

Environmental Monitoring Report

Semiannual Report (January to June 2021)
July 2021

India: Delhi-Meerut Regional Rapid Transit System Investment Project - Tranche 1

Prepared by the National Capital Region Transport Corporation (NCRTC), Government of India
for the Asian Development Bank.

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National Capital Region Transport Corporation
(A Joint venture of Government of India and participating State Governments)

(Delhi-Meerut Regional Rapid Transit System Project)

SEMI ANNUAL ENVIRONMENTAL MONITORING REPORT

(Period: 1st January 2021 to 30th June 2021)

Delhi-Meerut RRTS
ADB Loan No. 3964.-India

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ABBREVIATIONS

ADB	- Asian Development Bank
C&D	- Construction and Demolition
CCECC	- China Civil Engineering Construction Corporation
CGWA	- Central Ground Water Authority
CO	- Carbon Monoxide
CPCB	- Central Pollution Control Board
CPM	- Chief Project Manager
CTE	- Consent to Establish
CTO	- Consent to Operate
DDA	- Delhi Development Authority
DG	- Diesel Generator
DND	- Delhi Noida Direct
DPCC	- Delhi Pollution Control Committee
E&M	- Electrical and Mechanical
E&S	- Environment & Social
EA	- Executing Agency
ECS	- Environment Control System
EIA	- Environmental Impact Assessment
EMP	- Environmental Management Plan
EPE	- Eastern Peripheral Expressway
GC	- General Consultant
GDA	- Ghaziabad Development Authority
GoI	- Government of India
GRC	- Grievance Redress Committee
GRM	- Grievance Redress Mechanism
HOD	- Head of Department
IL & FS	- Infrastructure Leasing & Financial Services
IRS	- Indian Railway Standard
ISO	- International Organization for Standardization
MCD	- Municipal Corporation Delhi
MoEFCC	- Ministry of Environment, Forest, and Climate Change
NABL	- National Accreditation Board for Testing and Calibration Laboratories
NCR	- National Capital Region
NCRTC	- National Capital Region Transport Corporation
NCT	- National Capital Territory
NDMC	- New Delhi Municipal Council
NO ₂	- Nitrogen Dioxide
OHE	- Overhead Equipment
PAP	- Project-Affected People
PEB	- Pre-Engineered Building
PIU	- Project Implementation Unit
PM ₁₀	- Particulate Matter
PM _{2.5}	- Particulate Matter
PMO	- Project Management Office
PUC	- Pollution Under Control
RMC	- Ready Mix Concrete
RRTS	- Regional Rapid Transit System
RSS	- Receiving Substations
SEMU	- Social and Environmental Management Unit
SHE	- Safety, Health and Environment
SKK	- Sarai Kale Khan
SO ₂	- Sulphur Dioxide
STP	- Sewage Treatment Plant

TBM	-	Tunnel Boring Machine
TVS	-	Tunnel Ventilation System
UIC	-	International Union of Railways

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I. Introduction

A. Project Background

1. The investment project will finance the first of three prioritized corridors of the planned regional rapid transit system (RRTS) network in India's National Capital Region (NCR). The Delhi-Meerut RRTS will pass through the densely populated sections of the NCR, connecting Delhi to Meerut in the state of Uttar Pradesh. The 82-kilometer corridor will provide safe, reliable, and high-capacity commuter transit services between various locations along the corridor. The investment project will finance civil works for elevated viaduct and tunnel, rail track, Power supply and overhead traction, station buildings, and maintenance facilities. It will also support capacity and institutional development of the National Capital Region Transport Corporation (NCRTC), a joint venture company of the Government of India and states of Delhi, Haryana, Rajasthan and Uttar Pradesh, that is mandated to implement the RRTS project across the NCR. Tranche 1 will finance the first slice of the contract packages under the investment project. It will also support various capacity building activities for the NCRTC, and initiatives to improve the mobility and economic opportunities of women and differently abled people.

B. Project Description

2. National Capital Region Transport Corporation (NCRTC)- a joint sector company of the government of India and state of Delhi, Haryana, Rajasthan, and Uttar Pradesh is developing a rail based suburban transport system i.e. Regional Rapid Transit System (RRTS) for National capital Region (NCR). The Goal is to offer a rail based sustainable Urban Transport System, to increase the quality of life and better access to goods, services creating employment opportunities and sustainable development, climate change mitigation resulting in a livable city environment i.e. health supportive environment with more of road space to people rather than vehicle.

3. The proposed RRTS (Delhi- Ghaziabad-Meerut) corridor originating from Sarai Kale Khan in the state of Delhi and ending at Modipuram in Uttar Pradesh will be double line standard gauge, rapid railway system, built on elevated viaduct and going underground in heavily populated area. As per the final alignment, out of total length of 82.15 km, 14.15 km is in underground section and 68 Km is in elevated section.

4. As per the technical design, the construction of Delhi-Ghaziabad-Meerut RRTS will be limited to mostly within the existing right-of-way of the road, as the alignment is proposed on the median or along the carriageway. The proposed centerline is designed such that minimum land acquisition is required, however, the project will require acquisition of private land in addition to utilizing available Govt. land for the entry/exit of RRTS stations and 2 maintenance depots proposed to be constructed at Duhai and Modipuram.

5. The land acquisition and resettlement impact assessed through project census survey includes loss of private land, loss of non-land assets and loss of livelihoods. The land requirement for Delhi-Ghaziabad-Meerut RRTS corridor is estimated as 170 ha out of which 138.29 ha will be required from private individuals and 32 ha will be government land to be used for the project facilities including running sections, stations & facilities, staff quarters, operation control Centre, receiving sub-stations. It was found that 138.29-hectare private land and 525 structures owned by 813 households will be affected. The affected households include both titleholders losing land and non-land assets and non-titleholders i.e. encroachers and squatters losing non-land assets.

6. The details of various concerned sub-projects (contract packages) are given in **Table-1** under:

Table 1: List of Packages

Package No.	Package Description	Package Commencement Date
P1	Construction of elevated viaduct including 2 stations from start of elevated ramp near Sahibabad RRTS Station upto end of Ghaziabad RRTS Station	23-Aug-2019
P2	Construction of elevated viaduct including 2 stations from end of Ghaziabad RRTS Station up to EPE crossing (including), elevated viaduct & Ramp for connection to Duhai Depot	10-May-2019
P3(Lot 1)	Construction of elevated viaducts including 2 stations from Duhai Eastern Peripheral Expressway (EPE) to start of Modi Nagar North	08-Jun-2020
P3(Lot 2)	Construction of elevated viaducts including 5 stations from Modi Nagar North Shatabdi Nagar	08-Jun-2020
P4	Design and construction of tunnels by tunnel boring machine (TBM) from New Ashok Nagar Ramp to Sahibabad Ramp and one underground station	06-Jan-2021
P5A	Construction of Duhai Depot and 1 at-grade station including finishes, PEB, E&M (including training center)	11-Dec-2020
P6	Construction of elevated viaducts including 2 stations from Sarai Kale Khan (SKK) to New Ashok Nagar	07-Dec-2020
P7	Construction of elevated viaduct from Shatabdi Nagar Station to Brahmpuri Down Ramp & Begumpul Up Ramp to Modipuram including 5 elevated stations	10-Dec-2020
P8	Design and construction of tunnels by tunnel boring machine (TBM) from Brahmpuri DN Ramp to Begumpul UP ramp and 3 Underground stations at Meerut Central, Bhaisali & Begumpul including finishes, E&M	06-Jan-2021
P9A	Construction of Multi-storied Staff Quarters and connectivity from Mathura Road to Jangpura Stabling Yard Complex (Financed by NDB)	23-Oct-2020
P13	Supply of head hardened rails	01-Dec-2020
P14	Supply of fastening systems for ballast less track	10-Nov-2020
P15	Supply of turnout and scissor cross over	05-Feb-2021
P16(Lot1)	Manufacture, Supply, Transportation, and delivery of 2000 MT of UIC 60/60E-1/60 KG 1080 Grade Head Hardened Rails Class-A confirming to IRS T-12-2009 (latest amendment) for Depot and Depot Connecting line	08-Feb-2021
P16(Lot2)	Manufacture, Supply, transportation, and delivery of 4000 MT of 60 KG 880 Grade Rail Class-A confirming to IRS T-12-2009 (latest amendment) for Depot and Depot Connecting line	08-Feb-2021
P17	Trackwork installation from SKK (Delhi) to Modipuram (UP) including Jangpura Stabling Yard, Duhai and Modipuram depots	11-Dec-2020
P19(Lot1)	Design, supply, installation, testing and commissioning of receiving substations (RSS) and traction overhead equipment	04-Dec-2020

Package No.	Package Description	Package Commencement Date
	(OHE) – from SKK to Duhai (EPE) including Jangpura Yard and Duhai depot	
P19(Lot2)	Design, supply, installation, testing and commissioning of receiving substations (RSS) and traction overhead equipment (OHE) – from Duhai (EPE) to Modipuram including Modipuram depot	04-Dec-2020
P21	Design, supply, installation, testing and commissioning of Escalators	16-Dec-2020
P22	Design, supply, installation, testing and commissioning of elevators	11-Jan-2021
P23	Design, supply, installation, testing and commissioning of tunnel ventilation system (TVS) and ECS (environment control system) for 4 UG stations	27-Feb-2021
P24	Design, Supply, Installation, Testing and Commissioning of Signaling and Train Control, Telecommunication Systems, and Platform Screen Doors (Financed by NDB)	24-Dec-2020
P30	Design, Manufacture, Supply, Testing, Commissioning and Comprehensive Maintenance of RRTS & MRTS Trainsets, and Depot M&Ps (Financed by NDB)	20-May-2020

C. Present Status of Various Packages: -The status Physical Progress of Major Packages for Delhi-Ghaziabad-Meerut RRTS Project are given in Table-2.

Table 2: Physical Progress

(As on 30-June-2021)

Package No.	Package Description	Package Commencement Date	Physical Progress (%)	Remarks
P1	Construction of elevated viaduct including 2 stations from start of elevated ramp near Sahibabad RRTS Station up to end of Ghaziabad RRTS Station	23-Aug-2019	59.3%	
P2	Construction of elevated viaduct including 2 stations from end of Ghaziabad RRTS Station up to EPE crossing (including), elevated viaduct & Ramp for connection to Duhai Depot	10-May-2019	51.4%	
P3(Lot 1)	Construction of elevated viaducts including 2 stations from Duhai Eastern Peripheral Expressway (EPE) to start of Modi Nagar North	08-Jun-2020	16.8%	
P3(Lot 2)	Construction of elevated viaducts including 5 stations from Modi Nagar North Shatabadi Nagar	08-Jun-2020	17.7%	
P4	Design and construction of tunnels by tunnel boring machine (TBM) from New Ashok Nagar Ramp to	06-Jan-2021	2.4%	Detailed Design and

Package No.	Package Description	Package Commencement Date	Physical Progress (%)	Remarks
	Sahibabad Ramp and one underground station			Drawings in Progress
P5A	Construction of Duhai Depot and 1 at-grade station including finishes, PEB, E&M (including training center)	11-Dec-2020	15.6%	
P6	Construction of elevated viaducts including 2 stations from Sarai Kale Khan (SKK) to New Ashok Nagar	07-Dec-2020	5.7%	
P7	Construction of elevated viaduct from Shatabdi Nagar Station to Brahmpuri Down Ramp & Begumpul Up Ramp to Modipuram including 5 elevated stations	10-Dec-2020	5.2%	
P8	Design and construction of tunnels by tunnel boring machine (TBM) from Brahmpuri DN Ramp to Begumpul UP ramp and 3 Underground stations at Meerut Central, Bhaisali & Begumpul including finishes, E&M	06-Jan-2021	2.4%	Detailed Design and Drawings in Progress
P9A	Construction of Multi-storied Staff Quarters and connectivity from Mathura Road to Jangpura Stabling Yard Complex	23-Oct-2020	8.7%	
P13	Supply of head hardened rails	01-Dec-2020	18%	
P14	Supply of fastening systems for ballastless track	10-Nov-2020	10.1%	
P15	Supply of turnout and scissor cross over	05-Feb-2021	0%	Supply Expected shortly
P16(Lot1)	Manufacture, Supply, Transportation, and delivery of 2000 MT of UIC 60/60E-1/60 KG 1080 Grade Head Hardened Rails Class-A confirming to IRS T-12- 2009 (latest amendment) for Depot and Depot Connecting line	08-Feb-2021	0%	Supply Expected shortly
P16(Lot2)	Manufacture, Supply, transportation, and delivery of 4000 MT of 60 KG 880 Grade Rail Class- A confirming to IRS T-12-2009 (latest amendment) for Depot and Depot Connecting line	08-Feb-2021	50%	
P17	Trackwork installation from SKK (Delhi) to Modipuram (UP) including Jangpura Stabling Yard, Duhai and Modipuram depots	11-Dec-2020	1.5%	
P19(Lot1)	Design, supply, installation, testing and commissioning of receiving substations (RSS) and traction overhead equipment (OHE) – from	04-Dec-2020	3.1%	

Package No.	Package Description	Package Commencement Date	Physical Progress (%)	Remarks
	SKK to Duhai (EPE) including Jangpura Yard and Duhai depot			
P19(Lot2)	Design, supply, installation, testing and commissioning of receiving substations (RSS) and traction overhead equipment (OHE) – from Duhai (EPE) to Modipuram including Modipuram depot	04-Dec-2020	2.4%	
P21	Design, supply, installation, testing and commissioning of Escalators	16-Dec-2020	0%	Detailed Design and Drawings in Progress
P22	Design, supply, installation, testing and commissioning of elevators	11-Jan-2021	0%	Detailed Design and Drawings in Progress
P23	Design, supply, installation, testing and commissioning of tunnel ventilation system (TVS) and ECS (environment control system) for 4 UG stations	27-Feb-2021	0.1%	Detailed Design and Drawings in Progress
P24	Design, Supply, Installation, Testing and Commissioning of Signaling and Train Control, Telecommunication Systems, and Platform Screen Doors	24-Dec-2020	5.3%	Detailed Design and Drawings in Progress
P30	Design, Manufacture, Supply, Testing, Commissioning and Comprehensive Maintenance of RRTS & MRTS Trainsets, and Depot M&Ps	20-May-2020	3.6%	

7. Tree Cutting & Tree Transplantation: -12,084 trees will need to be removed for construction of the RRTS/stations/depots. These trees are to be cut or transplanted as per standard practice with the prior approval from Forest department. Permission for cutting of 7751 nos. of trees and permission for transplantation of 1111 nos. of trees had been obtained from Forest Department. 88,808 nos of new trees shall be planted as per compensatory afforestation plan by Forest Department. Photographs of tree transplantation are attached in **Attachment-1**. Complete status of tree cutting are given in **Table-3**.

Table 3: Scope and Progress of Tree Cutting Transplantation and Afforestation

Scope and Progress of Tree Cutting /Transplantation and Afforestation Done										Position as on 30.06.2021		
CPM UNIT	Scope			Permission Granted by State/Forest Deptt. For Cutting/ Transplantation of trees			Progress till Date			Cutting/Afforestation Approvals		
	Tree Cutting	Tree Transplantation	Total	Tree Cutting	Tree Transplantation	Total	Tree Cutting	Tree Transplantation	Total	No. of Trees	Amount Approved by CO in Rs.	Amount Paid so far in Rs.
DELHI	3,562	1,506	5,068	1,544	910	2,454	1,411	305	1,716	31,410	27,49,62,107	11,82,32,944
GHAZIABAD	1,652	0	1,652	1,646	0	1,646	1,457	0	1,457	12,258	5,55,19,239	5,54,62,594
MODINAGAR	3,004	120	3,124	2,776	120	2,896	2,494	120	2,614	25,770	10,97,66,920	10,96,32,648
MEERUT	2,159	81	2,240	1,785	81	1,866	1,478	93	1,511	19,370	4,96,70,372	4,96,57,777
TOTAL	10,377	1,707	12,084	7,751	1,111	8,862	6,840	518	7,298	88,808	48,99,18,638	33,29,85,963

8. The contractors for different contract packages have set up their casting yards with facilities like; Ready Mix Concrete Batching Plant, Casting beds with gantries, Quality Control Laboratory, Health Care Unit/First Aid Centre, Cement Storage Area, Wheel Washing Areas, Diesel Generating Set, Diesel Storage Area etc. The list of Ready-Mix Concrete Batching Plant with their capacity and casting yard details are given in **Table-4**.

Table 4: Ready Mix Concrete Plant/Batching Plants & Casting Yard

(As on 30-June-2021)

SR No.	Package No.	Contractor	Ready Mix Concrete Plant/Batching Plant	Casting Yard
1	P01	M/s KEC-CCECC JV	RMC-30 Cum/hr & RMC-60 Cum/hr	1-(Vasundhara)
2	P02	M/s APCO- CRFG JV	RMC Vasundhara- RMC-60 Cum/hr and RMC Duhai RMC-60 Cum/hr	2 - (Vasundhara & Duhai)
3	P03 (Lot 1)	M/s Larsen & Toubro Limited	RMC- 60 Cum/hr and RMC-70 Cum/hr	1-(Abupur)
4	P03 (Lot 2)	M/s Larsen & Toubro Limited	RMC-60 Cum/hr and RMC-30 Cum/hr	1- (Shatabdinagar)
5	P04	M/s SHANGHAI Tunnel Engineering Co. Limited	RMC-45 Cum/hr	1- (Karkaradooma)
6	P05A	M/s VNC-KEC (JV)	RMC-60 Cum/hr.	No
7	P06	M/s AFCONS Infrastructure Limited	RMC (2 No.)60 Cum/hr and 30 Cum/hr	1-(Ghazipur)
8	P07	M/s Larsen & Toubro Limited	RMC-60 Cum/hr	1- (Shatabdinagar)
9	P08	M/s AFCONS Infrastructure Limited	RMC-60 Cum/hr	1- (Shatabdinagar)
10	P9A	Sam India Built Well Pvt Ltd	RMC-30 cum/ hr	No

1.

9. C&D Waste Disposal Status- C&D wastes are being disposed at approved recycling unit's setup by Ghaziabad Nagar Nigam and at IL&FS Shastri Park, Delhi. Quantity of C&D waste disposed are given in **Table-5**. Photographs and Sample Challan shown in **Attachment-2**.

10. ISO Status: - Contractors have adopted the International guidelines for ensuring effective setup of Safety, Health and Environment (SHE) Management System and continually improvement. ISO 45001: 2018 – Occupational Health and Safety Management Systems and ISO 14001:2015 – Environment Management System, the status of same are given in **Table-6**. Sample copy of ISO are attached in **Attachment-3**.

Table 5: Status Of C&D Waste Disposal

(As of 30.06.2021 Unit-Mt)

SR No	Package No.	Contractor	Cumulative up to Dec 2020	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Location of C&D waste collection	Disposal Site	Remarks
1	P01	M/s KEC-CCECC JV	9496.8	1773.9	1715	1072	472.5	0	600	Viaduct & Station Site & Casting Yard	C&D Recycling Plant - Ghaziabad Nagar Nigam	
2	P02	M/s APCO-CRFG JV	565.51	998.54	2290.26	1135.48	1729.5	1468.35	389.84	Viaduct & Station Site & Casting Yard	C&D Recycling Plant - Ghaziabad Nagar Nigam	
3	P03 (Lot 1)	M/s Larsen & Toubro Limited	670.72	372.28	429	348.54	334	348.54	94.143	Viaduct & Site	C&D Recycling Plant - Ghaziabad Nagar Nigam	
4	P03 (Lot 2)	M/s Larsen & Toubro Limited	570.595	Nil	34.6	480.17	421.61	593.41	232.20	Viaduct & Site	C&D Recycling Plant - Ghaziabad Nagar Nigam	
5	P04	M/s SHANGHAI Tunnel Engineering Co. Limited	-	-	-	802.2	368.61	84.1	356.62	Anand vihar and Khripur Site	C&D Recycling Plant -IL&FS Shastri Park	
6	P05A	M/s VNC-KEC (JV)	-	-	-	-	-	101.5	-	Site Activity	C&D Recycling Plant -	

Table 6: Status of ISO 14001:2015 & ISO 45001: 2018

(As on 30-June-2021)

SR No	Package No.	Contractor	Certification Body	ISO 14001:2015 & ISO 45001: 2018	Remarks
1	P01	M/s KEC-CCECC JV	TÜV NORD CERT GmbH	Obtained	Valid until 10.03.2024
2	P02	M/s APCO- CRFG JV	URS India	Obtained	Valid until 19.02.2023
3	P03 (Lot 1)	M/s Larsen & Toubro Limited	ASR (American Systems Registrar)	Obtained	Valid until 26.05.2024
4	P03 (Lot 2)	M/s Larsen & Toubro Limited	ASR (American Systems Registrar)	Obtained	Valid until 07.04.2024
5	P04	M/s SHANGHAI Tunnel Engineering Co. Limited		In process	
6	P05A	M/s VNC-KEC (JV)		Pending	
7	P06	M/s AFCONS Infrastructure Limited	ASR (American Systems Registrar)	In Progress	Agency approved on 19.04.2021
8	P07	M/s Larsen & Toubro Limited	ASR (American Systems Registrar)	In Progress	Stage-1 Audit Conducted on 25.06.2021
9	P08	M/s AFCONS Infrastructure Limited		In process	
10	P9A	Sam India Built Well Pvt Ltd		In process	

II. Compliance on Environment Safeguard Requirements

11. Table-4 of the approved EIA report describes the status of clearances/approvals from various authorities at the time of finalization of the report in April 2020. The status of the clearances/approvals which were not obtained at the time of finalization of above report is as under **Table-7**.

Table 7: Applicable Permits and Clearances Required for the Project and Status

S. No.	Permissions/ Clearances	Acts/Rules/Notifications/ Guidelines	Concerned Agency	Status ending June 2021
A. Pre-construction Stage				
1.	Forest Clearance	Forest Conservation Act, 1980.	State Forest Department	Obtained except for RRTS alignment in Delhi for which application is under process.
2.	Permission for felling of trees	Forest Conservation Act, 1980. Delhi Preservation of Trees Act, 1994. The U. P. Protection of Trees Act, 1976.	District Forest Office/State Forest Department for trees felling in forest areas and District Authorities in non-forests Areas	Obtained except for RRTS alignment in Delhi.
B. Implementation Stage				
1.	Consent to Establish & Operate for	Air (Prevention and Control of Pollution) Act 1981	DPCC for NCT of Delhi and U.P. State Pollution Control	Status for each contract package given in

S. No.	Permissions/Clearances	Acts/Rules/Notifications/Guidelines	Concerned Agency	Status ending June 2021
	Ready Mix Concrete plant & casting yard, setting of labor camps		Board for Ghaziabad and Meerut.	subsequent paragraphs
2.	Permission for withdrawal / dewatering of groundwater	Environment (Protection) Act, 1986	CGWA	
3.	Permission for sand mining from riverbed	Environment (Protection) Act, 1986	Mining Department/ MoEFCC	Contractors are procuring sand from existing sources
4.	Authorization for Disposal of Hazardous Waste	Hazardous Waste (Management and Handling) Rules 1989	DPCC for NCT of Delhi and U.P. State Pollution Control Board for Ghaziabad and Meerut.	Status for each contract package given in subsequent paragraphs
5.	Disposal of bituminous and other wastes	Hazardous Waste (Management and Handling) Rules 1989	DPCC for NCT of Delhi and U.P. State Pollution Control Board for Ghaziabad and Meerut.	
6.	Consent for disposal of sewage from labour camps.	Water (Prevention and Control of Pollution) Act 1974	DPCC for NCT of Delhi and U.P. State Pollution Control Board for Ghaziabad and Meerut.	
7.	Pollution Under Control Certificate for various vehicles use for project	Central Motor and Vehicle Act, 1988	Department of Transport, State govt. authorized testing centers	
8.	Employing Labour/ workers	The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996	District Labour Commissioner	
9.	Roof Top Rainwater Harvesting (RWH)	Central Groundwater Authority (CGWA) Guidelines	Central Ground Water Authority	In progress
10.	Permission for use of fresh water for construction and drinking purpose.	Environment (Protection) Act, 1986	MCD/ NDMC/DDA in case of NCT of Delhi, GDA/ Ghaziabad Nagar Nigam for Ghaziabad, and Municipal Corporation/Meerut Nagar Nigam for Meerut.	Obtained
11.	Quarry Operation	The Mines and Minerals (Development and Regulation) Act, 1957	State Department of Mines and Geology	Contractors are sourcing materials from existing quarries

12. As per GoI EIA Notification 2006, all railways projects in India are exempted from requirements of preparing EIA, therefore environmental clearance for RRTS Project is not required.

13. Consent to Establish and Consent to operate obtained from respective State Pollution Control Board for Ready Mix Concrete Plant/Batching Plant to comply with Water Act, 1974 and Air Act, 1981 has been obtained. Status of CTE & CTO for various civil construction contract packages ending June 2021 is as under in **Table-8** and sample copy of CTE & CTO as attached in **Attachment-4**.

Table 8: Status of Consent to Establish (CTE) & Consent to Operate (CTO) for Ready Mix Concrete Plant/Batching Plant

(As on 30-June-2021)

Sr No.	Package No.	Contractor	Status of Consent to Establish (CTE) & Consent to Operate (CTO) for Ready Mix Concrete Plant/Batching Plant
1	P01	M/s KEC-CCECC JV	CTE & CTO obtained.
2	P02	M/s APCO- CRFG JV	CTE & CTO obtained.
3	P03 (Lot 1)	M/s Larsen & Toubro Limited	CTE & CTO obtained.
4	P03 (Lot 2)	M/s Larsen & Toubro Limited	CTE & CTO obtained.
5	P04	M/s SHANGHAI Tunnel Engineering Co. Limited	CTE & CTO obtained.
6	P05A	M/s VNC-KEC (JV)	CTE & CTO obtained.
7	P06	M/s AFCONS Infrastructure Limited	CTE & CTO obtained.
8	P07	M/s Larsen & Toubro Limited	CTE & CTO obtained.
9	P08	M/s AFCONS Infrastructure Limited	CTE & CTO obtained.
10	P09A	M/s Sam (India) Builtwell Pvt.Ltd	CTE & CTO obtained.

Table 9: Status of Authorization for Disposal of Hazardous Waste & Bio Medical Waste

(As on 30-June-2021)

Sr.No.	Package No.	Contractor	Authorization for Disposal of Hazardous Waste	Disposal of Bio Medical Waste
1	P01	M/s KEC-CCECC JV	Disposed by recycler approved by Pollution Control Board-M/S IFP Petro Product Pvt Ltd.	Tie up with Vasundhara Hospital, Ghaziabad
2	P02	M/s APCO- CRFG JV	Disposed by recycler approved by Pollution Control Board-Bharti Oil & Waste Management Pvt Ltd.	Through Vinayak Hospital Ghaziabad.
3	P03 (Lot 1)	M/s Larsen & Toubro Limited	Disposed by recycler approved by Pollution Control Board-Shruti Petrochem Industries (Attachment-5)	Through Vinayak Hospital Ghaziabad. (Attachment-6)
4	P03 (Lot 2)	M/s Larsen & Toubro Limited	Disposed by recycler approved by Pollution Control Board-Shruti Petrochem Industries	Through Synergy Waste Management (P) Ltd
5	P04	M/s SHANGHAI Tunnel Engineering Co. Limited	In Process	In Process
6	P05A	M/s VNC-KEC (JV)	In Process	In Process
7	P06	M/s AFCONS Infrastructure Limited	Disposed by recycler approved by Pollution Control Board-	In Process

Sr.No.	Package No.	Contractor	Authorization for Disposal of Hazardous Waste	Disposal of Bio Medical Waste
			Bharti Oil & Waste Management Pvt Ltd	
8	P07	M/s Larsen & Toubro Limited	In Process	In Process
9	P08	M/s AFCONS Infrastructure Limited	Disposed by recycler approved by Pollution Control Board-Shruti Petrochem Industries	Through Synergy Waste Management (P) Ltd
10	P09A	M/s Sam (India) Builtwell Pvt.Ltd	In Process	In Process

III. Change in Project Scope

14. The preparation of EIA Report for the project was taken up in 2018. At that time the location of the stabling yard at Jungpura including the alignment of connecting line viaduct from Sarai Kale Khan RRTS station to this stabling yard, was not finalized and hence the above two components of the project are not included in the approved EIA report. Now when the details of the above two components have been finalized, the Environment Impact Assessment study for the stabling yard and the connecting line has been taken up by engaging a consultant. Draft report submitted to ADB and observation received were also addressed. The design is being optimized to reduce number of PAPs and their grievances are being addressed. It had also been assured to the residents of Siddharh Extension that base line data reflected in EIA report shall be maintained by NCRTC.

IV. Implementation of Environmental Management Plant

15. The environmental management plan (EMP) for the project is provided in the EIA report, NCRTC's SHE manual is also a part of all contract agreements; For the contract packages mention in Table-8, contract specific EMP have been submitted by the respective contractors and duly approved by NCRTC. Some of the mitigation measures implemented are as given below

Sr No.	Description	Mitigation measures
1	Surface water quality and quantity	i) Construction camps are away from any water bodies ii) Use of bio toilets. iii) No waste is discharged in water channel, streams, drains and any other water courses. iv) Provisions of septic tanks and soak pits at construction camp. v) Construction work close to the streams or other water bodies are avoided, especially during monsoon period. vi) Vehicles and equipment's are properly maintained and refuelled, to avoid contamination of the water bodies and drainage channels from fuel and lubricants.
2	Ground water quality and quantity-	i) Monitoring of ground water quality is being carried out at Batching Plant and Casting Yard once in a six month by approved laboratory. ii) Ground water extraction is not done in areas identified as critical by the Central Ground Water Board. iii) For construction activities water is supplied by local water supplier /local administration. iv) Use of fresh water is avoided for dust suppression; STP treated water or RO reject water is used for dust suppression

Sr No.	Description	Mitigation measures
3	Air quality	i) Mechanized dust suppression/damping arrangement like water sprinkling, mechanized dust collection system, Anti - Smog Gun etc. are being used. ii) Green/Debris nets are being used to cover aggregates, construction activities like pier construction etc. to avoid dust suspension in ambient air. Wherever required, height of site fencing is also increased based on the surrounding area to avoid dust in public area. iii) Material handling equipment's like conveyor system in batching plants are covered to minimize the dust generation. iv) During the transportation, materials are covered with tarpuline/plastic sheets to prevent flying away of the same v) Environment Monitoring is being carried out at station locations, depot, batching plant, casting yard by approved laboratory on fortnightly basis. Only those Construction machines are permitted to be deployed which are confirming to the national emission standards and on submission of valid Pollution under Control (PUC) certificate
4	Trees, terrestrial and aquatic vegetation	i) Implementation of compensatory plantation plan at the ratio of 1:10 is done in coordination with Forestry officials. Tree transplantation are carried out.
5	Land degradation/ pollution-	i) C&D waste are disposed through approved recyclers. ii) Spent oil is stored and disposed by recycler approved by Pollution Control Board. [IPF Petro Products PVT Ltd, Ghaziabad; Bharti Oil & Waste Management Ltd, Ghaziabad; Shruti Petrochem Industries]. iii) Spent oil and diesel is separately stored in closed container and on a paved surface to prevent any spills and contamination of soil.
6	Noise	i) DG. Sets used at site are provided with acoustic enclosures. Conforming to CPCB Norms. ii) The construction equipment and vehicles used are properly maintained to keep noise within the permissible limits. iii) Noise monitoring are conducted at depot, casting yard, at station location once a week

16. Monthly Safety Health and Environment (SHE) Reports and Monthly Environmental Reports are being submitted by various contractors. Further these reports are being reviewed by General Consultant (GC) and NCTRC. The comment/observation raised by GC and NCTRC are being addressed by the contractors. Contractor resubmit the report after incorporating the comment/observation. Sample copy of monthly Environmental Monitoring Report is attached in the **Annexure-1**.

17. NCTRC has established a four-tier Safety, Health & Environment (SHE) organization to manage SHE aspects during project implementation, which include:

- i) SHE organization of the contractors (in line with the SHE requirements defined in the SHE manual) which is a part of all the contract agreements with various contractors.

- ii) SHE organization of the GC, which reviews, updates and ensures implementation of existing SHE plans, and plans prepared by the contractors, and support the PMOs in supervision and monitoring.
- iii) SHE organization of the PMOs; and (d) overall monitoring at the head office level through the Social and Environmental Management Unit (SEMU).

18. The contractors have developed an in-house team of SHE officers and supervisors to implement the management plans to ensure compliance with the E&S requirements of the Project.

19. Grievance Redress Mechanism (GRM) is an integral and important mechanism for addressing/resolving the concern and grievances in a transparent and swift manner. Depending on the nature and significance of the grievances or complaints, the grievance redress mechanism (GRM) addresses the grievances i) first at the PMO level and ii) second at the EA level and iii) third at the Grievance Redress Committee (GRC) level. Most serious complaints which cannot be addressed at the EA level are being forwarded to the GRC.

20. As per the requirements of EIA report, Social Environment Management Unit (SEMU) led by the Head of Department (HOD NCRTC) and supported by officers dealing with environment, social and land acquisition activities and GC experts has been constituted at the PIU level (at Corporate office) . In each of the PMO's, Grievance Redressal Committees have been constituted. Details of GRC at PMO (Project Management Office) and at Headquarter level (PIU-Project Implementation Unit) are given in Table-9 to 12. There are no grievances received for the period under report.

