-23)**
2	Particulate Matter ($PM_{2.5}$) $\mu g/m^3$	38.6	60	**Gravimetric Method as per CPCB method**
3	Sulphur Dioxide (SO_2) $\mu g/m^3$	18.4	80	**IS: 5182 (Part-2)**
4	Nitrogen Oxides (NO_x) $\mu g/m^3$	25.2	80	**IS: 5182 (Part-6)**
5	Carbon Monoxide (CO) mg/m^3	0.61	4.0	**IS: 5182 (Part-10)**

**NAAQ (National Ambient Air Quality Standard as per 18th Nov, 2009 Gatt. Notification)*

****END OF REPORT****

Authorized Signatory **Seal of Laboratory**

Notes:

- The results relate only to the sample tested.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

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MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Certificate No.: 6646

Report no. – CEMC/RSC/170521/N **Issued Date-17.05.2021**

NOISE MONITORING TEST REPORT

Client Name	**M/s Rourkela Smart City, Rourkela.**
Name of the Project	**Turnkey Execution of Costruction of Command Control Centre, Convention Hall & Auditorium and Tribal Museum in ABD Area At Rourkela.**
Name of Customer	**Engineering Projects (INDIA) Limited.**
Reference No.	**CEMC-1705202108N**
Nature of Sampling	**Noise Sampling**
Instrument used	**Noise Level Meter**
Job Code	**CEMC/20-21/08N**
Sampling Date	**25.04.2021**

Sl. No.	Locations	dB(A) Day time	dB(A) Night time
1	Auditorium Building in ABD Area Near Hockey Chhak	63.8	52.2

NOISE LEVEL STANDARD

Area Code	Category of Area/Zone	Permissible Limit in dB (A)	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

Authorized Signatory **Seal of Laboratory**

Notes:

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CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

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MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Certificate No.: 6646

Report no. - CEMC/RSC/170521/W **Issued Date-17.05.2021**

GROUND WATER TEST REPORT

Project Name : **M/s Rourkela Smart City, Rourkela**
Name of the Project : **Turnkey Execution of Costruction of Command Control Centre, Convention Hall & Auditorium and Tribal Museum in ABD Area At Rourkela.**
Date of Sampling : 25.04.2021
Sampling by : Client's Representative
Date of Sample Received : 26.04.2021
Date of Analysis : 26.04.2021 to 11.05.2021
ULR NO. : **TC664621000000004F**
Sample Description : Ground Water
Sample Location with Job Code : **Auditorium Building in ABD Area Near Hockey Chhak-CEMC/20-21/24W**
Sample Quantity : 1.0 Ltr
Reference No. : CEMC-1705202124W

ANALYSIS RESULT

Sl. No	Parameter	Unit of measurement	Standard as per IS: 10500, 2012		Result
			Acceptable Limit	Permissible Limit	
1	Colour	Hazen	5	15	<5
2	Odour	--	AL	AL	AL
3	Taste	--	AL	AL	AL
4	Turbidity	NTU	1	5	<1
5	pH Value @ 25ºC	--	6.5-8.5	No Relaxation	6.41
6	Total Hardness (as $CaCO_3$)	mg/l	200	600	152
7	Iron (as Fe)	mg/l	0.3	No Relaxation	0.26
8	Chloride (as Cl)	mg/l	250	1000	32.9
9	Residual, free Chlorine	mg/l	0.2	1.0	ND
10	Total Dissolved Solids	mg/l	500	2000	286
11	Calcium (as Ca)	mg/l	75	200	37.67
12	Magnesium (as Mg)	mg/l	30	100	14.09
13	Copper (as Cu)	mg/l	0.05	1.5	<0.03
14	Manganese (as Mn)	mg/l	0.1	0.3	<0.02
15	Sulphate (as SO_4)	mg/l	200	400	10.2
16	Nitrate (as NO_3)	mg/l	45	No Relaxation	3.8
17	Fluoride (as F)	mg/l	1.0	1.5	0.14
18	Phenolic Compounds (as C_6H_5OH)	mg/l	0.001	0.002	<0.001
19	Mercury (as Hg)	mg/l	0.001	No Relaxation	<0.001
20	Cadmium (as Cd)	mg/l	0.003	No Relaxation	<0.003
21	Selenium (as Se)	mg/l	0.01	No Relaxation	<0.001
22	Arsenic (as As)	mg/l	0.01	0.05	<0.001
23	Cyanide (as CN)	mg/l	0.05	No Relaxation	ND

24	Lead (as Pb)	mg/l	0.01	No Relaxation	<0.01
25	Zinc (as Zn)	mg/l	5	15	<0.05
26	Total Chromium (as Cr)	mg/l	0.05	No Relaxation	<0.05
27	Mineral Oil	mg/l	0.5	No Relaxation	ND
28	Total Alkalinity (as $CaCO_3$)	mg/l	200	600	140
29	Aluminium (as Al)	mg/l	0.03	0.2	<0.01
30	Boron (as B)	mg/l	0.5	1.0	<0.2
31	Total Coliform	MPN/100ml	Absent	Absent	Absent
32	Faecal Coliform	MPN/100ml	Absent	Absent	Absent
33	E. Coli	MPN/100ml	Absent	Absent	Absent

NB: ND- Not Detectable, AL- Agreeable, MPN-Most Probable Number

END OF REPORT

Authorized Signatory **Seal of Laboratory**

Notes:

- The result given above related to the tested sample, as received. The customer asked for the above test only.
- This Test Report shall not be reproduced wholly or in part without prior written consent of the laboratory.
- The samples received shall be destroyed after two weeks from the date of issue of the Test Report unless specified otherwise.
- This Test Report shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory.

APPENDIX-V

Gmail

Rourkela Smart City <rourkelascl@gmail.com>

Submission of Environmental Statement Form V for the project “Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)” of Rourkela Smart City Limited at Rourkela in the district of Sundargarh in Odisha

1 message

Rourkela Smart City <rourkelascl@gmail.com> Tue, Apr 13, 2021 at 11:46 AM
To: roez.bsr-mef@nic.in

Respected Sir/Madam,

As per clause no. 17 of the General Condition of clearance of Environmental Clearance, please find the attachment of Form V of Environmental Statement for the financial year 2020-2021 for the project “Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)” at Rourkela in the district of Sundargarh in Odisha

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With Regards,

General Manager(E&T)
Rourkela Smart City Limited
Rourkela

Environmental Statement(Form V) Rourkela One Project.pdf
2415K

ROURKELA
SMART CITY LTD.

