TAURUS INDIA

Dragonstone Realty Private Limited
Registered Office: B'Hub,
Cardinal Cleemis Centre for Innovation,
Mar Ivanios Vidya Nagar, Nalanchira,
Trivandrum 695015
Landline: 799 444 80 60
W: www.tihloldings.in
CIN: U45201KL2015FTC038988

Ref: TIH/DRPL/ZEN/CR-MOEF/03

30th June 2021

To
The Additional Principal Chief Conservator of Forests (C)
The Ministry of Environment, Forests & Climate Change - Regional Office (Southern Zone)
4th Foor, E&F Wings Kendriya Sadan, 17th Main Road
2nd Block, Koramangala, Bangalore – 560 034

Sub: Submission of Half Yearly Compliance Report for the Period from 01/10/2020 to 31/03/2021 in respect to Construction of our Commercial cum Office complex at Technopark Phase – 3 campus in (Non-SEZ) Sy. Nos 290/2(part), 290/3(part) & others, Village Attipara, Taluk & District Thiruvananthapuram, Kerala.

Ref: MOEF EC No. 21-48/2018–IA–III, Dt: 07th June, 2019

Dear Sir,

Please find enclosed herewith the Half Yearly compliance Report of the conditions stipulated in the Environment Clearances as mentioned above.

We hope you find the same in order

Thanking you,

Yours faithfully,
For Dragonstone Realty Pvt Ltd

Authorized Signatory

Encl: as above

COMPLIANCES STATEMENT FOR CONDITIONS GIVEN IN THE MOEF EC CLEARANCE FOR THE PROPOSED COMMERCIAL CUM OFFICE COMPLEX PROJECT AT TECHNOPARK PHASE-3 CAMPUS IN (NON-SEZ PLOT) SY. NOS. 290/2(PART), 290/3(PART) & OTHERS, VILLAGE ATTIPRA, TALUK & DISTRICT THIRUVANANTHAPURAM, KERALA BY M/S DRAGONSTONE REALTY PRIVATE LIMITED

F NO.21-48/2018-IA-III DATED 7TH JUNE 2019

PART A — SPECIFIC CONDITIONS:

S. No.	Conditions	Compliances
1	The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work.	All clearance / permission for all relevant agencies have been received for commencement of work
2	Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974	The project has submitted all the relevant documents and the fee for getting the Consent to Establish and is awaiting for the same
3	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc	Shall be provided post completion of the project construction
Topography and natural Drainage		
4	The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rainwater.	The site is being planned such that the natural drain system will be maintained to ensure unrestricted flow of water and there is no obstruction to the flow of water. In addition storm water channels/trenches will be provided throughout the site to ensure that when the storm water runs off from site it does not carry away the soil along with it.
Water requirement, Conservation, rainwater Harvesting, and Ground Water Recharge		
5	Water requirement – as proposed the fresh water requirement from Kerala Water Authority/Rain water shall not exceed 174 KLD	The project will be installing a Sewage treatment plant (STP) to treat 100% of the waste water from the building. This treated water from STP shall then be reused for flushing, irrigation and cooling tower make up water requirements thereby reducing the fresh water/potable water requirement for the

		project significantly. Only the water for domestic uses which is estimated to be around 131 KLD will be potable water. Even this will be further minimized by reuse of collected rain water to thereby ensure that the fresh water requirement from KWA does not exceed 174 KLD.
6	A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.	The project is coming up as part of the larger Technopark development. As per the arrangement with Technopark, they will be supplying water for the project based on the agreement. Relevant certificate for the same shall be provided by Technopark
7	The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF & CC along with six monthly Monitoring reports	Water meters shall be provided to monitor the water consumption post completion of the building. During the construction process the project shall use rain water collected onsite or water supplied by KWA for construction purposes. The quantity of this water shall be tracked by contractors. As the project construction progresses, it will track the water requirement and submit the same along with the six monthly reports. To start with onsite the project has also tested the existing water sample from the open well to ascertain the water quality. Attached is the test report from the NABL accredited 3rd party testing agency for reference. **ANNEXURE 01- Test report on water quality**
8	At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface	The project is providing open space area as required and in addition will be providing grass pavers in the external areas to increase pervious areas and reduce storm water runoffs.
9 & 11	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	Project has considered dual pipe plumbing system to enable reuse of treated water for flushing, cooling tower makeup and landscaping purposes separately and fresh water for drinking, cooking, bathing and other contact purposes in line with the requirements. This is to reduce the potable water requirement for the project.