Table 10: GRC at CPM Delhi

S.no	Designation	Name
1	Chief Project Manager, Delhi	Shri. Subodh Kumar
2	ADM/South East	By Designation
3	DGM/Land (NCRTC)	Shri. RK Jala
4	Xen/Safety (NCRTC)	Shri. Shiv Shanker Nayak
5	Social Safeguard expert (GC)	Shri. Ajay Kumar Sharma
6	Land Acquisition expert (RISA)	Shr. Arvind Singh
7	Representative from Affected families	Shri. Rajbir Singh

Table 11: GRC at CPM Ghaziabad

S.no	Designation	Name
1	Chief Project Manager, Ghaziabad	Shri. Rajeev Dhankar
2	ADM/LA	Shri. Kamlesh Vajpayee
3	DGM/Land NCRTC	Shri. Subodh Singh
4	Ex. Chairman Nagar Palika, Ghaziabad	Shri. Ajay Paul Singh
5	Assistant Safety	Shri. Harish Shiva Thirukam
6	Social Safeguard expert (GC)	Shri. Ajay Kumar Sharma
7	Representative from Affected families	Shri. Parmod kumar Tyagi
8	Land Acquisition expert (RISA)	Shri. Arvind Singh

Table 12: GRC at CPM MODINAGAR

S.no	Designation	Name
1	Chief Project Manager, Modinagar	Shri. R.P Kaushar
2	ADM/LA	Shri. Kamlesh Vajpayee
3	EA/Safety/MDNR	Shri. Akash Tiwari
4	Chairman Nagar palika	Shri. Ch. Vikas Tewatia
5	Social Safeguard expert (GC)	Shr. Ajay Kumar Sharma
6	Land Acquisition expert (RISA)	Shri. Arvind Singh
7	Representative from Affected families	TN

Table 13: GRC at CPM Meerut

S.no	Designation	Name
1	Chief Project Manager, Meerut	Shri. Pankaj Tyagi
2	ADM/LA, Meerut	Shri. S.A Siddique
3.	Manager/Safety	Shri. K. Pravin Kumar
4	Social Safeguard expert (GC)	Shr. Ajay Kumar Sharma
5	Land Acquisition expert (RISA)	Shri. Arvind Singh
6	Representative from NGO (Research and Relief)	Shri. Naveen Pradhan
7	Representative from Affected persons	Dr. Amit Pathak

Table 14: GRC Headquarter Level (PIU-Project Implementation Unit)

S.No	Designation	Name
1	D.G.M(Civil)	Shri. K.A Singhal
2	Manager/Environment	Shri. Shambu Nath Singh
3	Sr. Environmental Expert/GC	Mr. A. Lakshminaryanan
5	Sr. Social Safeguard Expert/GC	Shri. Ajay Kumar Sharma
6	Project Coordinator/ RISA	Shri. Md. Alimuddin Ansari

V. Environmental Monitoring Activity

21. Environmental monitoring is being carried out by approved NABL accredited laboratories during construction activity. Representative sensitive receivers in the vicinity of the works are being monitored for air, noise, ground water. Ambient air quality and noise levels monitoring is being conducted at station locations, depot, batching plant/ Casting yard. The results are being compared with baseline data and CPCB guideline. Monitoring Photographs and sample test results are attached in are attached as **Attachment-7 & 8**

Table 15: Summary of Environmental Monitoring

Sr.No.	Package No.	Contractor	Ambient Air Quality/Number of Sample	Ambient Noise Monitoring/Number of Samples	Name of Approved Laboratory (NABL certificate number)
1	P01	M/s KEC-CCECC JV	Monitored between 12.01.2021 to 29.06.2021/22	Monitored between 12.01.2021 to 29.06.2021/23	Arihant Analytical Laboratory Pvt Ltd (TC-5826)
2	P02	M/s APCO-CRFG JV	Monitored between 11.01.2021 to 08.06.2021/43	Monitored between 04.01.2021 to 28.06.2021/48	Enviro -Tech Services (TC-8771)
3	P03 (Lot 1)	M/s Larsen & Toubro Limited	Monitored between 07.01.2021 to 16.06.2021/23	Monitored between 07.01.2021 to 16.06.2021/22	Ecosteps Laboratory Pvt Ltd (TC-6518)
4	P03 (Lot 2)	M/s Larsen & Toubro Limited	Monitored between 12.01.2021 to 26.05.2021/18	Monitored between 12.01.2021 to 26.05.2021/14	Arihant Analytical Laboratory (TC-5826)
5	P04	M/s SHANGHAI Tunnel Engineering Co. Limited	Monitored between 24.03.2021 to 29.06.2021/20	Monitored between 23.03.2021 to 28.06.2021/27	Vardan Enviro lab (TC-6299)

Sr.No.	Package No.	Contractor	Ambient Air Quality/Number of Sample	Ambient Noise Monitoring/Number of Samples	Name of Approved Laboratory (NABL certificate number)
6	P05A	M/s VNC-KEC (JV)	Monitored between 02.02.2021 to 07.06.2021/24	Monitored between 02.02.2021 to 08.06.2021/24	Arihant Analytical Laboratory (TC-5826)
7	P06	M/s AFCONS Infrastructure Limited	Monitored between 11.02.2021 to 17.06.2021/28	Monitored between 11.02.2021 to 25.06.2021/54	Ecosteps Laboratory Pvt Ltd (TC-6518)
8	P07	M/s Larsen & Toubro Limited	Monitored between 25.02.2021 to 21.06.2021/26	Monitored between 25.02.2021 to 21.06.2021/36	Ecosteps Laboratory Pvt Ltd (TC-6518)
9	P08	M/s AFCONS Infrastructure Limited	Monitored between 29.05.2021/4	Monitored between 29.05.2021/4	Dell Environmental Monitoring Centre Pvt.Ltd
10	P09A	M/s Sam (India) Builtwell Pvt.Ltd	Monitored between 04.02.2021 to 23.06.2021/12	Monitored between 04.02.2021 to 29.06.2021/17	Ecosteps Laboratory Pvt Ltd (TC-6518)

22. **Package No- P01-** During the months of January-June 2021 , the environmental parameters like PM10, PM2.5, Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) and Noise level measured by NABL accredited laboratory (M/s Arihant Analytical Laboratory Pvt Ltd). PM10, PM 2.5 & NO₂ value are more than permissible limit provided by CPCB. Values have exceeded due to heavy traffic movement on existing road. Other environmental parameters like Sulphur dioxide (SO₂) & Carbon Monoxide (CO) were found within permissible limit. Noise level at day and nighttime found within the CPCB limit. Except at one day noise level is more then CPCB limits for daytime.

Table 16: Particulate Matters-PM10 Report- P01

Location	Monitoring Date	PM10 Value (µg/m ³)	Specification /Requirement (as per CPCB) (µg/m ³)	Baseline monitoring (µg/m ³)	Baseline monitoring Date	Time weighted Average
Casting Yard	12.01.2021	278.50	100	224.90	25-Nov-19	24 hours
	11.02.2021	252.80	100	224.90	25-Nov-19	
	15.03.2021	211.20	100	224.90	25-Nov-19	
	08.04.2021	172.50	100	224.90	25-Nov-19	
	15.05.2021	178.20	100	224.90	25-Nov-19	
	10.06.2021	182.50	100	224.90	25-Nov-19	
Shahibabad Station	12.01.2021	271.20	100	282.50	03-Dec-19	
	26.02.2021	234.20	100	282.50	04-Dec-19	
	25.03.2021	192.20	100	282.50	05-Dec-19	
	28.05.2021	156.80	100	282.50	06-Dec-19	
	29.06.2021	212.70	100	282.50	07-Dec-19	
Ghaziabad Station	30.01.2021	251.40	100	281.50	25-Dec-19	
	15.03.2021	182.30	100	281.50	26-Dec-19	

Location	Monitoring Date	PM10 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
	28.05.2021	164.60	100	281.50	27-Dec-19	
	29.06.2021	228.50	100	281.50	28-Dec-19	
P30	30.01.2021	234.50	100	278.80	24-Dec-19	
P126	11.02.2021	228.60	100	184.50	25-Nov-19	
P148	26.02.2021	144.5	100	312.20	24-Dec-20	
P177	25.03.2021	167.2	100	242.40	15-Dec-20	
	15.05.2021	202.5	100	242.40	15-Dec-20	
Hindon Area	08.04.2021	113.6	100	312.20	24-Dec-20	
	10.06.2021	119.3	100	312.20	24-Dec-20	

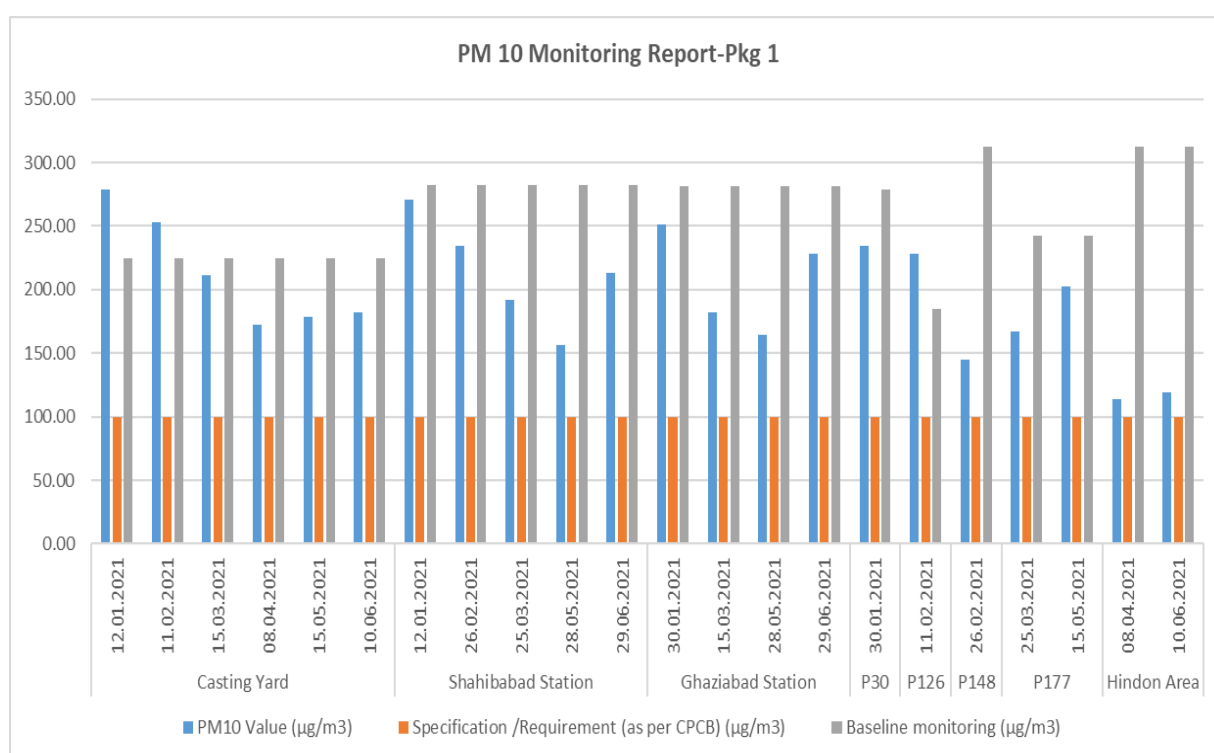


Table 17: Particulate Matters-PM2.5 Report-P01

Location	Monitoring Date	PM2.5 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Casting Yard	12.01.2021	292.80	60	276.40	25-Nov-19	24 hours
	11.02.2021	276.20	60	276.40	26-Nov-19	
	15.03.2021	131.30	60	276.40	27-Nov-19	
	08.04.2021	118.60	60	276.40	28-Nov-19	
	15.05.2021	116.30	60	276.40	29-Nov-19	
	10.06.2021	113.40	60	276.40	30-Nov-19	
Shahibabad Station	12.01.2021	284.30	60	318.40	03-Dec-19	
	26.02.2021	156.50	60	318.40	04-Dec-19	
	25.03.2021	137.20	60	318.40	05-Dec-19	

Location	Monitoring Date	PM2.5 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
	28.05.2021	91.30	60	318.40	06-Dec-19	
	29.06.2021	136.40	60	318.40	07-Dec-19	
	30.01.2021	278.50	60	299.10	25-Dec-19	
	15.03.2021	116.70	60	299.10	26-Dec-19	
Ghaziabad Station	28.05.2021	107.20	60	299.10	27-Dec-19	
	29.06.2021	147.90	60	299.10	28-Dec-19	
P30	30.01.2021	257.20	60	296.40	24-Dec-19	
P126	11.02.2021	241.70	60	197.40	25-Nov-19	
P148	26.02.2021	86.3	60	278.50	24-Dec-20	
P117	25.03.2021	124.9	60	271.50	15-Dec-20	
	15.05.2021	123.7	60	271.50	15-Dec-20	
Hindon Area	08.04.2021	84.4	60	278.50	24-Dec-20	
	10.06.2021	84.5	60	278.50	24-Dec-20	

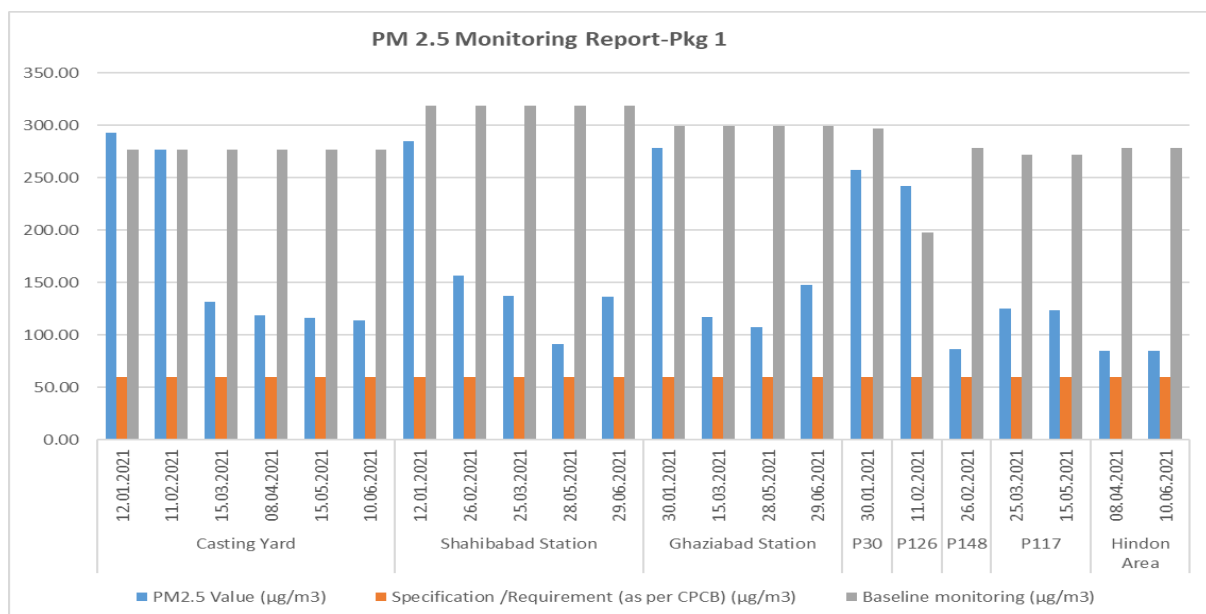


Table 18: Sulphur Dioxide-SO₂ Report-P01

Location	Monitoring Date	SO ₂ Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Casting Yard	12.01.2021	29.6	80	14.7	25-Nov-19	24 hours
	11.02.2021	28.6	80	14.7	25-Nov-19	
	15.03.2021	23.7	80	14.7	25-Nov-19	
	08.04.2021	24.6	80	14.7	25-Nov-19	
	15.05.2021	18.5	80	14.7	25-Nov-19	
	10.06.2021	15.2	80	14.7	25-Nov-19	
	12.01.2021	27.4	80	8.5	03-Dec-19	

Location	Monitoring Date	SO2 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Shahibabad Station	26.02.2021	16.5	80	8.5	03-Dec-19	
	25.03.2021	19.6	80	8.5	03-Dec-19	
	28.05.2021	14.2	80	8.5	03-Dec-19	
	29.06.2021	22.5	80	8.5	03-Dec-19	
Ghaziabad Station	30.01.2021	28.5	80	11.3	25-Dec-19	
	15.03.2021	18.6	80	11.3	25-Dec-19	
	28.05.2021	13.2	80	11.3	25-Dec-19	
	29.06.2021	20.2	80	11.3	25-Dec-19	
P30	30.01.2021	20.7	80	10.9	24-Dec-19	
P126	11.02.2021	20.3	80	10.6	25-Nov-19	
P148	26.02.2021	12.8	80	14.5	30-Nov-20	
P117	25.03.2021	17.5	80	18.5	15-Dec-20	
	15.05.2021	24.7	80	18.5	15-Dec-20	
Hindon Area	08.04.2021	16.5	80	14.5	30-Nov-20	
	10.06.2021	10.2	80	14.5	30-Nov-20	

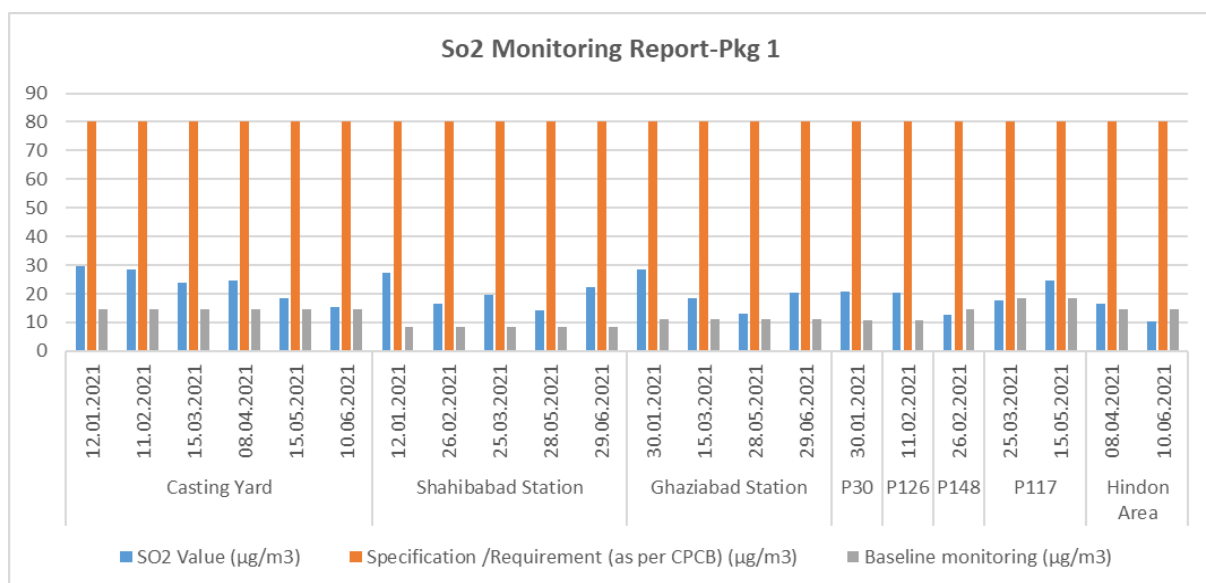
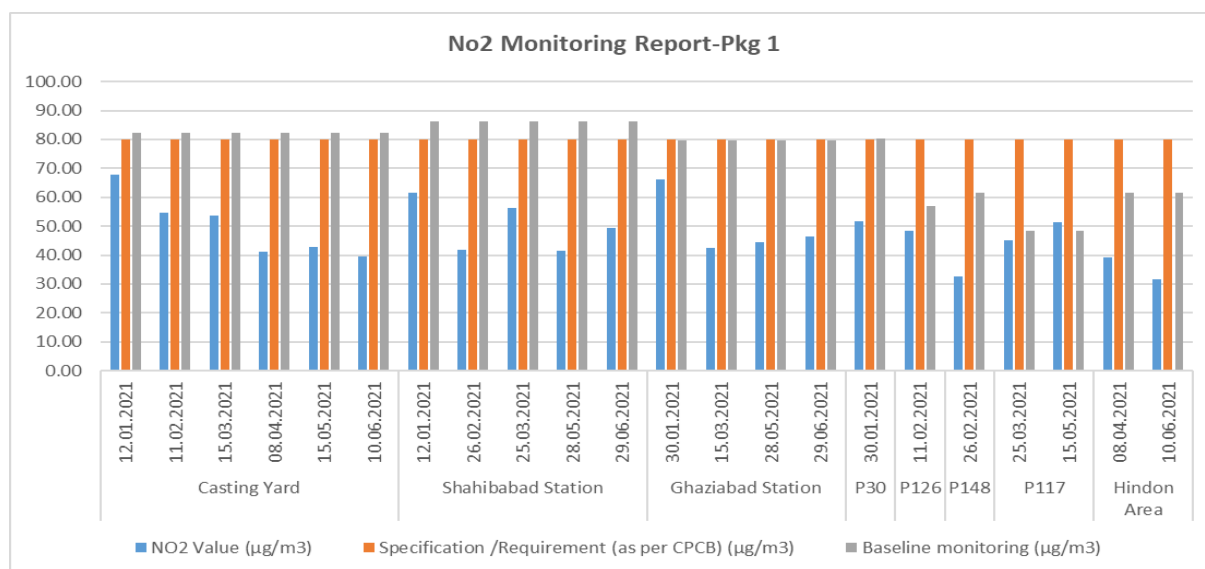


Table 19: Nitrogen Dioxide-NO2 Report-P01

Location	Monitoring Date	NO2 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Casting Yard	12.01.2021	67.80	80	82.40	25-Nov-19	24 hours
	11.02.2021	54.50	80	82.40	25-Nov-19	
	15.03.2021	53.50	80	82.40	25-Nov-19	
	08.04.2021	41.20	80	82.40	25-Nov-19	
	15.05.2021	42.80	80	82.40	25-Nov-19	

Location	Monitoring Date	NO2 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
	10.06.2021	39.50	80	82.40	25-Nov-19	
Shahibabad Station	12.01.2021	61.50	80	86.20	03-Dec-19	
	26.02.2021	41.70	80	86.20	03-Dec-19	
	25.03.2021	56.20	80	86.20	03-Dec-19	
	28.05.2021	41.50	80	86.20	03-Dec-19	
	29.06.2021	49.40	80	86.20	03-Dec-19	
Ghaziabad Station	30.01.2021	66.20	80	79.60	25-Dec-19	
	15.03.2021	42.40	80	79.60	25-Dec-19	
	28.05.2021	44.60	80	79.60	25-Dec-19	
	29.06.2021	46.50	80	79.60	25-Dec-19	
P30	30.01.2021	51.60	80	80.40	24-Dec-19	
P126	11.02.2021	48.50	80	56.80	25-Nov-19	
P148	26.02.2021	32.5	80	61.6	24-Dec-20	
P117	25.03.2021	45.2	80	48.4	15-Dec-20	
	15.05.2021	51.3	80	48.4	15-Dec-20	
Hindon Area	08.04.2021	39.3	80	61.6	24-Dec-20	
	10.06.2021	31.7	80	61.6	24-Dec-20	

2.

**Table 20: Carbon Monoxide-CO Report-P01**

Location	Monitoring Date	CO Value (mg/m3)	Specification /Requirement (as per CPCB) (mg/m3)	Baseline monitoring (mg/m3)	Baseline monitoring Date	Time weighted Average
Casting Yard	12.01.2021	1.2	2	1	25-Nov-19	8 hours
	11.02.2021	1.5	2	1	25-Nov-19	
	15.03.2021	1.5	2	1	25-Nov-19	

Location	Monitoring Date	CO Value (mg/m ³)	Specification /Requirement (as per CPCB) (mg/m ³)	Baseline monitoring (mg/m ³)	Baseline monitoring Date	Time weighted Average
	08.04.2021	1	2	1	25-Nov-19	
	15.05.2021	1	2	1	25-Nov-19	
	10.06.2021	1	2	1	25-Nov-19	
Shahibabad Station	12.01.2021	1	2	1.2	03-Dec-19	
	26.02.2021	1.2	2	1.2	03-Dec-19	
	25.03.2021	1	2	1.2	03-Dec-19	
	28.05.2021	1	2	1.2	03-Dec-19	
	29.06.2021	1	2	1.2	03-Dec-19	
Ghaziabad Station	30.01.2021	1.5	2	1.4	25-Dec-19	
	15.03.2021	0.5	2	1.4	25-Dec-19	
	28.05.2021	1	2	1.4	25-Dec-19	
	29.06.2021	1	2	1.4	25-Dec-19	
P30	30.01.2021	1	2	1.4	24-Dec-19	
P126	11.02.2021	1	2	0.5	25-Nov-19	
P148	26.02.2021	0.5	2	1.3	24-Dec-20	
P177	25.03.2021	0.5	2	1.5	15-Dec-20	
	15.05.2021	1	2	1.5	15-Dec-20	
Hindon Area	08.04.2021	0.5	2	1.3	24-Dec-20	
	10.06.2021	0.5	2	1.3	24-Dec-20	

3.

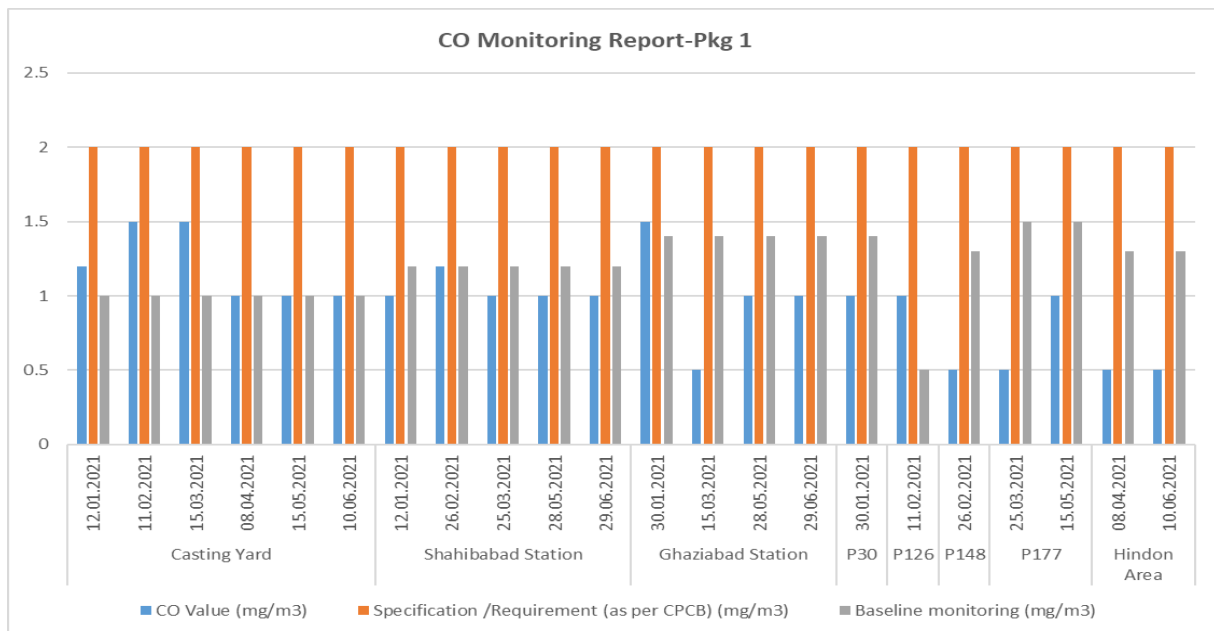
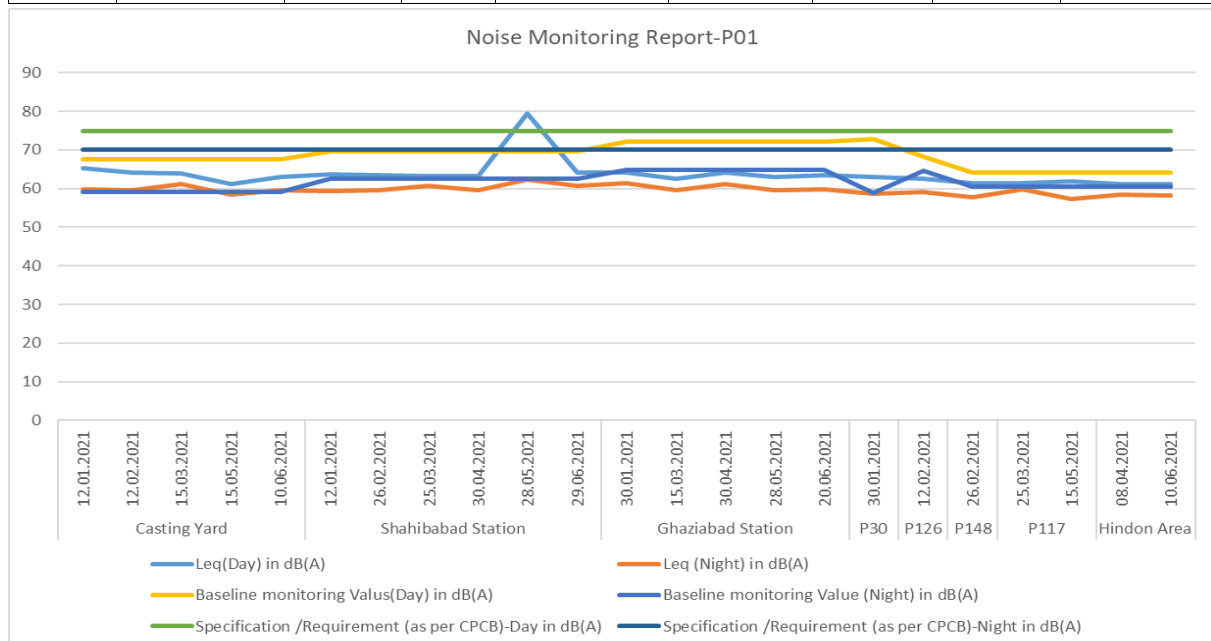


Table 21: Noise Monitoring Report-P01

Location	Monitoring Date	Leq(Day) in dB(A)	Leq (Night) in dB(A)	Baseline monitoring Date	Baseline monitoring Values (Day) in dB(A)	Baseline monitoring Value (Night) in dB(A)	Specification /Requirement (as per CPCB)-Day in dB(A)	Specification /Requirement (as per CPCB)-Night in dB(A)
Casting Yard	12.01.2021	65.2	59.9	25.11.2019	67.5	59.1	75	70
	12.02.2021	64.2	59.6	25.11.2019	67.5	59.1	75	70
	15.03.2021	63.9	61.1	25.11.2019	67.5	59.1	75	70
	15.05.2021	61.2	58.5	25.11.2019	67.5	59.1	75	70
	10.06.2021	63.1	59.5	25.11.2019	67.5	59.1	75	70
Shahibabad Station	12.01.2021	63.6	59.4	03.12.2019	69.6	62.5	75	70
	26.02.2021	63.5	59.6	03.12.2019	69.6	62.5	75	70
	25.03.2021	63.3	60.8	03.12.2019	69.6	62.5	75	70
	30.04.2021	63.2	59.6	03.12.2019	69.6	62.5	75	70
	28.05.2021	79.5	62.3	03.12.2019	69.6	62.5	75	70
	29.06.2021	64.2	60.7	03.12.2019	69.6	62.5	75	70
Ghaziabad Station	30.01.2021	64.2	61.3	25.12.2019	72.2	64.9	75	70
	15.03.2021	62.5	59.6	25.12.2019	72.2	64.9	75	70
	30.04.2021	64.1	61.2	25.12.2019	72.2	64.9	75	70
	28.05.2021	62.9	59.5	25.12.2019	72.2	64.9	75	70
	20.06.2021	63.5	59.8	25.12.2019	72.2	64.9	75	70
P30	30.01.2021	63.1	58.7	24.12.2019	72.8	58.8	75	70
P126	12.02.2021	62.5	59.2	25.11.2019	68.3	64.5	75	70
P148	26.02.2021	61.4	57.8	24.12.2020	64.1	60.5	75	70
P117	25.03.2021	61.3	59.7	24.12.2020	64.1	60.5	75	70
	15.05.2021	61.9	57.2	24.12.2020	64.1	60.5	75	70
Hindon Area	08.04.2021	61.1	58.4	24.12.2020	64.1	60.5	75	70
	10.06.2021	61.2	58.3	24.12.2020	64.1	60.5	75	70



23. **Package No- P02-** During the month of January-June 2021 the environmental parameters like PM10, PM2.5, Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) and Noise level measured by NABL accredited laboratory (M/S Enviro -Tech Services). PM 10 & PM 2.5 value are more than permissible limit provided by CPCB. Values are exceeded due to heavy traffic movement. Other environmental parameters like Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂) and Carbon Monoxide (CO) are within the limit. Noise level at day and nighttime found within the CPCB limit except on one day where noise limit for nighttime exceed the CPCB limit.

