

Chennai Metro Rail Limited

(A Joint Venture of Govt. of India and Govt. of Tamil Nadu)

(ISO 9001:2015 and ISO 14001:2015 Certified)

Letter No. CMRL/CON/ES/1021/2024

Dated: 14.11.2024

To,

Dr. V. George Jenner, IFS, Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office, 1st Floor, Additional Office Block for GPOA, Shastri Bhawan, Haddows Road Nungambakkam, Chennai – 600 034.



Dear Sir,

Sub: Submission of Six-Monthly Monitoring report (CRZ Clearance) for the period of May 2024 to October 2024 for the Construction of Extended Corridor 4 of Chennai Metro Rail Project Phase II from the Light House to Poonamalle Bypass by M/s Chennai Metro Rail Limited (CMRL) - Reg.

Ref: CRZ Clearance Letter No F.No.11-13/2022-IA.III dated 22nd April 2022.

With reference to the Part B - General Conditions, Condition no. (vii) stipulated in the CRZ Clearance cited above we are submitting herewith the six-monthly monitoring report (May 2024 to October 2024) along with necessary supporting documents for your kind information and perusal.

We wish to mention that all the necessary actions are being taken in compliance to the specific and general conditions of CRZ Clearance granted to the project.

We trust that the information furnished is in line with your requirement.

Thanking You.

Yours Sincerely,

Saravana Kumar R. Manager - Environment.

Enclosure: As stated above

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Part A - Specific Conditions

S.No	Description	Status of Compliance/ Remarks
i. *	All Construction shall be strictly by the provisions of CRZ Notification, 2011 and as amended from time to time.	Noted The recommendation/ conditions applicable for construction stage are
ii.	The PP as committed should submit a Tree	compiled as per CRZ notification 2011. Complied
	Plantation Management Plan that around 133 trees will be cut during the construction phase of the project with a consultation with the Forest Department before the commencement of the project or activity.	Tree plantation management plan for the light house station (CRZ area) submitted to Tamil Nadu Forest Department for approval. The tree cutting/translocation permission obtained from District Green committee vide letter Minutes of the 4th District Green Committee meeting at District Collectorate, Chennai on 02.09.0222. 133 trees in the coastal area were translocated to the Queen Mary's College and Marina Beach Lawn.
iii.	No ground water shall be extracted within the CRZ area to meet water requirements during the construction and/ or operational phase of the project.	Being Complied. No ground water within the CRZ area was extracted during the construction or operational phase of the project.
iv.	The project proponent shall ensure the natural flow of the creek water at the project site.	Noted and Being Complied No blockage of river or creek is envisaged in our project proposal. Proper care was taken to ensure the natural flow of the creek water throughout the project.
V.	No excavated material during the construction shall be dumped in water bodies or adjacent areas. The site shall be restored to its near original condition after completion of construction.	Noted and agreed to comply. CMRL will ensure that no excavated materials will be dumped in the water bodies or adjacent areas, site restoration will also be done after the completion of the construction.
vi.	Permanent labour camp, machinery and material storage shall not be set up in the CRZ area.	Complied Labour camp, machinery, and material storage are located away from the CRZ area.
vii.	Any temporary physical infrastructure set up during the construction period shall be removed simultaneously with the completion of laying of each segment of the project.	Noted and agreed to comply. CMRL will ensure that all temporary physical infrastructure will be remove post work completion.
viii.	All the conditions stipulated by the Tamil Nadu Coastal Zone Management Authority for CRZ clearance vide its Letter No. RC No P1/2503/2021. Dated 19/01/2022, and its	Noted and agreed to comply CMRL will comply with all stipulation made by Tamil Nadu Coastal Zone Management Authority and the

	commitments made by the CZMA and EAC	commitments made by the CZMA and	
	shall be followed in letter and spirit	EAC	
ix.	shall be followed in letter and spirit All necessary clearance from the concerned authority, as may be applicable, should be obtained before commencement of the project or activity. EAC Noted and Being Co All prerequisite appropriate are being obtained from authorities before commencement.	Noted and Being Complied.	
	authority, as may be applicable, should be	All prerequisite approvals/ clearances	
	obtained before commencement of the project	are being obtained from the relevant	
	or activity.	authorities before commencement of	
		the project or activity	

