Gmail

EPRI Mumbai <mumbai.epri@gmail.com>

Request for Certification of status of Compliance for Integrated Township Development Project

1 message

EPRI Mumbai <mumbai.epri@gmail.com> Fri, Dec 2, 2022 at 7:23 PM
To: EC Compliance Maharashtra <eccompliance-mh@gov.in>, "Shri. V N Ambade" <apccfcentral-ngp-mef@gov.in>
Cc: Avick Sil <avick1114@gmail.com>, Avick <avick@eprindia.com>

Respected Sir,

We, M/s. Macrotech Developers Ltd. has obtained Environmental clearance for Integrated Township Development Project Plot bearing S.No. 15, 16, 17, 19, 20, 21, 22, 23,24,25,26,27,28,29,30,31,39,40 of village Usatane,S.No 13,29,31 of village Burdul, S.No. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80,81,82,83,84,85,86,87,88,89,90,91,95,96,97,98,99,100,101 of village Narhen,Tal.Ambernath & Dist.Thane.

Environmental Clearance No. EC21B039MH111585 dated 9th 2021

With reference to Environmental Clearance obtained, we are submitting the status of Compliance to the conditions stipulated in the Environment Clearance of the project and we request your good office to certify the compliance report.

Please find the link for Six Monthly Compliance Monitoring Report (June 2022 to December 2022)

https://drive.google.com/drive/folders/1OYqaIh5xeCJeOIBXM1LkZ_Z_bzNobwGN?usp=share_link

Regards,

For,

M/s. Macrotech Developers Ltd.

Request for MoEF Site Visit Nagpur - Macrotech.pdf
480K

LODHA
BUILDING A BETTER LIFE

Date: 22/12/2022

To,
The Additional Director (S),
Regional Office (WCZ),
Ministry of Environment, Forest and Climate Change,
Nagpur.

Subject	**:**	Submission of six-monthly compliance monitoring report (June 2022- December 2022) for Integrated Township Development Project at Plot Bearing S.No,15,16,17,19,20,21,22,23,24,25,26,27,28,29,30,31,39,40 of village Usatane, S.NAO.13,29,31 of village Burdul, S.No. 34, 35, 36, 37, 38, 39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,90,91,95,96,97,98,99, 100, 101 of village Narhen,Tal.Ambernath & Dist.Thane
Reference	**:**	EC Identification No. EC21B039MH111585 dated 9th December, 2021.

Respected Sir,

The Proposed Integrated Township Development Project is located Plot Bearing S.No,15,16,17,19,20,21,22,23,24,25,26,27,28,29,30,31,39,40 of village Usatane, S.NAO.13,29,31of village Burdul,S. No. 34, 35, 36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,90,91,95,96,97,98,99,100,101 of village Narhen,Tal.Ambernath & Dist.Thane is being developed by **M/s. Macrotech Developers Ltd**

As per EIA notification dated 14th October 2006 & conditions stated in Environmental Clearance Letter, we are submitting **June 2022- December 2022 Six Monthly Compliance Monitoring Report**.

We request to acknowledge the same and oblige.

Thanking you,

Yours Sincerely,

Authorized Signatory
For, M/s. Macrotech Developers Ltd

Enclosures:
1. Point wise compliance report

SIX MONTHLY COMPLIANCE REPORT OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE

(June 2022 – December 2022)

Of

Integrated Township Development Project

At

Plot bearing A.No.15,16,17,19,20,21,22,23,24,25,26,27,28,29,30,31,39,40 of village Usatane,S.No 13,29,31 of village Burdul, S.NO.34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,95,96,97,98,99,100,101 of village Narhen,Tal.Ambernath & Dist.Thane

M/s. Macrotech Developers Ltd.
Village Usatane,Burdul,Narhen,
Tal.Ambernath & Dist.Thane

Prepared By

Enviro Policy Research India Pvt. Ltd (EPRIPL)
QCI-NABET Accredited Consultant
An ISO 9001:2015 Certified Company
607, Oriana Business Park, Road No. 22,
Wagle Estate, Thane (W) – 400604, Maharashtra
Email: manager@eprindia.com; Website: www.eprindia.com

Submitted to

Maharashtra Pollution Control Board (Mumbai),
Environment Department, Mantralaya and
Ministry of Environment and Forests and Climate Change
(Regional Office)

Project Details:

Sr. No.	Project details	
1.	Name of the project	Integrated Township Development Project
2.	Name of the project proponent	M/s. Macrotech Developers Ltd.
3.	Clearance Identification No. and Date	**EC21B039MH111585 dated 9th December2021**
4.	**Area Statement:**	
5.	Total Plot area	51,14,710.51 Sq.mt
	Plot Area of Phase - I	11,60,979 sq. mt.
6.	FSI Area	8,61,826 Sq.mt.
7.	Total Construction area	9,20,857 Sq.mt.
8.	Total no. of flats and commercial	1,920 Nos Warehouse Area: 1, 60,315 sq. m. Industrial Area: 5, 34,787 sq. mt. Commercial Area: 3,936 sq. mt.
9.	Water Requirement of the project	Total Water Requirement: 3259 KLD
10.	STP details	4 STP of 2,840 KLD with MBBR Technology
11.	Solid waste details	Total Waste Generated: 15,078 Kg/Day

Monitoring the Implementation of Environmental Safeguards

Ministry of Environment & Forests

Regional Office (West Central Zone), Nagpur

Monitoring Report

PART – I

DATA SHEET

Date: 11.1.2023

1.	Project type: River - valley/ Mining / Industry / Thermal / Nuclear / Other (specify)		:	8(b)Townships and Area Development Project
2.	Name of the project		:	Integrated Township Development Project located at Plot bearing S.No.15,16,17,19,20,21,22,23,24,25,26,27, 28,29,30,31,39,40 of village Usatane,S.No 13,29,31 of village Burdul, S.NO.34,35,36,37,38,39,40,41,42,43,44,45, 46,47,48,49,50,51,52,53,65,66,67,68,69,70, 71,72,73,74,75,76,77,78,79,80,81,82,83,84, 85,86,87,88,89,90,91,95,96,97,98,99,100,1 01 of village Narhen,Tal.Ambernath & Dist.Thane
3.	Clearance Identification No. and Date		:	EC21B039MH111585 dated 9th 2021
4.	Location		:	Village-Usatane
	a.	District (S)	:	Thane
	b.	State (S)	:	Maharashtra
	c.	Latitude/ Longitude	:	Latitude- Longitude -
5.	Address for correspondence		:	M/s. Macrotech Developers Ltd. Village Usatane, Burdul,Narhen, Tal.Ambernath & Dist.Thane
	a.	Address of Concerned Project Chief Engineer (with pin code & Telephone / telex / fax numbers	:	Rahul Kulkarni 3rd Floor, collector office, Kharkar Alley, Thane West, Thane, Maharashtra 400601
	b.	Address of Executive Project:	:	Rahul Kulkarni