Table 22: Particulate Matters-PM10 Report-P02

Location	Monitoring Date	PM10 Value (µg/m ³)	Specification /Requirement (as per CPCB) (µg/m ³)	Baseline monitoring (µg/m ³)	Baseline monitoring Date	Time weighted Average
Casting Yard- Vasundhara	11.01.2021	175.50	100	220	03-Jul-19	24 hours
	21.01.2021	188.60	100	220	03-Jul-19	
	08.02.2021	185.1	100	220	03-Jul-19	
	22.02.2021	181.30	100	220	03-Jul-19	
	08.03.2021	172.20	100	220	03-Jul-19	
	24.03.2021	192.60	100	220	03-Jul-19	
	08.04.2021	185.50	100	220	03-Jul-19	
	12.05.2021	175.60	100	220	03-Jul-19	
	24.05.2021	142.80	100	220	03-Jul-19	
	08.06.2021	208.50	100	220	03-Jul-19	
Casting Yard- Duhai	11.01.2021	180.40	100	190.1	12-Nov-20	
	21.01.2021	184.20	100	190.1	12-Nov-20	
	08.02.2021	182.20	100	190.1	12-Nov-20	
	22.02.2021	178.90	100	190.1	12-Nov-20	
	08.03.2021	167.20	100	190.1	12-Nov-20	
	24.03.2021	198.10	100	190.1	12-Nov-20	
	26.04.2021	180.50	100	190.1	12-Nov-20	
	12.05.2021	189.50	100	190.1	12-Nov-20	
	24.05.2021	151.40	100	190.1	12-Nov-20	
	08.06.2021	178.60	100	190.1	12-Nov-20	
Guldhar Station	12.01.2021	242.70	100	202.2	29-Sep-20	
	21.01.2021	212.40	100	202.2	29-Sep-20	
	09.02.2021	219.40	100	202.2	29-Sep-20	
	09.03.2021	155.40	100	202.2	29-Sep-20	
	25.03.2021	157.30	100	202.2	29-Sep-20	
	09.04.2021	157.00	100	202.2	29-Sep-20	
	27.04.2021	155.40	100	202.2	29-Sep-20	
	13.05.2021	147.80	100	202.2	29-Sep-20	
	25.05.2021	138.60	100	202.2	29-Sep-20	
	09.06.2021	189.60	100	202.2	29-Sep-20	
Duhai Station	12.01.2021	235.30	100	325	30-Dec-19	
	21.01.2021	205.50	100	325	30-Dec-19	
	09.02.2021	213.40	100	325	30-Dec-19	
	23.02.2021	210.40	100	325	30-Dec-19	
	09.03.2021	151.90	100	325	30-Dec-19	

Location	Monitoring Date	PM10 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
	25 .03.2021	158.30	100	325	30-Dec-19	
	09.04.2021	149.00	100	325	30-Dec-19	
	24.04.2021	144.00	100	325	30-Dec-19	
	13.05.2021	134.00	100	325	30-Dec-19	
	25.05.2021	130.70	100	325	30-Dec-19	
	09.06.2021	289.50	100	325	30-Dec-19	
P- 323	23.02.2021	205.40	100			
Near Main Gate	08.04.2021	181.00	100			

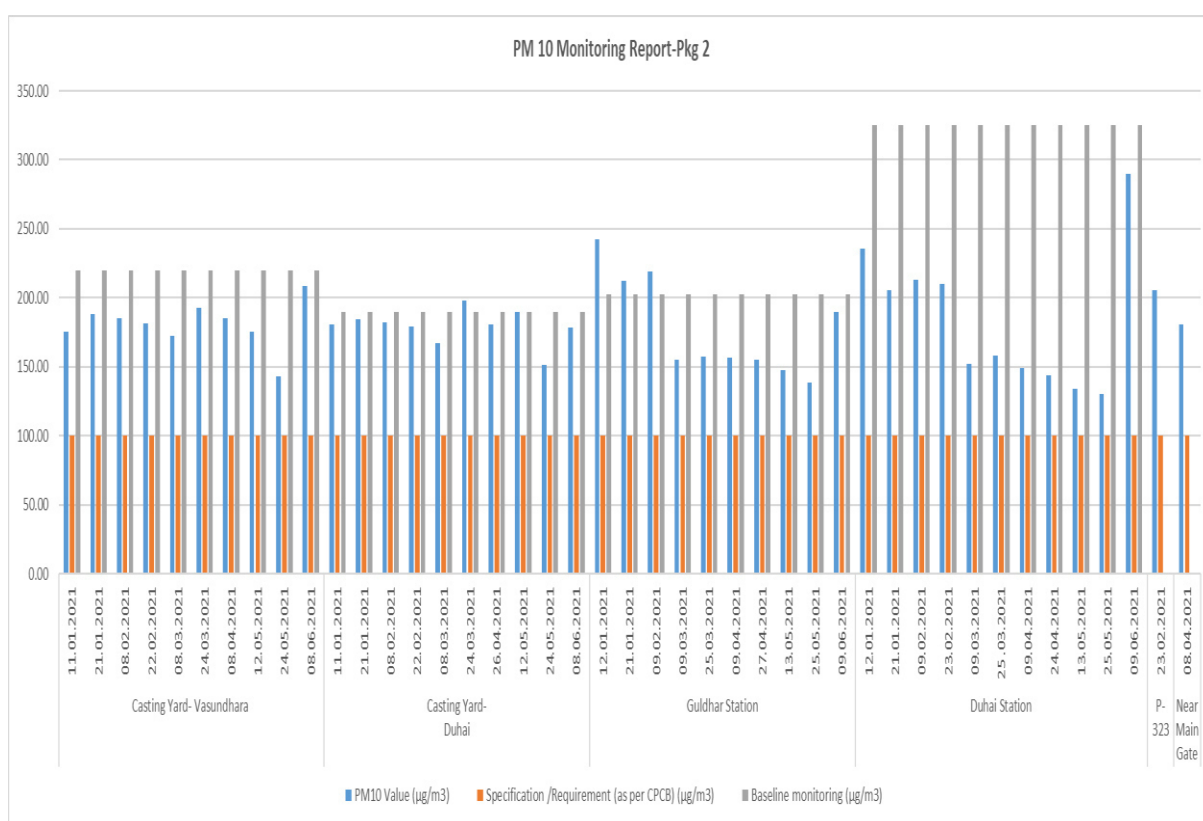


Table 23: Particulate Matters-PM2.5 Report-P02

Location	Monitoring Date	PM2.5 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Casting Yard- Vasundhara	11.01.2021	87.10	60	185	03-Jul-19	24 hours
	21.01.2021	92.10	60	185	03-Jul-19	
	08.02.2021	93.80	60	185	03-Jul-19	
	22.02.2021	85.50	60	185	03-Jul-19	
	08.03.2021	75.50	60	185	03-Jul-19	
	24.03.2021	65.20	60	185	03-Jul-19	

Location	Monitoring Date	PM2.5 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
	08.04.2021	63.10	60	185	03-Jul-19	
	12.05.2021	59.70	60	185	03-Jul-19	
	24.05.2021	52.80	60	185	03-Jul-19	
	08.06.2021	108.40	60	185	03-Jul-19	
Casting Yard-Duhai	11.01.2021	81.20	60	84.3	12-Nov-20	
	21.01.2021	85.50	60	84.3	12-Nov-20	
	08.02.2021	90.60	60	84.3	12-Nov-20	
	22.02.2021	83.50	60	84.3	12-Nov-20	
	08.03.2021	71.40	60	84.3	12-Nov-20	
	24.03.2021	69.20	60	84.3	12-Nov-20	
	26.04.2021	68.60	60	84.3	12-Nov-20	
	12.05.2021	72.00	60	84.3	12-Nov-20	
	24.05.2021	57.50	60	84.3	12-Nov-20	
	08.06.2021	75.00	60	84.3	12-Nov-20	
Guldhar Station	12.01.2021	92.50	60	75.3	29-Sep-20	
	21.01.2021	96.6	60	75.3	29-Sep-20	
	09.02.2021	98.20	60	75.3	29-Sep-20	
	09.03.2021	74.60	60	75.3	29-Sep-20	
	25.03.2021	51.20	60	75.3	29-Sep-20	
	09.04.2021	53.40	60	75.3	29-Sep-20	
	27.04.2021	52.80	60	75.3	29-Sep-20	
	13.05.2021	50.30	60	75.3	29-Sep-20	
	25.05.2021	47.10	60	75.3	29-Sep-20	
	09.06.2021	72.00	60	75.3	29-Sep-20	
Duhai Station	12.01.2021	97.80	60	215	30-Dec-19	
	21.01.2021	101.40	60	215	30-Dec-19	
	09.02.2021	99.10	60	215	30-Dec-19	
	23.02.2021	96.10	60	215	30-Dec-19	
	09.03.2021	76.80	60	215	30-Dec-19	
	25.03.2021	49.20	60	215	30-Dec-19	
	09.04.2021	58.10	60	215	30-Dec-19	
	24.04.2021	56.20	60	215	30-Dec-19	
	13.05.2021	52.30	60	215	30-Dec-19	
	25.05.2021	51.00	60	215	30-Dec-19	
	09.06.2021	188.20	60	215	30-Dec-19	
P-323	23.02.2021	92.80	60			
Near Main Gate	08.04.2021	68.8	60			

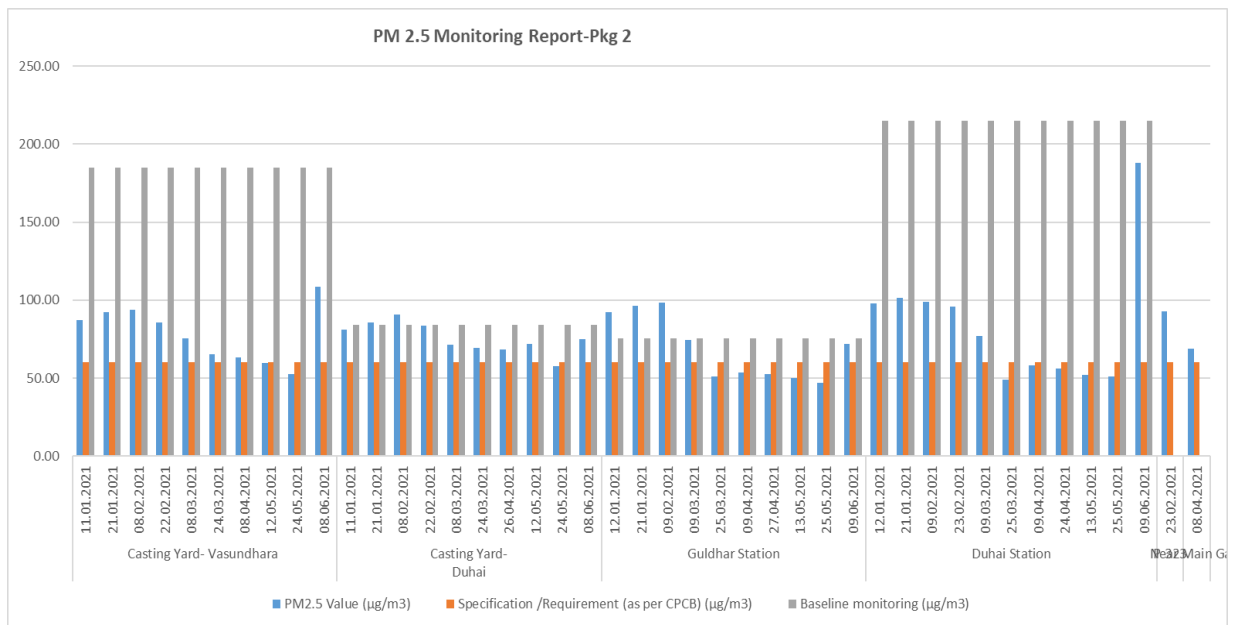


Table 24: Sulphur Dioxide-SO₂ Report-P02

Location	Monitoring Date	SO ₂ Value (µg/m ³)	Specification /Requirement (as per CPCB) (µg/m ³)	Baseline monitoring (µg/m ³)	Baseline monitoring Date	Time weighted Average
Casting Yard- Vasundhara	11.01.2021	19.7	80	23	03-Jul-19	24 hrs
	21.01.2021	14.7	80	23	03-Jul-19	
	08.02.2021	21.3	80	23	03-Jul-19	
	22.02.2021	12.6	80	23	03-Jul-19	
	08.03.2021	15.3	80	23	03-Jul-19	
	24.03.2021	20.9	80	23	03-Jul-19	
	08.04.2021	22.7	80	23	03-Jul-19	
	12.05.2021	21.5	80	23	03-Jul-19	
	24.05.2021	20.6	80	23	03-Jul-19	
	08.06.2021	20.6	80	23	03-Jul-19	
Casting Yard- Duhai	11.01.2021	21.5	80	15.9	12-Nov-20	
	21.01.2021	19.5	80	15.9	12-Nov-20	
	08.02.2021	20.3	80	15.9	12-Nov-20	
	22.02.2021	11.6	80	15.9	12-Nov-20	
	08.03.2021	13.1	80	15.9	12-Nov-20	
	24.03.2021	19.7	80	15.9	12-Nov-20	
	26.04.2021	24.7	80	15.9	12-Nov-20	
	12.05.2021	25.9	80	15.9	12-Nov-20	
	24.05.2021	18.4	80	15.9	12-Nov-20	
	08.06.2021	13.5	80	15.9	12-Nov-20	
Guldhar Station	12.01.2021	17.2	80	9.2	29-Sep-20	
	21.01.2021	14.1	80	9.2	29-Sep-20	
	09.02.2021	16.3	80	9.2	29-Sep-20	
	09.03.2021	19.3	80	9.2	29-Sep-20	
	25.03.2021	16.3	80	9.2	29-Sep-20	
	09.04.2021	18.1	80	9.2	29-Sep-20	
	27.04.2021	18	80	9.2	29-Sep-20	
	13.05.2021	17.1	80	9.2	29-Sep-20	
	25.05.2021	16	80	9.2	29-Sep-20	
	09.06.2021	8.6	80	9.2	29-Sep-20	
Duhai Station	12.01.2021	19.3	80	11	30-Dec-19	
	21.01.2021	17.3	80	11	30-Dec-19	
	09.02.2021	15.3	80	11	30-Dec-19	
	23.02.2021	17.3	80	11	30-Dec-19	
	09.03.2021	17.3	80	11	30-Dec-19	
	25.03.2021	15.9	80	11	30-Dec-19	
	09.04.2021	22.7	80	11	30-Dec-19	
	24.04.2021	21.9	80	11	30-Dec-19	
	13.05.2021	20.4	80	11	30-Dec-19	
	25.05.2021	19.9	80	11	30-Dec-19	
P-323	23.02.2021	16.3	80			
Near Main Gate	08.04.2021	24.8	80			

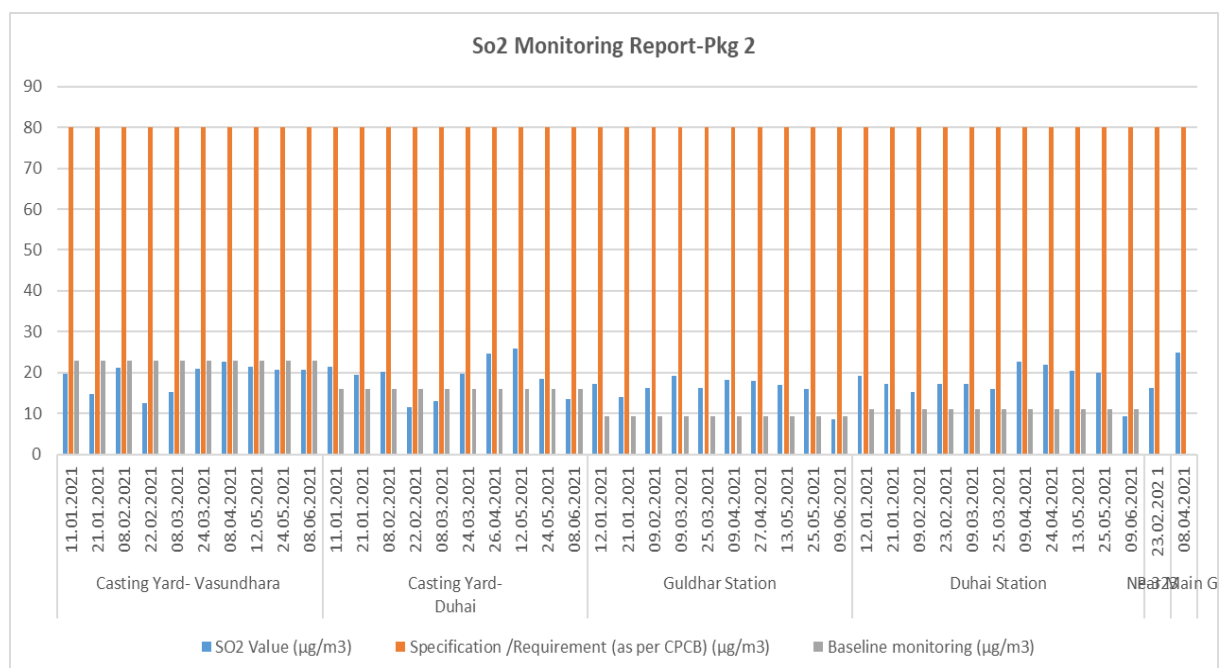


Table 25: Nitrogen Dioxide-NO2 Report-P02

Location	Monitoring Date	NO2 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Casting Yard- Vasundhara	11.01.2021	33.20	80	57	03-Jul-19	24 hours
	21.01.2021	27.2	80	57	03-Jul-19	
	08.02.2021	28.40	80	57	03-Jul-19	
	22.02.2021	18.40	80	57	03-Jul-19	
	08.03.2021	24.10	80	57	03-Jul-19	
	24.03.2021	39.60	80	57	03-Jul-19	
	08.04.2021	29.30	80	57	03-Jul-19	
	12.05.2021	27.70	80	57	03-Jul-19	
	24.05.2021	26.60	80	57	03-Jul-19	
	08.06.2021	48.40	80	57	03-Jul-19	
Casting Yard- Duhai	11.01.2021	31.30	80	34.6	12-Nov-20	
	21.01.2021	33.1	80	34.6	12-Nov-20	
	08.02.2021	26.70	80	34.6	12-Nov-20	
	22.02.2021	16.20	80	34.6	12-Nov-20	
	08.03.2021	22.70	80	34.6	12-Nov-20	
	24.03.2021	37.30	80	34.6	12-Nov-20	
	26.04.2021	31.90	80	34.6	12-Nov-20	
	12.05.2021	33.40	80	34.6	12-Nov-20	
	24.05.2021	23.70	80	34.6	12-Nov-20	
	08.06.2021	31.70	80	34.6	12-Nov-20	
Guldhar Station	12.01.2021	29.90	80	21.4	29-Sep-20	
	21.01.2021	30.90	80	21.4	29-Sep-20	

Location	Monitoring Date	NO2 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
	09.02.2021	34.50	80	21.4	29-Sep-20	
	09.03.2021	34.60	80	21.4	29-Sep-20	
	25.03.2021	37.70	80	21.4	29-Sep-20	
	09.04.2021	23.40	80	21.4	29-Sep-20	
	27.04.2021	23.20	80	21.4	29-Sep-20	
	13.05.2021	22.00	80	21.4	29-Sep-20	
	25.05.2021	20.70	80	21.4	29-Sep-20	
	09.06.2021	20.00	80	21.4	29-Sep-20	
Duhai Station	12.01.2021	39.10	80	42	30-Dec-19	
	21.01.2021	37.10	80	42	30-Dec-19	
	09.02.2021	32.50	80	42	30-Dec-19	
	23.02.2021	24.70	80	42	30-Dec-19	
	09.03.2021	31.70	80	42	30-Dec-19	
	25.03.2021	32.7	80	42	30-Dec-19	
	09.04.2021	29.2	80	42	30-Dec-19	
	24.04.2021	28.3	80	42	30-Dec-19	
	13.05.2021	26.30	80	42	30-Dec-19	
	25.05.2021	25.60	80	42	30-Dec-19	
	09.06.2021	38.10	80	42	30-Dec-19	
P-323	23.02.2021	16.30	80			
Near Main Gate	08.04.2021	31.9	80			

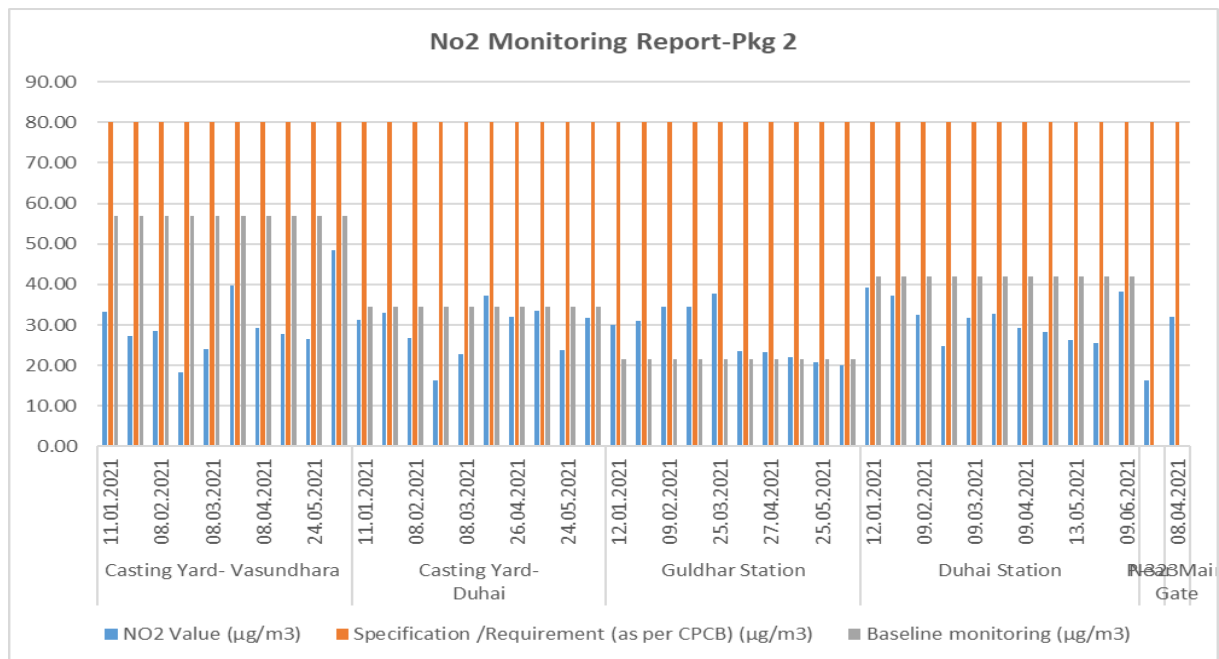


Table 26: Carbon Monoxide-CO Report-P02

Location	Monitoring Date	CO Value (mg/m3)	Specification /Requirement (as per CPCB) (mg/m3)	Baseline monitoring (mg/m3)	Baseline monitoring Date	Time weighted Average
Casting Yard- Vasundhara	11.01.2021	0.87	2	0.7	03-Jul-19	8 hours
	21.01.2021	0.95	2	0.7	03-Jul-19	
	08.02.2021	0.94	2	0.7	03-Jul-19	
	22.02.2021	0.9	2	0.7	03-Jul-19	
	08.03.2021	0.78	2	0.7	03-Jul-19	
	24.03.2021	0.42	2	0.7	03-Jul-19	
	08.04.2021	0.5	2	0.7	03-Jul-19	
	12.05.2021	0.5	2	0.7	03-Jul-19	
	24.05.2021	0.5	2	0.7	03-Jul-19	
	08.06.2021	0.6	2	0.7	03-Jul-19	
Casting Yard- Duhai	11.01.2021	0.8	2	1.91	12-Nov-20	
	21.01.2021	0.84	2	1.91	12-Nov-20	
	08.02.2021	0.91	2	1.91	12-Nov-20	
	22.02.2021	0.86	2	1.91	12-Nov-20	
	08.03.2021	0.74	2	1.91	12-Nov-20	
	24.03.2021	0.45	2	1.91	12-Nov-20	
	26.04.2021	0.7	2	1.91	12-Nov-20	
	12.05.2021	0.7	2	1.91	12-Nov-20	
	24.05.2021	0.5	2	1.91	12-Nov-20	
	08.06.2021	0.8	2	1.91	12-Nov-20	
Guldhar Station	12.01.2021	0.85	2	0.87	29-Sep-20	
	21.01.2021	0.88	2	0.87	29-Sep-20	
	09.02.2021	1.57	2	0.87	29-Sep-20	
	09.03.2021	0.65	2	0.87	29-Sep-20	
	25.03.2021	0.32	2	0.87	29-Sep-20	
	09.04.2021	0.5	2	0.87	29-Sep-20	
	27.04.2021	0.4	2	0.87	29-Sep-20	
	13.05.2021	0.4	2	0.87	29-Sep-20	
	25.05.2021	0.4	2	0.87	29-Sep-20	
	09.06.2021	0.7	2	0.87	29-Sep-20	
Duhai Station	12.01.2021	0.99	2	0.88	30-Dec-19	
	21.01.2021	0.97	2	0.88	30-Dec-19	
	09.02.2021	1.68	2	0.88	30-Dec-19	
	23.02.2021	1.61	2	0.88	30-Dec-19	
	09.03.2021	0.58	2	0.88	30-Dec-19	
	25 .03.2021	0.32	2	0.88	30-Dec-19	
	09.04.2021	0.6	2	0.88	30-Dec-19	
	24.04.2021	0.6	2	0.88	30-Dec-19	
	13.05.2021	0.6	2	0.88	30-Dec-19	
	25.05.2021	0.5	2	0.88	30-Dec-19	
P-323	23.02.2021	1.55	2			
Near Main Gate	08.04.2021	0.7	2			

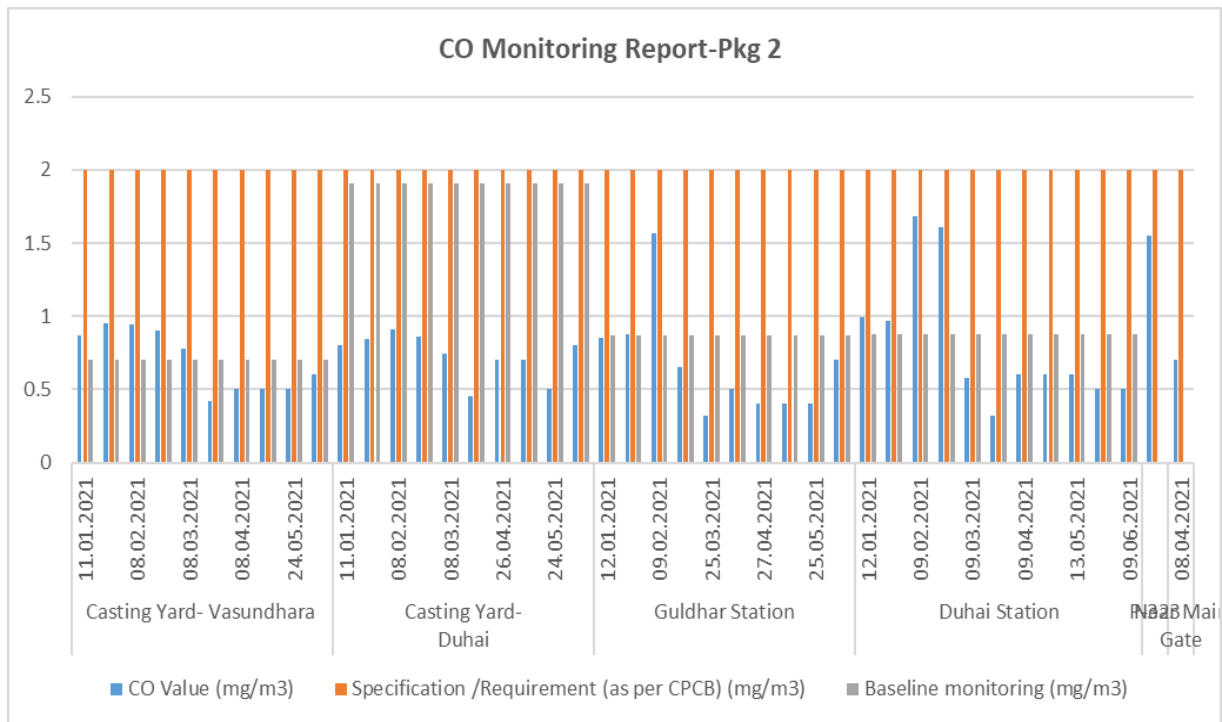
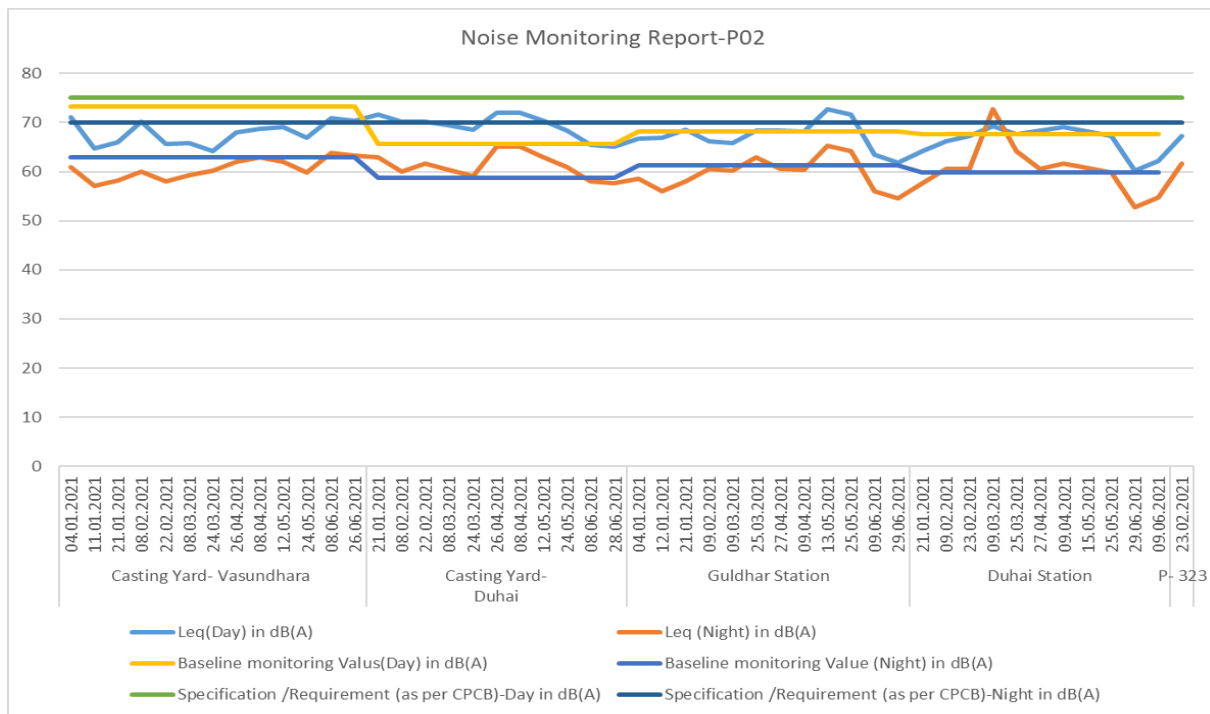


Table 27: Noise Monitoring Report-P02

Location	Monitoring Date	Leq(Day) in dB(A)	Leq (Night) in dB(A)	Baseline monitoring Date	Baseline monitoring Values (Day) in dB(A)	Baseline monitoring Value (Night) in dB(A)	Specification /Requirement (as per CPCB)- Day in dB(A)	Specification /Requirement (as per CPCB)- Night in dB(A)
Casting Yard- Vasundhara	04.01.2021	71.1	60.95	03.07.2019	73.21	63	75	70
	11.01.2021	64.8	57.05	03.07.2019	73.21	63	75	70
	21.01.2021	65.95	58.2	03.07.2019	73.21	63	75	70
	08.02.2021	70.2	59.95	03.07.2019	73.21	63	75	70
	22.02.2021	65.65	58	03.07.2019	73.21	63	75	70
	08.03.2021	65.8	59.3	03.07.2019	73.21	63	75	70
	24.03.2021	64.2	60.15	03.07.2019	73.21	63	75	70
	26.04.2021	68	62	03.07.2019	73.21	63	75	70
	08.04.2021	68.7	63	03.07.2019	73.21	63	75	70
	12.05.2021	69	62	03.07.2019	73.21	63	75	70
	24.05.2021	66.9	59.9	03.07.2019	73.21	63	75	70
	08.06.2021	70.9	63.9	03.07.2019	73.21	63	75	70
	26.06.2021	70.3	63.3	03.07.2019	73.21	63	75	70
Casting Yard- Duhai	21.01.2021	71.7	62.95	14.12.2020	65.65	58.75	75	70
	08.02.2021	70.2	59.95	14.12.2020	65.65	58.75	75	70
	22.02.2021	70.15	61.65	14.12.2020	65.65	58.75	75	70
	08.03.2021	69.45	60.3	14.12.2020	65.65	58.75	75	70
	24.03.2021	68.45	59.15	14.12.2020	65.65	58.75	75	70
	26.04.2021	72	65.1	14.12.2020	65.65	58.75	75	70

Location	Monitoring Date	Leq(Day) in dB(A)	Leq (Nigh t) in dB(A)	Baseline monitoring Date	Baseline monitorin g Values (Day) in dB(A)	Baseline monitorin g Value (Night) in dB(A)	Specifi cation /Requir ement (as per CPCB)- Day in dB(A)	Specificati on /Requireme nt (as per CPCB)- Night in dB(A)
	08.04.2021	71.9	65	14.12.2020	65.65	58.75	75	70
	12.05.2021	70.4	63	14.12.2020	65.65	58.75	75	70
	24.05.2021	68.4	61	14.12.2020	65.65	58.75	75	70
	08.06.2021	65.4	58	14.12.2020	65.65	58.75	75	70
	28.06.2021	65	57.6	14.12.2020	65.65	58.75	75	70
Guldhar Station	04.01.2021	66.65	58.6	02.12.2020	68.2	61.25	75	70
	12.01.2021	66.85	56.05	02.12.2020	68.2	61.25	75	70
	21.01.2021	68.45	57.95	02.12.2020	68.2	61.25	75	70
	09.02.2021	66.25	60.6	02.12.2020	68.2	61.25	75	70
	09.03.2021	65.75	60.2	02.12.2020	68.2	61.25	75	70
	25.03.2021	68.35	62.95	02.12.2020	68.2	61.25	75	70
	27.04.2021	68.4	60.6	02.12.2020	68.2	61.25	75	70
	09.04.2021	68.2	60.4	02.12.2020	68.2	61.25	75	70
	13.05.2021	72.7	65.3	02.12.2020	68.2	61.25	75	70
	25.05.2021	71.6	64.2	02.12.2020	68.2	61.25	75	70
	09.06.2021	63.5	56.1	02.12.2020	68.2	61.25	75	70
	29.06.2021	61.9	54.5	02.12.2020	68.2	61.25	75	70
Duhai Station	21.01.2021	64.2	57.7	14.12.2020	67.65	59.8	75	70
	09.02.2021	66.25	60.6	14.12.2020	67.65	59.8	75	70
	23.02.2021	67.35	60.6	14.12.2020	67.65	59.8	75	70
	09.03.2021	69.35	72.7	14.12.2020	67.65	59.8	75	70
	25.03.2021	67.55	64.2	14.12.2020	67.65	59.8	75	70
	27.04.2021	68.3	60.6	14.12.2020	67.65	59.8	75	70
	09.04.2021	69.1	61.6	14.12.2020	67.65	59.8	75	70
	15.05.2021	68.1	60.7	14.12.2020	67.65	59.8	75	70
	25.05.2021	67.2	59.8	14.12.2020	67.65	59.8	75	70
	29.06.2021	60.2	52.8	14.12.2020	67.65	59.8	75	70
P- 323	09.06.2021	62.1	54.7	14.12.2020	67.65	59.8	75	70
	23.02.2021	67.2	61.7				75	70



24. **Package No- P03 (Lot 1)-** During the months of January-June 2021 the environmental parameters like PM₁₀, PM_{2.5}, Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) and Noise level measured by NABL accredited laboratory (M/s Ecosteps Laboratory Pvt Ltd). PM₁₀ & PM_{2.5} value are more than permissible limit provided by CPCB. Values have exceeded due to heavy traffic movement on existing highway (Delhi- Haridwar), matter emission is very high due to burning of fuels in vehicles. Other environmental parameters like Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂) & Carbon Monoxide (CO) found within permissible limit. Noise level at day and nighttime are within the CPCB limit.