ROURKELA SMART CITY LTD.
(A SPV OF GOVERNMENT OF ODISHA, RMC & RDA)

Letter No. RSCL/3044/2021

Date. 12/04/2021

To,

The Member Secretary,
State Pollution Control Board,
Bhubaneswar

Sub: Submission of Environmental Statement (Form V) for the financial year 2020-2021 for the project "Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)"

Ref: Environmental Clearance letter no. 199/SEIAA, dated 27.01.2021

Sir,

With reference to the subject cited above, please find enclosed Environmental Statement (Form V) for the financial year 2020- 2021 of the project "Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)" under the Smart City Mission Plan near Hockey Chowk at Rourkela in the district of Sundargarh in Odisha.

This is for favour of your kind information and necessary action.

Yours Faithfully,

12/4/21

General Manger (E&T)
Rourkela Smart City Limited
Rourkela

Memo 3045 Dated 12/04/2021
Copy forwarded to the Director, Regional Office of MoEF&CC, Bhubaneswar for kind information and necessary action.

12/4/21

General Manger (E&T)
Rourkela Smart City Limited
Rourkela

Memo 3046 Dated 12/04/2021
Copy forwarded to the Regional officer, SPCB, Rourkela for kind information and necessary action.

12/4/21

General Manger (E&T)
Rourkela Smart City Limited
Rourkela

State Pollution Control Board (Odisha)
RECEIVED
No. [illegible]
Date 15/04/2021
Regional Office, Rourkela

: Uditnagar, Rourkela - 769012, Sundargarh, Odisha : (0661) - 2500 388 / 2500 239
: rourkelascl@gmail.com : www.rmc.nic.in CIN : U749990R2016PLC026168

ROURKELA
SMART CITY LTD.

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General Manger (E&T)
Rourkela Smart City Limited
Rourkela

Memo 3046 Dated 12/04/2021
Copy forwarded to the Regional officer, SPCB, Rourkela for kind information and necessary action.

13 APR 2021

12/4/21
General Manger (E&T)
Rourkela Smart City Limited
Rourkela

13.04.21

: Uditnagar, Rourkela - 769012, Sundargarh, Odisha : (0661) - 2500 388 / 2500 239
: rourkelascl@gmail.com : www.rmc.nic.in CIN : U749990R2016PLC026168

APPENDIX-VI

ROURKELA
SMART CITY LTD.

ROURKELA SMART CITY LTD.

(A SPV OF GOVERNMENT OF ODISHA, RMC & RDA)

Letter No. RSCL/3110/2021 Date. 23-04-2021

To,

The Dy. Commissioner,
Rourkela Municipal Corporation

Sub: No objection Certificate for drainage connection and handling of Municipal Solid waste for the project "Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)"

Sir,

With reference to the subject cited above, I am to inform that the Rourkela Smart City Limited has taken up a project namely "Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)" under the Smart City Mission Plan near Hockey Chowk at Rourkela. As per the planning, the storm water runoff and excess treated water is planned to be discharged to Municipal drainage line running along Civil Township and Solid waste generated shall be collected by RMC for further disposal.

It is therefore requested to provide NOC for connecting the internal drainage system to Municipal Drainage and handling of Solid waste.

Encl.

1. Storm water drainage plan and quantity of storm & treated water discharge details.
2. Solid waste generated quantity details.

Yours Faithfully,

Chief Executive Officer
Rourkela Smart City Limited
Rourkela

26.4.21

APPENDIX-VII

Fax No. 0661-2664791
Ph No. 0661-2664791 (O)
e-mail eephrkl@nic.in

ନିର୍ବାହୀ ଯନ୍ତ୍ରୀଙ୍କ କାର୍ଯ୍ୟାଳୟ, ଜନସ୍ୱାସ୍ଥ୍ୟ ବିଭାଜନ, ରାଉରକେଲା

No. 1004 /Date 07-02-2020

To

The Chief Executive Officer,
Rourkela SMART City Limited , Rourkela

Sub :- Issue of feasibility report for water supply to the proposed Rourkela One project (Integrated complex comprising of command & control Centre, Auditorium centre & Tribal Museum) near Hockey Chowk, Rourkela developed by Rourkela Smart City Ltd. .

Ref :- Your application No. 194 dt. 03.02.2020.

Sir,

As per the site inspection, there is public water supply system & it is feasible to cater the demand of the proposed Rourkela One project (Integrated complex comprising of command & control Centre, Auditorium centre & Tribal Museum) near Hockey Chowk, Rourkela.

The applicant is allowed to take water supply connection for the above proposed project observing the following term & conditions.

i. Requisite capacity of RCC storage reservoir (Demand of drinking water= 84,000 ltrs/day) is to be constructed in the above premises under the supervision of PHEO personnel.
ii. After completion certificate is obtained from the person concerned water supply connection will be given.
iii. All the expenditure for laying of pipe line to the storage reservoir from the tapping point including interconnection & valve arrangement as per PH Specification will be borne by the agency.
iv. Road cutting permission if required during the execution of the above will be the sole responsibility of the agency.
v. The water supply connection will be invariable metered for the proposed UGR
vi. The Department is at liberty to disallow the water supply in case any emergency for which the applicant can not claim any compensation.

Yours faithfully,

Executive Engineer (PH)