		Engineer/Manager (with pincode/ Fax numbers)		3rd Floor, collector office, Kharkar Alley, Thane West, Thane, Maharashtra 400601
6.	Salient features		:	
	a.	of the project	:	Annexure A
	b.	of the environmental management plans	:	Annexure B
7.	Break up of the project area		:	
	a.	submergence area forest & non-forest	:	Non-Forest
	b.	Others	:	Annexure – A
8.	Break up of the project affected Population with enumeration of Those losing houses/dwelling units Only agricultural land only, both Dwelling units & agricultural Land & landless labourers/artisan		:	Not Applicable
	a.	SC, ST/Adivasis	:	Not Applicable
	b.	Others (Please indicate whether these Figures are based on any scientific And systematic survey carried out Or only provisional figures, it a Survey is carried out give details And years of survey)	:	Not Applicable
9.	Financial details		:	
	a.	Project cost as originally planned and subsequent revised estimates and the year of price reference	:	Cost of the project: **Rs. 966.43 Crores**
	b.	Allocation made for environ-mental management plans with	:	Yes. Attached as **Annexure B**

		item wise and year wise Break-up.		
	c.	Benefit cost ratio/Internal rate of Return and the year of assessment	:	-
	d.	Whether (c) includes the Cost of environmental management as shown in the above.	:	Yes. Refer Annexure - C
	e.	Actual expenditure incurred on the environmental management plans so far	:	0 Lakhs
10.	Forest land requirement		:	
	a.	The status of approval for diversion of forest land for non-forestry use	:	Not Applicable
	b.	The status of clearing felling	:	Not Applicable
	c.	The status of compensatory afforestation, if any	:	Not Applicable
	d.	Comments on the viability & sustainability of compensatory afforestation program in the light of actual field experience so far	:	Not Applicable
11.	The status of clear felling in Non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information		:	Not Applicable
12.	Status of construction		:	Work in progress
	a.	Date of commencement (Actual and/or planned)	:	December 2022
	b.	Date of completion (Actual and/ of planned)	:	December 2032

13.	Reasons for the delay if the Project is yet to start		:	There is change in planning
14	Dates of site visits		:	
	a.	The dates on which the project was monitored by the Regional Office on previous Occasions, if any	:	-
	b.	Date of site visit for this monitoring report	:	1.12.2022
15.	Details of correspondence with Project authorities for obtaining Action plans/information on Status of compliance to safeguards Other than the routine letters for Logistic support for site visits		:	Not Applicable
	(The first monitoring report may contain the details of all the Letters issued so far, but the Later reports may cover only the Letters issued subsequently.)		:	-

UNDERTAKING LETTER FOR STATUS OF CONSTRUCTION

LODHA
BUILDING A BETTER LIFE

Date:

To,
The Director
Ministry of Environment, Forests & Climate Change,
Regional Office, West Central Zone,
New Secretarial Building, East wing, Civil Lane,
Near Old VCA stadium,
Nagpur - 440001.
Maharashtra.

Subject: Present status of Project work for the period of June, 2022 – December, 2022.

Reference: EC Identification No. EC 21B039MH111585 dated 09.12.2021

Dear Sir,
This is with reference to above subject our Proposed Integrated Township Development Project at Plot Bearing S.No,15,16,17,19,20,21,22,23,24,25,26,27,28,29,30,31,39,40 of village Usatane,S.NAO.13,29,31of village,Burdul,S.No.34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,65,66,67,68,69,70,71,72, 73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,90,91,95,96,97,98,99,100,101 of village Narhen,Tal. Ambernath & Dist. Thane by

The present project status at site is as follows :

Area statement as per EC received	In sq. m
Total Construction area	9,20,857
Total FSI area	8,61,826
Total Non- FSI area	59,030
Construction done till date	32351

Thanking you,

Yours truly,

Authorized Signatory

For M/s. Macrotech Developers Ltd

Macrotech Developers Limited: Lodha Excelus , NM Joshi Marg, Mahalaxmi, Mumbai 400 011, India • T + 91 22 6133 4400
Regd. Office : 412, Floor-4, 17G Vardhaman Chamber, Cawasji Patel Road, Horniman Circle, Fort, Mumbai 400 001, India
CIN: L45200MH1995PLC093041
www.lodhagroup.in

Point wise compliance status to various stipulations laid down by the Government of Maharashtra as per the Environmental Clearance issued vide letter no.

EC21BO39MH111585 dated 9th December 2021 as follows:

Sr. No.	Conditions	Status
Specific Condition		
A. SEAC Condition		
1.	1.PP to submit IOD/IOA/Concession Document/Plan Approval or any other form of document as applicable clarifying its conformity with local planning rules and provisions thereunder as per the circular dated 30.01.2014 issued by the Environment Department, Gov. of Maharashtra.	Noted
2.	2.PP to obtain following Nocs: a) Sewer Connection) CFO NOC, c) Tree NOC, d) High Tension Line NOC, e)SWD remarks	Noted
3.	PP to ensure that minimum 25% four-wheeler and two-wheeler parking's should be equipped with electric charging facilities.	Noted
4.	PP to explore possibility of providing recharge tanks in lieu of recharge pits for rainwater harvesting. PP to revise the conclusion submitted in ToR point no.7 as per Geo-hydrology survey carried out on project site.	Noted
5.	Planning authority to ensure sewer line network and storm water drainage network before issuing Occupation Certificate.	Noted
B. SEIAA Conditions		
1	PP to keep open space unpaved so as to ensure permeability of water. However,	Noted

	whenever paving is deemed necessary to provide grass pavers of suitable types & strength to increase the water permeable area as well as to allow effective fire tender movement.	
2	PP to achieve at least 5% of total energy requirement from solar/other renewable sources.	We have proposed CFL, T8, LED lights to conserve energy. Energy saving details attached as **Annexure 5**
3.	PP Shall comply with Standard EC Conditions mentioned in the Office Memorandum issued by MoEF& CC vide F.No.22-34/2018-IA.III dt.04.01.2019.	We will comply with all the standard EC conditions.
4	SEIAA after deliberation decided to grant EC for-FSI-861826 m2,Non-FSI-59030 mm2,Total BUA-920857m2 (Plan approval-ITP/ Mou. Asode & others/SHSKV,dated-11.11.2021)	We have obtained Environment Clearance with vide no. **EC21B039MH111585 dated 9th December2021**
General Condition **a) Construction Phase**		
I.	The solid waste generated should be properly collected and segregated. Dry/inert solid waste should be disposed of the approved sites for land filling after recovering recyclable material.	During operational phase generated solid waste would be collected and segregated into wet and dry waste. Wet waste will be treated by Organic Waste Converter method. Solid waste generation details: a. Total solid waste: **15078 Kg/Day** b. Biodegradable waste: **5971 Kg/Day** c. Non- biodegradable waste: **9107 Kg/Day**
II.	Disposal of muck, Construction spoils, including bituminous material during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the	We have provided designated areas for temporary storage of mucks and are being handed over to concerned

