



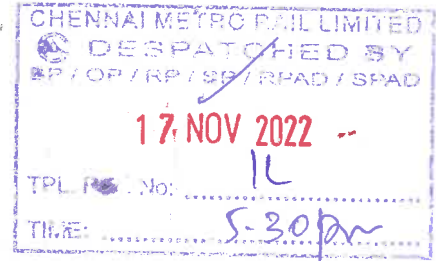
Chennai Metro Rail Limited
(A Joint Venture of Govt. of India and Govt. of Tamil Nadu)

Letter No. CMRL/CON/ES/868/2022

Dated: 10.11.2022

To,

Shri Hemanth Kumar, 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 2022 to October 2022 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 2022 to October 2022) 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.

Yours Sincerely,

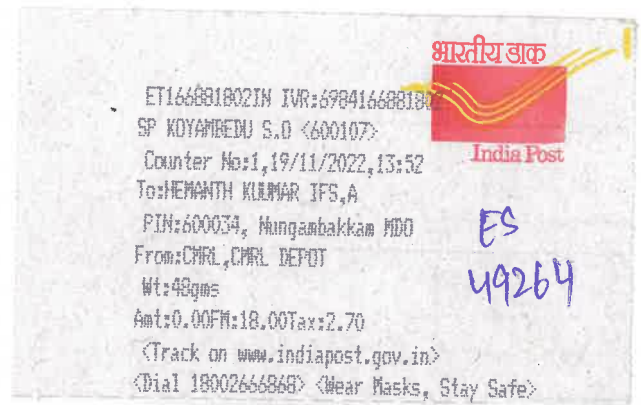
Thanking You.

10/11/2022

Saravana Kumar R,
DM/Environment.



Enclosure: As stated above



CMRL Depot, Admin Building, Poonamallee High Road, Koyambedu, Chennai - 600 107.

Phone : 23792000 Fax : 23792200

Email : chennaietrail@cmrl.in website : www.chennaietrail.org

CIN : I160100TN200290000500

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. Agreed to comply the 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 cutting/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. Copy of MoM attached as Annexure 1.
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 shall be taken to ensure free flow of water.
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.
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 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 removed post work completion.
viii.	All the conditions stipulated by the Tamil Nadu Coastal Zone Management	Noted and Agreed to Comply.



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

S. No.	Description	Status of Compliance / Remarks
	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.	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 Agreed to Comply. All pre requisite approvals / clearance will be obtained 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.
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. CMRL ensure that the 'Consent to Establish' and / or 'Consent to Operate' will be 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 health aspects of people, only in approved sites with the approval of Competent Authority.	Noted and Agreed to Comply.
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	Complied. No disposal of liquid wastes done in the sea / coastal water bodies.



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

S. No.	Description	Status of Compliance / Remarks
	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.	
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 1 st compliance report and it is also being sent to Regional Office, MoEF&CC & would be uploaded in CMRL website.
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	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.



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

S. No.	Description	Status of Compliance / Remarks
	monitoring team. A complete set of all the documents submitted to MoEF&CC shall be forwarded to the concerned Regional Office of MoEF&CC.	
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.
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.	Agreed to Comply. Presently, activities are yet to be started. All other applicable statutory clearances will be taken from the respective competent authorities.
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	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.



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

S. No.	Description	Status of Compliance / Remarks
	should be forwarded to the concerned Regional Office of 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.	<p>Complied.</p> <p>A copy of the CRZ Clearance letter marked to Greater Chennai Corporation vide letter no. CMRL/CON/ES/765/2022 on 03.05.2022.</p> <p>As on date, No suggestions and representation received from the said authority.</p>
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.	<p>Being complied.</p>
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 the status of compliance of clearance conditions and shall also be sent to the Regional Office of the Ministry by e-mail.	<p>Agreed to Comply.</p> <p>The environmental statement for each financial year ending 31st March in Form-V will be sent to TNPCB and to the Regional Office of the Ministry by e-mail.</p>



Report No	: PCEI/TR-AAQ-5649	Report Date	: 21.09.2022
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	: 15.09.2022	Sample Reference No	: PCEI/AAQ-172-09-22
Sample Description	: Ambient Air	Sample Received On	: 16.09.2022
Qty of Sample Received	: Filter Paper & 30ml	Test Commenced On	: 16.09.2022
Sample Condition	: Fit for Analysis	Test Completed On	: 21.09.2022
Sampling Location	: Light House Location		