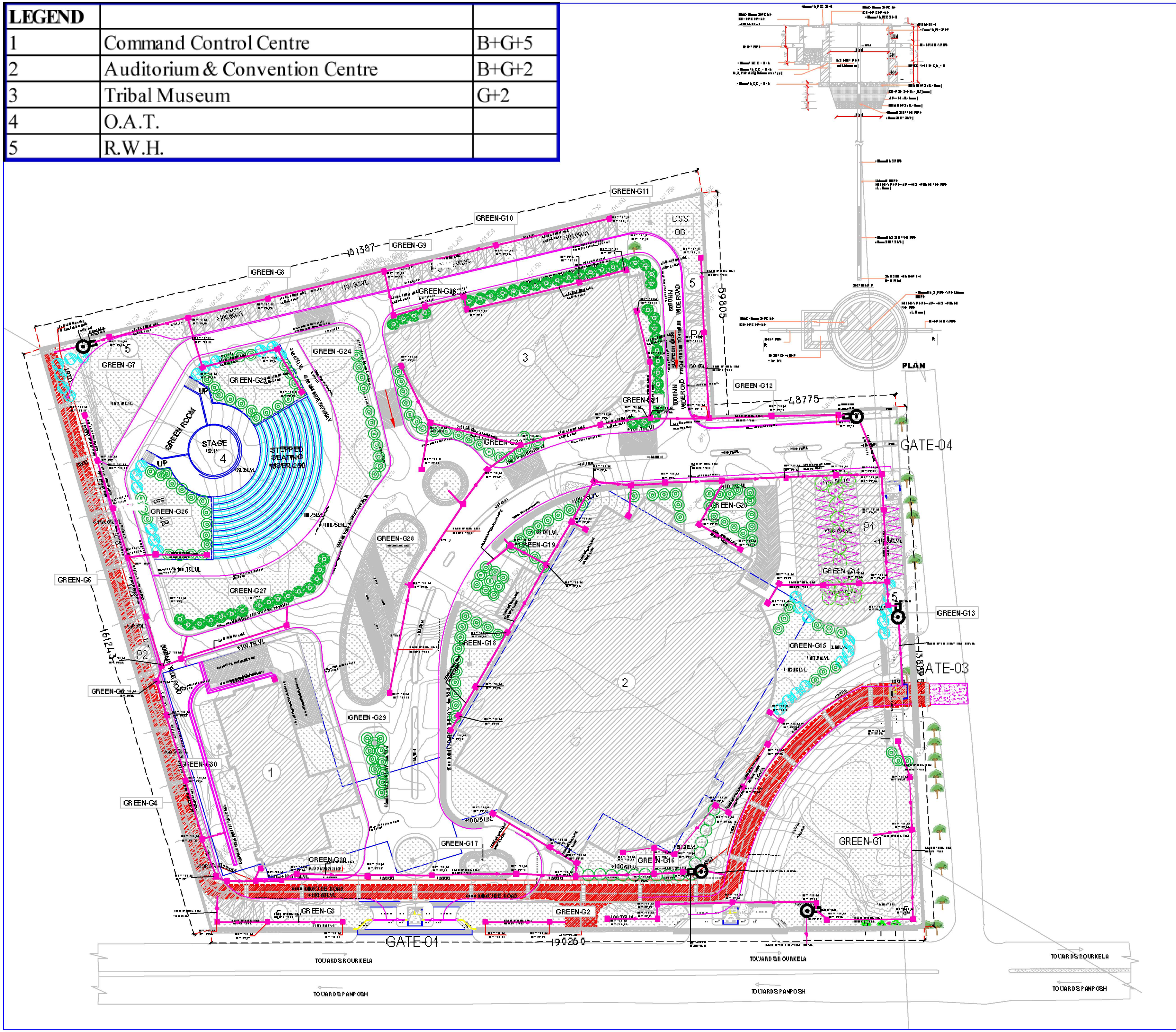
Memo No 1005 /Date 07-02-2020

Copy to the Asst. Executive Engineer, PH Sub-Division, Rourkela with for information & necessary action.

Executive Engineer (PH)

APPENDIX-VIII

LEGEND		
1	Command Control Centre	B+G+5
2	Auditorium & Convention Centre	B+G+2
3	Tribal Museum	G+2
4	O.A.T.	
5	R.W.H.	



SUBMISSION DRAWING

ARCH-EN DESIGN
B-1/37, GROUND FLOOR
HAUZ KHAS, NEW DELHI-16
Ph : 011-45188222
Fax: 011-45188288
Email: info.delhi@aed.co.in

PROJECT:
TURNKEY EXECUTION OF CONSTRUCTION OF COMMAND CONTROL CENTRE, CONVENTION HALL, AUDITORIUM AND TRIBAL MUSEUM IN ABD AREA AT ROURKELA

CLIENT:
ROURKELA SMART CITY LTD
PDMC FOR AREA BASED DEVELOPMENT

TATA CONSULTING ENGINEERS LIMITED

DRAWING TITLE:
SITE PLAN
STORM WATER LAYOUT

DATE	SCALE	REVISION	NORTH
31 AUG 2020	1:500 @A1		
DRG. NO.: AED/RONE/SD/S/P/PL-001		AR-001	

CONSULTING ARCHITECTS AND ENGINEERS
ARCH-EN DESIGN

APPENDIX-IX

ROURKELA
SMART CITY LTD.

ROURKELA SMART CITY LTD.

(A SPV OF GOVERNMENT OF ODISHA, RMC & RDA)

Letter No. RSCL/3110/2021 Date. 23-04-2021

To,

The Dy. Commissioner,
Rourkela Municipal Corporation

Sub: No objection Certificate for drainage connection and handling of Municipal Solid waste for the project "Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)"

Sir,

With reference to the subject cited above, I am to inform that the Rourkela Smart City Limited has taken up a project namely "Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)" under the Smart City Mission Plan near Hockey Chowk at Rourkela. As per the planning, the storm water runoff and excess treated water is planned to be discharged to Municipal drainage line running along Civil Township and Solid waste generated shall be collected by RMC for further disposal.

It is therefore requested to provide NOC for connecting the internal drainage system to Municipal Drainage and handling of Solid waste.

Encl.

1. Storm water drainage plan and quantity of storm & treated water discharge details.
2. Solid waste generated quantity details.

Yours Faithfully,

Chief Executive Officer
Rourkela Smart City Limited
Rourkela

26.4.21

APPENDIX-X


AI DUAL CAMERA
Shot by SaNdY
2021/06/09 10:46

APPENDIX-XI

ROURKELA
SMART CITY LTD.

ROURKELA SMART CITY LTD.

(A SPV OF GOVERNMENT OF ODISHA, RMC & RDA)

Letter No. RSCL/3141/2021 Date. 28-04-2021

To,

The Executive Engineer,
WESCO, Rourkela

Sub: **No objection Certificate for supply of power for the project "Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)"**

Sir,

With reference to the subject cited above, I am to inform that the Rourkela Smart City Limited has taken up a project namely "Construction of rOURkela One (Command Control Centre and Convention Hall, Auditorium & Tribal Museum)" under the Smart City Mission Plan near Hockey Chowk at Rourkela. As per the planning, the power requirement for the project is 2.12 MVA

It is therefore requested to provide NOC for supply of 2.12 MVA power.

Yours Faithfully,

28/4/21

General Manger (E&T)
Rourkela Smart City Limited
Rourkela

Rahaker
04-05-2021

RECEIVED CLERK
Rourkela Sadar Electrical Division
TPWODL, Rourkela

Uditnagar, Rourkela -769012, Sundergarh, Odisha (0661) 2500 388 / (0661) 2500 239
rourkelascl@gmail.com www.rmc.nic.in CIN: U749900R2016PLC026168

APPENDIX-XII

1. **Traffic Circulation & Road Widths**

The site has in total 4 segregated Entry and Exits,

- General Entry-Exit – 13.5m width in the Southern edge of the site
- General Entry-Exit – 13.5m width in the Eastern edge of the site
- Emergency Entry-Exit - 15m width in the bottom portion of the Eastern edge
- Emergency Entry-Exit - 15m width in the right most portion of the Southern Edge

The roads would also be developed in two phases accordingly for phase 1 and 2 buildings. The general entry-exits would cater to all visitors and staff visiting the One Stop campus, also the pedestrians entering the complex. The General Entry Gates would be open and accessible all through the day. The Emergency Entry-Exits would cater to the fire safety demands on the site only during the times of need. Rest of the time the entry-exit gates would be closed, and the paved pathway would be treated as recreational space and pedestrian walkway.