	necessary precautions for general safety and health aspects of people, only in the approved sites with the approval of competent authority.	authority on daily basis.
III.	Any hazardous waste generated during construction phase should be disposed of as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.	Noted
IV.	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid waste generated during the construction phase should be ensured.	An adequate drinking water and onsite sanitation facility has been provided to the construction workers. Mobile STP will be provided for labor huts. Debris generated during construction phase is handed to authorized vendor.
V.	Arrangement shall be made that waste water and storm water do not get mixed.	There will be provision of separate storm water drains and sewer line network for the plot.
VI.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices	For construction purpose ready mix concrete is being used.
VII	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.	Noted
VIII	Permission to draw ground water for construction of basement if any shall be obtained form the competent Authority prior to construction/operation of the project.	No ground water abstraction is involved hence not applicable.
IX	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing device or sensor based control.	Yes. Low pressure water fixtures are proposed.

X	The Energy Conservation Building code shall be strictly adhered to.	We have proposed CFL, T8, LED lights to conserve energy.
XI.	All the topsoil excavated during construction activities should be stored for use in horticulture /landscape development within the project site.	Excavated soil will be used for backfilling and leveling of the plot and remaining shall be used within site for landscaping.
XII	Additional soil for levelling of the proposed site shall be generated within the site (to the extent possible) so that natural drainage system of the area is protected and improved.	Agreed. Excavated soil/additional soil would be used for backfilling and leveling of the plot.
XIII	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants	Noted.
XIV	PP to strictly adhere to all the conditions mentioned in Maharashtra (Urban Areas)Protection and Preservation of Tress Act 1975 as amended during the validity of Environment Clearance	Agreed.
XV	The diesel generator sets to be used during construction phase should be low Sulphur diesel type and should conform to Environments (Protection)Rules prescribed for air and noise emission standards	Agreed. DG set Power back up: 23603(9X1250 Kva,5X1600,1X630,6X500,1X320,1X180,2X80,1X63 kVA) Low sulphur High speed diesel will be used as fuel for the DG sets. The DG sets will be as per EPA rule. Stack will be provided as per CPCB rules for dispersion of pollutants.
XVI	PP to strictly adhere to all the conditions mentioned (Urban Areas) Protection and Preservation of Trees Act, 1975 as amended during the validity of	Agreed.

	Environment Clearance.	
XVII	Vehicles hired for transportation of Raw material shall strictly comply the emission norms prescribed by Ministry of Road Transport & Highways Department. The vehicle shall be adequately covered to avoid spillage/leakages.	Vehicles used for transportation of material are with valid PUC as per Government norms.
XVIII	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/MPCB	During construction adequate measures will be taken to maintain air quality and noise levels within the prescribed limits. Water sprinkling would be carried out as Dust suppression to arrest fugitive dust arising mainly due to transportation of construction material. The vehicles hired by the Contractor for construction purposes are checked for valid PUC certificates. Air and Noise level monitoring is being carried out during the construction phase to ensure that the ambient air quality and noise levels are within the prescribed limits. The plot is barricaded to avoid spread of pollutants.
XIX	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during phase should be of enclosed types and conform to	Agreed. During operational phase DG sets would be kept in the DG room which would be acoustically covered. Stack

	rules made under the Environment (Protection)Act,1986.The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG Sets. Use low Sulphur diesel is preferred. The location of the DG Sets may be decided with in consultation with Maharashtra Pollution Control Board	heights will be provided as per norms.
XX	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surrounding by a separate environment cell/designated person.	Regular supervision of site is being carried out.
a) Operation Phase		
I	a) The solid waste generated should be properly collected and segregated. b)Wet waste should be treated by organic Waste converter and treated waste(manure) should be utilized in the existing premises. c)Dry /inert solid waste should be disposed of the approved sites for land filling after recovering recyclable material	Segregation of non-biodegradable and biodegradable garbage on site. • Treatment of biodegradable waste: By OWC • Segregation, storages facilities for all solid waste streams • Non- biodegradable garbage: Will be segregated into recyclable and non-recyclable waste. Recyclable waste shall be handed over to recyclers and non-recyclable waste shall be handed over to local body. • E waste generated during operation phase shall be stored separately and disposed of to the recyclers authorized by MPCB

II	E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling)Rule,2016.	Noted
III.	The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and report in this regard should be submitted to the MPCB and Environment department. Before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled /reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Necessary measures should be made to mitigate the odor problem from STP .b) PP to give 100% treatment to sewage /Liquid waste and explore the possibility to recycle at least 50% of water, Local authority should ensure this	Noted.
IV	Project proponent shall ensure completion of STP,MSW disposal facility, green belt development prior to occupation of the buildings. As agreed during the SEIAA meeting, PP to explore possibility of utilizing excess treated water in the adjacent area for gardening before discharging it into sewer line No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement	During operational phase 2825 KLD sewage will be generated which will be treated in STP of total Capacity 2840 KLD (4 No of STPs) KLD capacity of MBBR Technology.
V	The Occupancy Certificate shall be issued by the Local Planning Authority to the project after ensuring sustained availability of drinking water, connectivity of the sewer line to the project site and proper disposal of treated water as per environmental norms.	Agreed.

VI	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	Separate entry and exit points will be provided. Provisions are made for adequate parking facilities within the project complex and no public space will be used for parking of vehicles. 4 Wheelers –2,928 2 Wheelers- 3,237 Truck : 591 Trailer: 22
VII	PP to provide adequate electric charging points for electric vehicles(EVs)	Agreed. Provision will be made for electric charging points for EVs.
VIII	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/Agriculture Dept	Landscape area: Total RG area required: 115364 Total RG provide: 183036.10
IX	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	A separate environment management cell with qualified staff will be formed.
X	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cist shall be included as per of the project cost. The funds earmarked for the environment protection measures shall not be diverted for the purposes.	Separate funds are allocated for environment protection measures.
XI	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be Marathi language of the local concerned within seven days of issue of this letter, informing that the	We have given advertisement in two local newspapers.

	project has been the Maharashtra Pollution Control Board and may also be seen at Website at parivesh.nic.in	
XII	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st December of each calendar year.	Agreed & complied.
XIII	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestion/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	Environment clearance copy to local municipal corporation.
XIV	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient level as well as stack emission) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Agreed & complied.
a) General EC Conditions		
I.	PP has to strictly abide by the conditions stipulated by SEAC&SEIAA	Agreed.