10	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.	Project has proposed to use the low flow water fixtures as per the green building requirement. Dual flush water closets 4.2/ 2.1 litres, low flow water fixtures including kitchen faucet at 4 LPM, Lavatory faucet at 2.5 LPM, urinal at 1.15 LPF. The effort is to reduce the water use by over 30% in comparison to conventional buildings
12	Water consumption during construction.	It is proposed to reduce the water demand during construction by use of pre-mixed concrete, curing agents and other best practices. In addition the project shall use collected rain water, treated water or water supplied by KWA to reduce the potable/ground water use during construction
13	The local bye-law provisions on rain water harvesting should be followed. If local bye-law provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016.	Project has considered the rainwater harvesting tank of 200 KLD to harvest the storm water runoff at site. The entire roof run off as well as the surface runoff is harvested in the tank which can then be reused for various purposes. In addition recharge pits shall be provided on the periphery of the site to recharge the excess runoff into the aquifers
14	As proposed, no ground water shall be used during construction/ operation phase of the project.	The project will only be using collected rain water and water supplied by KWA for construction purposes and confirms that no ground water will be used during the construction as well as operation phase of the project
15	Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter.	Yes. The project shall ensure that any ground water dewatering if done shall conform to the approval and guidelines of CGWA
Solid Waste Management		
16	The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.	Yes the project confirms that it shall be following the same
17	Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	The project shall be reusing all the excavated soil back for filling and levelling purposes. In addition the project is also providing storm water trenches onsite to capture any soil that is washed away by rain so that no soil leaves the site. Moreover the vehicles leaving the site shall have their wheels washed to ensure no muck it taken through the wheels into the neighbouring communities. All construction debris including the muck if to be disposed

		shall be taken out by the contactor and disposed safely in approved site only
18	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste.	Project has proposed to dedicate separate area for solid waste management within the premises, which will include the area for waste collection and segregation. This area shall have bins for segregating paper, plastic, metals, cardboard and glass. In addition the wet waste shall be separated and using onsite waste converter units shall be converted to manure which will then be reused in the landscaping
19	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.	The effort in this project has been firstly to minimize the amount of waste generated by careful resource planning, factory manufacturing of most products etc. Additionally whatever waste is generated onsite is also being recycled /reused thereby diverting it away from landfills and dump yards. Any hazardous waste will be segregated and disposed off as per applicable CPCB norms.
20	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.	Shall be obtained at the stage of completion of the project
Sewage Treatment		
21	Sewage shall be treated in the STP based on MBBR Technology with tertiary treatment i.e. Ultra Filtration. The treated effluent from STP shall be recycled/re-used for flushing, gardening, HVAC Cooling. As proposed, no treated water shall be discharged to Municipal drain.	A Sewage Treatment Plant (STP) with MBBR technology has been proposed for treatment of 100% of waste water onsite and no untreated water shall leave the site. This treated water shall be 100% reused for flushing, landscape irrigation and cooling tower make up purposes as mentioned. The capacity of the STP for (Mall + Parking) shall be 337 cum and the project confirms that 100% of the sewage will be treated to tertiary standards and reused onsite
22	The project/activity shall be dove tailed with the sewerage collection and disposal facilities to be created by the Municipal Corporation/Competent State Authorities so that all sewage generated in the construction and operation phases is disposed accordingly. Necessary permission from the Municipal Authority shall be obtained.	The project ensure that the same is done and the necessary permission for the same shall be obtained
23	No sewage or untreated effluent water would be discharged through storm water drains.	100% of the Waste water onsite shall be treated and reused on site. This treated was shall be reused for flushing, Irrigation and