Table 28: Particulate Matters-PM₁₀ Report- P03 (Lot 1)

Location	Monitoring Date	PM ₁₀ Value (µg/m ³)	Specification /Requirement (as per CPCB) (µg/m ³)	Baseline monitoring (µg/m ³)	Baseline monitoring Date	Time weighted Average
Near Guard Room, opposite to IOCL Petrol Pump,	07.01.2021	235.00	100	430.42	22-Oct-20	24 hrs
	18.01.2021	263.20	100	430.42	22-Oct-20	
	02.02.2021	229	100	430.42	22-Oct-20	
	15.02.2021	262.50	100	430.42	22-Oct-20	
	01.04.2021	241.50	100	430.42	22-Oct-20	
Near DG Sets, opposite to Reliance Petrol Pump, P71 9 Location, Ghaziabad	18.01.2021	241.50	100	398.51	22-Oct-20	
	15.02.2021	279.50	100	398.51	22-Oct-20	
	15.03.2021	246.50	100	398.51	22-Oct-20	
	15.04.2021	236.60	100	398.51	22-Oct-20	
	02.06.2021	206.60	100	398.51	22-Oct-20	
Near Pillar No. - 520 Opposite to Homestead Muradnagar (Ghaziabad)	07.01.2021	242.20	100	430.42	22-Oct-20	
	02.02.2021	271.20	100	430.42	22-Oct-20	

Location	Monitoring Date	PM10 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Opposite to KIET College, Muradnagar, Ghaziabad	02.03.2021	235.80	100	430.42	22-Oct-20	
	01.04.2021	232.90	100	430.42	22-Oct-20	
	16.06.2021	164.00	100	430.42	22-Oct-20	
Casting Yard, RMC Batching Plant, Ghaziabad	02.03.2021	260.80	100	366.55	21-Oct-20	
	15.04.2021	227.80	100	366.55	21-Oct-20	
	26.05.2021	207.20	100	366.55	21-Oct-20	
	02.06.2021	190.40	100	366.55	21-Oct-20	
Duhai, Ghaziabad	15.03.2021	249.2	100	430.42	22-Oct-20	
Opposite to Homestead Muradnagar (Ghaziabad)	07.01.2021	242.2	100	430.42	22-Oct-20	
Modinager Metro Station, Modinagar	26.05.2021	198.00	100	398.51	22-Oct-20	
	16.06.2021	148.00	100	398.51	22-Oct-20	

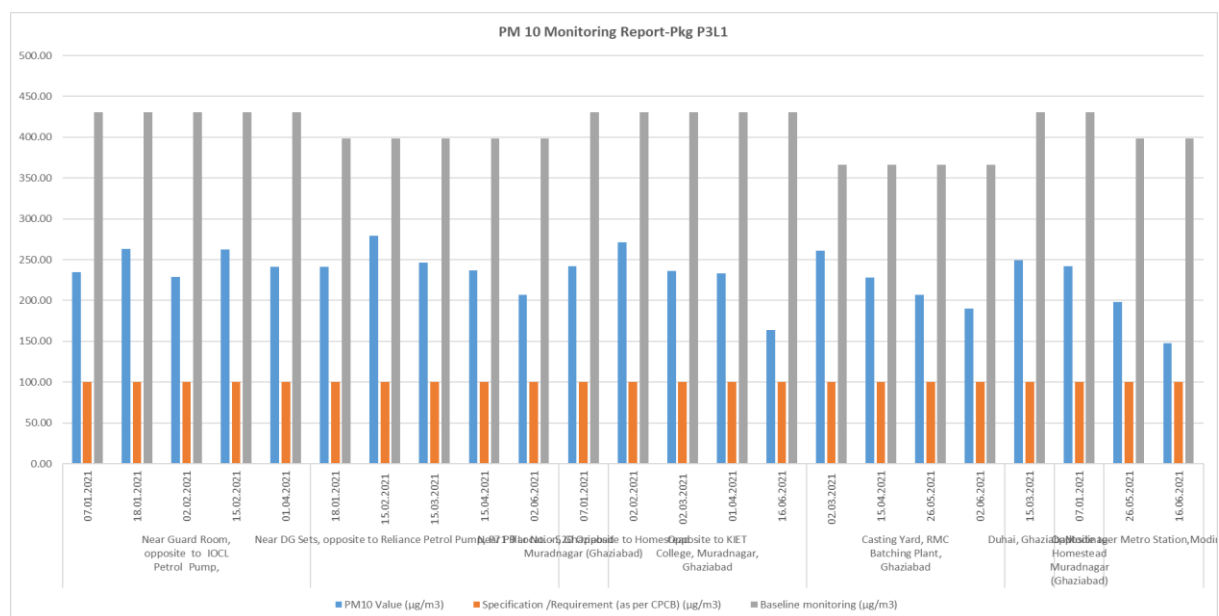


Table 29: Particulate Matters-PM2.5 Report - P03 (Lot 1)

Location	Monitoring Date	PM2.5 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Near Guard Room, opposite to IOCL Petrol Pump,	07.01.2021	172.8	60	200.23	22-Oct-20	24 hrs
	18.01.2021	165.8	60	200.23	22-Oct-20	
	02.02.2021	159.50	60	200.23	22-Oct-20	
	15.02.2021	184.80	60	200.23	22-Oct-20	
	01..4.2021	146.60	60	200.23	22-Oct-20	
	18.01.2021	156.80	60	192.26	22-Oct-20	

Location	Monitoring Date	PM2.5 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement t (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Near DG Sets, opposite to Reliance Petrol Pump, P71 9 Location, Ghaziabad	15.02.2021	192.80	60	192.26	22-Oct-20	
	15.03.2021	181.40	60	192.26	22-Oct-20	
	15.04.2021	138.40	60	192.26	22-Oct-20	
	02.06.2021	128.90	60	192.26	22-Oct-20	
Near Pillar No. - 520 Opposite to Homestead Muradnagar (Ghaziabad)	07.01.2021	165.4	60	200.23	22-Oct-20	
Opposite to KIET College, Muradnagar, Ghaziabad	02.02.2021	170.50	60	200.23	22-Oct-20	
	02.03.2021	145.50	60	200.23	22-Oct-20	
	01.04.2021	129.80	60	200.23	22-Oct-20	
	16.06.2021	72.00	60	200.23	22-Oct-20	
Casting Yard, RMC Batching Plant, Ghaziabad	02.03.2021	168.50	60	201.20	21-Oct-20	
	15.04.2021	122.60	60	201.20	21-Oct-20	
	26.05.2021	137.40	60	201.20	21-Oct-20	
	02.06.2021	119.70	60	201.20	21-Oct-20	
Duhai, Ghaziabad	15.03.2021	162.80	60	200.23	22-Oct-20	
Opposite to Homestead Muradnagar (Ghaziabad)	07.01.2021	165.4	60	200.23	22-Oct-20	
Modinager Metro Station, Modinagar	26.05.2021	129.50	60	198.26	22-Oct-20	
	16.06.2021	68.00	60	198.26	22-Oct-20	

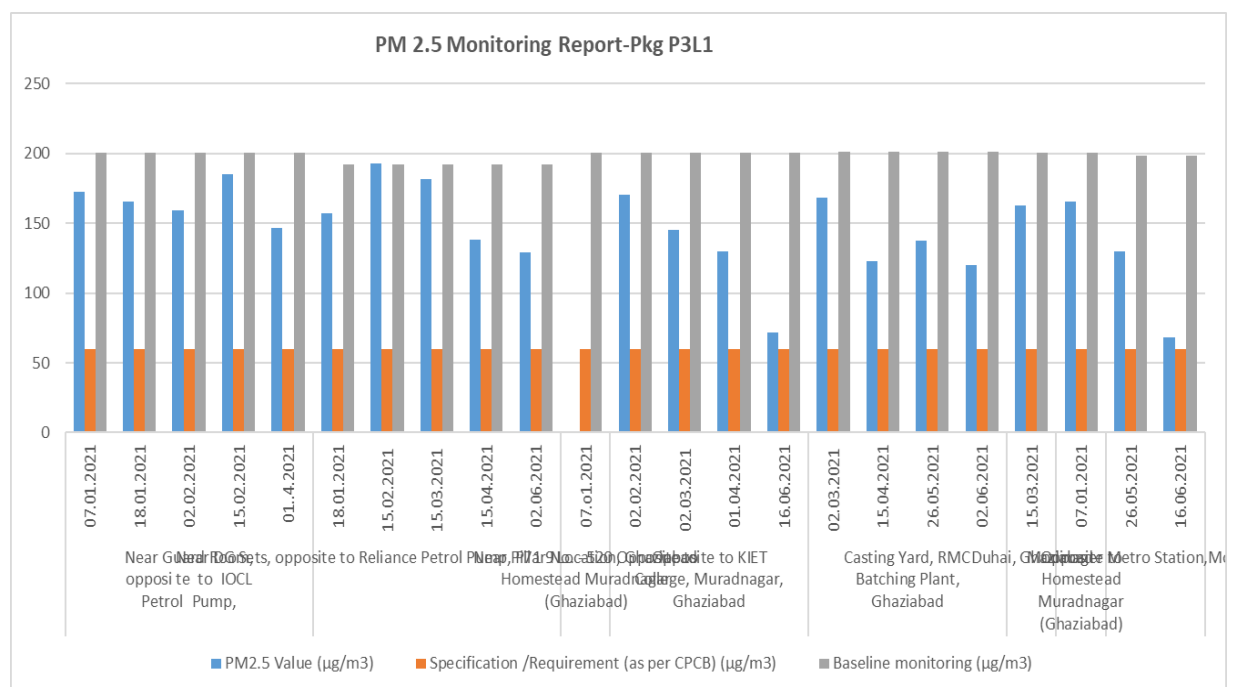


Table 30: Sulphur Dioxide-SO2 Report- P03 (Lot 1)

Location	Monitoring Date	SO2 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Near Guard Room, opposite to IOCL Petrol Pump,	07.01.2021	13.7	80	30.2	22-Oct-20	24 hrs
	18.01.2021	12.9	80	30.2	22-Oct-20	
	02.02.2021	15.5	80	30.2	22-Oct-20	
	15.02.2021	14	80	30.2	22-Oct-20	
	01.04.2021	15.3	80	30.2	22-Oct-20	
Near DG Sets, opposite to Reliance Petrol Pump, P71 9 Location, Ghaziabad	18.01.2021	14.2	80	24.5	22-Oct-20	
	15.02.2021	16.3	80	24.5	22-Oct-20	
	15.03.2021	17.3	80	24.5	22-Oct-20	
	15.04.2021	14.2	80	24.5	22-Oct-20	
	02.06.2021	13.9	80	24.5	22-Oct-20	
Near Pillar No. - 520 Opposite to Homestead Muradnagar (Ghaziabad)	07.01.2021	12.1	80	30.2	22-Oct-20	
Opposite to KIET College, Muradnagar, Ghaziabad	02.02.2021	13.4	80	30.2	22-Oct-20	
	02.03.2021	18.9	80	30.2	22-Oct-20	
	01.04.2021	17.4	80	30.2	22-Oct-20	
	16.06.2021	12.8	80	30.2	22-Oct-20	
Casting Yard, RMC Batching Plant, Ghaziabad	02.03.2021	17.4	80	26.2	21-Oct-20	
	15.04.2021	16.2	80	26.2	21-Oct-20	
	26.05.2021	16.8	80	26.2	21-Oct-20	
	02.06.2021	14	80	26.2	21-Oct-20	
Duhai, Ghaziabad	15.03.2021	16.7	80	30.2	22-Oct-20	
Opposite to Homestead Muradnagar (Ghaziabad)	07.01.2021	12.1	80	30.2	22-Oct-20	
Modinager Metro Station, Modinagar	26.05.2021	17.5	80	24.5	22-Oct-20	
	16.06.2021	13.4	80	24.5	22-Oct-20	

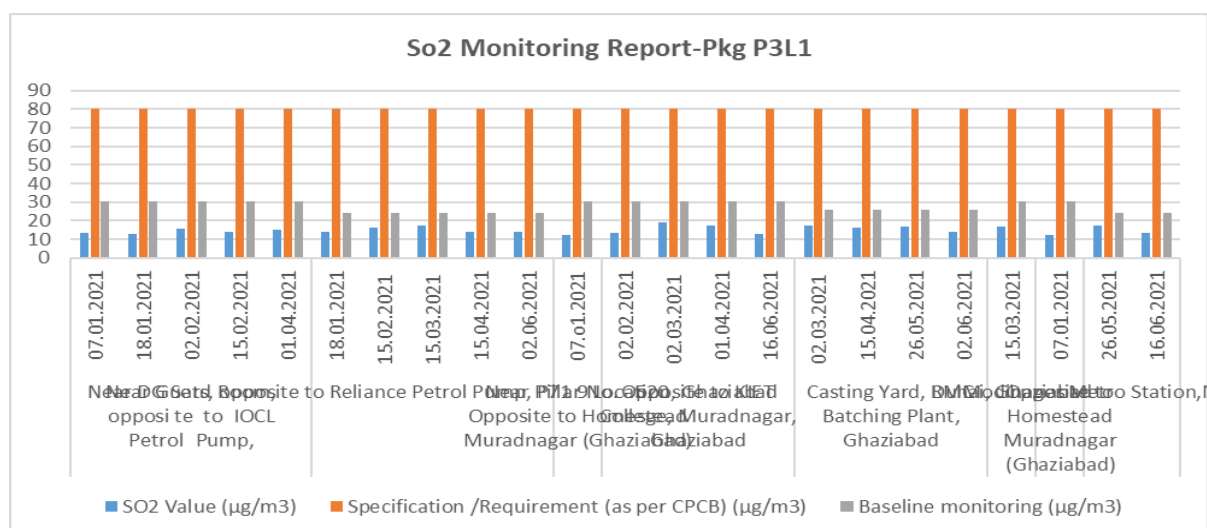


Table 31: Nitrogen Dioxide-NO2 Report- P03 (Lot 1)

Location	Monitoring Date	NO2 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Near Guard Room, opposite to IOCL Petrol Pump,	07.01.2021	41.2	80	72	22-Oct-20	24
	18.01.2021	36.5	80	72	22-Oct-20	
	02.02.2021	46.40	80	72	22-Oct-20	
	15.02.2021	53.30	80	72	22-Oct-20	
	01.04.2021	49.80	80	72	22-Oct-20	
Near DG Sets, opposite to Reliance Petrol Pump, P71 9 Location, Ghaziabad	18.01.2021	40.8	80	61.6	22-Oct-20	
	15.02.2021	47.8	80	61.6	22-Oct-20	
	15.03.2021	54.50	80	61.6	22-Oct-20	
	15.04.2021	44.60	80	61.6	22-Oct-20	
	02.06.2021	38.40	80	61.6	22-Oct-20	
Near Pillar No. - 520 Opposite to Homestead Muradnagar (Ghaziabad)	07.01.2021	38.9	80	72	22-Oct-20	
Opposite to KIET College, Muradnagar, Ghaziabad	02.02.2021	51.40	80	72.00	22-Oct-20	
	02.03.2021	52.80	80	72.00	22-Oct-20	
	01.04.2021	46.40	80	72.00	22-Oct-20	
	16.06.2021	41.20	80	72.00	22-Oct-20	
Casting Yard, RMC Batching Plant, Ghaziabad	02.03.2021	49.60	80	68.40	21-Oct-20	
	15.04.2021	41.20	80	68.40	21-Oct-20	
	26.05.2021	39.30	80	68.40	21-Oct-20	
	02.06.2021	36.80	80	68.40	21-Oct-20	
Duhai, Ghaziabad	15.03.2021	49.3	80	72	22-Oct-20	
Opposite to Homestead Muradnagar (Ghaziabad)	07.01.2021	38.9	80	72	22-Oct-20	
Modinager Metro Station, Modinagar	26.05.2021	47.20	80	61.6	22-Oct-20	
	16.06.2021	43.50	80	61.6	22-Oct-20	

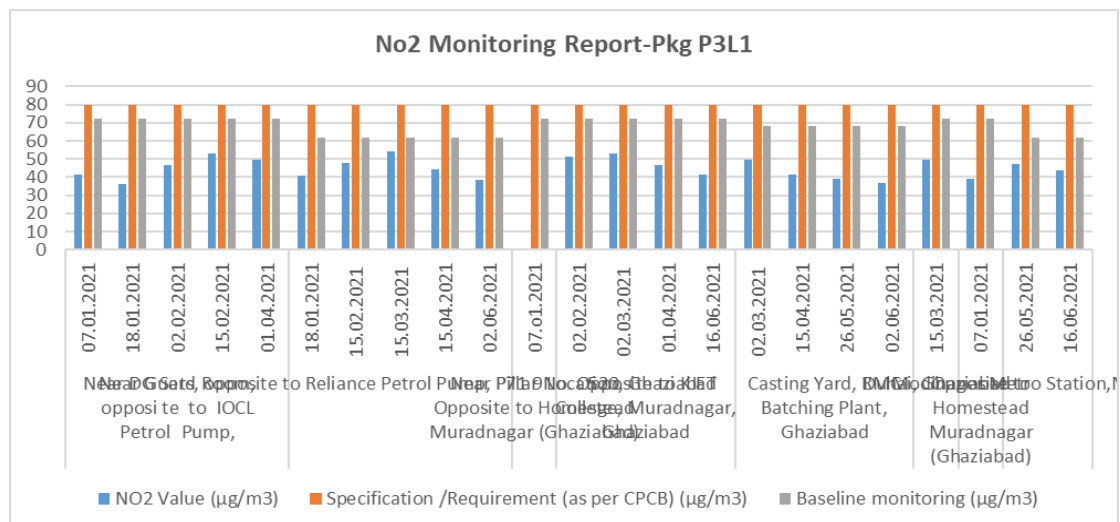


Table 32: Carbon Monoxide-CO Report- P03 (Lot 1)

Location	Monitoring Date	CO Value (mg/m ³)	Specification /Requirement (as per CPCB) (mg/m ³)	Baseline monitoring (mg/m ³)	Baseline monitoring Date	Time weighted Average
Near Guard Room, opposite to IOCL Petrol Pump,	07.01.2021	0.44	2	1.05	22-Oct-20	8 hrs
	18.01.2021	0.59	2	1.05	22-Oct-20	
	02.02.2021	0.47	2	1.05	22-Oct-20	
	15.02.2021	0.55	2	1.05	22-Oct-20	
	01.04.2021	0.51	2	1.05	22-Oct-20	
Near DG Sets, opposite to Reliance Petrol Pump, P71 9 Location, Ghaziabad	18.01.2021	0.48	2	0.86	22-Oct-20	
	15.02.2021	0.59	2	0.86	22-Oct-20	
	15.03.2021	0.64	2	0.86	22-Oct-20	
	15.04.2021	0.48	2	0.86	22-Oct-20	
	02.06.2021	0.44	2	0.86	22-Oct-20	
Near Pillar No. - 520 Opposite to Homestead Muradnagar (Ghaziabad)	07.01.2021	0.41	2	1.05	22-Oct-20	
Opposite to KIET College, Muradnagar, Ghaziabad	02.02.2021	0.5	2	1.05	22-Oct-20	
	02.03.2021	0.69	2	1.05	22-Oct-20	
	01.04.2021	0.62	2	1.05	22-Oct-20	
	16.06.2021	0.49	2	1.05	22-Oct-20	
Casting Yard, RMC Batching Plant, Ghaziabad	02.03.2021	0.62	2	0.95	21-Oct-20	
	15.04.2021	0.54	2	0.95	21-Oct-20	
	26.05.2021	0.46	2	0.95	21-Oct-20	
	02.06.2021	0.4	2	0.95	21-Oct-20	
Duhai, Ghaziabad	15.03.2021	0.58	2	1.05	22-Oct-20	
Opposite to Homestead Muradnagar (Ghaziabad)	07.01.2021	0.41	2	1.05	22-Oct-20	
Modinager Metro Station, Modinagar	26.05.2021	0.51	2	0.86	22-Oct-20	
	16.06.2021	0.53	2	0.86	22-Oct-20	

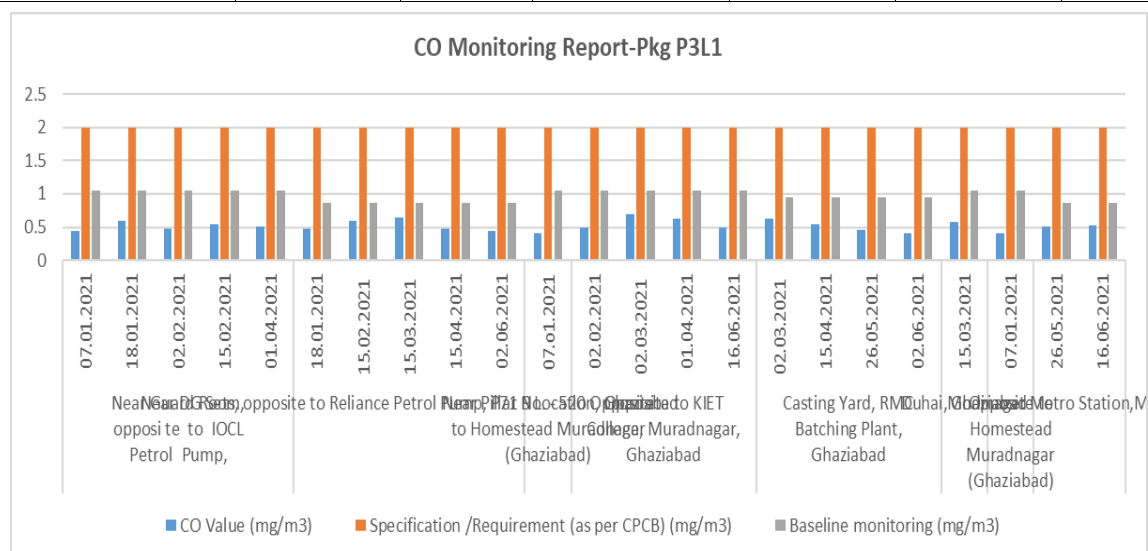
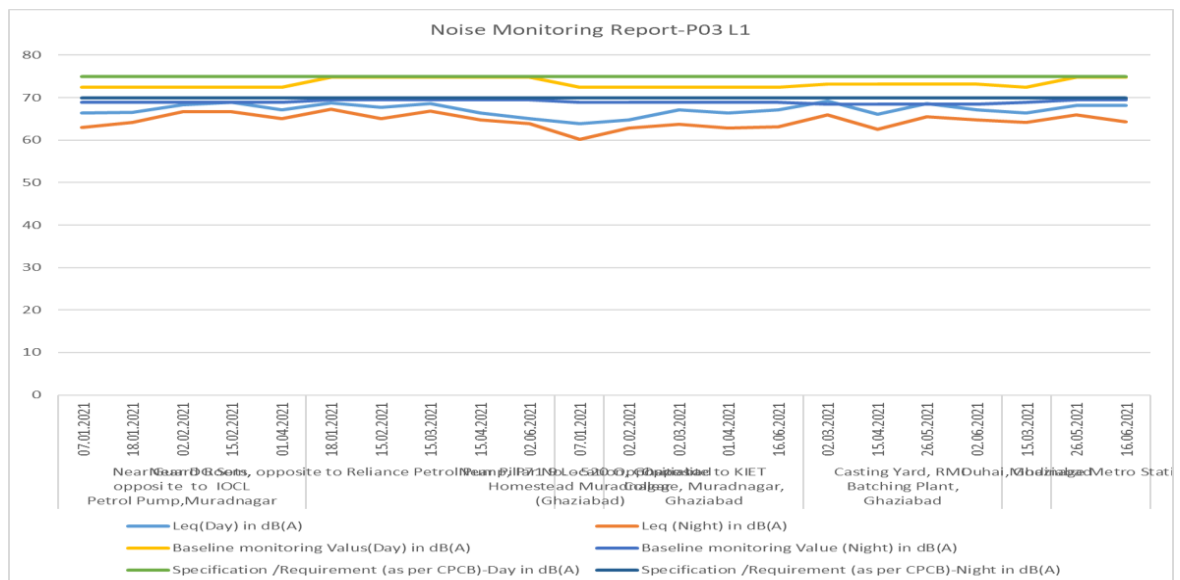


Table 33: Noise Monitoring Report- P03 (Lot 1)

Location	Monitoring Date	Leq (Day) in dB(A)	Leq (Night) in dB(A)	Baseline monitoring Date	Baseline monitoring Values (Day) in dB(A)	Baseline monitoring Value (Night) in dB(A)	Specification /Requirement (as per CPCB)-Day in dB(A)	Specification /Requirement (as per CPCB)-Night in dB(A)
Near Guard Room, opposite to IOCL Petrol Pump, Muradnagar	07.01.2021	66.4	63	22.10.2020	72.5	68.9	75	70
	18.01.2021	66.5	64.2	22.10.2020	72.5	68.9	75	70
	02.02.2021	68.3	66.7	22.10.2020	72.5	68.9	75	70
	15.02.2021	68.9	66.7	22.10.2020	72.5	68.9	75	70
	01.04.2021	67.2	65.1	22.10.2020	72.5	68.9	75	70
Near DG Sets, opposite to Reliance Petrol Pump, P71 9 Location, Ghaziabad	18.01.2021	68.8	67.3	22.10.2020	74.8	69.5	75	70
	15.02.2021	67.7	65.1	22.10.2020	74.8	69.5	75	70
	15.03.2021	68.6	66.8	22.10.2020	74.8	69.5	75	70
	15.04.2021	66.4	64.8	22.10.2020	74.8	69.5	75	70
Near Pillar No. - 520 Opposite to Homestead Muradnagar (Ghaziabad)	07.01.2021	63.9	60.2	22.10.2020	72.5	68.9	75	70
	02.02.2021	64.8	62.9	22.10.2020	72.5	68.9	75	70
	02.03.2021	67.1	63.7	22.10.2020	72.5	68.9	75	70
	01.04.2021	66.4	62.9	22.10.2020	72.5	68.9	75	70
Opposite to KIET College, Muradnagar, Ghaziabad	16.06.2021	67.1	63.2	22.10.2020	72.5	68.9	75	70
	02.03.2021	69.2	66	21.10.2020	73.2	68.4	75	70
	15.04.2021	66.1	62.5	21.10.2020	73.2	68.4	75	70
	26.05.2021	68.6	65.5	21.10.2020	73.2	68.4	75	70
Casting Yard, RMC Batching Plant, Ghaziabad	02.06.2021	67.2	64.8	21.10.2020	73.2	68.4	75	70
	15.03.2021	66.4	64.1	21.10.2020	72.5	68.9	75	70
	26.05.2021	68.1	65.9	22.10.2020	74.8	69.5	75	70
	16.06.2021	68.1	64.3	22.10.2020	74.8	69.5	75	70
Modinage Metro Station	26.05.2021	68.1	65.9	22.10.2020	74.8	69.5	75	70
	16.06.2021	68.1	64.3	22.10.2020	74.8	69.5	75	70



25. **Package No- P03 (Lot 2)**-During the months of January-June 2021 the environmental parameters like PM10, PM2.5, Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) and Noise level measured by NABL accredited laboratory (M/s Arihant Analytical Laboratory Pvt. Ltd). PM 10 & PM 2.5 value are more than permissible limit provided by CPCB. Values have exceeded due to heavy traffic movement on existing highway (Delhi-Haridwar), matter emission is very high due to burning of fuels in vehicles. Other environmental parameters like Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) found within permissible limit. The noise level was found with the CPCB limit.