II.	If applicable consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and water Act and copy shall be submitted to the Environment department before start of any construction work at the site.	Consent to application is submitted.
III.	Under the provision of Environment (Protection) Act ,1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.	Received Environmental Clearance from MoEF identification no.**EC21B039MH111585 dated 9th December2021**
IV.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data(both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	We are enclosing status of the project along with six monthly report to respective MoEF regional office, MPCB and CPCB office both in hard copy and as well as by email format.
V.	The environmental statement for each financial year ending 31 st March in Form -V as is mandated to be submitted by the project proponent the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules,1986,as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC condition and shall also be sent to the respective Regional	We will submit Environment statement for each year to MPCB, CPCB and regional MoEF office.

	Offices of MoEF BY e-mail.	
VI.	No further Expansion or modifications, other than mentioned in the EIA Notification,2006 and its amendments shall be carried out without prior approval of SEIAA .In case of deviation or alternation in the project proposal from those submitted to SEIAA for clearance, a fresh reference shall be made to the SEIAA as applicable to assess the adequacy of condition imposed and to add additional environmental protection measures required, if any	Agreed.
VII.	This environmental clearance is issued subject to obtaining NOC from Forestry &Wild life as if applicable & this environment clearance does not necessarily implies that Forestry & Wild life clearance granted to the project which will be considered separately on merit.	Not Applicable as the project site is not in the forest area.

ANNEXURE - A

1. PROJECT DETAILS

<table>
<tr><th>Sr. No.</th><th>Description</th><th>Details</th></tr>
<tr><td>1</td><td>Area Details</td><td>
<table>
<tr><th>Particulars</th><th>Details (m^2)</th></tr>
<tr><td>Total Plot Area (sq. m.)</td><td>51,14,710.51</td></tr>
<tr><td>Total plot area of Phase - I</td><td>1160979.00</td></tr>
<tr><td>FSI Area (sq m.)</td><td>8,61,826</td></tr>
<tr><td>Non-FSI (sq. m.)</td><td>59,030</td></tr>
<tr><td>Proposed built-up area (FSI + Non FSI) (sq. m.)</td><td>920,856</td></tr>
</table>
</td></tr>
<tr><td>2</td><td>Building Configuration</td><td>A1-A3,A6-A8(Industrial Bldg)G+1(14.0 m)
A4,A5(Warehouse)G+1(14.0 m)
B1-B4(Industrial Bldg)G+1 (14.0 m)
B5(Warehouse) G+1 (14.0 m)
C1-C3,C6 C-7(Industrial Bldg) G+1 (14.0 m)
C4,C5,C8,C9(Warehouse) G+1 (14.0 m)
D1-D11(Residential)G +7(23.65 m)
E1-E3(Commercial) G+3(12.60 m)</td></tr>
<tr><td>3</td><td>No. of Tenements & Shops</td><td>1,920 Nos
Warehouse Area: 1, 60,315 sq. m.
Industrial Area: 5, 34,787 sq. mt.
Commercial Area: 3,936 sq. mt.</td></tr>
<tr><td>4</td><td>Total Water Requirements</td><td>3259 KLD</td></tr>
<tr><td>5</td><td>Sewage Generation</td><td>2825 KLD</td></tr>
<tr><td>6</td><td>STP Capacity & Technology</td><td>2,840 KLD (Total capacity of 4 STPs)
MBBR Technology</td></tr>
<tr><td>7</td><td>STP Location</td><td>Ground</td></tr>
<tr><td>8</td><td>Total Solid Waste Quantities</td><td>Total-15,078 Kg/Day,
Biodegradable-5,971 Kg/Day
(Bio methanation Plant: 6 TPD)
Non-Biodegradable-9,107 Kg/d</td></tr>
</table>

<table>
<tr><td>9</td><td>R.G. Area (sq. m).</td><td><table><tr><td>RG required</td><td>1,15,364 Sq.m</td></tr><tr><td>Total RG provided</td><td>1,83,036.10 Sq.m</td></tr></table></td></tr>
<tr><td>10</td><td>Power requirement</td><td>During Operation Phase:<table><tr><td>Details</td><td></td></tr><tr><td>Demand Load (kW)</td><td>53 KW</td></tr></table></td></tr>
<tr><td>11</td><td>Energy Efficiency</td><td>15.9(Solar Saving :10.5)%</td></tr>
<tr><td>12</td><td>D.G. set capacity</td><td>23603(9X1250 Kva,5X1600,1X630,6X500,1X320,1X 180,2X80,1X63 kVA</td></tr>
<tr><td>13</td><td>Parking 4W & 2W</td><td>4 Wheelers –2,928
2 Wheelers- 3,237
Truck : 591
Trailer: 22</td></tr>
<tr><td>14</td><td>Rain water harvesting scheme</td><td>cum</td></tr>
<tr><td>15</td><td>Project Cost in (Cr.)</td><td>966.43 Cr</td></tr>
<tr><td>16</td><td>EMP Cost</td><td>Construction Phase – 4796.21 Lakhs
Operation Phase – 511.14 Lakhs</td></tr>
<tr><td>17</td><td>CER Details (with justification, if any)</td><td>Not applicable (as per MoEF&CC OM F. NO. 22-65/2017-IA.III dt. 30.09.2020)</td></tr>
</table>

ANNEXURE - B

EMP for Construction Phase

EMP FOR AIR ENVIRONMENT

- **Construction Phase (EMP for Air Environment):**

To mitigate the impacts of PM_{10} & $PM_{2.5}$ during the construction phase of the project, the following measures are recommended for implementation:

Dust Control Plan:

The most cost-effective dust suppressant is water because water is easily available on construction site. Water can be applied using water trucks, handled sprayers and automatic sprinkler systems. Furthermore, incoming loads could be covered to avoid loss of material in transport, especially if material is transported off-site.

Vehicle Emission Controls and Alternatives

- During construction, vehicles will be properly maintained to reduce emission. As it is a construction project, vehicles will be generally having "PUC" certificate.
- Footpaths and Pedestrian ways: Adequate footpaths and pedestrian ways would be provided at the site to encourage non-polluting methods of transportation

Procedural Changes to construction activities

Idle time reduction:

Construction equipment is commonly left idle while the operators are on break or waiting for the completion of another task. Emission from idle equipment tends to be high, since catalytic converters cools down, thus reducing the efficiency of hydrocarbon and carbon monoxide oxidation. Existing idle control technologies comprises of power saving mode, which automatically off the engine at present time and reduces emissions, without intervention from the operators.