		Cooling tower make up water requirements. We confirm that no sewage or untreated effluent water shall be discharged from site.
24	The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation.	Yes the same shall be provided. Once the STP has been installed it shall be certified by an independent expert and the same shall be provided at the end of completion of the project
25	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	Yes the same shall be taken care of in line with CPHEEO norms once the STP has been installed on site and becomes operational
Energy		
26	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. 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.	The project confirms that its design and specifications are in compliance with ECBC code as well as the ASHRAE 90.1-2010 standard. has been ensured in design. The project is also pursuing the LEED BD+C New construction rating and inline with both ECBC and LEED norms has considered as part of its design - passive solar strategies such as building orientation, shading, appropriate fenestration to harvest maximum natural lighting while minimizing the overall energy consumption. In addition the project is going for high performance glazing, high efficiency HVAC and electrical systems to bring down the energy demand of the building have been planned. The project shall take the energy simulation Whole building performance approach in ECBC as well as the Performance rating method as per ASHRAE 90.1-2010 standard. The project confirms that it meets the ECBC requirements
27	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.	Yes the project will be implementing several energy conservation measures including LEDs for external lighting and common area lightings and will have in place a program for recycling of the LEDs to avoid any mercury contamination as per the prevailing norms

28	Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher. Follow super ECBC requirement of ECBC 2017 and provide compliance report.	Solar Photovoltaic system of 448 KW is proposed onsite which is approximately 6.7% of the total demand load. This solar power shall be used for common area lighting, external lighting and other loads onsite.
29	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	Yes the onsite solar PV panels provided will be used for common area lighting and separate metering for solar shall also be installed. In addition the project has planned to provide 4000 litres of solar hot water systems catering to more than 20% of the hot water requirement in the commercial building
30	Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials. 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	In line with green building requirement environment friendly materials are used i.e.., which has good amount of recycled content in it, such as cement with fly ash, bricks / blocks with fly ash content up to 70% and glass with recycled content. In additional to that construction materials which is manufactured locally has given preference to reduce the impact on environment due to transportation.
31	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.	The project is coming up as part of the larger Technopark development. As per the arrangement with Technopark, they will be supplying adequate power for the project based on the agreement and the requirement. Relevant certificate for the same shall be provided by Technopark
Air Quality and Noise		
32	Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include	Yes all these measures have been implemented on site. The project has adequately barricaded the entire site with 3m height barricades. Various dust, smoke & other air pollution prevention measures such as spraying water regularly on site, dust screens, covering

	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.	vehicles bringing various materials with tarpaulin sheets, temporary vegetation, wheel washing etc. has been done to control dust onsite. shall be provided for the building as well as the site.
33	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.	The project is implementing a detailed construction waste management plan in line with these requirements and LEED norms. The project will ensure that all construction debris will be segregated and stored at the site before they are properly recycled/reused and or diverted. The project confirms that the same will not be dumped on the roads or open spaces outside
34 & 35	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards. (xxxv) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.	The project confirms that the DG sets used during construction complies with CPCB norms and is of low sulphur diesel type. Necessary certificates of the same are available onsite, Moreover the project confirms that gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards
36	Indoor air quality the ventilation provisions as per National Building Code of India.	As per green building requirement the project will adhere to the ventilation requirements as

		per ASHRAE 62.1.2010 standard and NBC norms as applicable
37	Ambient noise levels shall conform to Commercial Standard both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB	Ambient noise levels were measured onsite are in line with the Commercial Standard both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. During the entire site construction activity till date onsite, the ambient noise levels have been closely monitored by the project to ensure that the confirm to the stipulated standards by CPCB/SPCB. And whenever there were any instances when the noise levels exceeded the standards even marginally, suitable corrective action was taken onsite. We are enclosing the latest set of noise measurements that were taken onsite in Dec 2019 by an NABL accredited 3rd party testing agency for reference. Please refer to **ANNEXURE 02 -Test report on Noise Levels.**
38	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.	A plan has been put in place listing the various measures that have to be implemented to ensure that the air quality at the site is within acceptable limits. The project has also taken regular measurements on site on the ambient air quality to ensure that the same is within the limits as stipulated under the NAAQ standard. We are attaching herewith the report on are the various parameters measured at site by the NABL 3rd party accredited testing agency. Based on the report, it can be observed that Particulate matter (PM_{10}, $PM_{2.5}$), Sulphur dioxide, Nitrogen dioxide are all within the limits prescribed by National Ambient Air Quality Standard. Please refer to **Annexure 3 – Test report on Ambient Air quality.** The project will continue to regularly measure its ambient air quality and ensure that the same is always in line with the NAAQ standard requirements until the construction activities are complete.
Green Cover		
39	No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the Tree Authority constituted as per the Kerala Preservation of Trees Act, 1986 (Act 35 of	The project has planned the design of the entire site in a sustainable manner. There are landscaped areas that have been identified right from the initial stage of design and the same will be implemented at the end of the construction period. There were no existing