The circulation within is planned in the form of a circular ring road running through the periphery of the site and catering to all the components of the site by radial roads. Clockwise movement has been proposed within site. The internal roads are proposed to be of 6m width. The total internal road length within the rOURkela One complex is 1085m (1.1 km).

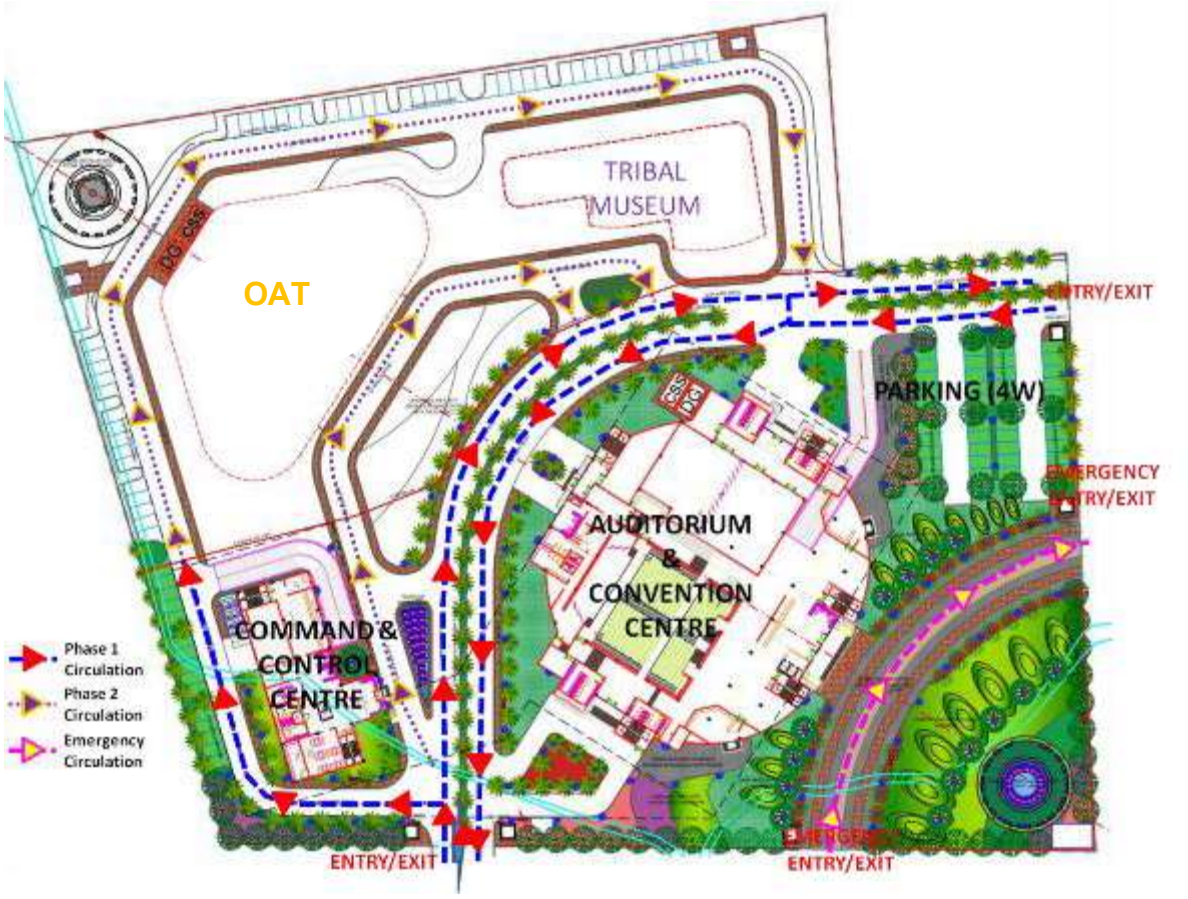


Figure 1 rOURkela One Site Plan

1.1 Road Geometry

Based on availability of space, turning radius of all roads in the overall site has been proposed to be varying from 6m to 9m for smooth turning of fire tender vehicles and other goods vehicles like LCVs. In conditions of space constraint, 6m turning radius has been provided but not less than that.

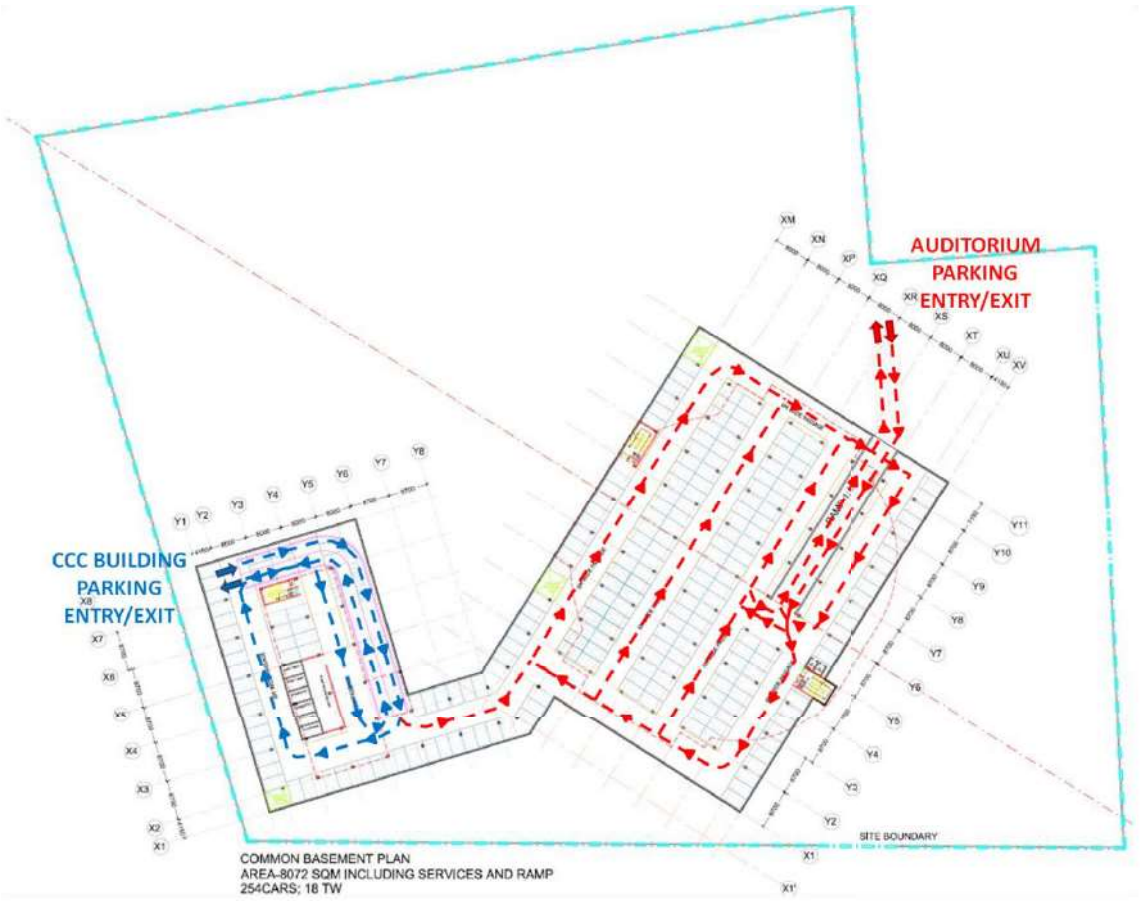
Details of traffic circulation are given below.