Improved Maintenance:

Significant emission reductions can be achieved through regular equipment maintenance. Contractors will be asked to provide maintenance records for their fleet as part of the contract bid, and at regular intervals throughout the life of the contract. Incentive provisions will be established to encourage contractors to comply with regular

maintenance requirements.

Reduction of On-Site Construction Time:

Rapid on-site construction would reduce the duration of traffic interference and therefore, will reduce emissions from traffic delay.

- **Operation Phase (EMP for Air Environment):**

To mitigate the impacts of pollutants from DG set and vehicular traffic during the operational phase of the Project, following measures are recommended for implementation:

Diesel Generator Set Emission Control Measures

Adequate stack height will be maintained to disperse the air pollutants generated from the operation of DG set to dilute the pollutants concentration within the immediate vicinity. Hence no additional emission control measures have been suggested.

RG Development

Increased vegetation in the form of greenbelt is one of the preferred methods to mitigate air and noise pollution. Plants serve as a sink for pollutants, act as a barrier to break the wind speed as well as allow the dust and other particulates to settle on the leaves. It also helps to reduce the noise level to a large extent.

EMP FOR NOISE ENVIRONMENT

- **Construction Phase (EMP for Noise Management):**

To mitigate the impacts of noise from construction equipment during the construction phase on the site, the following measures are recommended for implementation.

Time of Operation:

Noisy construction equipment has not been allowed to use at night time.

Job Rotation and Hearing Protection:

Workers employed in high noise areas are not employed on shift basis. Hearing protection such as earplugs/muffs will be provided to those working very close to the noise generating machinery.

Other Measures:

- Developer must ensure barricading for minimum of 5 m (as the site is adjacent to road)
- During construction, shady trees can be planted on the periphery of the boundary to reduce noise impact
- Also to reduce noise impact, one must ensure smooth movement of traffic Vehicles
- Measures of NBC, 2016 must be followed by developer to control noise
- Developer must follow guidelines of BS 5228 and Defra Guideline (NO 0234)
- Plant and vehicles should comply with EU noise emission limit
- Control hours of operation of all plants and vehicles and machineries
- Avoid unnecessary use of plant and machinery
- Use acoustic barriers whenever possible
- Use line flat bed lorries or storage bin with noise attenuating materials
- Handle materials carefully; for example, scaffolding and fittings should be carried and placed; not thrown or dropped
- Ensure that materials are delivered and installed during normal working hours
- Ensure site supervision during installation
- Maintain vehicles regularly to reduce engine, exhaust, and body rattle noise
- Use silencer based plants and machinery to avoid noise impact
- Ensure that hard road surfaces are well maintained to reduce rattling of vehicles
- Use mechanical sweeper with noise attenuators

- Observe less or no waiting time for the vehicles or plants and machinery so that they are not running unnecessarily
- Don't leave equipment running unnecessarily
- Service and maintain as well as clean the equipment of regular basis
- As far as possible, use self-compacting concrete to reduce the need for vibrating equipment
- Use shielding or barriers around pumps, compressors and machinery

  Also install online noise monitoring system to understand the noise level at the site (continuous level), so that immediate decision can be taken to control any activity which is causing noise pollution

- **Operation Phase:**

To mitigate the impacts of noise from diesel generator set during operational phase, the following measures are recommended

Noise Emission Control Technologies

Source of noise in the operational phase will be from backup DG sets (which will be in operation only during power failure) and pumps & motors. All the machinery will be of highest standard of reputed make and will comply with standard i.e. The DG set room will be provided with acoustic enclosure to have minimum 75 dB(A) insertion loss or for meeting the ambient noise standard whichever is on higher side.

RG Development

The following species can be used, as in a greenbelt, to serve as noise breakers:

- *Acacia auriculiformis*
- *Anonasquamosa*
- *Acacia farnesiana*
- *Acacia mearnsii*
- *Acacia nilotica*
- *Achras sapota*

EMP FOR WATER ENVIRONMENT

▪ Construction Phase (EMP for Water Management):

To prevent degradation and to maintain the quality of the water source, adequate control measures have been proposed. To check the surface run-off as well as uncontrolled flow of water into any water body check dams with silt basins are proposed. The following management measures are suggested to protect the water source being polluted during the construction phase.

- Avoid excavation during monsoon season
- Care has been taken to avoid soil erosion
- Common toilets have been constructed on site during construction phase and the sewage would be channelized to the septic tanks in order to prevent sewage to enter into the water bodies.
- To prevent surface and ground water contamination by oil and grease, leak-proof containers has been used for storage and transportation of oil and grease. The floors of oil and grease handling area have been kept effectively impervious. Any wash off from the oil and grease handling area or workshop has been drained through imperious drains.
- Collection and settling of storm water, prohibition of equipment wash downs and prevention of soil loss and toxic release from the construction site are necessary measure to betaken to minimize water pollution.
- All stacking and loading area has been provided with proper garland drains, equipped with baffles, to prevent run off from the site, to enter into any water body.

- **Operation Phase (EMP for Water Management):**

In the operation phase of the project, water conservation and development measures will be taken, including all possible potential for rain water harvesting. Following measures will be adopted.

Water Source Development

Water source development shall be practiced by installation of scientifically designed Rain Water Harvesting system. Rainwater harvesting promotes self-sufficiency and fosters an appreciation for water as a resource.

Minimizing Water Consumption

Consumption of fresh water will be minimized by combination of water saving devices and other domestic water conservation measures. Further, to ensure on-going water conservation, an awareness program will be introduced for the students and employees. The following section discusses the specific measures, which shall be implemented

Wastewater Treatment Scheme

The sewage will be treated in the STP provided within the complex. STP which will be recycled within the project and remaining will be discharged to Sewer.

Other Measures:

- LFD would be installed
- Rainwater harvesting would be installed
- Recycle and reuse of water would be taking place
- Recycled water would be used for flushing and gardening purpose

EMP FOR LAND ENVIRONMENT

- **Construction Phase:**

Construction Debris:

Construction debris is bulky and heavy and re-utilization and recycling is an important strategy for management of such waste. As concrete and masonry constitute the majority of waste generated, recycling of this waste by conversion to aggregate can offer benefits of reduced landfill space and reduced extraction of raw material for new construction activity. This is particularly applicable to the project site as the construction is to be completed in a phased manner. Mixed debris with high gypsum, plaster, has not been be used as fill, as they are highly susceptible to contamination, and will be send to designated solid waste landfill site. Metal scrap from structural steel, piping, concrete reinforcement and sheet metal work has been removed from the site by construction contractors. A significant portion of wood scrap has been reused on site. Recyclable wastes such as plastics, glass fibre insulation, roofing etc. shall be sold to recyclers.