	1986). Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).	trees on site in the phase 1 development as it can be seen in the survey plans. However in line with the sustainability commitment the project will now plan landscaping and trees in line with the requirements and also ensure that the entire species of landscaping to be native and adaptive species which are drought tolerant and require minimal water
40	A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). As proposed 5,906 sqm area shall be provided for green area development.	The project confirms that it will plan 1 tree for every 80 sqm as per the requirement. The species of these trees shall be native/ adaptive type and with broad canopy to provide shading and reduce urban heat islands. However given the minimal space available in the phase 1 of the development in case all these trees cannot be located on site, the project will plan the planting of these trees along the areas adjoining the site boundary and access roads to ensure that 1 tree for every 80 sqm is provided.
41	**Top Soil preservation and Reuse** - 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.	Project has conducted a soil fertility test to ascertain the quality of the top 20 cm of the soil and it has been found that the soil is not worthy of reuse for landscaping. Hence the soil is being reused for filling and other purposes onsite. The project confirms that it will not send any soil outside of the site.
	Transport	
42	A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria. • Hierarchy of roads with proper segregation of vehicular and pedestrian traffic. • Traffic calming measures	The project has prepared a detailed traffic study plan as per the MoUD guidelines and other international norms. It confirms that it shall ensure that same has been planned with due consideration for environment and safety of users

	• Proper design of entry and exit points. • Parking norms as per local regulation	
43	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 02 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 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D. / competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.	The same has been prepared by the project to ensure that there is no traffic congestion and the same shall be duly validated by the State Urban Development department and the P.W.D. / competent authority for road augmentation.
44	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 nonpeak hours.	The same is being followed onsite and the project will ensure that the vehicles conform to the air and noise emission standards
Environment management Plan		
45	An environmental management plan (EMP) as prepared and submitted along with the Form-1/1A shall be implemented to ensure compliance with the environmental conditions specified above. A dedicated Environment Monitoring Cell with defined functions and responsibility shall be put in place to implement the EMP. The environmental cell shall ensure that the environment infrastructure like Sewage Treatment Plant, Landscaping, Rain Water 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	As required by MOEF the project has developed this detailed environmental management plan (EMP) to demonstrate compliance with the various environmental conditions as specified in the approval. Also a dedicated Environment Monitoring Cell has been put in place to implement this EMP. The environmental cell meets at regular frequency and is ensuring that the environmental management plan is closely implemented in the project and shall also keep the record of these activities on an ongoing basis on site.

	also keep the record of environment monitoring and those related to the environment infrastructure.	
OTHERS		
46	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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Provision outside the site has been made for the housing of construction workers and all the necessary infrastructure including fuel for cooking, toilets, mobile STP, safe drinking water, medical care, creche etc. have been provided
47	A First Aid Room shall be provided in the project both during construction and operations of the project.	First aid room has been provided onsite as required
48	The company shall draw up and implement corporate social Responsibility plan as per the Company's Act of 2013.	The project shall implement corporate social Responsibility requirement as per Company's Act of 2013 in due course of the project
49	As per the Ministry's Office Memorandum F.No. 22-65/2017-IA.III dated 1st May 2018, and proposed by the project proponent, an amount of Rs. 5.4 Crore (@1.0% of project Cost) shall be earmarked under Corporate Environment Responsibility (CER) for the activities such as Waste Management, Promotion of Education, Healthcare, Water Conservation, Infrastructural Development 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	The project is currently planning on implementing few corporate environment responsibility (CER) measures such as Rain Water Harvesting, Waste management, Infrastructure development of retaining walls as required, soft landscaping for the rejuvenation of Thettiyar and other activities such as education and basic healthcare awareness creation in the neighbourhood. The project will be implementing these measures in the coming months and shall also provide required reports of these activities from time to time

Note: All activities on site were stopped from 20 March 2020 due to COVID 19 lockdown and not yet resumed.