Table 34: Particulate Matters-PM10 Report -P03 (Lot 2)

Location	Monitoring Date	PM10 Value (µg/m ³)	Specification /Requirement (as per CPCB) (µg/m ³)	Baseline monitoring (µg/m ³)	Baseline monitoring Date	Time weighted Average
P3 (Modinpur/Kadrad)	12.01.2021	148.6	100	322.7	26-Oct-20	24 hrs
	29.01.2021	197.3	100	322.70	26-Oct-20	
	13.02.2021	198.5	100	322.70	26-Oct-20	
	28.02.2021	168.4	100	322.70	26-Oct-20	
	17.03.2021	167.8	100	322.70	26-Oct-20	
	14.04.2021	158.5	100	322.70	26-Oct-20	
	30.04.2021	144.2	100	322.70	26-Oct-20	
	26.05.2021	138.5	100	322.70	26-Oct-20	
Meerut South Station	30.03.2021	205.30	100	320.30	26-Oct-20	
P4 (Partapur Bypass)	12.01.2021	195.30	100	320.30	26-Oct-20	
P5 (Partapur/Rithani)	28.02.2021	157.70	100	320.30	26-Oct-20	
	30.03.2021	181.60	100	320.30	26-Oct-20	
	30.04.2021	133.5	100	320.30	26-Oct-20	
PCY(Shatabdi Nagar)	29.01.2021	212	100	310.20	26-Oct-20	
	13.02.2021	188.2	100	310.20	26-Oct-20	
	17.03.2021	153.5	100	310.20	26-Oct-20	
	14.04.2021	176.3	100	310.20	26-Oct-20	
	26.05.2021	127.3	100	310.20	26-Oct-20	

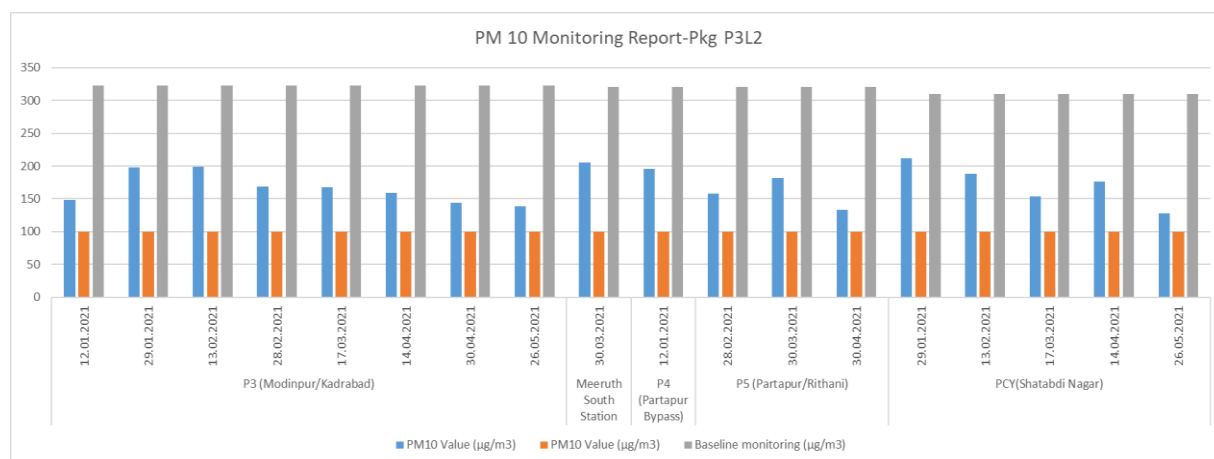


Table 35: Particulate Matters-PM2.5 Report-P03 (Lot 2)

Location	Monitoring Date	PM2.5 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
P3 (Modinpur/Kadrad)	12.01.2021	137.3	60	318.2	26-Oct-20	24 hrs
	29.01.2021	153.5	60	318.2	26-Oct-20	
	13.02.2021	156.30	60	318.2	26-Oct-20	
	28.02.2021	127.30	60	318.2	26-Oct-20	
	17.03.2021	132.50	60	318.2	26-Oct-20	
	14.04.2021	102.9	60	318.2	26-Oct-20	
	30.04.2021	113.6	60	318.2	26-Oct-20	
	26.05.2021	107.2	60	318.2	26-Oct-20	
Meerut South Station	30.03.2021	132.50	60	310.50	26-Oct-20	
P4 (Partapur Bypass)	12.01.2021	172.80	60	310.50	26-Oct-20	
P5 (Partapur/Rithani)	28.02.2021	243.60	60	310.50	26-Oct-20	
	30.03.2021	112.30	60	310.50	26-Oct-20	
	30.04.2021	102.3	60	310.50	26-Oct-20	
PCY (Shatabdi Nagar)	29.01.2021	189.3	60	297.30	26-Oct-20	
	13.02.2021	144.5	60	297.30	26-Oct-20	
	17.03.2021	114.2	60	297.30	26-Oct-20	
	14.04.2021	116.2	60	297.30	26-Oct-20	
	26.05.2021	89.4	60	297.30	26-Oct-20	

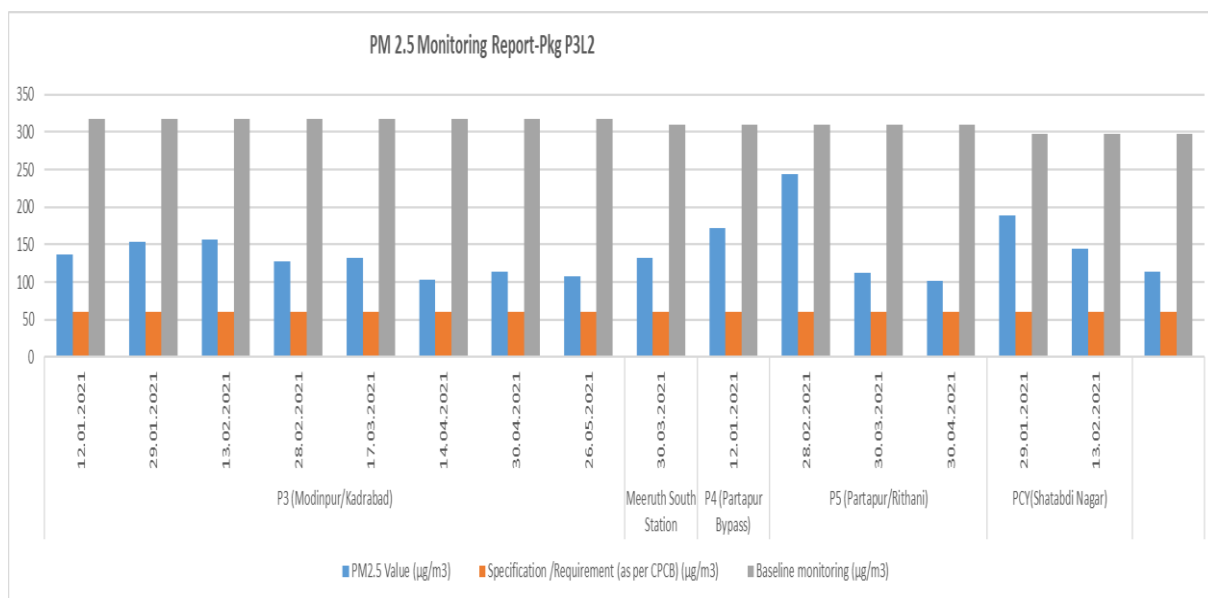


Table 36: Sulphur Dioxide-SO2 Report-P03 (Lot 2)

Location	Monitoring Date	SO2 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
P3 (Modinpur/Kadrad)	12.01.2021	10.5	80	71.3	26-Oct-20	24 hrs
	29.01.2021	15.5	80	71.3	26-Oct-20	
	13.02.2021	18.4	80	71.3	26-Oct-20	
	28.02.2021	14.5	80	71.3	26-Oct-20	
	17.03.2021	16.7	80	71.3	26-Oct-20	
	14.04.2021	14.6	80	71.3	26-Oct-20	
	30.04.2021	18.5	80	71.3	26-Oct-20	
	26.05.2021	15.5	80	71.3	26-Oct-20	
Meerut South Station	30.03.2021	14.6	80	16.2	26-Oct-20	
P4 (Partapur Bypass)	12.01.2021	14.6	80	16.2	26-Oct-20	
P5 (Partapur/Rithani)	28.02.2021	16.3	80	16.2	26-Oct-20	
	30.03.2021	14.5	80	16.2	26-Oct-20	
	30.04.2021	14.8	80	16.2	26-Oct-20	
PCY (Shatabdi Nagar)	29.01.2021	17.7	80	18.6	26-Oct-20	
	13.02.2021	15.4	80	18.6	26-Oct-20	
	17.03.2021	17.6	80	18.6	26-Oct-20	
	14.04.2021	17.5	80	18.6	26-Oct-20	
	26.05.2021	13.5	80	18.6	26-Oct-20	

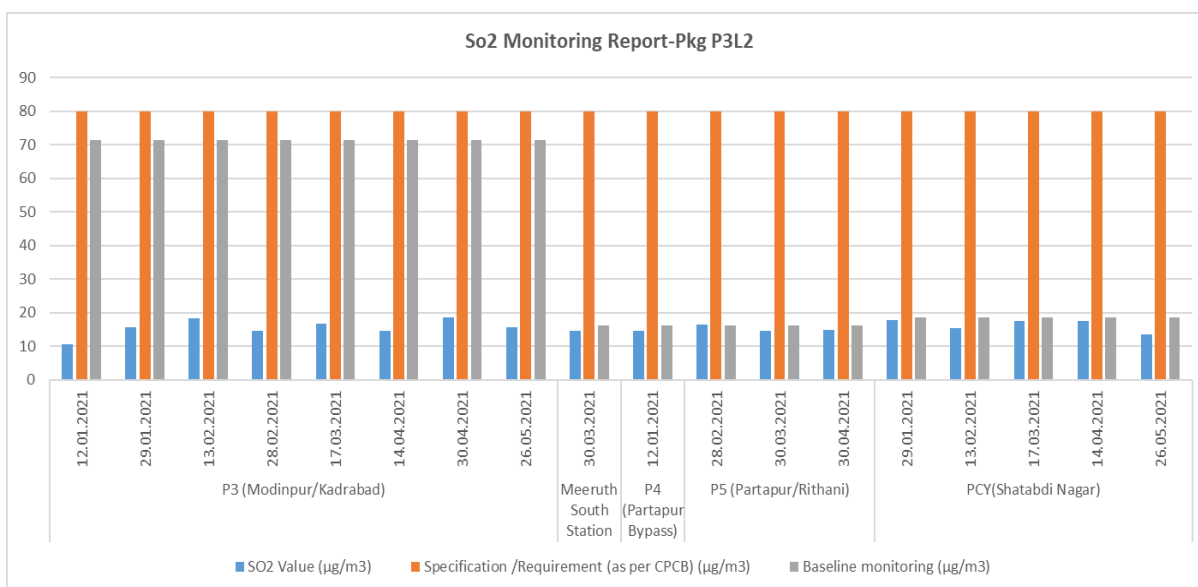


Table 37: Nitrogen Dioxide-NO2 Report-P03 (Lot 2)

Location	Monitoring Date	NO2 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
P3 (Modinpur/Kadrad)	12.01.2021	44.7	80	19.5	26-Oct-20	24 hrs
	29.01.2021	49.2	80	19.5	26-Oct-20	
	13.02.2021	55.50	80	19.5	26-Oct-20	
	28.02.2021	47.20	80	19.5	26-Oct-20	
	17.03.2021	51.20	80	19.5	26-Oct-20	
	14.04.2021	42.6	80	19.5	26-Oct-20	
	30.04.2021	46.5	80	19.5	26-Oct-20	
	26.05.2021	41.3	80	19.5	26-Oct-20	
Meerut South Station	30.03.2021	51.2	80	57.5	26-Oct-20	
P4 (Partapur Bypass)	12.01.2021	59.3	80	57.5	26-Oct-20	
P5 (Partapur/Rithani)	28.02.2021	51.50	80	57.50	26-Oct-20	
	30.03.2021	47.30	80	57.50	26-Oct-20	
	30.04.2021	47.3	80	57.50	26-Oct-20	
PCY (Shatabdi Nagar)	29.01.2021	51.40	80	61.50	26-Oct-20	
	13.02.2021	50.20	80	61.50	26-Oct-20	
	17.03.2021	53.8	80	61.50	26-Oct-20	
	14.04.2021	53.8	80	61.50	26-Oct-20	
	26.05.2021	49.6	80	61.50	26-Oct-20	

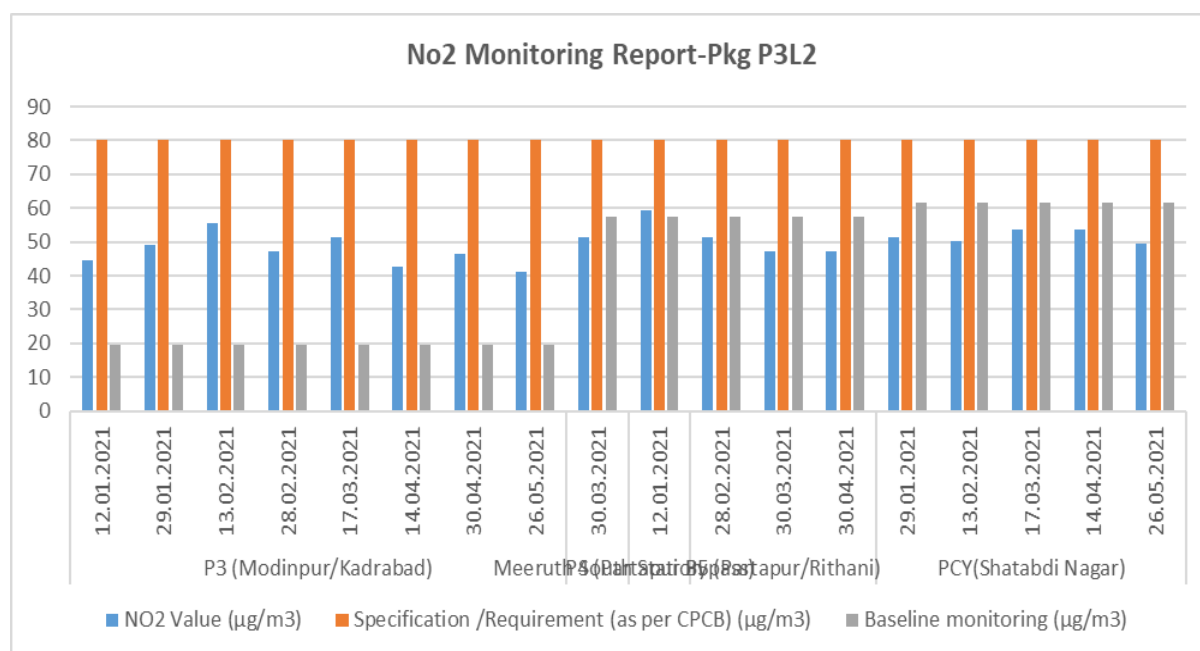


Table 38: Carbon Monoxide-CO Report-P03 (Lot 2)

Location	Monitoring Date	CO Value (mg/m ³)	Specification /Requirement (as per CPCB) (mg/m ³)	Baseline monitoring (mg/m ³)	Baseline monitoring Date	Time weighted Average
P3 (Modinpur/Kadrad)	12.01.2021	1.6	2	1.5	26-Oct-20	8 hrs
	29.01.2021	1	2	1.5	26-Oct-20	
	13.02.2021	1.2	2	1.5	26-Oct-20	
	28.02.2021	1	2	1.5	26-Oct-20	
	17.03.2021	1	2	1.5	26-Oct-20	
	14.04.2021	1	2	1.5	26-Oct-20	
	30.04.2021	1	2	1.5	26-Oct-20	
	26.05.2021	1	2	1.5	26-Oct-20	
Meerut South Station	30.03.2021	1.3	2	1	26-Oct-20	
P4 (Partapur Bypass)	12.01.2021	1.5	2	1	26-Oct-20	
P5 (Partapur/Rithani)	28.02.2021	1.1	2	1	26-Oct-20	
	30.03.2021	1	2	1	26-Oct-20	
	30.04.2021	1	2	1	26-Oct-20	
PCY (Shatabdi Nagar)	29.01.2021	1.3	2	1	26-Oct-20	
	13.02.2021	1	2	1	26-Oct-20	
	17.03.2021	1.5	2	1	26-Oct-20	
	14.04.2021	1.5	2	1	26-Oct-20	
	26.05.2021	1	2	1	26-Oct-20	

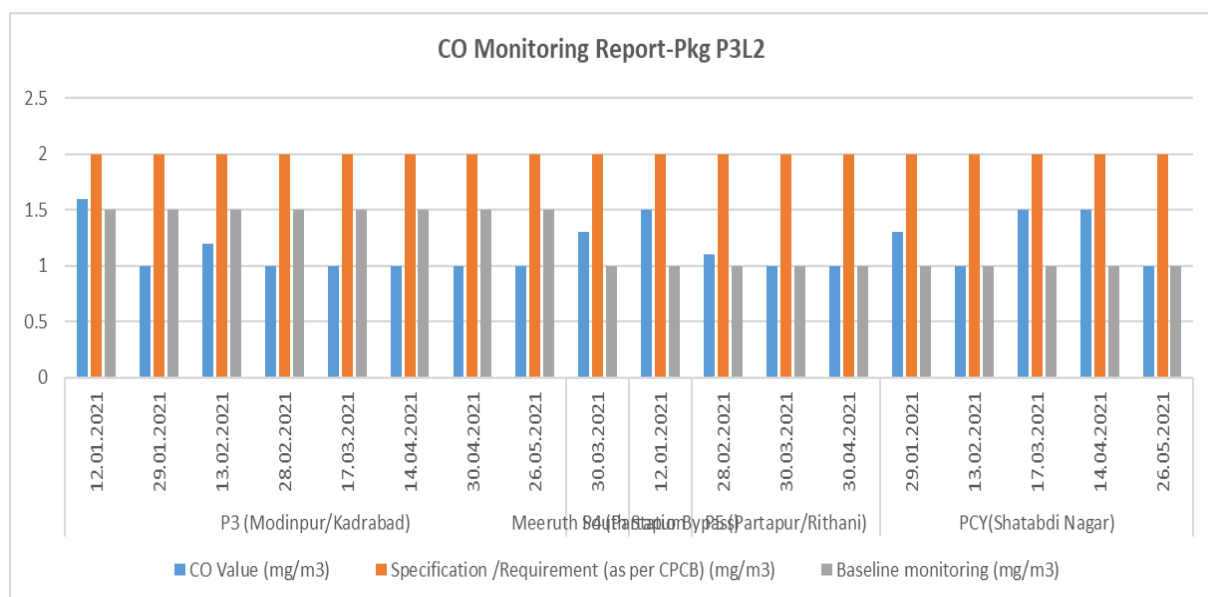
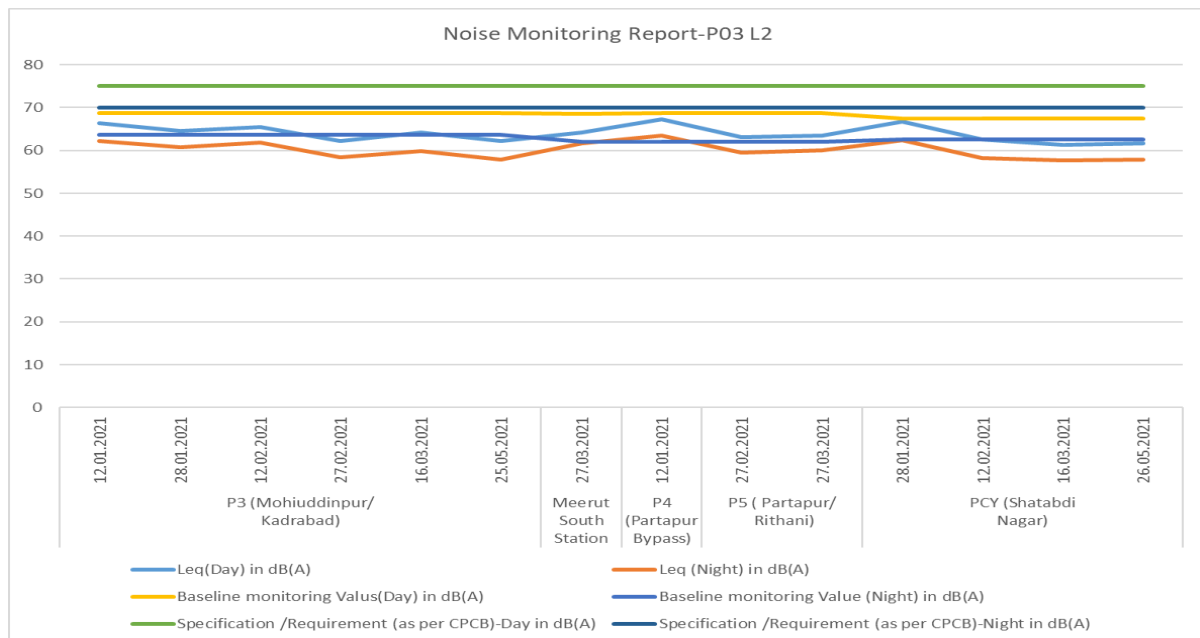


Table 39: Noise Monitoring Report-P03 (Lot 2)

Location	Monitoring Date	Leq (Day) in dB(A)	Leq (Night) in dB(A)	Baseline monitoring Date	Baseline monitoring Values (Day) in dB(A)	Baseline monitoring Value (Night) in dB(A)	Specification /Requirement (as per CPCB)-Day in dB(A)	Specification /Requirement (as per CPCB)-Night in dB(A)
P3 (Mohiuddinpur/ Kadrabad)	12.01.2021	66.4	62.2	26.10.2020	68.8	63.7	75	70
	28.01.2021	64.5	60.8	26.10.2020	68.8	63.7	75	70
	12.02.2021	65.5	61.8	26.10.2020	68.8	63.7	75	70
	27.02.2021	62.2	58.5	26.10.2020	68.8	63.7	75	70
	16.03.2021	64.2	59.8	26.10.2020	68.8	63.7	75	70
	25.05.2021	62.3	57.8	26.10.2020	68.8	63.7	75	70
Meerut South Station	27.03.2021	64.2	61.7	26.10.2020	68.5	62.1	75	70
P4 (Partapur Bypass)	12.01.2021	67.3	63.5	26.10.2020	68.8	62.1	75	70
P5 (Partapur/ Rithani)	27.02.2021	63.1	59.5	26.10.2020	68.8	62.1	75	70
	27.03.2021	63.4	60.1	26.10.2020	68.8	62.1	75	70
PCY (Shatabdi Nagar)	28.01.2021	66.7	62.4	26.10.2020	67.4	62.6	75	70
	12.02.2021	62.5	58.2	26.10.2020	67.4	62.6	75	70
	16.03.2021	61.3	57.7	26.10.2020	67.4	62.6	75	70
	26.05.2021	61.6	57.9	26.10.2020	67.4	62.6	75	70



26. **Package No- P04-** During the months of January-June 2021 the environmental parameters like PM₁₀ and Noise level measured by NABL accredited laboratory (M/s Vardan Enviro Lab). PM₁₀ value are more than permissible limit provided by CPCB. The noise levels for both day and nighttime exceed the CPCB limits.

Table 40: Particulate Matters-PM10 Report -P04

Location	Monitoring Date	PM10 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Casting Yard	24.03.2021	260.53	100			24 hours
	12.04.2021	200.81	100	260.53	24.03.2021	
	24.05.2021	166.2	100	260.53	24.03.2021	
	14.06.2021	112.04	100	260.53	24.03.2021	
	28.06.2021	139.06	100	260.53	24.03.2021	
Anand Vihar	24.03.2021	231.29	100			
	12.04.2021	202.55	100	231.29	24.03.2021	
	24.05.2021	171.50	100	231.29	24.03.2021	
	14.06.2021	131.75	100	231.29	24.03.2021	
	28.06.2021	148.75		231.29	24.03.2021	
Vaishali	25.03.2021	201.93	100			
	13.04.2021	190.53	100	201.93	25.03.2021	
	25.05.2021	156.01	100	201.93	25.03.2021	
	15.06.2021	122.34	100	201.93	25.03.2021	
	29.06.2021	134.86	100	201.93	25.03.2021	
Khichripur	25.03.2021	174.88	100			
	13.04.2021	162.04	100	174.88	25.03.2021	
	25.05.2021	130.60	100	174.88	25.03.2021	
	15.06.2021	107.58	100	174.88	25.03.2021	
	29.06.2021	124.94	100	174.88	25.03.2021	

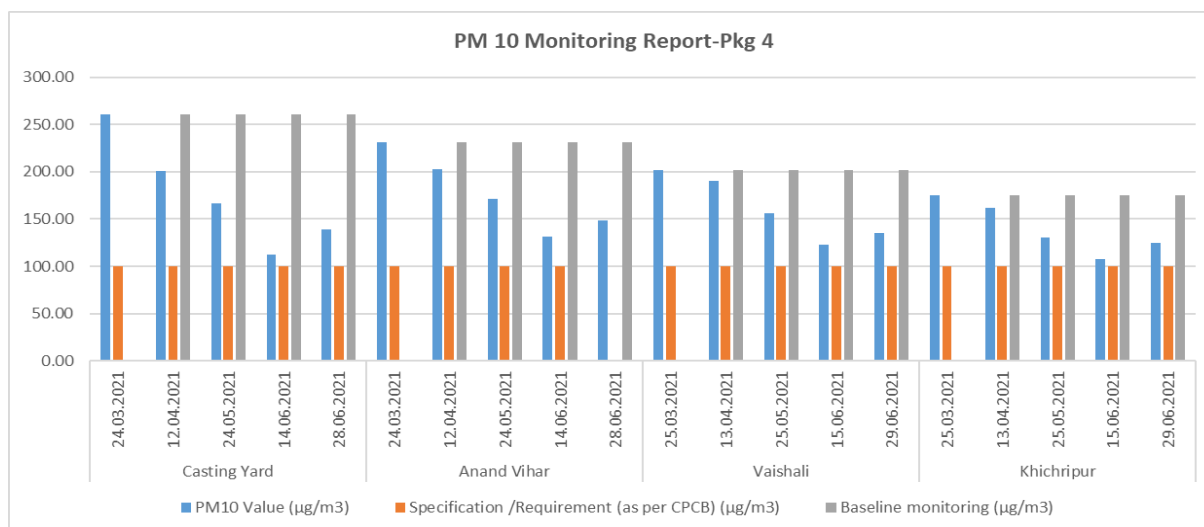
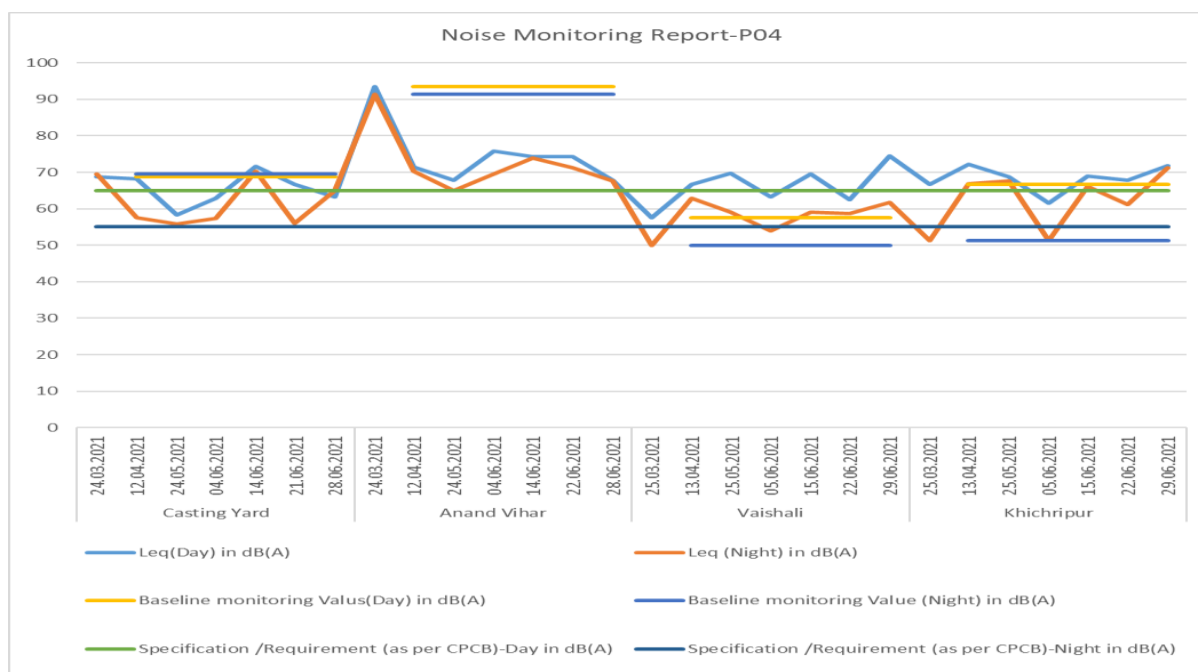


Table 41: Noise Monitoring Report-P04

Location	Monitoring Date	Leq(Day) in dB(A)	Leq(Night) in dB(A)	Baseline monitoring Date	Baseline monitoring Values (Day) in dB(A)	Baseline monitoring Value (Night) in dB(A)	Specification /Requirement (as per CPCB)-Day in dB(A)	Specification /Requirement (as per CPCB)-Night in dB(A)
Casting Yard	24.03.2021	68.76	69.59				65	55
	12.04.2021	68.22	57.61	24.03.2021	68.76	69.59	65	55
	24.05.2021	58.38	55.92	24.03.2021	68.76	69.59	65	55
	04.06.2021	62.81	57.42	24.03.2021	68.76	69.59	65	55
	14.06.2021	71.66	70.25	24.03.2021	68.76	69.59	65	55
	21.06.2021	66.65	56.08	24.03.2021	68.76	69.59	65	55
	28.06.2021	63.34	64.96	24.03.2021	68.76	69.59	65	55
Anand Vihar	24.03.2021	93.5	91.43				65	55
	12.04.2021	71.48	70.36	24.03.2021	93.5	91.43	65	55
	24.05.2021	67.77	64.94	24.03.2021	93.5	91.43	65	55
	04.06.2021	75.72	69.61	24.03.2021	93.5	91.43	65	55
	14.06.2021	74.23	73.86	24.03.2021	93.5	91.43	65	55
	22.06.2021	74.35	71.17	24.03.2021	93.5	91.43	65	55
	28.06.2021	67.77	67.57	24.03.2021	93.5	91.43	65	55
Vaishali	25.03.2021	57.51	49.92				65	55
	13.04.2021	66.6	62.94	25.03.2021	57.51	49.92	65	55
	25.05.2021	69.68	59.09	25.03.2021	57.51	49.92	65	55
	05.06.2021	63.18	53.87	25.03.2021	57.51	49.92	65	55
	15.06.2021	69.44	59.07	25.03.2021	57.51	49.92	65	55
	22.06.2021	62.57	58.73	25.03.2021	57.51	49.92	65	55
	29.06.2021	74.51	61.7	25.03.2021	57.51	49.92	65	55
Khichripur	25.03.2021	66.63	51.37				65	55
	13.04.2021	72.2	66.95	25.03.2021	66.63	51.37	65	55
	25.05.2021	68.71	67.59	25.03.2021	66.63	51.37	65	55
	05.06.2021	61.49	51.28	25.03.2021	66.63	51.37	65	55
	15.06.2021	68.94	66.06	25.03.2021	66.63	51.37	65	55
	22.06.2021	67.83	61.17	25.03.2021	66.63	51.37	65	55
	29.06.2021	71.73	71.2	25.03.2021	66.63	51.37	65	55



27. **Package No- P05A-** During the months of January-June 2021 the environmental parameters like PM₁₀, PM_{2.5}, Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) and Noise level measured by NABL accredited laboratory (M/s Arihant Analytical Laboratory Pvt. Ltd). PM₁₀ & PM_{2.5} value are more than permissible limit provided by CPCB. Other environmental parameters like Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) found within permissible limit. The noise level was found with the limit.