Weather Condition	
Ambient Temperature	: 32°C
Relative Humidity	: 72%
Climate Condition	: Broken 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)	18.4	80
2	Oxides of Nitrogen (as NO ₂)	µg/m ³	IS 5182 (Part 6) 2006 (RA 2017)	25.3	80
3	Respirable Particulate Matter (PM ₁₀)	µg/m ³	IS 5182 (Part 23) 2006 (RA 2017)	63.1	100
4	Respirable Particulate Matter (PM _{2.5})	µg/m ³	IS 5182 (Part 24) 2019	33.7	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
Page 1 of 1

V. Karthick
Verified By
Karthick.V
Senior Chemist


Authorised Signatory
Selvi.S
Technical Manager



Report No : PCEI/TR-N-5653		Report Date : 21.09.2022	
Sampling Date	Sampling Time	Day Time	Night Time
		Readings dB(A)	Readings dB(A)
15.09.2022	22:00 - 23:00	-	56.5
15.09.2022	23:00 - 00:00	-	55.0
16.09.2022	00:00 - 01:00	-	53.3
16.09.2022	01:00 - 02:00	-	52.6
16.09.2022	02:00 - 03:00	-	51.4
16.09.2022	03:00 - 04:00	-	50.2
16.09.2022	04:00 - 05:00	-	49.0
16.09.2022	05:00 - 06:00	-	48.6
Day Time		Leq (Day)	62.5
		Day Time Limit	65 dB(A)
Night Time		Leq (Night)	52.9
		Night Time Limit	55 dB(A)

Note:

Limit as per THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000, Schedule (as amended till 10/08/2017 vide S.O 2555(E))
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.

INTERPRETATION:

The Noise level were monitored as per IS 9989-1981 and CPCB Protocol for Ambient Noise Level Monitoring, Jul 2015.

In the following Noise results, The Day time and Night time Noise levels meets the NAAQS for Noise levels for Commercial Area (THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000) (as amended till 10/08/2017 vide S.O.2555(E))

*** End of Report ***

Page 2 of 2

V. Karthick
Verified By
Karthick.V
Senior Chemist




Authorised Signatory
Selvi.S
Technical Manager



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.

Report No	: PCEI/TR-N-5653	Report Date	: 21.09.2022
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 9989 - 1981 (RA 2008)		
Sampled by	: Laboratory Representative - Mr.Muthukumar		
Sample Description	: Noise Monitoring	Sample Reference No	: PCEI/N-176-09-22
Category of Area	: Commercial Area	Sample Received On	: 16.09.2022
Equipment Installed	: 1.5 m from Ground Level	Test Commenced On	: 16.09.2022
Sampling Date	: 15.09.2022 to 16.09.2022	Test Completed On	: 21.09.2022
Sampling Location	: Light House Location		

EQUIPMENT USED FOR SAMPLING

Equipment Name	Make/Model	Equipment ID	Calibration Date	Due Date
Sound Level Meter with Data Logger	Lutron/SL-4023SD	PCEI/EQ/45	07.02.2022	06.02.2023

Sampling Date	Sampling Time	Day Time	Night Time
		Readings dB(A)	Readings dB(A)
15.09.2022	06:00 - 07:00	58.8	-
15.09.2022	07:00 - 08:00	60.3	-
15.09.2022	08:00 - 09:00	61.0	-
15.09.2022	09:00 - 10:00	59.3	-
15.09.2022	10:00 - 11:00	62.8	-
15.09.2022	11:00 - 12:00	64.3	-
15.09.2022	12:00 - 13:00	64.9	-
15.09.2022	13:00 - 14:00	65.5	-
15.09.2022	14:00 - 15:00	62.0	-
15.09.2022	15:00 - 16:00	61.7	-
15.09.2022	16:00 - 17:00	64.6	-
15.09.2022	17:00 - 18:00	65.8	-
15.09.2022	18:00 - 19:00	61.0	-
15.09.2022	19:00 - 20:00	59.9	-
15.09.2022	20:00 - 21:00	58.9	-
15.09.2022	21:00 - 22:00	58.5	-

V. Karthick V
Verified By
Karthick.V
Senior Chemist




Authorized Signatory
Selvi.S
Technical Manager