1.2 Detailed Parking Area Calculation:

Total ECS proposed at site is 360 which include 256 ECS in basement and 104 at surface Level. The further detail of same is as follow:

Basement Parking

A major portion of the site has basement parking provided, consisting of 1 level of parking (256 car spaces). Thus, total parking capacity of the Basement parking accounts to approximately 256cars. The Basement Parking has 2 ramps/Entry-Exits, one from each Auditorium & Convention Centre and Command Control Centre having a direct access to the proposed peripheral road of the site. The circulation plan drawing for which has been illustrated below,



rOURkela One Basement Plan

Surface Parking

Surface Parking is provided at the North-Eastern corner of the site. 40 car spaces of parking have been provided within the area. Addition to this there is also proposal to

accommodate more car parking along the internal periphery road which sum up to 64 no of car space. Thus, total ECS achieved / proposed on surface level is 40 + 64 = 104 ECS.

In the Proposed 'Rourkela one' project the parking calculations are done considering both NBC and local bylaws giving preference to the local by-laws norms and considering NBC if the local by law fails to give clear picture.

1.2.1 PARKING CALCULATION AS PER NBC:

As per NBC 2016 – part 1 – part 3 – annexure A – of street parking space for city with population above 500000 (case Rourkela) are as follow:

1. Assembly area; cinema hall (case Auditorium & convention hall) = 1 ECS per 25 seat accommodated
2. Office space public / semipublic (case CCC building) = 1 ECS per 100sqm Built Up Area
3. Exhibition building (case tribal museum) = 1 ECS per 50 sqm of Built up area

Thus, total required parking for optimum condition as per NBC is as follow:

Table 1: Total Required Parking for Optimum condition as per NPC

BUILDING NAME	OCCUPANCY / BUA	ECS	PARKING REQUIREMENT
Auditorium	1350 SEATS	1 ECS/ 25 SEATS	54 ECS
Convention Hall	1500 PPL	1 ECS/ 25 SEATS	60 ECS
CCC Building	4352.5 SQM	1 ECS/ 100 SQM	43 ECS
Tribal Museum	5241 SQM	1 ECS/ 50 SQM	104 ECS
Total Required ECS			ECS

1.2.2 Parking Calculation As Per Local By Laws

Considering the Local city bylaws, the required parking space is as follow:

For Auditorium building = 40% of BUA = 0.4*8455 = 3382 SQM of parking

For CCC Building = 30 % of BUA = 0.3*4352= 2421SQM of parking

For Tribal Museum = 25 % of BUA = 0.25*5241 = 1310 SQM of parking

Thus, total parking area required as per the local by-laws = 7113 sqm

Accommodating 20% on surface and remaining 80% in basement; the proposed parking area as follow:

Surface parking = 1783 sqm = 104 ECS

Basement parking = 8072 sqm = 256 ECS (including service area).

EVENT DAY: PARKING CALCULATION AS PER RIDERSHIP SHARE IN RESPECT OF TRAFFIC SURVEY BY TCE

However, during the event days if the parking space provided inside the campus feels not to be adequate for all the vehicles of the spectators. In such scenarios we have identified dedicated parking spaces in nearby spaces which can be used during event days. Feeder bus service and e-rikshaw will be provided from the parking lots to the event area.

Table 2: Number of required parking during Event days as per ridership

Sr. No.	Buildings	Capacity/ Occupancy	No of Cars 12%	No of Two Wheelers 50%
1	Auditorium	1350	54	338
2	Convention hall	1500	60	375
3	CCC building	436	52	218
4	Tribal museum	524	21	131
REQUIRED PARKING			187CAR	1062 2W
REQUIRED ECS			187 ECS	212 ECS

Thus, Total ECS required = 187 + 212 = 399 ECS

Since the ECS required for tribal museum is more as per the NBC thus for tribal museum the ECS shall be considered as per NBC for event day calculation.

Thus, Total ECS considered = (54+60+52)+(388+375+218)/5 + 104 ECS = 466 ECS

Note -

As per the traffic survey the ridership share is 12% by car, 50% by two-wheeler & 38% spectator will commute by public transport. This is based on the traffic survey conducted for the city.

For auditorium; convention hall and tribal museum 3 people are considered per car and 2 people per 2-wheeler.

For CCC Building 1 person is considered per car and 2-wheeler. Details of available parking spaces is given in the table below,

Table 3: Available parking spaces details

Sr. No	Location for Parking	Distance from Stadium	ECS
1	Surface parking at site	0 KM	104
2	Basement parking	0 KM	256
3	Brahmani River front development	0.6 KM	110
		Total	470

1.2.3 Traffic Calculation for Rourkela One

Table 4: Traffic calculation for rOURkela One

** Estimated Population for Rourkela One*	*4,620*	*(Maximum Population considering simultaneous events in all the building of Complex)*					
Sl. No.	**Traffic Calculation**	**Percent Share**	**Commuters Share**	**Assumed Average Commuter per Vehicle**	**Vehicle Nos.**	**PCU Factor**	**Volume in PCUs**
1	Two Wheelers, Motor Cycle, Scooter, etc.,	50.00%	2310	1.5	1,540.00	0.5	770.00
2	Passenger Car, Pick-up Van/Taxi	12.00%	554	2	278.00	1	278.00
3	Auto Rickshaw	15.00%	693	1	693.00	1.2	832.00
4	Bus	15.00%	693	20	35.00	3.7	130.00
5	Walk/Others	8.00%	370	-	-	-	-
		100.00%			**2,546.00**		**2,010.00**

1.2.4 Traffic due to Rourkela One

The Traffic generated due to Rourkela one is calculated. The detail PCU factor Consider by referring below table.