Part B - General Conditions

S.No	Description	Status of Compliance/ Remarks
i.	Management of Solid waste by the Solid Waste Management Rules, 2016 shall be strictly implemented.	Agreed to Comply CMRL ensures the proper waste management systems are implemented to minimize the negative impact on the environment.
ii.	'Consent to Establish' and / or ' Consent to Operate' shall be obtained from State Pollution Control Board under the provisions of the Air (Prevention and Control of Pollution) Act, 1981 and/ or the Water (Prevention and Control of Pollution) Act, 1974, as may be applicable.	Noted and Agreed to Comply. 'Consent to Operate' – CTO was obtained from TNPCB before the establishing the Batching plants (RMC Plant) in the Non – CRZ areas.
III.	Disposal of muck during the construction phase should not create any adverse effect on the neighboring communities and be disposed of taking the necessary precautions for general safety and healthy aspects of people, only in approved sites with the approval of Competent Authority.	Noted and Being Complied CMRL ensures that the muck generated during the construction phase will be disposed in the approved sites without creating any adverse effects on the neighborhood communities.
iv.	All liquid waste arising from the proposed development will be disposed of as per the norms prescribed by the Central/State Pollution Control Board. There shall not be any disposal of untreated effluent into the sea/ Coastal water bodies. It shall be ensured that the wastewater generated is treated in the STP as committed by the project proponent. The treated wastewater shall be reused for landscaping, flushing and/or HVAC cooling purposed etc. Within the development. The project proponent should also make alternate arrangements for situations arising fir to malfunctioning STP. There shall be regular monitoring of standard parameters of the effluent discharge from STP under intimation to the SPCB.	Complied All liquid waste is treated as per Pollution Control Board norms, with no untreated effluent disposed into coastal water bodies.



V.	Any hazardous waste generated during the	Noted and Complied
	construction phase, shall be disposed off as	The hazardous waste generated from
	per the applicable rules and norms with the	the sites during construction are disposed to the CPCB/TNPCE
	necessary approval of the State Pollution	authorized vendor.
vi.	Control Board. A copy of the clearance letter shall be	TNPCB and TNCZMA is the concern
VI.	uploaded on the website of the concerned	authority for the same.
	State Coastal Management Authority/ State	,
	Pollution Control Board. The clearance letter	
	shall also be displayed at the Regional Office,	
	District Industries Center and Collector's	
	Office for 30 days.	
vii.	A Six- Monthly monitoring report shall need to	Being Complied. This is the 5 th Compliance report, and
	be submitted by the project proponent to the concerned Regional Office of this Ministry	it is also being sent to the Regiona
	regarding the implementation of Stipulated	Office, MoEF&CC. And all the CR.
	conditions.	compliance monitoring reports have been uploaded o
		https://chennaimetrorail.org/compliar
		ce-reports/ and are being uploade
√iii.	The Ministry of Environment Ferent 9	periodically
VIII.	The Ministry of Environment, Forest & Climate Change or any other Competent	Noted and agreed, subjected to applicability and validity of condition,
	Authority may stipulate any additional	any.
+ 5 3	conditions or modify the existing ones, if	
	necessary, in the interest of the environment	2
	and the same shall be complied with.	
ix.	Full co-operation shall be extended to the	Agreed to Comply.
	officials from the Regional Office of MoEF&CC, during monitoring of the	Full support and coordination will be extended to the Officials from the
	implementation of environmental safeguards	Regional Office of MoEF&CC during
	stipulated. It shall be ensured that	the monitoring of the implementatio
	documents/data sought pertinent is made	of environmental safeguards.
	available to the Monitoring team. A complete	
	set of all the documents submitted to	
	MoEF&CC shall be forwarded to the	
V	concerned Regional Office of MoEF&CC.	Agreed and shall be somethed if such
X.	In the case of any change(s) in the scope of the project, the project would require a fresh	Agreed and shall be complied if sucle event occurs
	appraisal by the Ministry.	