Table 42: Particulate Matters-PM₁₀ Report -P05a

Location	Monitoring Date	PM ₁₀ Value (µg/m ³)	Specification /Requirement (as per CPCB) (µg/m ³)	Baseline monitoring (µg/m ³)	Baseline monitoring Date	Time weighted Average
Batching Plant	02.02.2021	218.20	100			24 hours
	09.04.2021	221.70	100	218.20	02.02.2021	
	20.04.2021	205.70	100	218.20	02.02.2021	
	27.05.2021	196.30	100	218.20	02.02.2021	
	17.05.2021	188.5	100	218.20	02.02.2021	
	07.06.2021	215.2	100	218.20	02.02.2021	
Admin Building	02.02.2021	167.40	100			
	13.03.2021	100.00	100	167.40	02.02.2021	
	24.03.2021	217.20	100	167.40	02.02.2021	
	09.04.2021	183.20	100	167.40	02.02.2021	
	26.05.2021	171.60	100	167.40	02.02.2021	
	18.05.2021	192.20	100	167.40	02.02.2021	
	08.06.2021	202.50	100	167.40	02.02.2021	
Office Area	13.03.2021	233.50	100	218.20	02.02.2021	
	24.03.2021	241.30	100	218.20	02.02.2022	
	10.04.2021	132.80	100	218.20	02.02.2023	
	20.04.2021	171.20	100	218.20	02.02.2024	

Location	Monitoring Date	PM10 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
ETU Building (Electrical Traction Unit)	27.05.2021	172.50	100	218.20	02.02.2025	
	17.05.2021	178.30	100	218.20	02.02.2026	
	07.06.2021	174.60	100	218.20	02.02.2027	
	10.04.2021	141.50	100	167.40	02.02.2021	
	26.05.2021	168.30	100	167.40	02.02.2021	
	18.05.2021	152.30	100	167.40	02.02.2021	
	08.06.2021	182.80	100	167.40	02.02.2021	

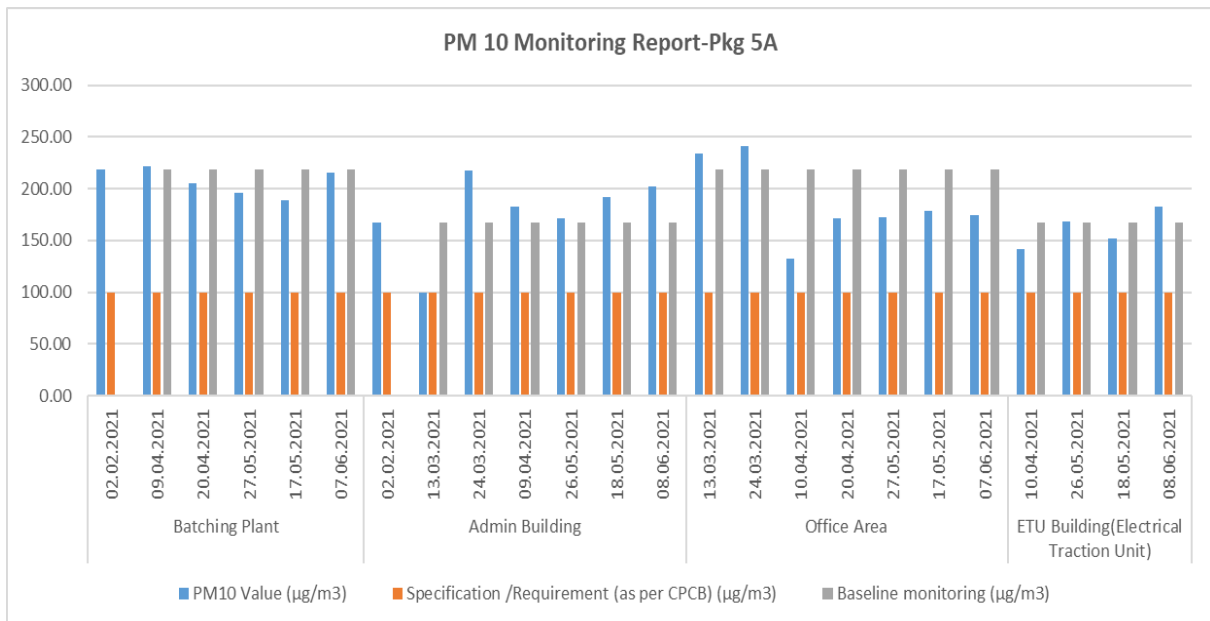


Table 43: Particulate Matters-PM2.5 Report-P05a

Location	Monitoring Date	PM2.5 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Batching Plant	02.02.2021	137.7	60			24 hours
	09.04.2021	147.8	60	137.7	02.02.2021	
	20.04.2021	142.2	60	137.7	02.02.2021	
	27.05.2021	141.5	60	137.7	02.02.2021	
	17.05.2021	137.60	60	137.7	02.02.2021	
	07.06.2021	156.70	60	137.7	02.02.2021	
Admin Building	02.02.2021	104.50	60			
	13.03.2021	127.50	60	104.50	02.02.2021	
	24.03.2021	134.50	60	104.50	02.02.2021	
	09.04.2021	121.50	60	104.50	02.02.2021	
	26.05.2021	109.80	60	104.50	02.02.2021	
	18.05.2021	117.50	60	104.50	02.02.2021	

Location	Monitoring Date	PM2.5 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Office Area	08.06.2021	113.70	60	104.50	02.02.2021	
	13.03.2021	152.70	60	137.7	02.02.2021	
	24.03.2021	147.4	60	137.7	02.02.2021	
	10.04.2021	87.3	60	137.7	02.02.2021	
	20.04.2021	126.4	60	137.7	02.02.2021	
	27.05.2021	116.20	60	137.7	02.02.2021	
	17.05.2021	112.80	60	137.7	02.02.2021	
	07.06.2021	126.30	60	137.7	02.02.2021	
ETU Building (Electrical Traction Unit)	10.04.2021	98.50	60	104.50	02.02.2021	
	26.05.2021	109.50	60	104.50	02.02.2021	
	18.05.2021	106.70	60	104.50	02.02.2021	
	08.06.2021	131.30	60	104.50	02.02.2021	

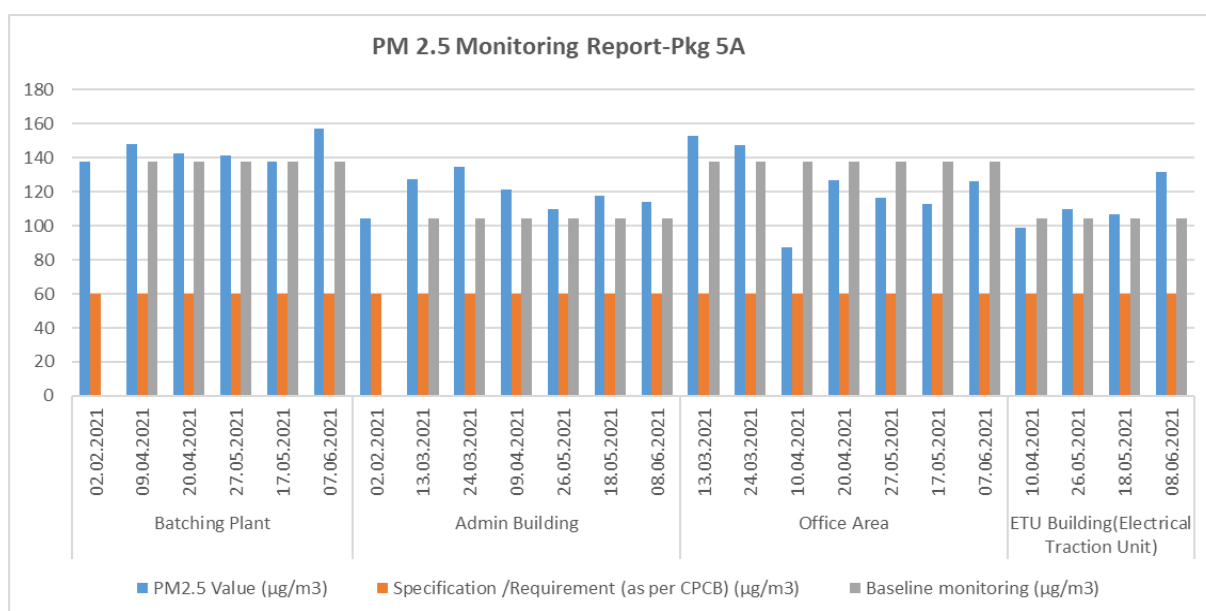


Table 44: Sulphur Dioxide-SO₂ Report-P05a

Location	Monitoring Date	SO ₂ Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Batching Plant	02.02.2021	17.4	80			24 hours
	09.04.2021	23.5	80	17.4	02.02.2021	
	20.04.2021	19.2	80	17.4	02.02.2021	
	27.05.2021	16.2	80	17.4	02.02.2021	
	17.05.2021	17.5	80	17.4	02.02.2021	
	07.06.2021	13.8	80	17.4	02.02.2021	
Admin Building	02.02.2021	15.2	80			
	13.03.2021	15.3	80	15.2	02.02.2021	

Location	Monitoring Date	SO2 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
	24.03.2021	17.4	80	15.2	02.02.2021	
	09.04.2021	17.7	80	15.2	02.02.2021	
	26.05.2021	17.3	80	15.2	02.02.2021	
	18.05.2021	19.4	80	15.2	02.02.2021	
	08.06.2021	14.8	80	15.2	02.02.2021	
Office Area	13.03.2021	20.8	80	17.4	02.02.2021	
	24.03.2021	19.7	80	17.4	02.02.2021	
	10.04.2021	15.6	80	17.4	02.02.2021	
	20.04.2021	14.6	80	17.4	02.02.2021	
	27.05.2021	14.5	80	17.4	02.02.2021	
	17.05.2021	15.2	80	17.4	02.02.2021	
	07.06.2021	12.8	80	17.4	02.02.2021	
ETU Building (Electrical Traction Unit)	10.04.2021	16.8	80	15.2	02.02.2021	
	26.05.2021	15.2	80	15.2	02.02.2021	
	18.05.2021	14.8	80	15.2	02.02.2021	
	08.06.2021	13.5	80	15.2	02.02.2021	

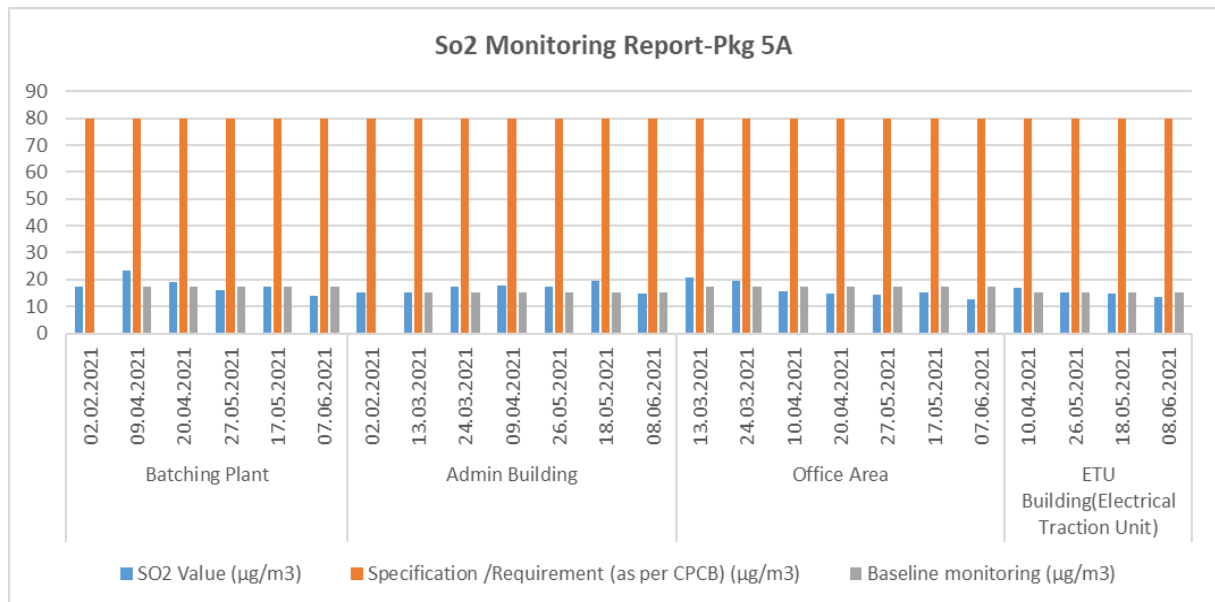


Table 45: Nitrogen Dioxide-NO2 Report-P05a

Location	Monitoring Date	NO2 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Batching Plant	02.02.2021	53.2	80			24 hours
	09.04.2021	54.8	80	53.2	02.02.2021	
	20.04.2021	48.5	80	53.2	02.02.2021	
	27.05.2021	45.5	80	53.2	02.02.2021	

Location	Monitoring Date	NO2 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
	17.05.2021	42.30	80	53.2	02.02.2021	
	07.06.2021	51.60	80	53.2	02.02.2021	
Admin Building	02.02.2021	47.8	80			
	13.03.2021	46.5	80	47.8	02.02.2021	
	24.03.2021	47.70	80	47.8	02.02.2021	
	09.04.2021	48.20	80	47.8	02.02.2021	
	26.05.2021	43.50	80	47.8	02.02.2021	
	18.05.2021	39.80	80	47.8	02.02.2021	
	08.06.2021	48.60	80	47.8	02.02.2021	
Office Area	13.03.2021	53.6	80	53.2	02.02.2021	
	24.03.2021	51.50	80	53.2	02.02.2021	
	10.04.2021	41.30	80	53.2	02.02.2021	
	20.04.2021	39.20	80	53.2	02.02.2021	
	27.05.2021	42.60	80	53.2	02.02.2021	
	17.05.2021	38.50	80	53.2	02.02.2021	
	07.06.2021	45.50	80	53.2	02.02.2021	
ETU Building (Electrical Traction Unit)	10.04.2021	46.20	80	47.8	02.02.2021	
	26.05.2021	39.80	80	47.8	02.02.2021	
	18.05.2021	37.20	80	47.8	02.02.2021	
	08.06.2021	42.80	80	47.8	02.02.2021	

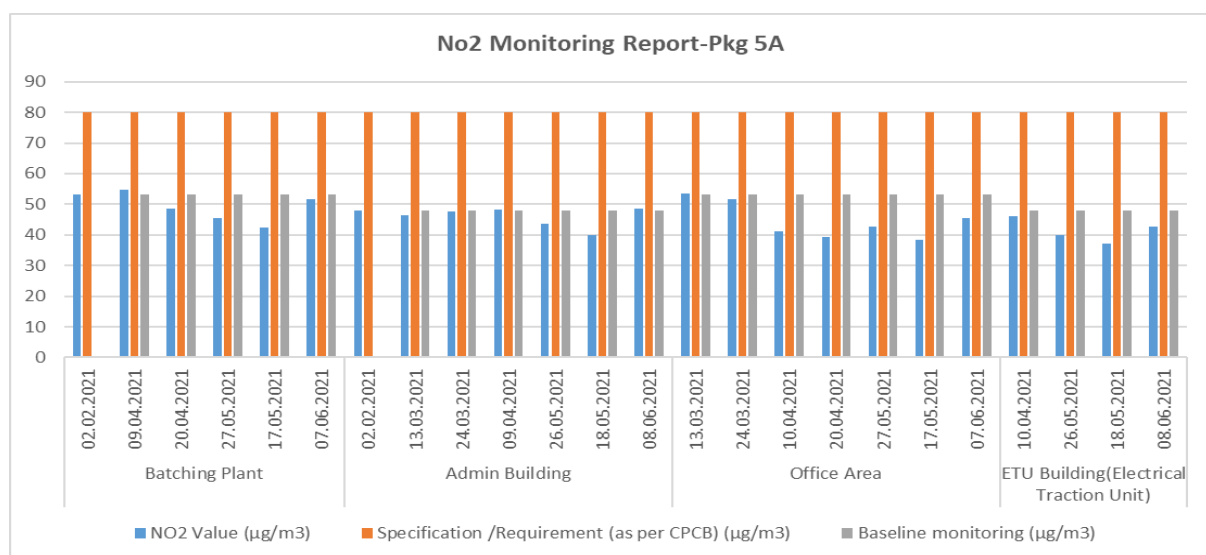


Table 46: Carbon Monoxide-CO Report-P05a

Location	Monitoring Date	CO Value (mg/m3)	Specification /Requirement (as per CPCB) (mg/m3)	Baseline monitoring (mg/m3)	Baseline monitoring Date	Time weighted Average
Batching Plant	02.02.2021	1	2			8 hours
	09.04.2021	1	2	1	02.02.2021	

Location	Monitoring Date	CO Value (mg/m3)	Specification /Requirement (as per CPCB) (mg/m3)	Baseline monitoring (mg/m3)	Baseline monitoring Date	Time weighted Average
	20.04.2021	1	2	1	02.02.2021	
	27.05.2021	1	2	1	02.02.2021	
	17.05.2021	1	2	1	02.02.2021	
	07.06.2021	1	2	1	02.02.2021	
Admin Building	02.02.2021	0.8	2			
	13.03.2021	1.6	2	0.8	02.02.2021	
	24.03.2021	0.9	2	0.8	02.02.2021	
	09.04.2021	0.8	2	0.8	02.02.2021	
	26.05.2021	0.5	2	0.8	02.02.2021	
	18.05.2021	0.6	2	0.8	02.02.2021	
	08.06.2021	1	2	0.8	02.02.2021	
Office Area	13.03.2021	1.5	2	1	02.02.2021	
	24.03.2021	1	2	1	02.02.2021	
	10.04.2021	0.5	2	1	02.02.2021	
	20.04.2021	0.8	2	1	02.02.2021	
	27.05.2021	0.5	2	1	02.02.2021	
	17.05.2021	0.5	2	1	02.02.2021	
	07.06.2021	0.5	2	1	02.02.2021	
ETU Building (Electrical Traction Unit)	10.04.2021	0.5	2	0.8	02.02.2021	
	26.05.2021	0.6	2	0.8	02.02.2021	
	18.05.2021	0.5	2	0.8	02.02.2021	
	08.06.2021	0.8	2	0.8	02.02.2021	

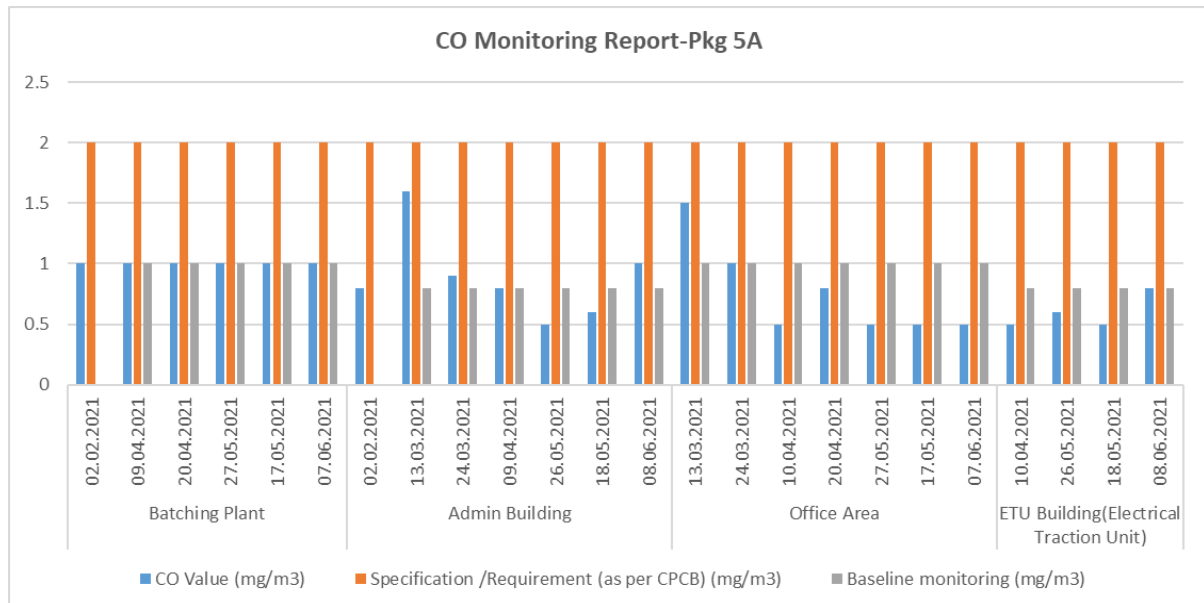
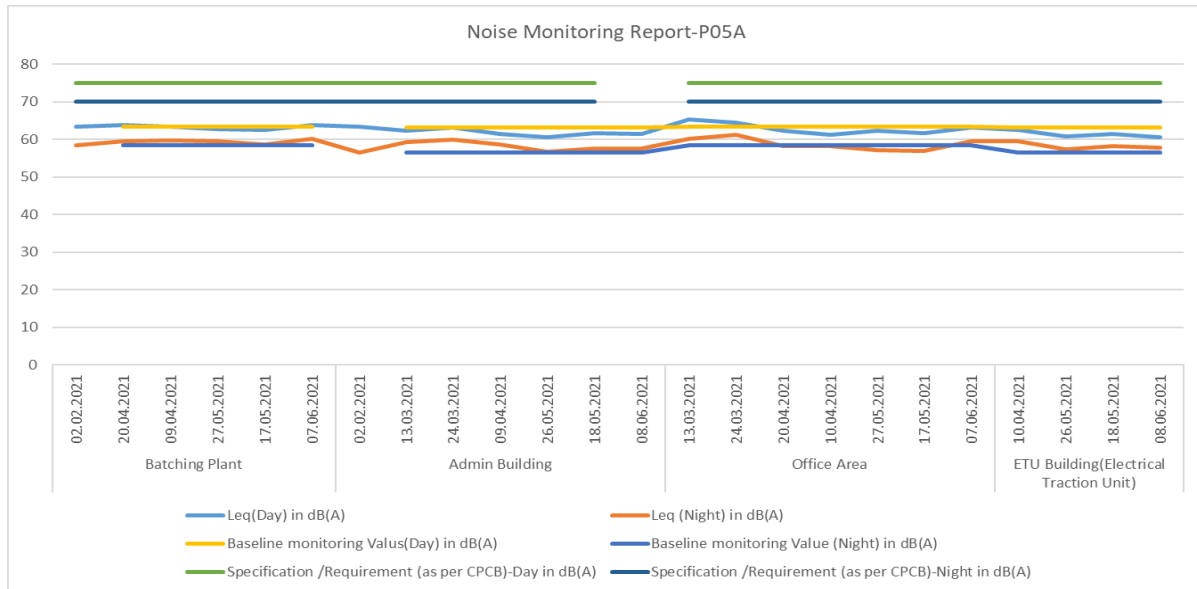


Table 47: Noise Monitoring Report-P05a

Location	Monitoring Date	Leq(Day) in dB(A)	Leq (Night) in dB(A)	Baseline monitoring Date	Baseline monitoring Values (Day) in dB(A)	Baseline monitoring Value (Night) in dB(A)	Specification /Requirement (as per CPCB)-Day in dB(A)	Specification /Requirement (as per CPCB)-Night in dB(A)
Batching Plant	02.02.2021	63.4	58.4				75	70
	20.04.2021	63.9	59.4	02.02.2021	63.4	58.4	75	70
	09.04.2021	63.4	59.8	02.02.2021	63.4	58.4	75	70
	27.05.2021	62.8	59.4	02.02.2021	63.4	58.4	75	70
	17.05.2021	62.5	58.6	02.02.2021	63.4	58.4	75	70
	07.06.2021	63.9	60.1	02.02.2021	63.4	58.4	75	70
Admin Building	02.02.2021	63.3	56.4				75	70
	13.03.2021	62.2	59.3	02.02.2021	63.3	56.4	75	70
	24.03.2021	63.1	59.9	02.02.2021	63.3	56.4	75	70
	09.04.2021	61.4	58.7	02.02.2021	63.3	56.4	75	70
	26.05.2021	60.5	56.8	02.02.2021	63.3	56.4	75	70
	18.05.2021	61.6	57.6	02.02.2021	63.3	56.4	75	70
	08.06.2021	61.5	57.6	02.02.2021	63.3	56.4		
Office Area							75	70
	13.03.2021	65.3	60.2	02.02.2021	63.4	58.4		
	24.03.2021	64.5	61.3	02.02.2021	63.4	58.4	75	70
	20.04.2021	62.3	58.2	02.02.2021	63.4	58.4	75	70
	10.04.2021	61.3	58.2	02.02.2021	63.4	58.4	75	70
	27.05.2021	62.4	57.1	02.02.2021	63.4	58.4	75	70
	17.05.2021	61.7	56.9	02.02.2021	63.4	58.4	75	70
	07.06.2021	63.2	59.5	02.02.2021	63.4	58.4	75	70
ETU Building (Electrical Traction Unit)		62.6	59.4				75	70
	10.04.2021			02.02.2021	63.3	56.4		
	26.05.2021	60.8	57.4	02.02.2021	63.3	56.4	75	70
	18.05.2021	61.5	58.3	02.02.2021	63.3	56.4	75	70
	08.06.2021	60.5	57.7	02.02.2021	63.3	56.4	75	70



28. **Package No- P06-** During the months of January-June 2021 the environmental parameters like PM₁₀, PM_{2.5}, Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) and Noise level measured by NABL accredited laboratory (M/s Ecoteps Laboratory Pvt Ltd). PM₁₀ & PM_{2.5} value are more than permissible limit provided by CPCB. Values have exceeded due to heavy traffic movement. Other environmental parameters like Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) found within permissible limit. The noise level exceeds the CPCB limit.

Table 48: Particulate Matters-PM₁₀ Report -P06

Location	Monitoring Date	PM ₁₀ Value (µg/m ³)	Specification /Requirement (as per CPCB) (µg/m ³)	Baseline monitoring (µg/m ³)	Baseline monitoring Date	Time weighted Average
Ghaziपुर Casting Yard	11.02.2021	380.50	100			24 hours
	26.02.2021	339.6	100	380.50	11.02.2021	
	11.03.2021	232	100	380.50	11.02.2021	
	25.03.2021	209.5	100	380.50	11.02.2021	
	08.04.2021	225.7	100	380.50	11.02.2021	
	02.06.2021	198.00	100	380.50	11.02.2021	
	17.06.2021	207.00	100	380.50	11.02.2021	
New Ashok Nagar	11.02.2021	298	100			
	26.02.2021	312.4	100	298	11.02.2021	
	11.03.2021	214	100	298	11.02.2021	
	25.03.2021	197.4	100	298	11.02.2021	
	08.04.2021	218.4	100	298	11.02.2021	
	02.06.2021	182.1	100	298	11.02.2021	
	17.06.2021	198	100	298	11.02.2021	
Sarai Kale Khan	12.02.2021	356.2	100			
	27.02.2021	319.4	100	356.2	12.02.2021	
	12.03.2021	248	100	356.2	12.02.2021	
	26.03.2021	219	100	356.2	12.02.2021	
	09.04.2021	238.2	100	356.2	12.02.2021	

Location	Monitoring Date	PM10 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Well Foundation	03.06.2021	209.00	100	356.2	12.02.2021	
	18.06.2021	217.00	100	356.2	12.02.2021	
	12.02.2021	282.20	100			
	27.02.2021	296.40	100	282.20	12.02.2021	
	12.03.2021	204.00	100	282.20	12.02.2021	
	26.03.2021	186.20	100	282.20	12.02.2021	
	09.04.2021	172.60	100	282.20	12.02.2021	
	03.06.2021	157.90	100	282.20	12.02.2021	
	18.06.2021	166.00	100	282.20	12.02.2021	

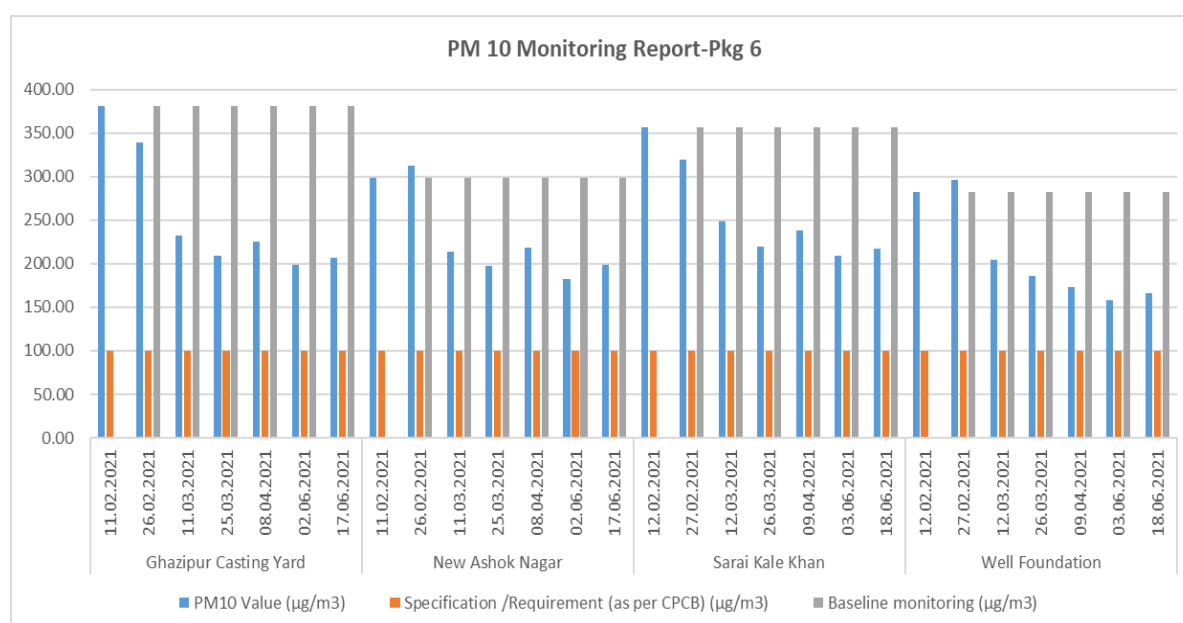


Table 49: Particulate Matters-PM2.5 Report-P06

Location	Monitoring Date	PM2.5 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Ghazipur Casting Yard	11.02.2021	264	60			24 hours
	26.02.2021	242.6	60	264	11.02.2021	
	11.03.2021	213	60	264	11.02.2021	
	25.03.2021	152.4	60	264	11.02.2021	
	08.04.2021	164.1	60	264	11.02.2021	
	02.06.2021	137.60	60	264	11.02.2021	
	17.06.2021	144.20	60	264	11.02.2021	
New Ashok Nagar	11.02.2021	176.4	60			
	26.02.2021	188.5	60	176.4	11.02.2021	
	11.03.2021	192.4	60	176.4	11.02.2021	

Location	Monitoring Date	PM2.5 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
	25.03.2021	123.2	60	176.4	11.02.2021	
	08.04.2021	139.7	60	176.4	11.02.2021	
	02.06.2021	122	60	176.4	11.02.2021	
	17.06.2021	137.4	60	176.4	11.02.2021	
Sarai Kale Khan	12.02.2021	248.2	60			
	27.02.2021	217.6	60	248.2	12.02.2021	
	12.03.2021	209	60	248.2	12.02.2021	
	26.03.2021	161.2	60	248.2	12.02.2021	
	09.04.2021	170.5	60	248.2	12.02.2021	
	03.06.2021	153.20	60	248.2	12.02.2021	
	18.06.2021	145.60	60	248.2	12.02.2021	
Well Foundation	12.02.2021	192.8	60			
	27.02.2021	181.2	60	192.8	12.02.2021	
	12.03.2021	160.6	60	192.8	12.02.2021	
	26.03.2021	119.4	60	192.8	12.02.2021	
	09.04.2021	112.2	60	192.8	12.02.2021	
	03.06.2021	102.50	60	192.8	12.02.2021	
	18.06.2021	112.50	60	192.8	12.02.2021	

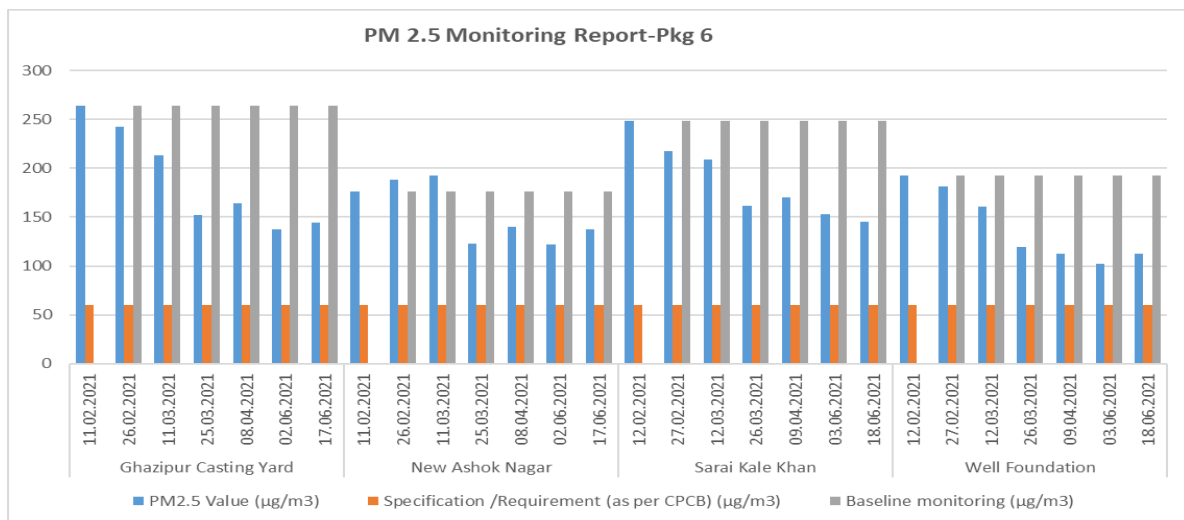


Table 50: Sulphur Dioxide-SO₂ Report-P06

Location	Monitoring Date	SO ₂ Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Ghazipur Casting Yard	11.02.2021	12.8	80			24 hours
	26.02.2021	14.6	80	12.8	11.02.2021	
	11.03.2021	19.8	80	12.8	11.02.2021	
	25.03.2021	18.4	80	12.8	11.02.2021	
	08.40.2021	17.4	80	12.8	11.02.2021	

Location	Monitoring Date	SO2 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
	02.06.2021	15.8	80	12.8	11.02.2021	
	17.06.2021	16	80	12.8	11.02.2021	
New Ashok Nagar	11.02.2021	10.2	80			
	26.02.2021	16.3	80	10.2	11.02.2021	
	11.03.2021	18.8	80	10.2	11.02.2021	
	25.03.2021	17.6	80	10.2	11.02.2021	
	08.04.2021	18.5	80	10.2	11.02.2021	
	02.06.2021	14.2	80	10.2	11.02.2021	
	17.06.2021	15.1	80	10.2	11.02.2021	
Sarai Kale Khan	12.02.2021	14.6	80			
	27.02.2021	16.2	80	14.6	12.02.2021	
	12.03.2021	21.2	80	14.6	12.02.2021	
	26.03.2021	20.4	80	14.6	12.02.2021	
	09.04.2021	19.4	80	14.6	12.02.2021	
	03.06.2021	17.4	80	14.6	12.02.2021	
	18.06.2021	16.5	80	14.6	12.02.2021	
Well Foundation	12.02.2021	10.9	80			
	27.02.2021	13.2	80	10.9	12.02.2021	
	12.03.2021	17.2	80	10.9	12.02.2021	
	26.03.2021	16.1	80	10.9	12.02.2021	
	09.04.2021	15.4	80	10.9	12.02.2021	
	03.06.2021	12.7	80	10.9	12.02.2021	
	18.06.2021	13.2	80	10.9	12.02.2021	

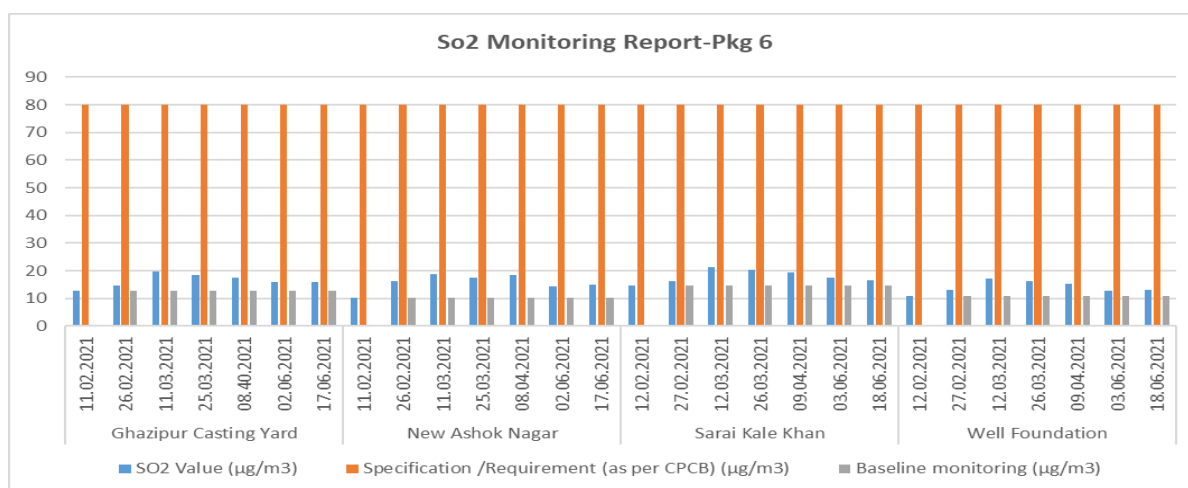


Table 51: Nitrogen Dioxide-NO2 Report-P06

Location	Monitoring Date	NO2 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Ghazipur Casting Yard	11.02.2021	68.5	80			24 hours
	26.02.2021	63.2	80	68.5	11.02.2021	
	11.03.2021	59.20	80	68.5	11.02.2021	
	25.03.2021	57.10	80	68.5	11.02.2021	
	08.04.2021	53.40	80	68.5	11.02.2021	
	02.06.2021	44.60	80	68.5	11.02.2021	
	17.06.2021	48.30	80	68.5	11.02.2021	
New Ashok Nagar	11.02.2021	52.4	80			
	26.02.2021	57.20	80	52.4	11.02.2021	
	11.03.2021	53.90	80	52.4	11.02.2021	
	25.03.2021	52.50	80	52.4	11.02.2021	
	08.04.2021	56.20	80	52.4	11.02.2021	
	02.06.2021	38.40	80	52.4	11.02.2021	
	17.06.2021	42.40	80	52.4	11.02.2021	
Sarai Kale Khan	12.02.2021	61.2	80			
	27.02.2021	57.60	80	61.2	12.02.2021	
	12.03.2021	51.00	80	61.2	12.02.2021	
	26.03.2021	53.20	80	61.2	12.02.2021	
	09.04.2021	56.20	80	61.2	12.02.2021	
	03.06.2021	45.60	80	61.2	12.02.2021	
	18.06.2021	50.20	80	61.2	12.02.2021	
Well Foundation	12.02.2021	48.20	80			
	27.02.2021	45.10	80	48.20	12.02.2021	
	12.03.2021	41.30	80	48.20	12.02.2021	
	26.03.2021	39.90	80	48.20	12.02.2021	
	09.04.2021	37.60	80	48.20	12.02.2021	
	03.06.2021	32.6	80	48.20	12.02.2021	
	18.06.2021	34.80	80	48.20	12.02.2021	