TABLE 1. RECOMMENDED PCU FACTORS FOR VARIOUS TYPES OF VEHICLES ON URBAN ROADS

Vehicle Type	Equivalent PCU Factors — Percentage composition of Vehicle type in traffic stream	
	5%	10% and above
Fast Vehicles		
1. Two wheelers Motor cycle or scooter etc.	0.5	0.75
2. Passenger car, pick-up van	1.0	1.0
3. Auto-rickshaw	1.2	2.0
4. Light commercial vehicle	1.4	2.0
5. Truck or Bus	2.2	3.7
6. Agricultural Tractor Trailer	4.0	5.0
Slow Vehicles		
7. Cycle	0.4	0.5
8. Cycle rickshaw	1.5	2.0
9. Tonga (Horse drawn vehicle)	1.5	2.0
10. Hand cart	2.0	3.0

Figure 2: PCU Factor considered as per IRC: 106-1990

S. No.	Type of carriageway	Total Design Service Volumes for Different Categories of Urban Roads		
		Arterial*	Sub-arterial**	Collector***
1.	2-Lane (One-Way)	2400	1900	1400
2.	2-Lane (Two-Way)	1500	1200	900
3.	3-Lane (One-Way)	3600	2900	2200
4.	4-Lane Undivided (Two-Way)	3000	2400	1800
5.	4-Lane Divided (Two-Way)	3600	2900	–
6.	6-Lane Undivided (Two-Way)	4800	3800	–
7.	6-Lane Divided (Two-Way)	5400	4300	–
8.	8-Lane Divided (Two-Way)	7200	–	–

Figure 3: Design Service Volume for Urban Roads PCU/ Hr. as per IRC: 106-1990

The impact of the Rourkela One on the Link Road is Calculated and Shown in the Below Table.

Table5: Calculation for Impact of rOURkela on link roads

Impact Traffic				
Year	**Total Traffic (PCU/day)**	**Carriageway**	**Level of Service (LOS)**	**Remarks**
2019	25774	4-Lane Divided	LOS A	
2020	27063			
2021	28416			
2022	29837		LOS B	
2023	31328			
2024	32895			
2025	34540			
2026	36267			
2027	38080			
2028	39984			
2029	41983		LOS C	
2030	44082			
2031	46286			
2032	48601			
2033	51031	Demands for Six Lane	LOS D	
2034	53582			

The Link Road is Demands for Widening to Six Lane for the year of 2034 and it comes under Level of Service D (LOS D)

1.2.5 Entry Exist Width for the Project:

There are 3 types of entry and exit at site; i.e. at individual building level; basement level and plot entry and exit.

Individual buildings:

All the buildings are design as per NBC norms considering fire and safety norms. Thus, at times of full occupancy and emergency condition the staircase for fire exit and the doors are designed as per the safety norms which give direct access of people in building to an open and safe area.

Basement entry and exit:

The basement is design as per the fire safety norms staircase for exit from basement to open safe space are located at strategic location as per the safety norms. The entry and exit (carriage way) for vehicle are kept at 6M Wide; which allows a smooth flow of vehicle IN and OUT.

Normally in general practice we considered 1 entry and exit for 500 cars. In case of Rourkela One project there is a proposal of 2 entry and exit for 254 cars in basement.

Plot entry and exit:

The master plan shows 4 entry and exit to the plot. Two numbers of entry and exit are for normal movement while other two are reserved for emergency movement. Width of each entry and exit are kept minimum 12-meter-wide which allows two-way smooth movement traffic inside the campus.


LEVEL OF SERVICE OF ROAD IS C
Four lane two way
LEVEL OF SERVICE OF ROAD IS B
For lane two way
Two lane two way
LEVEL OF SERVICE OF ROAD IS A
Hotel Tridev
Unique TVS
Motorcycle dealer
Government Autonomous Girls' Hostel
Sai Bridal Makeup
Temporarily closed
Kusum Botique
Temporarily closed
AFPL PANPOSH BRANCH
Super Speciality Hosp
Wesco Utility MRT Office
Temporarily closed
MAMA HOTEL
Takeout · Delivery
KRISHI VIGYAN KENDRA,PANPOSH...
amit verity store
DEPT Agriculture Office
RUNWAY GROUP OF COMPANY
Health and beauty shop
SBM Toilet
Link Rd
143

Description	Illustration
Level of Service A: Represents a condition of free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to manoeuvre within the traffic stream is high. The general level of comfort and convenience provided to the road users is excellent.	
Level of Service B: Represents a zone of stable flow, with the drivers still having reasonable freedom to select their desired speed and manoeuvre within the traffic stream. Level of comfort and convenience provided to the road users is good.	
Level of Service C: This also is a zone of stable flow, but marks the beginning of the range of flow in which the operation of individual drivers starts getting affected by interactions with others in the traffic stream. The selection of speed is now getting affected by the presence of others, and manoeuvring within the traffic stream requires vigilance on the part of the user. The general level of comfort and convenience starts declining.	
Level of Service D: Represents the limit of stable flow, with conditions approaching close to unstable flow Due to high density, the drivers are severely restricted in their freedom to select desired speed and manoeuvre within the traffic stream. The general level of comfort and convenience is poor. Small increases in traffic flow will usually cause operational problems at this level.	
Level of Service E: Represents operating conditions when traffic volumes are at or close to the capacity level. Freedom to manoeuvre within the traffic stream is extremely difficult, and is generally accomplished by forcing a vehicle to give way to accommodate such manoeuvres. Level of comfort and convenience is poor, and driver frustration high. Operations at this level are usually unstable, because small increases in flow or minor disturbances within the traffic stream will cause breakdowns.	
Level of Service F: Represents zone of forced or breakdown flow. This condition occurs when the amount of traffic approaching a point exceeds the amount, which can pass it. Queues form behind such locations. Operations within the queue are characterised by stop-and-go waves, which are extremely unstable. Vehicles may progress at a reasonable speed for several hundred metres and thereafter may be required to stop in a cyclic fashion. Due to high volumes, breakdown occurs and long queues and delays are a result.	