Hazardous Waste:

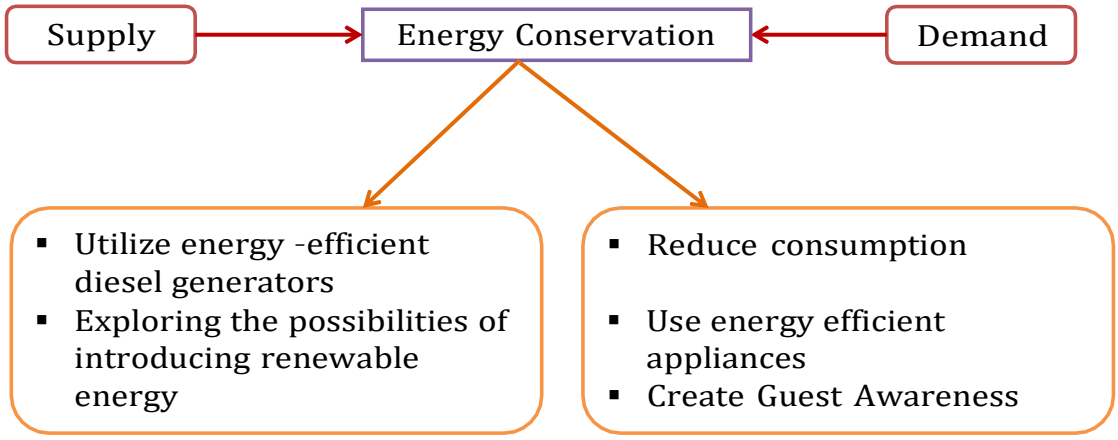
Construction sites are sources of many toxic substances such as paints, solvents wood preservatives, pesticides, adhesives and sealants. Hazardous waste generated during construction phase shall be stored in sealed containers and disposed off as per The Hazardous Wastes (Management, Handling & Transboundary Movement) Rules, 2008.

- **Operation Phase:**

The philosophy of solid waste management at the complex will be to encouraging the four R's of waste i.e. Reduction, Reuse, Recycling and Recovery (materials & energy). Regular public awareness meetings will be conducted to involve the people in the proper segregation and storage techniques. With regards to the disposal/treatment of waste, the management will take the services of the authorized agency for waste management and disposal of the same on the project site during its operational phase.

EMP FOR ENERGY CONSERVATION

Energy conservation program will be implemented through measures taken bothon energy demand and supply.



Energy conservation will be one of the main focuses during the complex planningand operation stages. The conservation efforts would consist of the following;

Architectural design

- Maximum utilization of solar light has been done.
- Maximize the use of natural lighting through design.
- The orientation of the buildings has been done in such a way that maximum daylight is available.
- The green areas has been spaced, so that a significant reduction in the temperature can take place

Energy Saving Practices

- Energy efficient lamps have been provided within the complex.
- Constant monitoring of energy consumption and defining targets for energy conservation.
- Adjusting the settings and illumination levels to ensure minimum energy used for desired comfort levels

ENVRONMENTAL MONITORING

The purpose of environmental monitoring is to evaluate the effectiveness of implementation of Environmental Management Plan (EMP) by periodic monitoring. The important environmental parameters within the impact area are selected so that anyadverse effects are detected and time action can be taken. The project proponent will monitor ambient air Quality, Ground Water Quality and Quantity, and Soil Quality in accordance with an approved monitoring schedule.

The detailed Monitoring Programme is given in **Table**

Monitoring Programme for Project

Sr. No.	Type	Location	Parameters	Period and Frequency
1	Ambient Air Quality	Project Site	Criteria Pollutants: SO_2, NO_2, PM_{10}, $PM_{2.5}$, CO	Half yearly (24 hr. average samples) during construction phase and annual during operation phase.
2	Groundwater (Portability testing)	Project Site	Drinking water parameters as per Standards	Half yearly
3	Ambient Noise	Project Site	dB (A) levels	Half yearly (Hourly day and night time leq levels) during construction phase and every year during operation phase.
4	Potable Water Quality	Municipal Supply	As per IS potable water standards	Half yearly
5	Soil Quality	Project Site	Organic matter, C.H., N, Alkalinity, Acidity, heavy metals and trace metal, Alkalinity, Acidity	Half yearly
6	Waste Characterization	Educational	Physical and Chemical composition	Daily
7	Treated Water	Outlet of STP	BOD, MPN, coliform count, etc.	Daily

ANNEXURE - C

BUDGETARY ALLOCATION DURING OPERATIONAL PHASE

No.	Component	Description	Capital Cost in Lakhs Rs	O/M Cost in Lakhs Rs. Per yr
1	EMP (For All Services)	For all Services	4796.21	511.14
Total			**4796.21**	511.14

The above budgetary allocations are the approximate values

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TEST CERTIFICATE

Report No: GESEC/2022/12/13	**Date of Sampling**	1.12.2022
Client Name and Address: **M/s. Macrotech Developers Ltd.** **Pot bearing S.No.15,16,17,19,20,21,22,23,24,25,26,27,28,29,30,31,39,40 of village Usatane,S.No 13,29,31 of village Burdul, S.No.34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,65,66, 67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90 ,91,95,96,97,98,99,100,101 of village Narhen,Tal.Ambernath & Dist.Thane**	**Sample Details**	Water Sample
	Location	Project Site
Sample Collected By	**Self**	

Surface Water Analysis Report

Sr. No.	Parameter	Result	Limits	Unit (s)	Standard Methods
1.	Electrical Conductivity	4123	NS	µmho/ cm	Indian Standards (IS) – 3025 (Part –14) - 1984 (1st Revision) (Reaffirmed - 1996)
2.	Color	4.1	5	Hazen	APHA 22nd Edition
3.	pH at 250C	7.2	6.5- 8		IS:3025 Part 11-1983 (Reaff:2002)
4.	Nitrate as NO_3	23	45	Mg/l	IS – 3025(Part – 34) 1988 Chromo tropic Acid method
5.	Nitrite as NO_2	ND	NS	Mg/l	IS- 3025 (Part – 34 – 4)
6.	Phosphorous as Phosphate	2.0	NS	Mg/l	Standard M methods – APHA 22nd Ed. 4500 P.D.4- 154.
7.	Potassium	30	NS	Mg/l	Standard M methods – APHA 22ND ED 3500 – K 21st Ed B. 3 -87
8.	Calcium	60	75	Mg/l	Standard M methods – APHA 22nd Ed 3500 Ca – B. 3 – 67
9.	Magnesium	23	30	Mg/l	APHA 22nd Edition 2005 3500-Mg-B
10.	Carbonate	20	NS	Mg/l	IS – 3025 (Part –51) -2001- Calculation Method
11.	Bicarbonate	240	NS	Mg/l	IS – 3025 (Part –51) -2001- Calculation Method
12.	Total Hardness as CaCO3	211	300	Mg/l	Standard M methods – APHA 22nd Ed. 2340 C. 2- 44
13.	Total Alkalinity as CaCO3	139	200	Mg/l	IS:3025 Part 23-1984 (Reaff:2003)