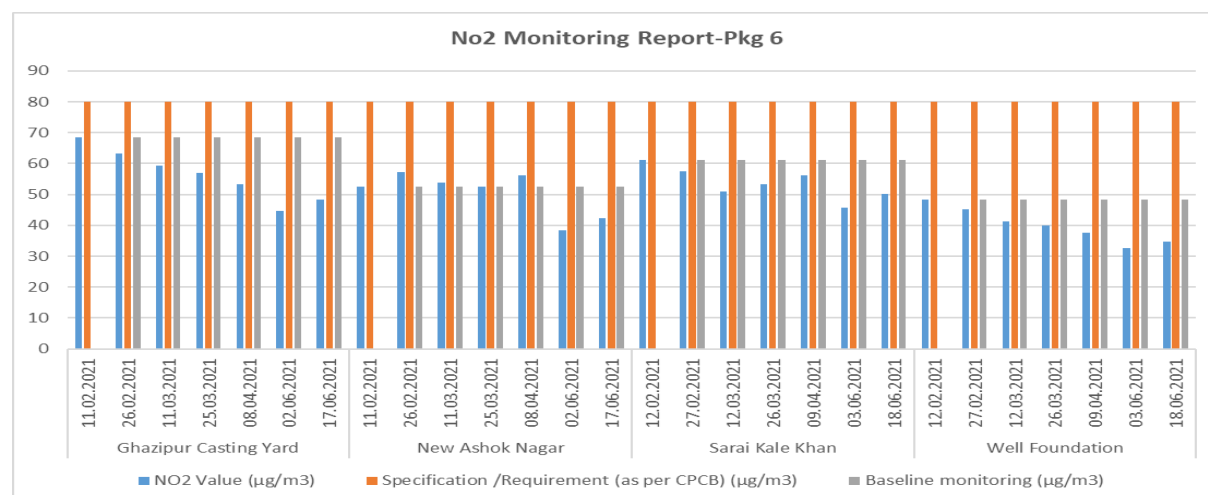


Table 52: Carbon Monoxide-CO Report-P06

Location	Monitoring Date	CO Value (mg/m3)	Specification /Requirement (as per CPCB) (mg/m3)	Baseline monitoring (mg/m3)	Baseline monitoring Date	Time weighted Average
Ghazipur Casting Yard	11.02.2021	0.76	2			8 hrs
	26.02.2021	0.7	2	0.76	11.02.2021	
	11.03.2021	0.74	2	0.76	11.02.2021	
	25.03.2021	0.68	2	0.76	11.02.2021	
	08.04.2021	0.65	2	0.76	11.02.2021	
	02.06.2021	0.49	2	0.76	11.02.2021	
	17.06.2021	0.52	2	0.76	11.02.2021	
New Ashok Nagar	11.02.2021	0.66	2			
	26.02.2021	0.74	2	0.66	11.02.2021	
	11.03.2021	0.68	2	0.66	11.02.2021	
	25.03.2021	0.5	2	0.66	11.02.2021	
	08.04.2021	0.57	2	0.66	11.02.2021	
	02.06.2021	0.46	2	0.66	11.02.2021	
	17.06.2021	0.49	2	0.66	11.02.2021	
Sarai Kale Khan	12.02.2021	0.68	2			
	27.02.2021	0.72	2	0.68	12.02.2021	
	12.03.2021	0.61	2	0.68	12.02.2021	
	26.03.2021	0.67	2	0.68	12.02.2021	
	09.04.2021	0.69	2	0.68	12.02.2021	
	03.06.2021	0.52	2	0.68	12.02.2021	
	18.06.2021	0.54		0.68	12.02.2021	
Well Foundation	12.02.2021	0.46	2			
	27.02.2021	0.51	2	0.46	12.02.2021	
	12.03.2021	0.45	2	0.46	12.02.2021	
	26.03.2021	0.42	2	0.46	12.02.2021	
	09.04.2021	0.46	2	0.46	12.02.2021	
	03.06.2021	0.4	2	0.46	12.02.2021	
	18.06.2021	0.42	2	0.46	12.02.2021	

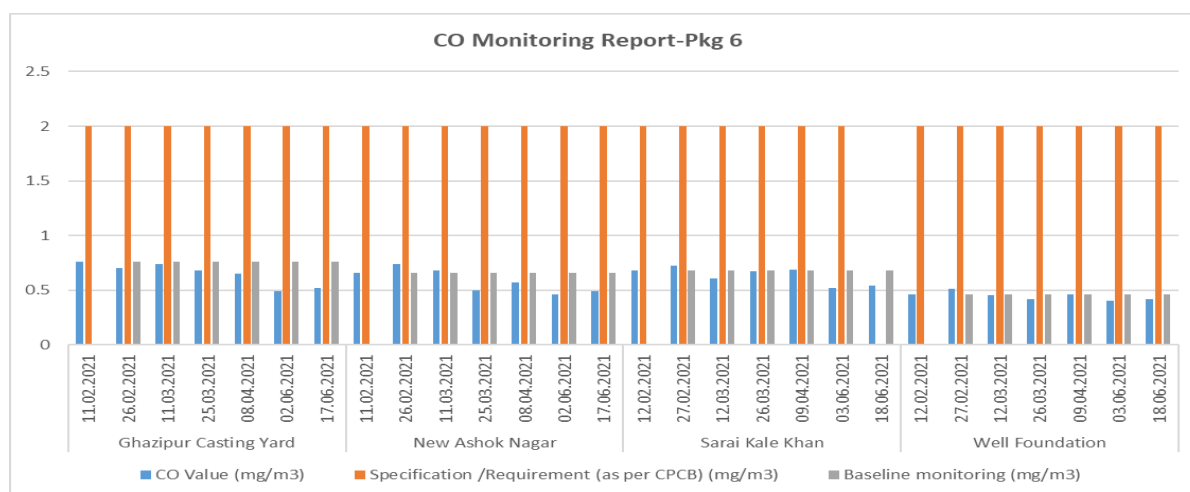
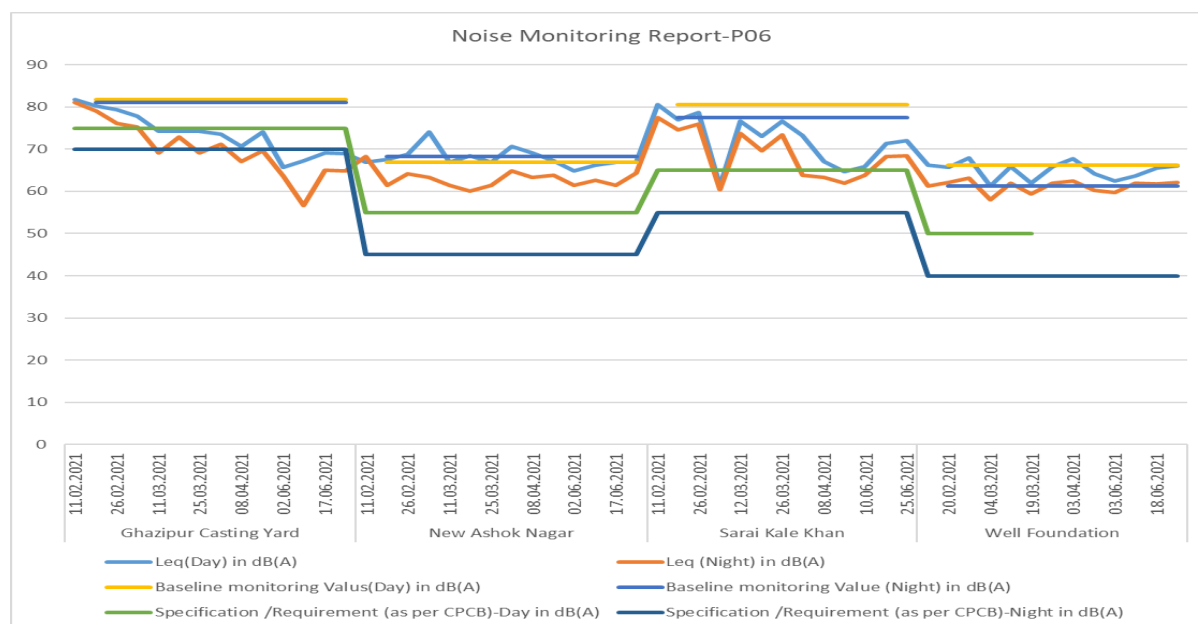


Table 53: Noise Monitoring Report-P06

Location	Monitoring Date	Leq(Day) in dB(A)	Leq (Night) in dB(A)	Baseline monitoring Date	Baseline monitoring Values (Day) in dB(A)	Baseline monitoring Value (Night) in dB(A)	Specification /Requirement (as per CPCB)- Day in dB(A)	Specification /Requirement (as per CPCB)- Night in dB(A)
Ghazipur Casting Yard	11.02.2021	81.8	81.1				75	70
	19.02.2021	80.3	79.1	11.02.2021	81.8	81.1	75	70
	26.02.2021	79.3	76.1	11.02.2021	81.8	81.1	75	70
	04.03.2021	77.8	75.2	11.02.2021	81.8	81.1	75	70
	11.03.2021	74.3	69.2	11.02.2021	81.8	81.1	75	70
	19.03.2021	74.2	72.9	11.02.2021	81.8	81.1	75	70
	25.03.2021	74.3	69.2	11.02.2021	81.8	81.1	75	70
	02.04.2021	73.5	71.1	11.02.2021	81.8	81.1	75	70
	08.04.2021	70.7	67.1	11.02.2021	81.8	81.1	75	70
	15.04.2021	74.1	69.6	11.02.2021	81.8	81.1	75	70
	02.06.2021	65.7	63.6	11.02.2021	81.8	81.1	75	70
	10.06.2021	67.3	56.6	11.02.2021	81.8	81.1	75	70
	17.06.2021	69.1	65.1	11.02.2021	81.8	81.1	75	70
	25.06.2021	69	64.8	11.02.2021	81.8	81.1	75	70
New Ashok Nagar	11.02.2021	66.9	68.2				55	45
	19.02.2021	67.5	61.5	11.02.2021	66.9	68.2	55	45
	26.02.2021	68.7	64.2	11.02.2021	66.9	68.2	55	45
	04.03.2021	74	63.4	11.02.2021	66.9	68.2	55	45
	11.03.2021	66.9	61.4	11.02.2021	66.9	68.2	55	45
	19.03.2021	68.4	60.1	11.02.2021	66.9	68.2	55	45
	25.03.2021	66.9	61.4	11.02.2021	66.9	68.2	55	45
	03.04.2021	70.6	64.8	11.02.2021	66.9	68.2	55	45
	08.04.2021	69.1	63.4	11.02.2021	66.9	68.2	55	45
	15.04.2021	67.3	63.9	11.02.2021	66.9	68.2	55	45
	02.06.2021	64.9	61.5	11.02.2021	66.9	68.2	55	45
	10.06.2021	66.2	62.7	11.02.2021	66.9	68.2	55	45
	17.06.2021	66.9	61.4	11.02.2021	66.9	68.2	55	45
	24.06.2021	66.9	64.3	11.02.2021	66.9	68.2	55	45
Sarai Kale Khan	11.02.2021	80.6	77.5				65	55
	19.02.2021	76.9	74.6	11.02.2021	80.6	77.5	65	55
	26.02.2021	78.6	75.9	11.02.2021	80.6	77.5	65	55
	04.03.2021	61.2	60.4	11.02.2021	80.6	77.5	65	55
	12.03.2021	76.6	73.7	11.02.2021	80.6	77.5	65	55
	20.03.2021	73.1	69.7	11.02.2021	80.6	77.5	65	55
	26.03.2021	76.6	73.4	11.02.2021	80.6	77.5	65	55
	03.04.2021	73.3	63.9	11.02.2021	80.6	77.5	65	55
	08.04.2021	67.1	63.3	11.02.2021	80.6	77.5	65	55
	03.06.2021	64.7	61.9	11.02.2021	80.6	77.5	65	55
	10.06.2021	65.9	63.8	11.02.2021	80.6	77.5	65	55
	18.06.2021	71.4	68.3	11.02.2021	80.6	77.5	65	55
	25.06.2021	72.1	68.4	11.02.2021	80.6	77.5	65	55

Location	Monitoring Date	Leq(Day) in dB(A)	Leq(Night) in dB(A)	Baseline monitoring Date	Baseline monitoring Values (Day) in dB(A)	Baseline monitoring Value (Night) in dB(A)	Specification /Requirement (as per CPCB)-Day in dB(A)	Specification /Requirement (as per CPCB)-Night in dB(A)
Well Foundation	12.02.2021	66.3	61.2				50	40
	20.02.2021	65.7	62.2	12.02.2021	66.3	61.2	50	40
	27.02.2021	67.9	63.2	12.02.2021	66.3	61.2	50	40
	04.03.2021	61.2	58.1	12.02.2021	66.3	61.2	50	40
	12.03.2021	65.8	61.9	12.02.2021	66.3	61.2	50	40
	19.03.2021	62	59.4	12.02.2021	66.3	61.2	50	40
	26.03.2021	65.8	61.9	12.02.2021	66.3	61.2	50	40
	03.04.2021	67.7	62.5	12.02.2021	66.3	61.2	50	40
	09.04.2021	64.1	60.3	12.02.2021	66.3	61.2	50	40
	03.06.2021	62.4	59.8	12.02.2021	66.3	61.2	50	40
	10.06.2021	63.7	62	12.02.2021	66.3	61.2	50	40
	18.06.2021	65.6	61.8	12.02.2021	66.3	61.2	50	40
	24.06.2021	66	62.1	12.02.2021	66.3	61.2	50	40



29. **Package No- P07-** During the months of January-June 2021 the environmental parameters like PM₁₀, PM_{2.5}, Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) and Noise level measured by NABL accredited laboratory (M/s Ecosteps Laboratory Pvt Ltd). PM₁₀ & PM_{2.5} value are more than permissible limit provided by CPCB. Values have exceeded due to heavy traffic movement on existing highway (Delhi- Haridwar), matter emission is very high due to burning of fuels in vehicles. Other environmental parameters like Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) found within permissible limit; except on one day SO₂ value exceed more the limit. The noise level exceeds the CPCB limit at four locations.

Table 54: Particulate Matters-PM10 Report -P07

Location	Monitoring Date	PM10 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Casting Yard	25.02.2021	335.00	100			24 hours
	08.03.2021	234.00	100	335.00	25.02.2021	
	19.04.2021	217	100	335.00	25.02.2021	
	25.05.2021	198	100	335.00	25.02.2021	
	03.06.2021	179.50	100	335.00	25.02.2021	
	21.06.2021	186.00	100	335.00	25.02.2021	
Reach-1	25.02.2021	268.00	100			
	08.03.2021	228.40	100	268.00	25.02.2021	
	19.04.2021	237.00	100	268.00	25.02.2021	
	24.05.2021	211.00	100	268.00	25.02.2021	
	03.06.2021	192.40	100	268.00	25.02.2021	
	21.06.2021	152.00	100	268.00	25.02.2021	
MES	23.03.2021	248.60	100			
	09.03.2021	281.00	100	248.60	23.03.2021	
	21.04.2021	247.00	100	248.60	23.03.2021	
	04.06.2021	180.40	100	248.60	23.03.2021	
	22.06.2021	168.00	100	248.60	23.03.2021	
Daurli	23.03.2021	219.80	100			
	12.04.2021	238.60	100	219.80	23.03.2021	
	25.05.2021	202.00	100	219.80	23.03.2021	
Modipuram	26.02.2021	274.00	100			
	09.03.2021	268.20	100	274.00	26.02.2021	
	20.04.2021	253.00	100	274.00	26.02.2021	
	25.05.2021	214.00	100	274.00	26.02.2021	
	04.06.2021	190.20	100	274.00	26.02.2021	
	22.06.2021	148.00	100	274.00	26.02.2021	

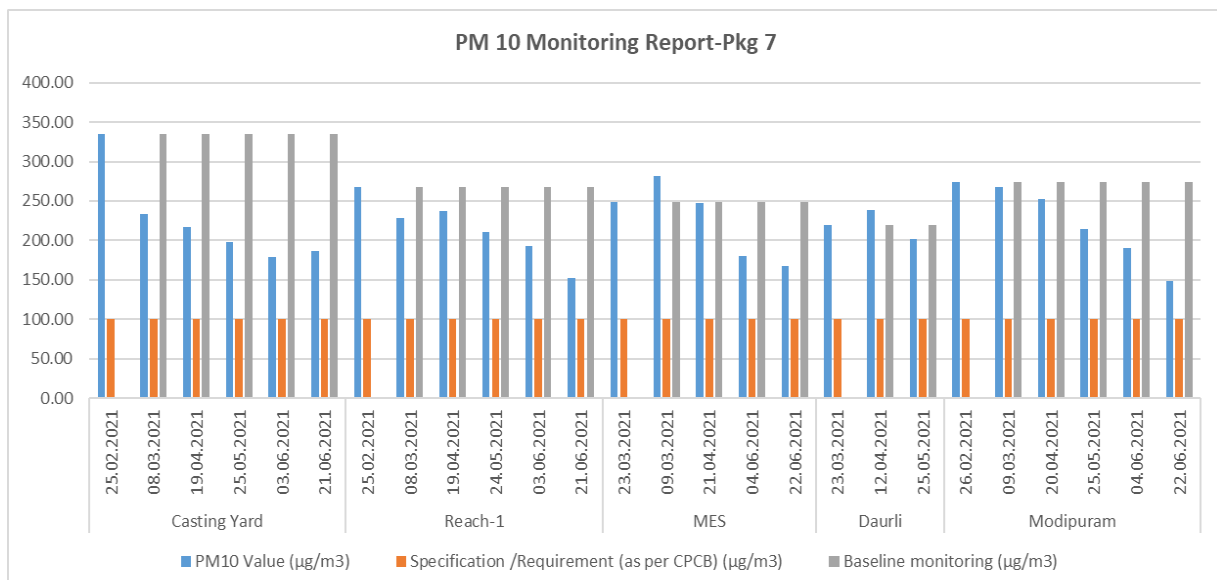


Table 55: Particulate Matters-PM2.5 Report-P07

Location	Monitoring Date	PM2.5 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Casting Yard	25.02.2021	185	60			24 hours
	08.03.2021	209	60	185	25.02.2021	
	19.04.2021	169.00	60	185	25.02.2021	
	25.05.2021	126.00	60	185	25.02.2021	
	03.06.2021	116.80	60	185	25.02.2021	
	21.06.2021	124.20	60	185	25.02.2021	
Reach-1	25.02.2021	235.00	60			
	08.03.2021	198.90	60	235.00	25.02.2021	
	19.04.2021	174.00	60	235.00	25.02.2021	
	24.05.2021	143.40	60	235.00	25.02.2021	
	03.06.2021	131.20	60	235.00	25.02.2021	
	21.06.2021	82.50	60	235.00	25.02.2021	
MES	23.03.2021	192.30	60			
	09.03.2021	240	60	192.30	23.03.2021	
	21.04.2021	196.00	60	192.30	23.03.2021	
	04.06.2021	125.40	60	192.30	23.03.2021	
	22.06.2021	168.00	60	192.30	23.03.2021	
Daurli	23.03.2021	179.60	60			
	12.04.2021	188.20	60	179.60	23.03.2021	
	25.05.2021	141.20	60	179.60	23.03.2021	
Modipuram	26.02.2021	214.00	60			
	09.03.2021	236.80	60	214.00	26.02.2021	
	20.04.2021	185.00	60	214.00	26.02.2021	
	25.05.2021	156.00	60	214.00	26.02.2021	
	04.06.2021	130.50	60	214.00	26.02.2021	
	22.06.2021	67.90	60	214.00	26.02.2021	

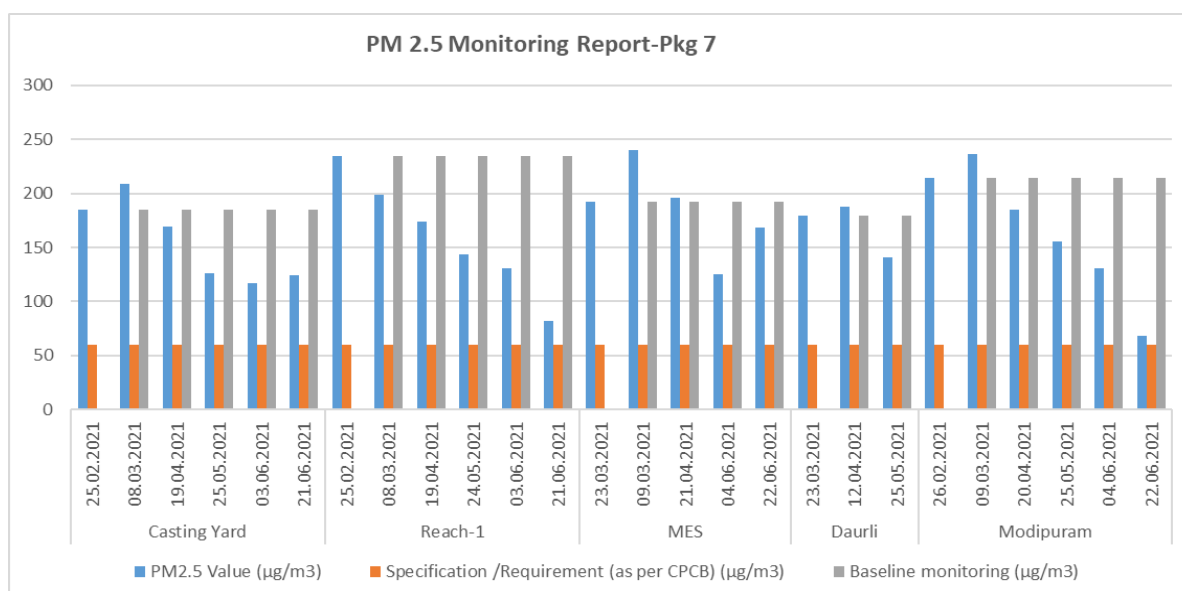


Table 56: Sulphur Dioxide-SO₂ Report-P07

Location	Monitoring Date	SO ₂ Value (µg/m ³)	Specification /Requirement (as per CPCB) (µg/m ³)	Baseline monitoring (µg/m ³)	Baseline monitoring Date	Time weighted Average
Casting Yard	25.02.2021	17.8	80			24 hours
	08.03.2021	15.6	80	17.8	25.02.2021	
	19.04.2021	15.3	80	17.8	25.02.2021	
	25.05.2021	14.2	80	17.8	25.02.2021	
	03.06.2021	13.2	80	17.8	25.02.2021	
	21.06.2021	20.6	80	17.8	25.02.2021	
Reach-1	25.02.2021	22.4	80			
	08.03.2021	17.6	80	22.4	25.02.2021	
	19.04.2021	16.7	80	22.4	25.02.2021	
	24.05.2021	18.2	80	22.4	25.02.2021	
	03.06.2021	17.4	80	22.4	25.02.2021	
	21.06.2021	18.9	80	22.4	25.02.2021	
MES	23.03.2021	17.4	80			
	09.03.2021	116.2	80	17.4	23.03.2021	
	21.04.2021	18.3	80	17.4	23.03.2021	
	04.06.2021	14.1	80	17.4	23.03.2021	
	22.06.2021	16.8	80	17.4	23.03.2021	
Daurli	23.03.2021	15.6	80			
	12.04.2021	16.8	80	15.6	23.03.2021	
	25.05.2021	14.1	80	15.6	23.03.2021	
Modipuram	26.02.2021	20.2	80			
	09.03.2021	18.4	80	20.2	26.02.2021	
	20.04.2021	19.4	80	20.2	26.02.2021	
	25.05.2021	17.3	80	20.2	26.02.2021	
	04.06.2021	13.6	80	20.2	26.02.2021	
	22.06.2021	18.2	80	20.2	26.02.2021	

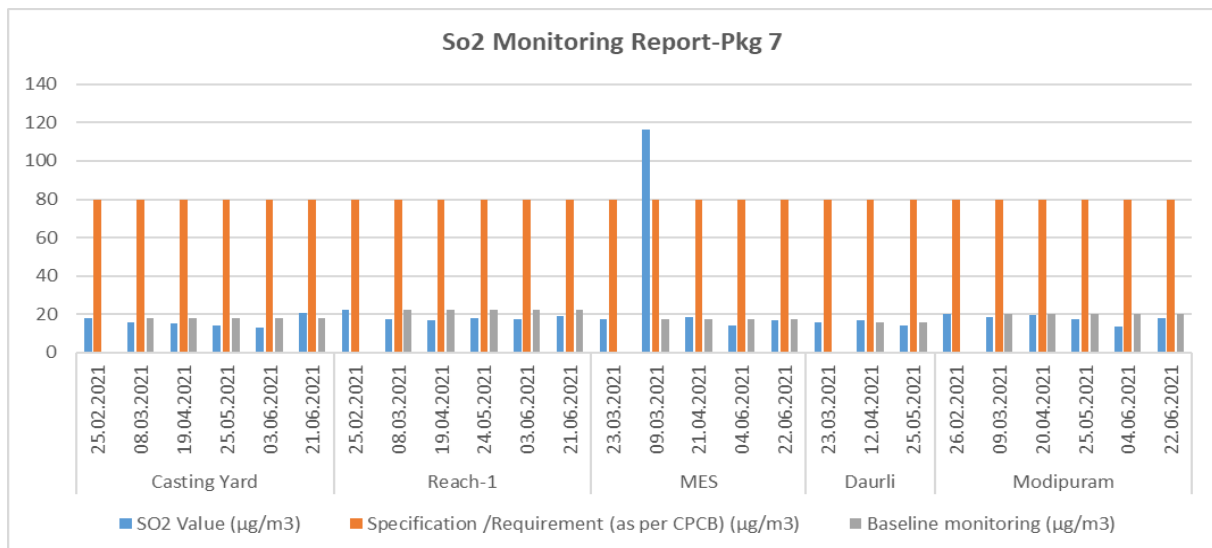


Table 57: Nitrogen Dioxide-NO2 Report-P07

Location	Monitoring Date	NO2 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Casting Yard	25.02.2021	46.6	80			24 hours
	08.03.2021	41.4	80	46.6	25.02.2021	
	19.04.2021	40.50	80	46.6	25.02.2021	
	25.05.2021	38.90	80	46.6	25.02.2021	
	03.06.2021	34.50	80	46.6	25.02.2021	
	21.06.2021	54.80	80	46.6	25.02.2021	
Reach-1	25.02.2021	59.2	80			
	08.03.2021	49.7	80	59.2	25.02.2021	
	19.04.2021	46.90	80	59.2	25.02.2021	
	24.05.2021	40.10	80	59.2	25.02.2021	
	03.06.2021	38.20	80	59.2	25.02.2021	
	21.06.2021	51.20	80	59.2	25.02.2021	
MES	23.03.2021	50.6	80			
	09.03.2021	43.70	80	50.6	23.03.2021	
	21.04.2021	50.10	80	50.6	23.03.2021	
	04.06.2021	41.00	80	50.6	23.03.2021	
	22.06.2021	45.40	80	50.6	23.03.2021	
Daurli	23.03.2021	45.80	80			
	12.04.2021	49.40	80	45.80	23.03.2021	
	25.05.2021	40.30	80	45.80	23.03.2021	
Modipuram	26.02.2021	54.70	80			
	09.03.2021	48.60	80	54.70	26.02.2021	
	20.04.2021	49.60	80	54.70	26.02.2021	
	25.05.2021	41.10	80	54.70	26.02.2021	
	04.06.2021	39.20	80	54.70	26.02.2021	
	22.06.2021	52.80	80	54.70	26.02.2021	

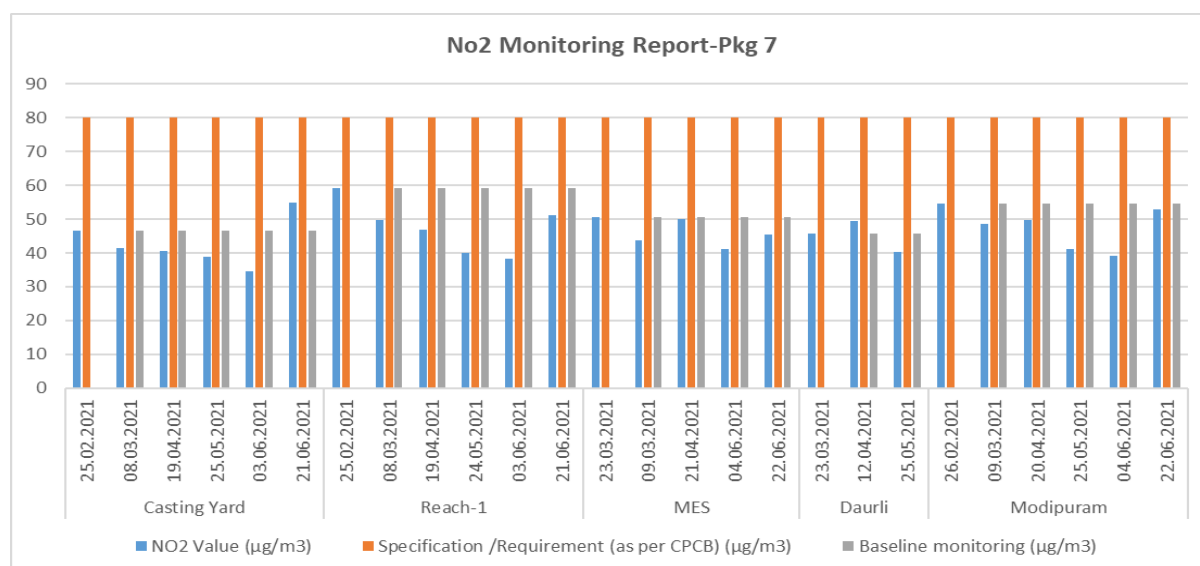


Table 58: Carbon Monoxide-CO Report-P07

Location	Monitoring Date	CO Value (mg/m3)	Specification /Requirement (as per CPCB) (mg/m3)	Baseline monitoring (mg/m3)	Baseline monitoring Date	Time weighted Average
Casting Yard	25.02.2021	0.49	2			8 hours
	08.03.2021	0.41	2	0.49	25.02.2021	
	19.04.2021	0.48	2	0.49	25.02.2021	
	25.05.2021	0.42	2	0.49	25.02.2021	
	03.06.2021	0.39	2	0.49	25.02.2021	
	21.06.2021	0.62	2	0.49	25.02.2021	
Reach-1	25.02.2021	0.51	2			
	08.03.2021	0.56	2	0.51	25.02.2021	
	19.04.2021	0.51	2	0.51	25.02.2021	
	24.05.2021	0.48	2	0.51	25.02.2021	
	03.06.2021	0.44	2	0.51	25.02.2021	
	21.06.2021	0.67	2	0.51	25.02.2021	
MES	23.03.2021	0.56	2			
	09.03.2021	0.58	2	0.56	23.03.2021	
	21.04.2021	0.49	2	0.56	23.03.2021	
	04.06.2021	0.42	2	0.56	23.03.2021	
	22.06.2021	0.49	2	0.56	23.03.2021	
Daurli	23.03.2021	0.51	2			
	12.04.2021	0.56	2	0.51	23.03.2021	
	25.05.2021	0.46	2	0.51	23.03.2021	
Modipuram	26.02.2021	0.62	2			
	09.03.2021	0.58	2	0.62	26.02.2021	
	20.04.2021	0.52	2	0.62	26.02.2021	
	25.05.2021	0.43	2	0.62	26.02.2021	
	04.06.2021	0.4	2	0.62	26.02.2021	
	22.06.2021	0.65	2	0.62	26.02.2021	

