

Letter No. CMRL/CON/ES/920/2023

Dated: 29.06.2023

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 November 2022 to April 2023 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 2022 to April 2023) 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, DM/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 cutting/translocation permission obtained from District Green Committee vide letter Minutes of the 4th District Green Committee meeting at District Collectorate, Chennai on 02.09.2022.
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 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.



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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. 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. 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. 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. viii. The Ministry of Environment, Forest & Climate Change or any other Competent Authority any stipulate any	· .	Tan n in in	
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need to be submitted by the project proponent to the concerned Regional Office of this Ministry regarding the implementation of stipulated conditions. Viii. The Ministry of Environment, Forest & Climate Change or any other This is the 2 nd 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://chennaimetrorail.org/ and are being updated periodically. Noted and Agreed, subjected to applicability and validity of condition, if	vi.	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	
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	viii.	Climate Change or any other	applicability and validity of condition, if

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	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.	 Dina Thanthi ((島岡ğ寅) 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	Complied.
	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.	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	Being complied.
	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.	Noted. Status of compliance of stipulated conditions have been uploaded on https://chennaimetrorail.org/ and are being updated periodically.
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.	Agreed to Comply. 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.





TEST REPORT

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

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

Ph: +91 44 2682 3190 / +91 73977 96831

Email: lab@pollucareindia.com Web: www.pollucareinida.com

Report No	: PCEI/TR-AAQ-1820	Report Date	: 07.03.2023
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	: 03.03.2023	Sample Reference No	: PCEI/AAQ-068-03-23
Sample Description	: Ambient Air	Sample Received On	: 04.03.2023
Qty of Sample Received	: Filter Paper & 30ml	Test Commenced On	: 04.03.2023
Sample Condition	: Fit for Analysis	Test Completed On	: 07.03.2023
Sampling Location	: Light House Location	<u> </u>	

Weather Condition				
Ambient Temperature	: 31°C			
Relative Humidity	: 67%			
Climate Condition	: Scattered Clouds			
Predominent Wind Direction	: NE [*]			

S.No	Parameters	Units	Test Method	Results	NAAQ Standards for Industrial, Residential, Rural and Other Area
1	Sulphur dioxide (as SO ₂)	µg/m³	IS 5182 (Part 2) 2001 (RA 2017)	11.4	× 80
2	Oxides of Nitrogen (as NO ₂)	µg/m³	IS 5182 (Part 6) 2006 (RA 2017)	28.0	.80
3	Respirable Particulate Matter (PM ₁₀)	µg/m³	IS 5182 (Part 23) 2006 (RA 2017)	79.5	100
4	Respirable Particulate Matter (PM _{2.5})	µg/m³	IS 5182 (Part 24) 2019	39.0	60
5	Carbon Monoxide (as CO)	mg/m³	IS 5182 (Part 10) 1999 (RA 2019)	1.96	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

Authorised Signatory







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Chennai - 600 077. Ph: +91 44 2682 3190 / +91 73977 96831

Email: lab@pollucareindia.com Web: www.pollucareinida.com

Torused to	: M/C. Channai Matra Bail Limited		
Discipline	: Chemical	Group	: Atmospheric Pollution
Report No	: PCEI/TR-N-1825	Report Date	: 07.03.2023

: M/S. Chennai Metro Rail Limited CMRL Depot Admin Building,

Poonamalle High Road, Koyambedu,

Chennai -600 107.

Project Name Sampling Method

: CMRL/CON/PHASE-II/C4/UG-1/2022 : IS 9989 - 1981 (RA 2008)

Sampled by

Sampling Date

Sampling Location

Sample Description Category of Area

: Laboratory Representative - Mr. Muthukumar

: Noise Monitoring **Equipment Installed**

: Commercial Area : 1.5 m from Ground Level

: 03.03.2023 to 04.03.2023 : Light House Location

Sample Reference No

: PCEI/N-073-03-23

Sample Received On Test Commenced On

: 04.03.2023 : 04.03.2023

Test Completed On

: 07.03.2023

EQUIPMENT USED FOR SAMPLING

Equipment Name	Make/Model	Equipment ID	Calibration Date	Due Date
Sound Level Meter with Data Logger	Hemsun/HDB2202	PCEI/EQ/79	02.12.2022	01.12.2023

		Day Time	Night Time
Sampling Date	Sampling Time	Readings dB(A)	Readings dB(A)
03.03.2023	06:00 - 07:00	60.3	R.
03.03.2023	07:00 - 08:00	62.4	. S ¹ .
03.03.2023	08:00 - 09:00	63.7	
03.03.2023	09:00 - 10:00	66.6	-
03.03.2023	10:00 - 11:00	65.5°	•:
03.03.2023	11:00 - 12:00	55.3	-
03.03.2023	12:00 - 13:00	50.8	· E
03.03.2023	13:00 - 14:00	64.7	•
03.03.2023	14:00 - 15:00	59.9	12
03.03.2023	15:00 - 16:00	64.4	-
03.03.2023	16:00 - 17:00	61.7	-
03.03.2023	17:00 - 18:00	62.6	
03.03.2023	18:00 - 19:00	59.8	
03.03.2023	19:00 - 20:00	62.9	-
03.03.2023	20:00 - 21:00	61.2	7-
03.03.2023	21:00 - 22:00	50.8	-

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Authorised Signatory



: PCEI/TR-N-2772

: 31.03.2023 to 01.04.2023

: Light House Location

Report No

Sampling Date

Sampling Location

TEST REPORT

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

: 03.04.2023

: 03.04.2023

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

Ph: +91 44 2682 3190 / +91 73977 96831

Email: lab@pollucareindia.com Web: www.pollucareinida.com

Report Date

Test Completed On

Discipline	: Chemical	Group	: Atmospheric Pollution		
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	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-1031-03-23		
Category of Area	: Commercial Area	Sample Received On	: 01.04.2023		
Equipment Installed					

EQUIPMENT USED FOR SAMPLING

Equipment Name	Make/Model	Equipment ID	Calibration Date	Due Date
Sound Level Meter with Data Logger	Hemsun/HDB2202	PCEI/EO/79	02.12.2022	01.12.2023

	<u> </u>	Day Time.	Night Time	
Sampling Date	Sampling Time	Readings dB(A)	Readings dB(A)	
31.03.2023	06:00 - 07:00	64.8	R-	
31.03.2023	07:00 - 08:00	60.5	57 to 2015	
31.03.2023	08:00 - 09:00	59.0	Sec P No Value .	
31.03.2023	09:00 - 10:00	64.6	-	
31.03.2023	10:00 - 11:00	51.9	-	
31.03.2023	11:00 - 12:00	57.8	-	
31.03.2023	12:00 - 13:00	53.4	• 11	
31.03.2023	13:00 - 14:00	64.8	-	
31.03.2023	14:00 - 15:00	61.6	-	
31.03.2023	15:00 ~ 16:00	62.8		
31.03.2023	16:00 - 17:00	63.7	·	
31.03.2023	17:00 - 18:00	61.9	-	
31.03.2023	18:00 - 19:00	64.5	-	
31.03.2023	19:00 - 20:00	51.0		
31.03.2023	20:00 - 21:00	61.8		
31.03.2023	21:00 - 22:00	58.6	-	

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