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14.	Chloride as Cl	160	250	Mg/l	IS:3025 Part 32-1988 (Reaff:2003)
15.	Sulphate as SO4	142	200	Mg/l	APHA 22nd Edition 4500-So_4^2 E
16.	Fluoride	0.7	1	Mg/l	APHA 22ND ED, 4500-F-, D, 4-87 SPADNS Method.
17.	Boron	0.6	0.5	Mg/l	Standard Method: APHA 22ND ED 4500 B., Pg. no: 4-25.
18.	Total Dissolved Solids	390	500	Mg/l	IS:3025 Part 16-1984 (Reaff:2003)
Remark(s): All parameters are within the limit					

ANALYZED BY **AUTHORIZED SIGNATORY**

Parvesh

GREEN ENVIROSAFE PUNE Engineers & Consultant Pvt Ltd

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CIN No. : U74900PN2013PTC149666

Recognised by Ministry of Environment, Forest & Climate Change (MoEF) Govt. of India and ISO 9001 : 2008, ISO 14001: 2004 and OHSAS 18001 : 2007 Certified company.

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Report No: GESEC/2022/12/14	**Date of Sampling**	1.12.2022
Client Name and Address:		
M/s. Macrotech Developers Ltd. **Pot bearing S.No.15,16,17,19,20,21,22,23,24,25,26,27,28,29,30,31,39,40 of village Usatane,S.No 13,29,31 of village Burdul, S.No.34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,95,96,97,98,99,100,101 of village Narhen,Tal.Ambernath & Dist.Thane**	**Sample Details**	Water Sample
	Location	Project Site
Sample Collected By	**Self**	

Surface Water Analysis Report

Sr. No.	Parameter	Result	Limits	Unit (s)	Standard Methods
1.	Electrical Conductivity	4180	NS	µmho/ cm	Indian Standards (IS) – 3025 (Part –14) - 1984 (1st Revision) (Reaffirmed - 1996)
2.	Color	4.1	5	Hazen	APHA 22nd Edition
3.	pH at 250C	7	6.5- 8		IS:3025 Part 11-1983 (Reaff:2002)
4.	Nitrate as NO_3	26	45	Mg/l	IS – 3025(Part – 34) 1988 Chromo tropic Acid method
5.	Nitrite as NO_2	ND	NS	Mg/l	IS- 3025 (Part – 34 – 4)
6.	Phosphorous as Phosphate	2.1	NS	Mg/l	Standard M methods – APHA 22nd Ed. 4500 P.D.4- 154.
7.	Potassium	20	NS	Mg/l	Standard M methods – APHA 22ND ED 3500 – K 21st Ed B. 3 -87
8.	Calcium	64	75	Mg/l	Standard M methods – APHA 22nd Ed 3500 Ca – B. 3 – 67
9.	Magnesium	21	30	Mg/l	APHA 22nd Edition 2005 3500-Mg-B
10.	Carbonate	22	NS	Mg/l	IS – 3025 (Part –51) -2001- Calculation Method
11.	Bicarbonate	252	NS	Mg/l	IS – 3025 (Part –51) -2001- Calculation Method
12.	Total Hardness as CaCO3	210	300	Mg/l	Standard M methods – APHA 22nd Ed. 2340 C. 2- 44
13.	Total Alkalinity as CaCO3	149	200	Mg/l	IS:3025 Part 23-1984 (Reaff:2003)
14.	Chloride as Cl	170	250	Mg/l	IS:3025 Part 32-1988 (Reaff:2003)

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15.	Sulphate as SO4	140	200	Mg/l	APHA 22nd Edition 4500-So_4^2 E
16.	Fluoride	0.2	1	Mg/l	APHA 22ND ED, 4500-F-, D, 4-87 SPADNS Method.
17.	Boron	0.6	0.5	Mg/l	Standard Method: APHA 22ND ED 4500 B., Pg. no: 4-25.
18.	Total Dissolved Solids	402	500	Mg/l	IS:3025 Part 16-1984 (Reaff:2003)
Remark(s): All parameters are within the limit					

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Report No: GESEC/2022/12/15	**Date of Sampling**	1.12.2022
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	Location	Project Site
Sample Collected By	**Self**	

Ground Water Analysis Report

Sr. No.	Parameter	Result	Limits	Unit (s)	Standard Methods
1.	Electrical Conductivity	4220	NS	µmho/ cm	Indian Standards (IS) – 3025 (Part –14) - 1984 (1st Revision) (Reaffirmed - 1996)
2.	Color	3.8	5	Hazen	APHA 22nd Edition
3.	pH at 25^0 C	7	6.5 – 8.5		IS:3025 Part 11-1983 (Reaff:2002)
4.	Nitrate as NO3	20	45	Mg/l	IS – 3025(Part – 34) 1988 Chromo tropic Acid method
5.	Nitrite as NO_2	ND	NS	Mg/l	IS- 3025 (Part – 34 – 4)
6.	Phosphorous as Phosphate	1.3	NS	Mg/l	Standard M methods – APHA 22nd Ed. 4500 P.D.4- 154.
7.	Potassium	29	NS	Mg/l	Standard M methods – APHA 22ND ED 3500 – K 21st Ed B. 3 -87
8.	Calcium	55	75	Mg/l	Standard M methods – APHA 22nd Ed 3500 Ca – B. 3 – 67
9.	Magnesium	27	30	Mg/l	APHA 22nd Edition 2005 3500-Mg-B
10.	Carbonate	20	NS	Mg/l	IS – 3025 (Part –51) -2001- Calculation Method
11.	Bicarbonate	235	NS	Mg/l	IS – 3025 (Part –51) -2001- Calculation Method

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12.	Total Hardness as CaCO3	177	300	Mg/l	Standard M methods – APHA 22nd Ed. 2340 C. 2- 44
13.	Total Alkalinity as CaCO3	180	200	Mg/l	IS:3025 Part 23-1984 (Reaff:2003)
14.	Chloride as Cl	191	250	Mg/l	IS:3025 Part 32-1988 (Reaff:2003)
15.	Sulphate as SO4	106	200	Mg/l	APHA 22nd Edition 4500-So_4^2 E
16.	Fluoride	0.4	1	Mg/l	APHA 22ND ED, 4500-F-, D, 4-87 SPADNS Method.
17.	Boron	0.2	0.5	Mg/l	Standard Method: APHA 22ND ED 4500 B., Pg. no: 4-25.
18.	Total Dissolved Solids	478	500	Mg/l	IS:3025 Part 16-1984 (Reaff:2003)