TAURUS INDIA

ANNEXURE 1 : WATER TEST REPORT

Standard^S
Environmental Monitoring

TEST REPORT

Test Report No: 20210318/R014	Date: 23-03-2021	Page 1 of 2

CUSTOMER DETAILS	
Customer Name & Address	M/s DORNE REALTY PRIVATE LIMITED B'Hub, TC No.11/2402-3 Cardinal Cleemis Centre for Innovations, Mar Ivanios Vidya Nagar, Nalanchira, Thiruvananthapuram District
Customer Reference	Test Request dt 18-03-2021

SAMPLE DETAILS			
Product Category	Water	Sample Code	20210318/S014
Sample Name	Tap Water	Sample Received on	19-03-2021
Sample Conditions at Receipt	Fit for Analysis	Temperature @ Receipt	5 °C
Sample Quantity& Packing	1L & Plastic Bottle	Test Commenced on	19-03-2021
Sampled by	Lab Authorized Sampler	Test Completed on	
DETAILS OF SAMPLING			
Sample Source	Tap Water- Near Project Site	Date of Sampling	18-03-2021
Sampling Procedure	SEAAL/ENL/GEN/SOP/01& SEAAL/MBL/SOP/06	Sample Temperature	31 °C

TEST RESULTS- CHEMICAL PARAMETERS

Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500 : 2012
1	Colour	IS 3025 (Part 4):1983 RA 2017	Hazen	1.00	Max 5
2	Odour	IS 3025 (Part 5):2018	---	Agreeable	Agreeable
3	Turbidity	IS 3025 (Part 10):1984 RA 2017	NTU	0.20	Max 1
4	pH	IS 3025 (Part 11):1983 RA 2017	---	7.12	6.50 – 8.50
5	Conductivity	IS 3025 (Part 14):1984 RA 2019	µS/cm	92.0	---
6	Total Dissolved Solids	IS 3025 (Part 16):1984 RA 2017	mg/L	55.0	Max 500
7	Total Hardness as $CaCO_3$	IS 3025 (Part 21):2009 RA 2019	mg/L	22.2	Max 200
8	Calcium as Ca	IS 3025 (Part 40):1991 RA 2019	mg/L	6.46	Max 75
9	Magnesium as Mg	IS 3025 (Part 46):1994 RA 2019	mg/L	1.47	Max 30
10	Chloride as Cl	IS 3025 (Part 32):1988 RA 2019	mg/L	10.9	Max 250

Shency Joy
Dy. TM Chemical
Checked by:

Selini I. S.
Microbiologist
Authorized Signatory

Laiju P. N.
Laboratory Head
Authorized Signatory

Standard^S Environmental & Analytical Laboratories
Approval & Recognition: "A" Grade Laboratory approved by Kerala State Pollution Control Board
K J Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel: 0484-2546660, 93 87 27 24 02, 90 74 34 14 43
Web: www.sealabs.in, E-mail: sealab@gmail.com

TAURUS INDIA

Standard^S Environmental Monitoring

TEST REPORT

Test Report No: 20210318/R014	Date: 23-03-2021	Page 2 of 2

TEST RESULTS– CHEMICAL PARAMETERS

Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500 : 2012
11	Total Alkalinity as $CaCO_3$	IS 3025 (Part 23):1986 RA 2019	mg/L	10.0	Max 200
12	Iron as Fe	IS 3025 (Part 53):2003 RA 2019	mg/L	0.17	Max 1
13	Sulphate as SO_4	IS 3025 (Part 24):1986 RA 2019	mg/L	3.92	Max 200

TEST RESULTS – BIOLOGICAL PARAMETERS

Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500 : 2012
1	Total Coliform Bacteria	IS 15185 : 2016	----	Absent/100 ml	Absent/100 ml
2	E coli	IS 15185 : 2016	----	Absent/100 ml	Absent/100 ml

Remarks:

End of Report

Shency Joy
Dy. TM Chemical
Checked by:

Salini T. S.
Microbiologist
Authorized Signatory

Laiju P. N.
Laboratory Head
Authorized Signatory

Standard^S Environmental & Analytical Laboratories
Approval & Recognition: "A" Grade Laboratory approved by Kerala State Pollution Control Board.
K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel: 0484-2546660, 93 87 27 24 02, 90 74 34 14 43
Web: www.sealabs.in, E-mail: sealab@gmail.com

TAURUS INDIA

ANNEXURE 2 - Test report on Ambient noise levels.