xi.	The Ministry reserves the right to add additional safeguard measures subsequently if considered necessary, and to take action to ensure effective implementation of the suggested safeguard measures in a time-bound and satisfactory manner, including revoking the environment clearance under the provisions of the Environmental (Protection) Act, 1986, for non-compliance.	Noted and Agreed to Comply.
xii.	All other statutory clearances such as approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc., shall be obtained, as applicable by project proponent from the respective Competent Authorities.	Being Complied. All applicable statutory clearances are being obtained from the respective competent authority.
xiii.	The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded CRZ	Complied Grant of CRZ Clearance Letter has been advertised on 01.05.2022 in two local newspapers namely Dina Thanthi in Tamil language.
	Clearance and copies of clearance letters are available with the State Pollution Control Board (SPCB) may also be seen on the website of the Ministry of Environment, Forest and Climate Change at https://parivesh.nic.in/ . The advertisement should be made within seven days from the date of receipt of Clearance letter and a copy of the same should be forwarded to the concerned Regional Office in this Ministry.	The Hindu in English Language. Copy of advertisement has been already submitted to MoEF&CC vide letter no. CMRL/CON/ES/773/2022 on 03.05.2022
Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc., shall be obtained, as applicable by project proponent from the respective Competent Authorities. xiii. The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board (SPCB) may also be seen on the website of the Ministry of Environment, Forest and Climate Change at https://parivesh.nic.in/. The advertisement should be made within seven days from the date of receipt of Clearance letter and a copy of the same should be forwarded to the concerned Regional Office in this Ministry. xiv. A copy of the clearance letter shall be sent by the project proponent to the concerned Panchayat, Zilla Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, for whom suggestions / representations, if any, were received while processing the proposal. Complied. A copy of the Complied. Complied.		A copy of the CRZ Clearance letter marked to Greater Chennai Corporation vide letter no. CMRL/CON/ES/765/2022 on 03.05.2022 As on date, no suggestions and representation received from the said
xv.	The proponent shall upload the status of compliance of the stipulated conditions, including the results of monitored data on their website and shall update the same periodically. It shall be simultaneously be sent	Being complied Status of compliance of stipulated conditions have been uploaded on https://chennaimetrorail.org/ and are being updated periodically

	to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB	
xvi.	The environmental statement for each financial year ending 31st March in Form-V is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environmental (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the project proponent along the status of compliance of clearance conditions and shall also be sent to the Regional Office of the Ministry by e-mail.	The environmental statement Form V for financial year 2023-24 ending 31 st March 2024 was submitted to TNPCB and to the Regional Office of the Ministry by e-mail.





TEST REPORT

POLLUCARE ENGINEERS INDIA PVT.LTD., (Laboratory Services Division)

HIG - 6152, TNHB Phase I & II, Kamarajar Road, Ayapakkam, Chennal - 600 077.

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Accredited by NABL & NABET, Certified ISO 9001:2015 ISO 14001:2015 & ISO 45001: 2018

Report No	: PCEI/TR-AAQ-7585	Report Date	05 00 0004
Discipline	: Chemical		: 06.08.2024
Issued to Project Name	: M/S Chennai Metro Rail Limited No.327 Anna Salai; Nandanam, Chennai - 600035 : CMRL/CON/PHASE-II/C4/UG-1/2022	Group	: Atmospheric Pollution
Sampling Method Sampled by Sample Collected Date Sample Description Qty of Sample Received Sample Condition Sampling Location	: IS 5182 (Part 23) 2006 : Laboratory : 01.08.2024 : Ambient Air : Filter Paper & 30ml : Fit for Analysis : Light House Station	Sample Reference No Sample Received On Test Commenced On Test Completed On	: PCEI/AAQ-001-08-24 : 02.08.2024 : 02.08.2024 : 06.08.2024

	Weather Condition		-
Ambient Temperature Relative Humidity	; 32.3°C ; 56%	n see Francisco Company	
Climate Condition	: Broken Clouds		
Predominent Wind Direction	: WSW		

S.No	Parameters	Units	Test Method	Results	NAAQ Standards for Industrial, Residential, Rura and Other Area
1	Sulphur dioxide (as SO ₂)	ha/w ₃	IS 5182 Part 2/Sec 1: 2023	12.6	80
2	Nitrogen dioxide (as NO ₂)	µg/m³	IS 5182 Part 6: RA 2017	22.7	80
3	Respirable Particulate Matter (PM ₁₀)	μg/m³	15 5182 Part 23: RA 2022	57.6	100
4	Respirable Particulate Matter (PM _{2.5})	µg/m³	IS 5182 (Part 24): 2019	29.9	60
5	Carbon Monoxide (as CO)	mg/m³	IS 5182 Part 10: RA 2019	BDL(DL:1,14)	4**