Remark(s): All parameters are within the limit

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TEST CERTIFICATE

Report No: GESEC/2022/12/16	**Date of Sampling**	1.12.2022
Client Name and Address:		
M/s. Macrotech Developers Ltd. **Pot bearing S. No. 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29,30,31,39,40 of village Usatane,S.No 13,29,31 of village Burdul, S.No.34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,95,96,97,98,99,100,101 of village Narhen,Tal.Ambernath & Dist.Thane**	**Sample Details**	Noise
	Location	Project Site
Sample Collected By	**Self**	

Noise Monitoring

Sr. No.	Location	Result				Unit (s)
		Day Time	Limits	Night Time	Limits	
1.	Near Construction Activity	45	55	36	45	dB
2.	Near Entry Gate	50	55	43	45	dB

Remark(s): During day time readings are within the limits

ANALYZED BY

AUTHORIZED SIGNATORY

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Engineers & Consultant Pvt Ltd.
Survey No-1405/06, Mayuri Residency, Shop No-16, 2nd Floor, Sanaswadi, Tal-Shirur, Pune-412208.
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TEST CERTIFICATE

Report No: GESEC/2022/12/17	**Date of Sampling**	1.12.2022
Client Name and Address:		
M/s. Macrotech Developers Ltd. **Pot bearing S. No. 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29,30,31,39,40 of village Usatane,S.No 13,29,31 of village Burdul, S.No.34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,65,66,67, 68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,95, 96,97,98,99,100,101 of village Narhen,Tal.Ambernath & Dist.Thane**	**Sample Details**	Soil
	Location	Project Site
Sample Collected By	**Self**	

Soil Analysis Report

Sr. No.	Parameter	Result	Unit (s)	Standard Methods
1.	pH of 10% Solution	6.1	-	IS 2720 Part 26: 1987 (Reaff. 2011)
2.	Texture	Loamy		
3.	Color	Reddish/Brown		
4.	EC	280	µS/cm	IS 14767: 2000
5.	Bulk Density	86	Gm/cm^3	IS: 2720 (Part 29) 1975
6.	Organic Content	0.5	%	IS 2720 Part 22: 1972 (Reaff.2010)
7.	Water Retaining Capacity	10	%	IS 2720 Part 29
8.	Calcium as Ca	14	mg/100gm	EPA3050 B
9.	Chloride as Cl	129	mg/100 gm	Mercury (II) Thiocyanate Method
10.	Magnesium as Mg	40	mg/100gm	EPA3050 B
11	Potassium as K	47	mg/kg	EPA3050 B
12.	Sodium as Na	161	mg/kg	EPA3050 B
13.	Sulphate as SO_4	48	mg/kg	IS 2720 Part 27
14.	Copper as Cu	26	mg/kg	EPA3050 B
15.	Lead as Pb	<2	mg/kg	EPA3050 B

GESEC

16	Zinc as Zn	381	mg/kg	EPA3050 B
17.	Total Kjeldahl Nitrogen as N	1	%	IS 14684 : 1999 (Reaff.2008)
18.	Total Phosphate as PO_4	1.1	mg/100 gm	IS 10158 –1982 (Reaff.2009)
19.	Iron	406	mg/kg	IS 13922 : 1994

Remark(s) : All parameters are within the limit

ANALYZED BY **AUTHORIZED SIGNATORY**

Parvesh

GREEN ENVIROSAFE PVT. LTD. PUNE Engineers & Consultant

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Recognised by Ministry of Environment, Forest & Climate Change (MoEF) Govt. of India and ISO 9001 : 2008, ISO 14001: 2004 and OHSAS 18001 : 2007 Certified company.

GESEC

TEST CERTIFICATE

Report No: GESEC/2022/12/18	**Date of Sampling**	1.12.2022
Client Name and Address: **M/s. Macrotech Developers Ltd.** **Pot bearing S. No. 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29,30,31,39,40 of village Usatane,S.No 13,29,31 of village Burdul, S.No.34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,65, 66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88, 89,90,91,95,96,97,98,99,100,101 of village Narhen,Tal.Ambernath & Dist.Thane**	**Sample Details**	Ambient Air
	Location	At Project Site
Sample Collected By	**Self**	

Ambient Air Quality Monitoring

Sr. No.	Parameter	Result	Limits	Unit (s)	Standard Methods
1.	Ambient Temperature (Max/Min)	32/31		^{O}C	
2.	Particulate Matter size less than 10-µm (PM_{10})	78	100	µg/m^3	Gravimetric
3.	Particulate Matter size less than 2.5-µm ($PM_{2.5}$)	56	60	µg/m^3	Gravimetric
4.	Sulphur Oxides (SO_X)	16	80	µg/m^3	Improved West & Gaeke
5.	Nitrogen Oxides (NO_X)	27	80	µg/m^3	Modified Jacob & Hochheister
6.	Carbon Monoxide (CO)	1.9	4	mg/m^3	By Electro Chemical Sensor

Remark(s): All parameters are within the limit

ANALYZED BY **AUTHORIZED SIGNATORY**

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GESEC

TEST CERTIFICATE

Report No: GESEC/2022/12/19	**Date of Sampling**	1.12.2022
Client Name and Address:		
M/s. Macrotech Developers Ltd. **Pot bearing S. No. 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29,30,31,39,40 of village Usatane,S.No 13,29,31 of village Burdul, S.No.34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,65,66 9,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,95, 8,99,100,101 of village Narhen,Tal.Ambernath & Dist.Thane**	**Sample Details**	Ambient Air
	Location	Near Gate
Mumbai.	**Self**	

Ambient Air Quality Monitoring

Sr. No.	Parameter	Result	Limits	Unit (s)	Standard Methods
1.	Ambient Temperature (Max/Min)	32/31		^{O}C	
2.	Particulate Matter size less than 10-µm (PM_{10})	86	100	$\mu g/m^3$	Gravimetric
3.	Particulate Matter size less than 2.5-µm ($PM_{2.5}$)	55	60	$\mu g/m^3$	Gravimetric
4.	Sulphur Oxides (SO_X)	20	80	$\mu g/m^3$	Improved West & Gaeke
5.	Nitrogen Oxides (NO_X)	36	80	$\mu g/m^3$	Modified Jacob & Hochheister
6.	Carbon Monoxide (CO)	1.6	4	mg/m^3	By Electro Chemical Sensor

Remark(s): All parameters are within the limit

ANALYZED BY **AUTHORIZED SIGNATORY**

Parvesh

GREEN ENVIROSAFE PUNE Engineers & Consultant Pvt Ltd.