Standard^S Environmental Monitoring

TEST REPORT

Test Report No: 20210318/R013	Date: 23-03-2021	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	**M/s DORNE REALTY PRIVATE LIMITED** **B'Hub, TC No.11/2402-3** **Cardinal Cleemis Centre for Innovations,** **Mar Ivunios Vidya Nagar, Nalanchira,** Thiruvananthapuram District
Customer Reference	Test Request dt 18-03-2021

DETAILS OF MONITORING			
Product Category	Atmospheric Pollution	Sample Code	20210318/S013
Sample Name	Ambient Noise	Monitoring Commenced on	18-03-2021 / 06:00
Monitoring Location	---	Monitoring Completed on	19-03-2021/ 06:00
Test Method	IS 9989:1981 RA:2008	Monitored by	Lab Authorized Sampler
Information Provided by Customer	Sampling Site:DORNE REALTY PRIVATE LIMITED Technopark Phase III Non SEZ Campus, Non SEZ 6, North of Ganga Building, Attipra Village, Kulathoor, Thiruvananthapuram District		

MONITORING RESULTS - Leq

TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)
06:00	32.7	14:00	43.8	22:00	31.7
07:00	35.0	15:00	44.1	23:00	34.8
08:00	38.8	16:00	45.2	24:00	37.3
09:00	41.8	17:00	45.5	01:00	38.1
10:00	43.8	18:00	40.8	02:00	37.7
11:00	46.5	19:00	37.7	03:00	38.4
12:00	44.1	20:00	34.4	04:00	37.3
13:00	43.5	21:00	34.0	05:00	39.1

TEST RESULTS- CHEMICALPARAMETERS

Sl. No.	PARAMETERS	UNIT	RESULT
1	Ambient Sound Level (Leq) Day Time (06:00 to 22:00)	dB(A)	42.3
2	Ambient Sound Level (Leq) Night Time (22:00 to 06:00)	dB(A)	37.6

Remarks:

End of Report

Rija Joseph
Technical Manager

Checked by:

Laiju P. N.
Laboratory Head

Authorized Signatory

Standard^S Environmental & Analytical Laboratories
Approval & Recognition: "A" Grade Laboratory approved by Kerala State Pollution Control Board.
K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel: 0484-2546660, 93 87 27 24 02, 90 74 34 14 43
Web: www.sealabs.in, E-mail: sealab@gmail.com

TAURUS INDIA

Annexure 3 – Test report on Ambient air quality

Standard^{S} Environmental Monitoring

TEST REPORT

Test Report No: 20210318/R012	Date: 23-03-2021	Page 1 of 1

CUSTOMER DETAILS	
Customer Name & Address	**M/s DORNE REALTY PRIVATE LIMITED** B'Hub, TC No.11/2402-3 Cardinal Cleemis Centre for Innovations, Mar Ivanios Vidya Nagar, Nalanchira, Thiruvananthapuram District
Customer Reference	Test Request dt 18-03-2021

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	20210318/S012
Sample Name	Ambient Air	Sample Received on	19-03-2021
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	19-03-2021
Sampled by	Lab Authorized Sampler	Test Completed on	23-03-2021
Information Provided by Customer	Sampling Site:DORNE REALTY PRIVATE LIMITED Technopark Phase III Non SEZ Campus, Non SEZ 6, North of Ganga Building, Attipra Village, Kulathoor, Thiruvananthapuram District		
DETAILS OF SAMPLING			
Sampling Location	Near Security Office	Date of Sampling	18-03-2021
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	68%

TEST RESULTS- CHEMICAL PARAMETERS

Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ Standards
1	Particulate Matter, PM_{10}	IS 5182 (Part 23):2006	$\mu g/m^3$	45.1	Max 100
2	Particulate Matter, $PM_{2.5}$	EPA 40 CFR (Part 50) Appendix – L	$\mu g/m^3$	19.6	Max 60
3	Sulphur Dioxide as SO_2	IS 5182 (Part 2): 2001 RA 2017	$\mu g/m^3$	<2.00	Max 80
4	Oxides of Nitrogen as NO_2	IS 5182 (Part 6): 2006 RA 2017	$\mu g/m^3$	<2.00	Max 80

Remarks:

End of Report

Rija Joseph
Technical Manager
Checked by:

Laiju P. N.
Laboratory Head
Authorized Signatory

Standard^{S} Environmental & Analytical Laboratories
Approval & Recognition: "A" Grade Laboratory approved by Kerala State Pollution Control Board.
K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43
Web: www.sealabs.in, E-mail: seaalab@gmail.com