



Chennai Metro Rail Limited
(A Joint Venture of Govt. of India and Govt. of Tamil Nadu)

Letter No. CMRL/CON/ES/986/2024

Dated: 10.05.2024

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 November 2024 to April 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 (November 2023 to April 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



Six Monthly Monitoring Report for CRZ Clearance issued by MoEF&CC, New Delhi vide letter . F. No. 11-13/2022-IA.III, dated 22nd April, 2022 for Construction of Extended Corridor 4 – of Chennai Metro Rail Project Phase – II from Light House to Poonamalle Bypass by M/s Chennai Metro Rail Limited

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 compiled as per CRZ Notification 2011 and its amendments.
ii.	The PP as committed should submit a Tree 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.	Complied. Tree Plantation Management Plan for the Light House Station (CRZ area) submitted to Tamil Nadu Forest Department for approval. The tree translocation permission obtained from District Green Committee vide letter Minutes of the 4 th District Green Committee meeting at District Collectorate, Chennai on 02.09.2022. 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 operation phase of the project.
iv.	The project proponent shall ensure the natural flow of the creek water at the project site.	Being Complied. No blockage of river or creek is envisaged in our project proposal. Proper care was taken to ensure free flow of 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.
vi.	Permanent labour camp, machinery and material storage shall not be set up in the CRZ area.	Complied. Labour camp, machinery and material storage area located far away from the CRZ area.
vii.	Any temporary physical infrastructure set up during the construction period shall be removed simultaneously with	Noted and Agreed to Comply. CMRL will ensure that all temporary physical infrastructure will be removed post work completion.



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S. No.	Description	Status of Compliance / Remarks
	the completion of laying of each segment of the project.	
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 commitments made by the CZMA and EAC shall be followed in letter and spirit.	Noted and Agreed to Comply. CMRL will comply with all the stipulation made by Tamil Nadu Coastal Zone Management Authority and the commitments made by the CZMA and EAC.
ix.	All necessary clearance from the concerned authority, as may be applicable should be obtained before commencement of the project or activity.	Noted and Being Complied. All prerequisite approvals / clearance is being obtained from the relevant 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.	Noted and Agreed to Comply. CMRL will ensure that the proper waste management systems are implemented to minimize the adverse 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 for operating 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 health aspects of people, only in approved sites with the approval of Competent Authority.	Noted and Being Complied. CMRL ensures that the muck generated during construction phase will be disposed only in the approved sites without creating any adverse effect on the neighborhood communities. Permission obtained from Chengalpattu collector vide order no 85/Mineral/2022 dated 23.11.2023 for dumping muck and other construction waste in the abandoned quarries



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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 waste water 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. No disposal of liquid wastes done in the sea / coastal water bodies.
v.	Any hazardous waste generated during the construction phase, shall be disposed off as per the applicable rules and norms with the necessary approvals of the State Pollution Control Board.	Noted and Agreed to Comply.
vi.	A copy of the clearance letter shall be uploaded on the website of the concerned State Coastal Management Authority/ State Pollution Control Board. The clearance letter shall also be displayed at the Regional Office, District Industries Centre and Collector's Office for 30 days.	TNPCB and TNCZMA is the concern authority for the same.
vii.	A Six-monthly monitoring report shall need to be submitted by the project proponent to the concerned Regional Office of this Ministry regarding the implementation of stipulated conditions.	Being complied. This is the 4 th compliance report and it is also being sent to Regional Office, MoEF&CC. And all the CRZ compliance monitoring reports have been uploaded on https://chennaietrorail.org/ and are being updated periodically.



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S. No.	Description	Status of Compliance / Remarks
viii.	The Ministry of Environment, Forest & Climate Change or any other Competent Authority may stipulate any additional conditions or modify the existing ones, if necessary, in the interest of the environment and the same shall be complied with.	Noted and Agreed , subjected to applicability and validity of condition, if any.
ix.	Full co-operation shall be extended to the officials from the Regional Office of MoEF&CC, during monitoring of the implementation of environmental safeguards stipulated. It shall be ensured that documents/data sought pertinent is made available to the monitoring team. A complete set of all the documents submitted to MoEF&CC shall be forwarded to the concerned Regional Office of MoEF&CC.	Agreed to Comply. Full support and coordination will be extended to the Officials from the Regional Office of MoEF&CC during the monitoring of the implementation of environmental safeguards.
x.	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.	Agreed and shall be complied if such event occurs.
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 environmental 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 authorities.



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S. No.	Description	Status of Compliance / Remarks
xiii.	The project proponent should advertise in at least two local newspaper 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 of this Ministry.	Complied. Grant of CRZ Clearance Letter has been advertised on 01.05.2022 in two local newspapers namely <ul style="list-style-type: none"> • Dina Thanthi ((தினத்தந்தி) in Tamil language. • 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.
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 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 authority.
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 to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB.	Being complied. Noted. Status of compliance of stipulated conditions have been uploaded on https://chennaiemtorail.org/ and are being updated periodically.
xvi.	The environmental statement for each financial year ending 31 st 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	Agreed to Comply. The environmental statement for each financial year ending 31 st March 2024 in Form-V will be sent to TNPCB and to the Regional Office of the Ministry by e-mail.