Entry Exit and pedestrian Plan

APPENDIX-XIII

Environmental Management Plan

Based on the environmental and social impacts identified in the above section, a detailed Environmental Management Plan is developed for the pre-construction and construction phase of the project. The same is presented in Table 18 below.

Table 1: Summary of Potential Impacts and Mitigation Measures for Construction Phase

Sr. No.	Environmental Components	Potential Impacts	Potential Source of Impact	Controls through EMP & Design	Impact Evaluation	Implementing Agency
1.	Surface water quality	Surface water contamination	Surface runoff carrying loose soil particles	- On site diversion ditch will be constructed to control any surface run-off during site development - Avoid demolition & excavation during monsoon season. - Care should be taken to avoid soil erosion. - All stacking and loading areas will be provided with proper garland drains to prevent run off from the site. - During construction, proper arrangements shall be made to dispose of any wastewater generated from the area.	No off-site impact envisaged as there is no surface water receiving body in impact zone.	Contractor/ RSCL
2.	Ground water quality	Ground water contamination	Waste water generated during construction activity containing waste water, various chemicals, solvents etc.	- Careful handling of materials - Controlling spillage through better management - Provision of dykes for material storage units of material such as oil.	Minor negative impact as quality generated is small and execution of EMP will reduce the impact to acceptable level.	Contractor/ RSCL

Sr. No.	Environmental Components	Potential Impacts	Potential Source of Impact	Controls through EMP & Design	Impact Evaluation	Implementing Agency
3.	Storm water	Contamination of Storm water	- Diesel and oil spills in the diesel power generator and fuel storage area. - Waste spills in the solid waste storage & dump area. - Oil spills and leaks in vehicle parking lots.	- Regular inspection and cleaning of storm water drains to ensure cleanliness. - Cover waste storage areas. - Provision of silt traps in storm water drains.	Not significant	Contractor/ RSCL
4.	Ground water quality	Ground water depletion	Use of ground water for activity	- There is no ground water extraction for the project except if required for landscape/ irrigation.	No impact	Contractor/ RSCL
5.	Air Quality	Dust Emissions	Heavy construction and demolition activities.	- Emission control particle filters on Construction equipment - Rapid on-site construction - Improved maintenance of construction equipment - Use of vehicles with valid Pollution Under Check (PUC) certificate - Apply water to at least 80% of the surface areas of all open storage piles daily when there is evidence of wind driven fugitive dust - Apply dust suppressants in enough quantity and frequency to maintain a stabilized surface	Not significant.	Contractor/ RSCL

Sr. No.	Environmental Components	Potential Impacts	Potential Source of Impact	Controls through EMP & Design	Impact Evaluation	Implementing Agency
				- Downwash of trucks (especially tyres) prior to departure from site.		
		Emissions of SPM, SO_2, NO_x and CO	Operation of construction equipment and vehicles during site development.	- Emission control particle filters on Construction equipment. Using electrically operated construction machinery is the best way to avoid external pollution produced by diesel engines - The diesel generators used on site, in case of power failure, are maintained properly - Rapid on-site construction - Improved maintenance of construction equipment - Use of vehicles with valid Pollution Under Check (PUC) certificate	Not significant.	Contractor/ RSCL
			Emission from Hot-Mix Plants and Batching Plants	- These shall be located sufficiently away from habitation, agricultural operations or industrial establishments. Where possible such plants will be located at least 1000 m downwind from the nearest habitation. The exhaust gases, and operation of the plants shall comply with the requirements of the relevant current emission control rules (as per OSPCB)	Temporary	Contractor/ RSCL
6.	Noise Environment	Noise emissions	Operation of construction & demolition equipment and vehicles during site development.	- Use of well-maintained equipment fitted with silencers. - Providing noise shields near the heavy construction operations - Construction activity will be limited to daytime hours only	Considering the present traffic flowing through the area, and existing commercial activities no noise	Contractor/ RSCL

Sr. No.	Environmental Components	Potential Impacts	Potential Source of Impact	Controls through EMP & Design	Impact Evaluation	Implementing Agency
					increase expected from the project activities.	
7.	Land Environment	Soil contamination	- Disposal of construction & demolition debris. - Inappropriate disposal of liquid waste, (lubricating oil and fuel spills, waste oil and lubricant and vehicle/ equipment washing effluent) and solid waste (fuel filters, oily rags)	- Contractors will be appointed for debris disposal & recycling as per rules. - Hazardous waste generated during construction phase shall be stored in sealed containers, labelled, and disposed of as required by the Hazardous Wastes Management and Handling Rules (2016) - Waste generated from labour camps, non-compostable and non-recyclable portion of the waste shall be collected and send to authorized agency. - The contractor shall take the top soil out separately and stockpile it. After the construction activity is over, top soil shall be utilized for landscaping activity	Not significant. Impact will be local, as any waste generated will be reused for construction activities. Not significant.	Contractor/ RSCL
		Soil Erosion	- Weakening of soil layers through Burrowing of earth and other	- Along sections abutting water bodies, stone pitching needs to be carried out for slopes between 1:4 and 1:2 Gabion structures/ Grass turfing shall be provided for slopes steeper than 1 vertical to 2 horizontal.	Not significant. All precautions will be taken during any such activities	Contractor/ RSCL

Sr. No.	Environmental Components	Potential Impacts	Potential Source of Impact	Controls through EMP & Design	Impact Evaluation	Implementing Agency
			earthwork resulting into soil erosion			
8.	Biological Environment	Displacement of Flora and Fauna on site	Site development during demolition & construction.	- After completion of soil work, temporary vegetation preferably grasses to be planted to minimize soil erosion	Beneficial Impact.	Contractor/ RSCL
				- Trees will be removed from the corridor of impact (or, site) before the commencement of construction with prior clearance from the Forest Dept.	Significant Impact. Any tree cutting is accountable.	Contractor/ RSCL
9.	Socio-Economic Environment	Employment opportunities	Construction activities.	- There will be generation of employment for local labour due to the ensuing construction activities	Beneficial Impact.	Contractor/ RSCL
10.	Traffic Pattern	Increase of Vehicular traffic	Heavy vehicular movement during construction.	- Heavy vehicular movement will be restricted to non-peak traffic hours only. - Adequate parking facility will be provided	No Negative Impact.	Contractor/ RSCL

Table 2: Summary of Potential Impacts and Mitigation Measures for Operational Phase