te: i) NAAQS - National Ambient Air Quality Standards Issued by CPCB (Central Pollution Control Board) in 2009

ii) TWA - Time Weighted Average

iii) **- TWA for 1 Hour iv) * - TWA for Annual

BDL - Below Detection Limit; DL - Detection Limit

Verified By



Authorised Signatory

Note: 1. The test results are only to the sample submitted for test. 2. Any Correction of the test report in full or part shall invalidate the report 3. Sample will be retained for 15 days from the date of reporting except in case of regulatory samples or specifically instructed by client. 4. Perishable samples will be discarded immediately after reporting. 5. Under no circumstances lab accepts any liability or loss/damage caused by use or misuse of test report after invoicing or issued of test report



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M/S Chennal Metro Rail Limited Issued to No.327 Anna Salai,

Nandanam, Chennal - 600035

Report No	PCEI/TR-N-7591	
Report Date	06.08.2024	

Sampling Location	Light House Station	Project Name	CHENT CONVENIENCE CONTRACTOR
Sample Description	Noise Monitoring		CMRL/CON/PHASE-II/C4/UG-1/2022
Sampling Method	The same of the sa	Category of Area	Commercial Area
	IS 9989 - 1981 (RA 2020)	Sample Reference No	PCEI/N-007-08-24
Sampled by	Laboratory	Sampling Date	01.08.2024 to 02.08.2024
Equipment Installed	1.5 m from Ground Level	Sample Received On	02.08.2024
Group	Atmospheric Pollution	Test Commenced On	The second secon
Discipline	Chemical		03.08.2024
- rocipinte	CHERROR	Test Completed On	05.08.2024

		REFERENCE EQUIP	PMENT DETAILS		CALL.
Equipment Name	Make/Model	Equipment ID	Calibration Date	Due Date	
Sound Level Meter with Data Logger	Lutron/SL-4023SD	PCEI/Noise/07	02.05.2024	01.05.2025	

Day Time						
Date	Time	Readings dB(A)				
01.08.2024	09:00 - 10:00	63.4				
01.08.2024	10:00 - 11:00	60.3				
01.08.2024	11:00 - 12:00	62.9				
01.08.2024	12:00 - 13:00	64.3				
01.08.2024	13:00 - 14:00	63.8				
01.08.2024	14:00 - 15:00	61.6				
01.08.2024	15:00 - 16:00	62.4	-			
01.08.2024	16:00 - 17:00	64.2	ı			
01.08.2024	17:00 - 18:00	63.5	I			
01.08.2024	18:00 -19:00	61.9				
01.08.2024	19:00 - 20:00	62.3				
01.08.2024	20:00 - 21:00	59.8	I			
01.08.2024	21:00 - 22:00	58.6	ı			
02.08.2024	06:00 - 07:00	55.7				
02.08.2024	07:00 - 08:00	64.2				
02.08.2024	08:00 - 09:00	62.8				

Night Time					
Date	Time	Readings dB(A)			
01.08.2024	22:00 - 23:00	53.2			
01.08.2024	23:00 - 00:00	52,9			
02.08.2024	00:00 - 01:00	54.3			
02.08.2024	01:00 - 02:00	52.6			
02.08.2024	02:00 - 03:00	54.6			
02.08.2024	03:00 - 04:00	53.2			
02.08.2024	04:00 - 05:00	52.7			
02.08.2024	05:00 - 06:00	51.8			

Time	Min	Max	Leq	Limit
Day	55.7	64.3	62.5	65 dB(A)
Night	51.8	54.6	53.2	55 dB(A)

Hote:

Limit as per THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000, Schedule Ambient Air Quality Standards in respect of Noise in Commercial Area Daytime 65 dB(A) & Night Time 55 dB(A). 1. Day time shall mean from 6.00 a.m. to 10.00 p.m. 2. Night time shall mean from 10.00 p.m. to 6.00 a.m. The Noise level were monitored as per IS 9989-1981 and CPCB Protocol for Ambient Noise Level Monitoring, Jul 2015.

INTERPRETATION:

The above result shows that the noise level meets the NAAQ standard for commercial area noise levels.

*** End of Report ** Page 1 of 1



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