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S. No.	Description	Status of Compliance / Remarks
	the status of compliance of clearance conditions and shall also be sent to the Regional Office of the Ministry by e-mail.	



TEST REPORT

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

Report No	: PCEI/TR-AAQ-10532	Report Date	: 07.11.2023
Discipline	: Chemical	Group	: Atmospheric Pollution
Issued to	: M/S Chennai Metro Rail Limited CMRL Depot Admin Building, Poonamalle High Road, Koyambedu, Chennai-600 107		
Project Name	: CMRL/CON/PHASE-II/C4/UG-1/2022		
Sampling Method	: IS 5182 (Part 23) 2006		
Sampled by	: Laboratory		
Sample Collected Date	: 02.11.2023		
Sample Description	: Ambient Air		
Qty of Sample Received	: Filter Paper & 30ml		
Sample Condition	: Fit for Analysis		
Sampling Location	: Light House Location		
Sample Reference No	: PCEI/AAQ-020-11-23		
Sample Received On	: 03.11.2023		
Test Commenced On	: 03.11.2023		
Test Completed On	: 07.11.2023		

Weather Condition

Ambient Temperature	: 30°C
Relative Humidity	: 59%
Climate Condition	: Scattered clouds
Predominant Wind Direction	: W

S.No	Parameters	Units	Test Method	Results	NAAQ Standards for Industrial, Residential, Rural and Other Area
1	Sulphur dioxide (as SO ₂)	µg/m ³	IS 5182 (Part 2) 2001 (RA 2017)	14.5	80
2	Nitrogen dioxide (as NO ₂)	µg/m ³	IS 5182 (Part 6) 2006 (RA 2017)	25.6	80
3	Respirable Particulate Matter (PM ₁₀)	µg/m ³	IS 5182 (Part 23) 2006 (RA 2017)	55.8	100
4	Respirable Particulate Matter (PM _{2.5})	µg/m ³	IS 5182 (Part 24) 2019	30.2	60
5	Carbon Monoxide (as CO)	mg/m ³	IS 5182 (Part 10) 1999 (RA 2019)	BDL(DL:1.14)	4**

Note: 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

..... End of Report
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Authorised Signatory
Authorised Signatory



TEST REPORT

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

Issued to	M/S Chennai Metro Rail Limited
	CMRL Depot Admin Building,
	Poonamalle High Road, Koyambedu,
	Chennai-600 107

Report No	PCEI/TR-N-10538
Report Date	07.11.2023

Sampling Location	Light House Location	Project Name	CMRL/CON/PHASE-II/C4/UG-1/2022
Sample Description	Noise Monitoring	Category of Area	Commercial Area
Sampling Method	IS 9989 - 1981 (RA 2008)	Sample Reference No	PCEI/N-026-11-23
Sampled by	Laboratory	Sampling Date	02.11.2023 to 03.11.2023
Equipment Installed	1.5 m from Ground Level	Sample Received On	03.11.2023
Group	Atmospheric Pollution	Test Commenced On	03.11.2023
Discipline	Chemical	Test Completed On	07.11.2023

REFERENCE EQUIPMENT DETAILS				
Equipment Name	Make/Model	Equipment ID	Calibration Date	Due Date
Sound Level Meter with Data Logger	Lutron/SL-4023SD	PCEI/Noise/09	02.05.2023	01.05.2024

Day Time		
Date	Time	Readings dB(A)
02.11.2023	09:00 - 10:00	60.7
02.11.2023	10:00 - 11:00	61.2
02.11.2023	11:00 - 12:00	62.8
02.11.2023	12:00 - 13:00	63.5
02.11.2023	13:00 - 14:00	56.7
02.11.2023	14:00 - 15:00	61.8
02.11.2023	15:00 - 16:00	60.1
02.11.2023	16:00 - 17:00	60.6
02.11.2023	17:00 - 18:00	59.3
02.11.2023	18:00 - 19:00	62.4
02.11.2023	19:00 - 20:00	61.6
02.11.2023	20:00 - 21:00	59.8
02.11.2023	21:00 - 22:00	60.7
03.11.2023	06:00 - 07:00	55.9
03.11.2023	07:00 - 08:00	57.4
03.11.2023	08:00 - 09:00	58.8

Night Time		
Date	Time	Readings dB(A)
02.11.2023	22:00 - 23:00	52.8
02.11.2023	23:00 - 00:00	52.6
03.11.2023	00:00 - 01:00	53.5
03.11.2023	01:00 - 02:00	54.6
03.11.2023	02:00 - 03:00	53.4
03.11.2023	03:00 - 04:00	51.8
03.11.2023	04:00 - 05:00	53.9
03.11.2023	05:00 - 06:00	51.2

Time	Min	Max	Leq	Limit
Day	55.9	63.5	60.7	65 dB(A)
Night	51.2	54.6	53.1	55 dB(A)

Note:

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 ***

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Confession
Verified By



H. D. Singh
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

TEST REPORT

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Report No	: PCEI/TR-AAQ-10532	Report Date	: 07.11.2023
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..... End of Report
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Colombia
Verified By

A. D. D. D.
Authorised Signatory