Sr. No.	Environmental Components	Potential Impacts	Potential Source of Impact	Controls through EMP & Design	Impact Evaluation	Implementing Agency
1.	Surface water quality	Surface water contamination	Discharge of domestic wastewater to surface water body.	- Waste water will be collected from all units by properly designed drainpipes and will be treated in centralized Sewage Treatment Plant (STP) of city. The treated water will further be advised for reusing it for flushing. - Water consumption will be minimized by a combination of water saving devices and other domestic water conservation measures	No off-site impact envisaged.	Contractor/ RSCL
2.	Storm water	Storm water contamination	- Waste spills in the solid waste storage area. - Oil spills and leaks in vehicle parking lots. - Silt from soil erosion in landscape area	- Regular inspection and cleaning of storm water drains to ensure cleanliness. - Cover waste storage areas. - Provision of silt traps in storm water drains. - Good housekeeping in the above areas		Contractor/ RSCL
3.	Ground water quality	Ground water contamination	- Sewage discharge on site or off site	- No sewer discharge will be directed to ground water sources.	No negative impact on ground water	Contractor/ RSCL

Sr. No.	Environmental Components	Potential Impacts	Potential Source of Impact	Controls through EMP & Design	Impact Evaluation	Implementing Agency
					quality envisaged	
4.	Air Quality	Emissions of SPM, SO2, NOx and CO	- Emissions from vehicular traffic in operations. - DG sets	- Use of good quality fuel with low Sulphur content - Periodic maintenance of DG sets as per defined schedule of manufacturer - Providing adequate stack heights. - Vehicle flow and traffic should be management in systematic manner - Vehicles carrying the construction material and sand shall be covered properly - Loading and unloading of construction materials must be in covered area with provisions of water fogging around these locations - Regular maintenance of machinery and equipment is essential; vehicular pollution check should be made mandatory.	No impact is envisaged.	Contractor/ RSCL
5.	Noise Environment	Noise emissions	- Noise from vehicular movement and DG sets.	- Better acoustic control will be maintained in the auditorium & convention center by use of noise absorbent measures and DG sets will be acoustically enclosed.	Not significant. The backgroun d noise	Contractor/ RSCL

Sr. No.	Environmental Components	Potential Impacts	Potential Source of Impact	Controls through EMP & Design	Impact Evaluation	Implementing Agency
			- Noise during the any events	- Staff to use earplugs inside DG room. - Noise level monitoring during the day time near the sensitive receptors should also be made mandatory - Anti-honking sign boards will be placed in the parking areas and on entry and exit points. - Green belt is provided as a barrier to cut the noise levels	levels are considerably high; thus, noise mingling would occur in a few meters distance.	
6.	Land Environment	Soil contamination	The project is going to reduce the waste disposal on the ground, therefore, land contamination would reduce.	This project is for managing waste disposal on the ground.	No impact on site.	Contractor/ RSCL
7.	Socio-Economic Environment	Employment opportunities	Plant operation.	- Project will provide employment opportunities to the local people in terms of service personnel during operations. - Providing comparatively better infrastructure.	Beneficial Impact.	Contractor/ RSCL

Sr. No.	Environmental Components	Potential Impacts	Potential Source of Impact	Controls through EMP & Design	Impact Evaluation	Implementing Agency
8.	Biological environment	Displacement of flora & fauna	Plant operation	- Enhancement of the current ecology at the proposed project site will entail the plantation and landscaping within the proposed development		

APPENDIX-XIV

ROURKELA
SMART CITY LTD.

145

ROURKELA SMART CITY LTD.
(A SPV OF GOVERNMENT OF ODISHA, RMC & RDA)

Letter No. 1156

Date. 14.07.2020

OFFICE ORDER

In order to monitor the Environmental impact of all the projects to be taken of by Rourkela Smart City at Rourkela an Environmental Cell is hereby constituted under the Chairmanship of CEO, RSCL with the following officials as members.

1. Chief Executive Officer, RSCL : Chairman
2. General Manager (Operation), RSCL : Member
3. General Manager(E&T), RSCL : Member
4. Regional Officer or Representatives, : Member
   Regional Office State Pollution Control Board, Rourkela
5. Team Leader, Tata Consulting Engineers Limited (TCE) : Member
6. Environment Expert, RSCL : Member Convener

The committee will meet once in a month or as and when required to assess and monitor the impact of all the Projects on Environment and ensure proper implementation of Environmental Management Plan (EMP).

Chief Executive Officer
Rourkela Smart City Limited
Rourkela

Memo No. 1157 Date. 14.07.2020

Copy forward to the officers concerned for information and necessary action

State Pollution Control Board [Odisha] RECEIVED No. Date. 16/7/20 Regional Office, Rourkela

Chief Executive Officer
Rourkela Smart City Limited

Uditnagar, Rourkela- 769012, Sundargarh, Odisha (0661)- 2500 388/2500 239
rourkelascl@gmail com : www.rmc.nic.in CIN : U749990R2016PLC026168

APPENDIX-XV

भारतीय प्रौद्योगिकी संस्थान रुड़की
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
सिविल अभियांत्रिकी विभाग
DEPARTMENT OF CIVIL ENGINEERING
रुड़की – 247 667, उत्तराखण्ड, भारत
ROORKEE-247 667, UTTARAKHAND, INDIA
Fax/फैक्स: 01332-275568, 273560
Tele/फोन : 01332-284319, 285219
E-mail/ई–मेल : civil@iitr.ac.in

Ref. No: CED/AC/R/RKLONE/1

Date: 28.09.2020

To,
M/s. Arch-En Design,
4/5, Vishal khand
Gomti Nagar
Lucknow: 226010

Sub: Vetting of Structural Designs for Proposed Construction of Rourkela One at Rourkela, Odisha

Ref:
1. Letter No. AED/ROURKELAONE/2019-20/27082020 dated 27 August, 2020
2. Structural design calculations and drawings as submitted

This is to certify that the structural designs and drawings of Proposed Construction of Rourkela One at Rourkela, Odisha have been checked and found to be safe and conforming to the latest relevant codes of practice as per the latest Indian standards. All the stipulated combinations of gravity Loads and the relevant lateral loads have been considered and duly incorporated in the analysis and design.

The responsibility of the Indian Institute of Technology Roorkee shall be limited to checking of structural design calculations and drawings only. All procedural /legal/operational matters and architectural/functional details will be the responsibility of the owner.

Sincerely

28/9/2020

(Dr. A. Chakrabarti)
Dr. Anupam Chakrabarti
Professor
Department of Civil Engineering
Indian Institute of Technology Roorkee
Roorkee-247 667, Uttarakhand, India