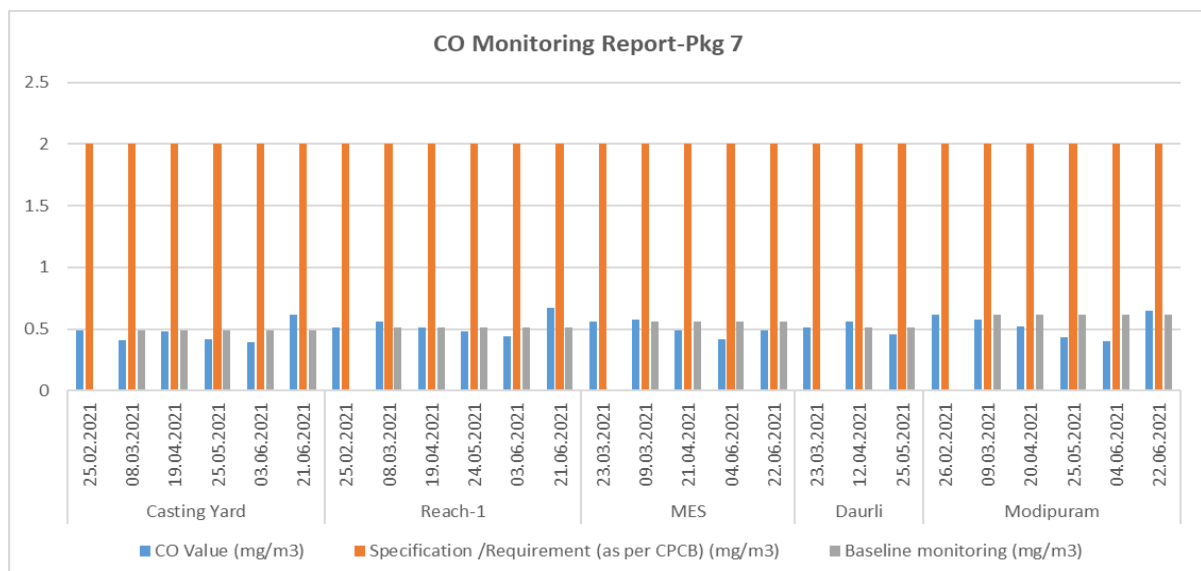
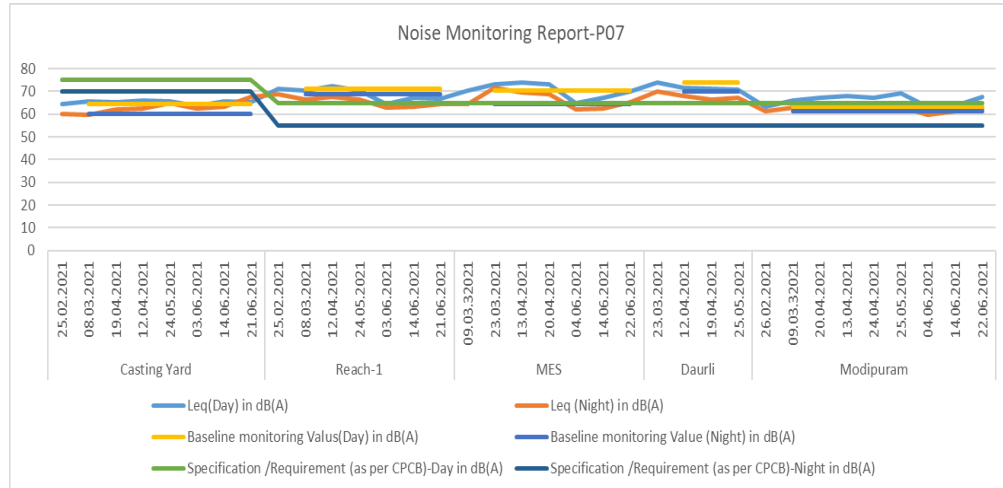


Table 59: Noise Monitoring Report-P07

Location	Monitoring Date	Leq (Day) in dB(A)	Leq (Night) in dB(A)	Baseline monitoring Date	Baseline monitoring Values (Day) in dB(A)	Baseline monitoring Value (Night) in dB(A)	Specification /Requirement (as per CPCB)-Day in dB(A)	Specification /Requirement (as per CPCB)-Night in dB(A)
Casting Yard	25.02.2021	64.5	60.1				75	70
	08.03.2021	65.7	59.6	25.02.2021	64.5	60.1	75	70
	19.04.2021	65.4	61.9	25.02.2021	64.5	60.1	75	70
	12.04.2021	66	62.5	25.02.2021	64.5	60.1	75	70
	24.05.2021	65.7	64.7	25.02.2021	64.5	60.1	75	70
	03.06.2021	63.8	62.5	25.02.2021	64.5	60.1	75	70
	14.06.2021	65.6	63.4	25.02.2021	64.5	60.1	75	70
	21.06.2021	65.2	67.7	25.02.2021	64.5	60.1	75	70
Reach-1	25.02.2021	71.2	68.9				65	55
	08.03.2021	70.3	66.5	25.02.2021	71.2	68.9	65	55
	12.04.2021	72.5	67.8	25.02.2021	71.2	68.9	65	55
	24.05.2021	70.5	66.5	25.02.2021	71.2	68.9	65	55
	03.06.2021	64.6	62.9	25.02.2021	71.2	68.9	65	55
	14.06.2021	67.1	63.4	25.02.2021	71.2	68.9	65	55
	21.06.2021	66.9	64.5	25.02.2021	71.2	68.9	65	55
MES	09.03.32021	70.2	64.3				65	55
	23.03.2021	73.1	71.5	09.03.32021	70.2	64.3	65	55
	13.04.2021	74	69.7	09.03.32021	70.2	64.3	65	55
	20.04.2021	73.2	68.9	09.03.32021	70.2	64.3	65	55
	04.06.2021	64.7	61.9	09.03.32021	70.2	64.3	65	55
	14.06.2021	67.3	62.5	09.03.32021	70.2	64.3	65	55
	22.06.2021	69.8	65.4	09.03.32021	70.2	64.3	65	55
Daurli	23.03.2021	73.8	70.1				65	55
	12.04.2021	71.7	67.9	23.03.2021	73.8	70.1	65	55
	19.04.2021	71	66.4	23.03.2021	73.8	70.1	65	55
	25.05.2021	70.7	67.1	23.03.2021	73.8	70.1	65	55
Modipuram	26.02.2021	63.4	61.2				65	55
	09.03.32021	66.1	62.8	26.02.2021	63.4	61.2	65	55
	20.04.2021	67.2	63.3	26.02.2021	63.4	61.2	65	55
	13.04.2021	67.9	64	26.02.2021	63.4	61.2	65	55
	24.04.2021	67.2	63.3	26.02.2021	63.4	61.2	65	55
	25.05.2021	69.1	63.4	26.02.2021	63.4	61.2	65	55
	04.06.2021	63.2	59.9	26.02.2021	63.4	61.2	65	55
	14.06.2021	63.7	61.2	26.02.2021	63.4	61.2	65	55
	22.06.2021	67.7	62.5	26.02.2021	63.4	61.2	65	55



30. **Package No- P08-** During the months of January-June 2021 the environmental for parameters PM10 & noise level measured by NABL accredited laboratory (Dell Environmental Monitoring Centre Pvt.Ltd). PM 10 value are more than permissible limit provided by CPCB. Particular matter emission is very high due to traffic on road. Noise limits exceed the CPCB limits for daytime at three locations.

Table 60: Particulate Matters-PM10 Report -P08

Location	Monitoring Date	PM10 Value ($\mu\text{g}/\text{m}^3$)	Specification /Requirement (as per CPCB) ($\mu\text{g}/\text{m}^3$)	Baseline monitoring ($\mu\text{g}/\text{m}^3$)	Baseline monitoring Date	Time weighted Average
Batching Plant/Casting Yard	29.05.2021	109.00	100			24 hours
Meerut Central Station	29.05.2021	126.00	100			
Bhaisali Station	29.05.2021	117.00	100			
Begumpul Station	29.05.2021	137.00	100			

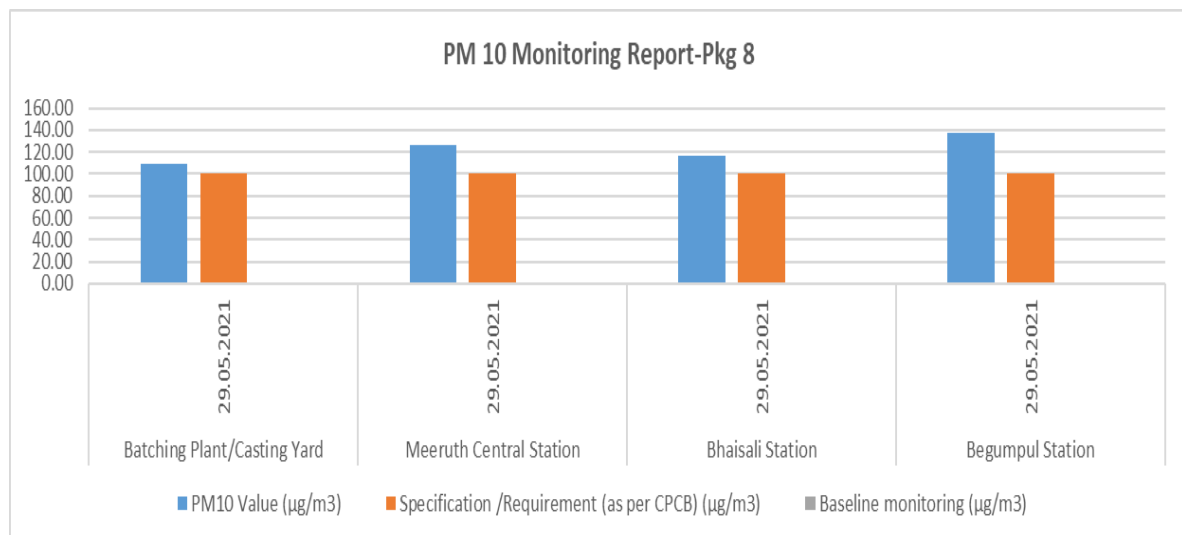
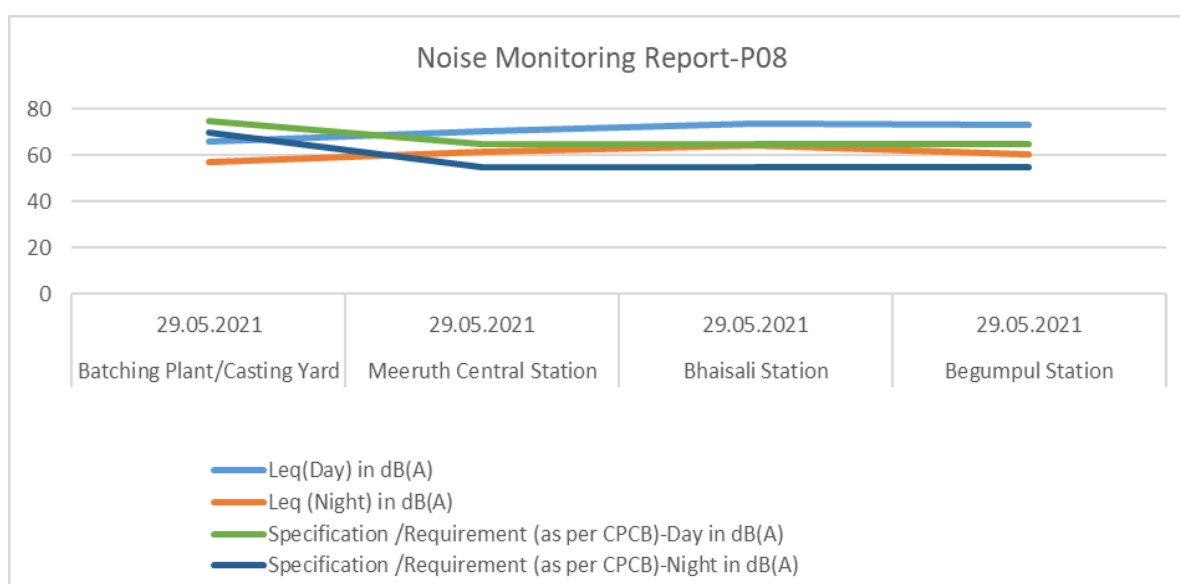


Table 61: Noise Monitoring Report-P08

Location	Monitoring Date	Leq (Day) in dB(A)	Leq (Night) in dB(A)	Baseline monitoring Date	Baseline monitoring Values (Day) in dB(A)	Baseline monitoring Value (Night) in dB(A)	Specification /Requirement (as per CPCB)-Day in dB(A)	Specification /Requirement (as per CPCB)-Night in dB(A)
Batching Plant/Casting Yard	29.05.2021	66.2	57.2				75	70
Meerut Central Station	29.05.2021	70.2	61.8				65	55
Bhaisali Station	29.05.2021	73.7	64.3				65	55
Begumpul Station	29.05.2021	73.5	60.2				65	55



31. **Package No- P09A-** During the months of January-June 2021 the environmental parameters like PM₁₀, PM_{2.5}, Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) and Noise level measured by NABL accredited laboratory (M/s Ecoteps Laboratory Pvt. Ltd). PM₁₀ & PM_{2.5} value are more than permissible limit provided by CPCB. Particular matter emission is very high due to burning of fuels in vehicles. Other environmental parameters like Sulphur dioxide (SO₂), Nitrogen dioxide (NO₂), Carbon Monoxide (CO) found within permissible limit. The noise level was found with the limit.

Table 62: Particulate Matters-PM₁₀ Report- P09a

Location	Monitoring Date	PM ₁₀ Value (µg/m ³)	Specification /Requirement (as per CPCB) (µg/m ³)	Baseline monitoring (µg/m ³)	Baseline monitoring Date	Time weighted Average
Batching Plant	04.02.2021	266.00	100			24 hours
	22.02.2021	296.50	100	266.00	04.02.2021	
	05.-3.2021	206	100	266.00	04.02.2021	
	23.03.2021	242	100	266.00	04.02.2021	
	08.06.2021	171.00	100	266.00	04.02.2021	

Location	Monitoring Date	PM10 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Fabrication Unit	23.06.2021	182.00	100	266.00	04.02.2021	
	04.02.2021	289.00	100			
	22.02.2021	305.80	100	289.00	04.02.2021	
	05.-3.2021	219.60	100	289.00	04.02.2021	
	23.03.2021	230.40	100	289.00	04.02.2021	
	08.06.2021	192.00		289.00	04.02.2021	
	23.06.2021	203.00	100	289.00	04.02.2021	

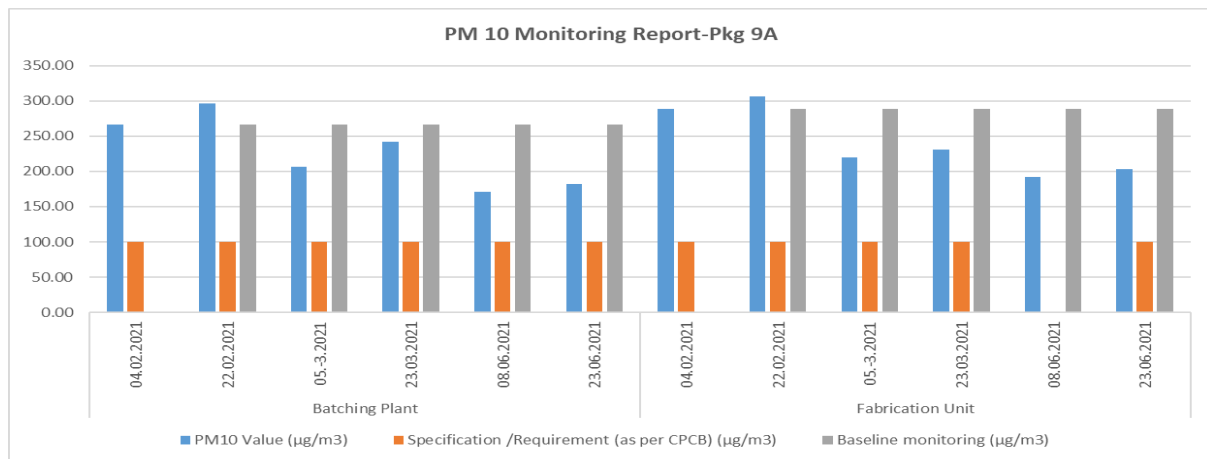


Table 63: Particulate Matters-PM2.5 Report-P09a

Location	Monitoring Date	PM2.5 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Batching Plant	04.02.2021	182.2	60			24 hours
	22.02.2021	198.6	60	182.2	04.02.2021	
	05.-3.2021	176.50	60	182.2	04.02.2021	
	23.03.2021	186.50	60	182.2	04.02.2021	
	08.06.2021	115.00	60	182.2	04.02.2021	
	23.06.2021	124.60	60	182.2	04.02.2021	
Fabrication Unit	04.02.2021	192.80	60			
	22.02.2021	215.20	60	192.80	04.02.2021	
	05.-3.2021	189.60	60	192.80	04.02.2021	
	23.03.2021	178.90	60	192.80	04.02.2021	
	08.06.2021	124.00	60	192.80	04.02.2021	
	23.06.2021	132.20	60	192.80	04.02.2021	

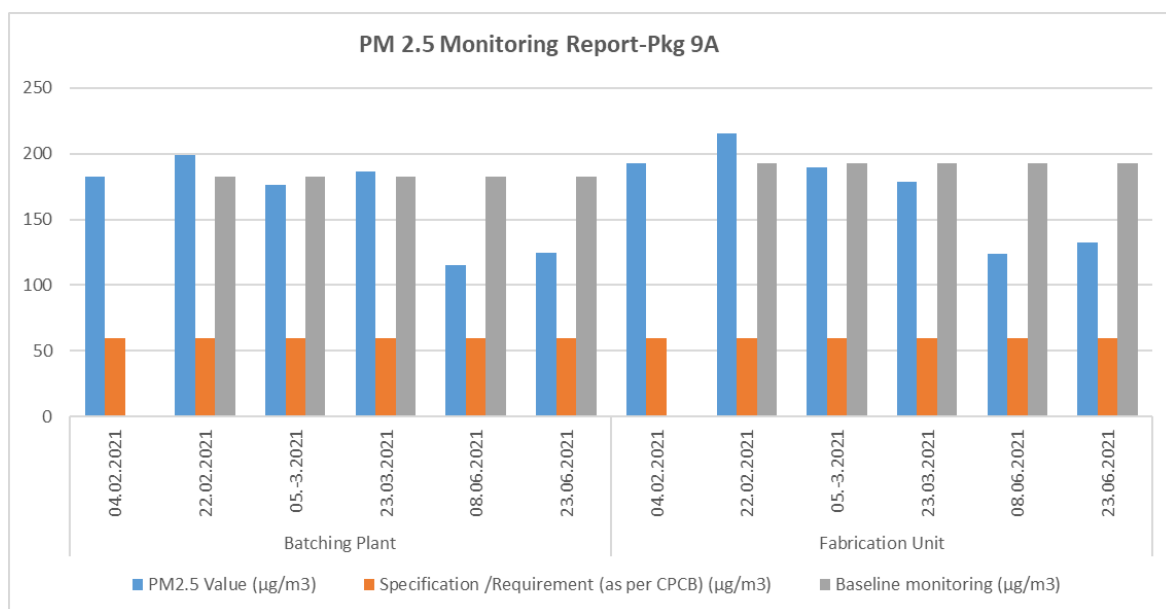


Table 64: Sulphur Dioxide-SO₂ Report-P09a

Location	Monitoring Date	SO ₂ Value (µg/m ³)	Specification / Requirement (as per CPCB) (µg/m ³)	Baseline monitoring (µg/m ³)	Baseline monitoring Date	Time weighted Average
Batching Plant	04.02.2021	14.5	80			24 hours
	22.02.2021	16.4	80	14.5	04.02.2021	
	05.03.2021	15.8	80	14.5	04.02.2021	
	23.03.2021	16.4	80	14.5	04.02.2021	
	08.06.2021	11.7	80	14.5	04.02.2021	
	23.06.2021	13.9	80	14.5	04.02.2021	
Fabrication Unit	04.02.2021	15.3	80			
	22.02.2021	17.4	80	15.3	04.02.2021	
	05.03.2021	19.2	80	15.3	04.02.2021	
	23.03.2021	17.5	80	15.3	04.02.2021	
	08.06.2021	12.1	80	15.3	04.02.2021	
	23.06.2021	14.8	80	15.3	04.02.2021	

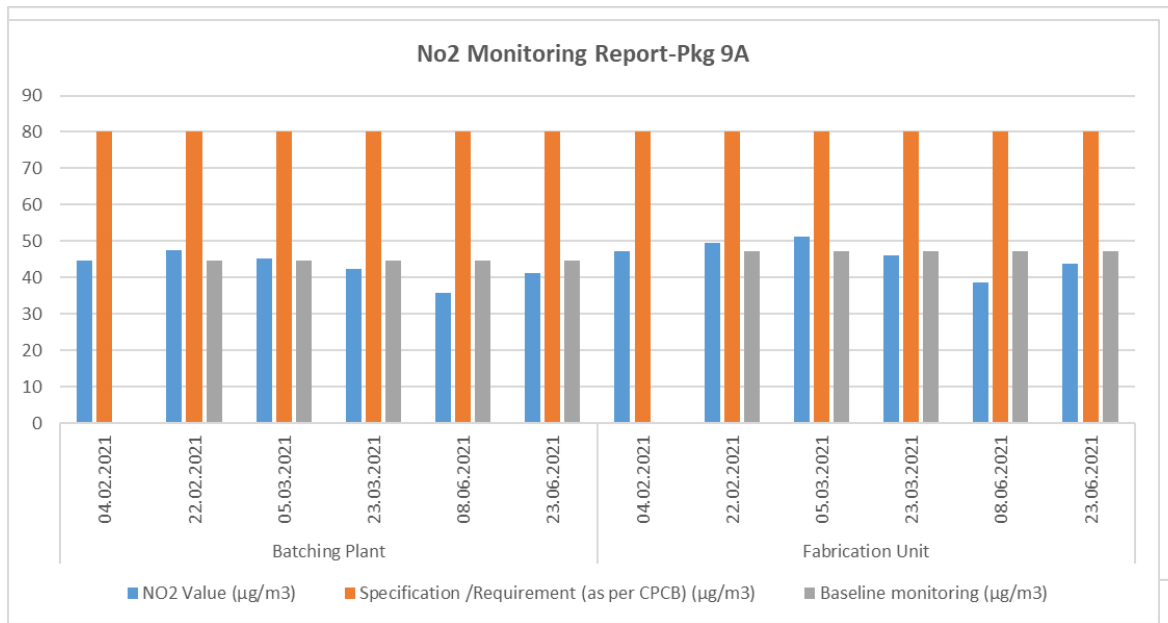


Table 65: Nitrogen Dioxide-NO2 Report-P09a

Location	Monitoring Date	NO2 Value (µg/m3)	Specification /Requirement (as per CPCB) (µg/m3)	Baseline monitoring (µg/m3)	Baseline monitoring Date	Time weighted Average
Batching Plant	04.02.2021	44.8	80			24 hours
	22.02.2021	47.6	80	44.8	04.02.2021	
	05.03.2021	45.20	80	44.8	04.02.2021	
	23.03.2021	42.40	80	44.8	04.02.2021	
	08.06.2021	35.80	80	44.8	04.02.2021	
	23.06.2021	41.30	80	44.8	04.02.2021	
Fabrication Unit	04.02.2021	47.2	80			
	22.02.2021	49.6	80	47.2	04.02.2021	
	05.03.2021	51.20	80	47.2	04.02.2021	
	23.03.2021	46.20	80	47.2	04.02.2021	
	08.06.2021	38.60	80	47.2	04.02.2021	
	23.06.2021	43.80	80	47.2	04.02.2021	

Table 66: Carbon Monoxide-CO Report-P09a

Location	Monitoring Date	CO Value (mg/m3)	Specification /Requirement (as per CPCB) (mg/m3)	Baseline monitoring (mg/m3)	Baseline monitoring Date	Time weighted Average
Batching Plant	04.02.2021	0.52	2			8 hours
	22.02.2021	0.64	2	0.52	04.02.2021	
	05.03.2021	0.48	2	0.52	04.02.2021	
	23.03.2021	0.45	2	0.52	04.02.2021	

Location	Monitoring Date	CO Value (mg/m3)	Specification /Requirement (as per CPCB) (mg/m3)	Baseline monitoring (mg/m3)	Baseline monitoring Date	Time weighted Average
Fabrication Unit	08.06.2021	0.49	2	0.52	04.02.2021	
	23.06.2021	0.53	2	0.52	04.02.2021	
	04.02.2021	0.48	2			
	22.02.2021	0.58	2	0.48	04.02.2021	
	05.03.2021	0.63	2	0.48	04.02.2021	
	23.03.2021	0.54	2	0.48	04.02.2021	
Batching Plant	08.06.2021	0.53	2	0.48	04.02.2021	
	23.06.2021	0.56	2	0.48	04.02.2021	

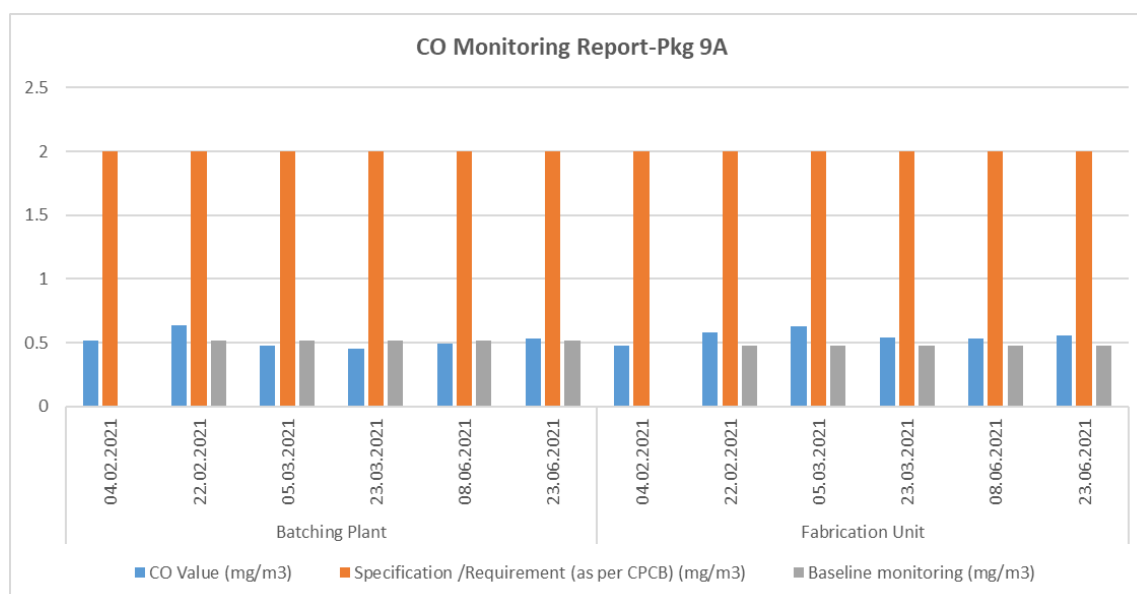
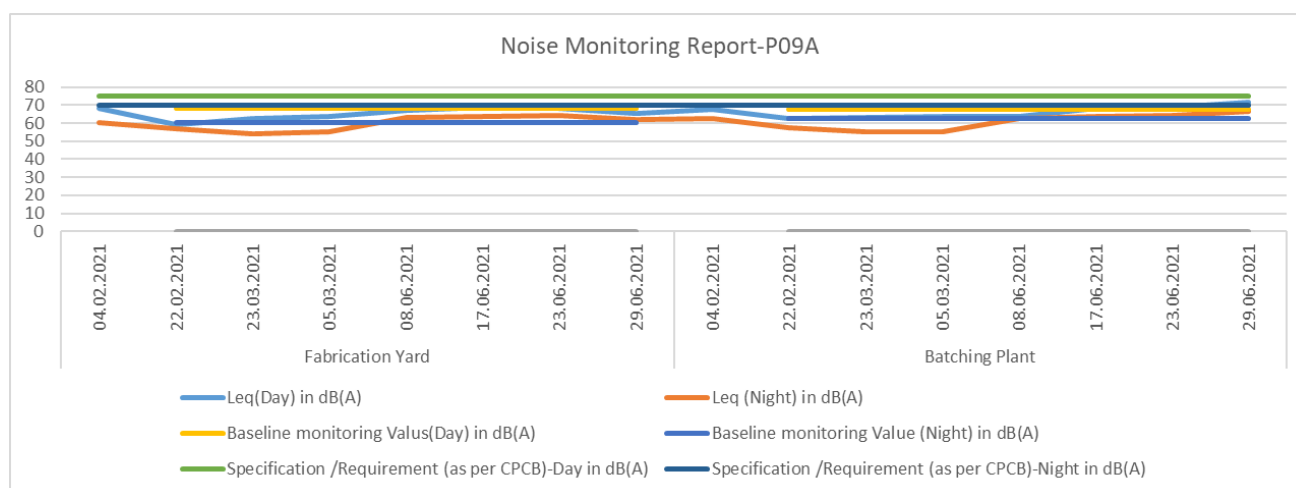


Table 67: Noise Monitoring Report-P09a

Location	Monitoring Date	Leq(Day) in dB(A)	Leq (Night) in dB(A)	Baseline monitoring Date	Baseline monitoring Values (Day) in dB(A)	Baseline monitoring Value (Night) in dB(A)	Specification /Requirement (as per CPCB)-Day in dB(A)	Specification /Requirement (as per CPCB)-Night in dB(A)
Fabrication Yard	04.02.2021	68.4	60.6				75	70
	22.02.2021	59.1	56.9	04.02.2021	68.4	60.6	75	70
	23.03.2021	62.7	54.2	04.02.2021	68.4	60.6	75	70
	05.03.2021	63.6	55.3	04.02.2021	68.4	60.6	75	70
	08.06.2021	67.1	63.4	04.02.2021	68.4	60.6	75	70
	17.06.2021	69.1	63.6	04.02.2021	68.4	60.6	75	70
	23.06.2021	68.2	64.3	04.02.2021	68.4	60.6	75	70
	29.06.2021	65.4	61.9	04.02.2021	68.4	60.6	75	70
Batching Plant	04.02.2021	67.7	62.9				75	70
	22.02.2021	62.8	57.6	04.02.2021	67.7	62.9	75	70
	23.03.2021	63.2	55.1	04.02.2021	67.7	62.9	75	70

Location	Monitoring Date	Leq(Day) in dB(A)	Leq (Night) in dB(A)	Baseline monitoring Date	Baseline monitoring Values (Day) in dB(A)	Baseline monitoring Value (Night) in dB(A)	Specification /Requirement (as per CPCB)-Day in dB(A)	Specification /Requirement (as per CPCB)-Night in dB(A)
	05.03.2021	63.9	55.2	04.02.2021	67.7	62.9	75	70
	08.06.2021	63.7	62.5	04.02.2021	67.7	62.9	75	70
	17.06.2021	68.4	64	04.02.2021	67.7	62.9	75	70
	23.06.2021	69.1	64.6	04.02.2021	67.7	62.9	75	70
	29.06.2021	71.9	66.5	04.02.2021	67.7	62.9	75	70



VI. Measures Taken to Mitigate Air pollution

32. The following mitigative measures are taken to control dust generation:
- Frequent sprinkling of water to suppress dust at the sites.
 - Deployment of anti-smog guns
 - Covering of construction vehicles carrying construction material with tarpuline
 - Disposal of C & D waste to the nearest C & D plant
 - Greening of open areas and tree plantation wherever possible
33. Photographs depicting some of the above measures are enclosed at **Attachment-9**.

VII. Building Conditions survey for underground section of the project-

34. This RRTS corridor involves underground construction (RRTS alignment and stations). The contracts for the underground section in Delhi (Pkg-4) and contract for the underground section in Meerut (Pkg-8) have been awarded in Dec.2020. The contractors in both these underground packages have taken up the building condition survey and is almost completed.

VIII. Noise and Vibration Study

35. Noise and vibration study for the entire project including the connecting line from Sarai Kale Khan RRTS station to Stabling yard at Jungpura, was entrusted by NCRTC to Central Road Research Institute (CRRI). The report submitted by CRRI was sent to ADB. Revised report incorporating compliance of ADB comments is under finalization.

IX. Measures to Combat COVID-19 Pandemic

36. COVID-19 pandemic situation which started on 24th March 2020 and continued till June 2021 with intermittent working windows. During this period COVID-19 protocol issued by Government of India has been followed in word and spirit. The sudden onset and rapid spread of the second wave of the pandemic has affected lot of personnel at all levels and caused disruption in movement of men, machinery, and material. Construction has slowed down on account of the following: -

- Complete stoppage of work for some time
- Reduction of working hours.
- Shortage of labour due to their immigration and health conditions.
- Supply chains has disturbed leading to shortage of construction materials
- Ban on industrial oxygen has affected works of shuttering for box pushing, concrete panels for building works etc.
- Restricted movement of contractors' personnel including engineers during lockdown.
- Difficulty in mobilization of heavy machinery and non-availability of spare parts.

37. Contractors were encouraged to increase the labour strength by making extra arrangements for ensuring safety and comfort and medical support to improve confidence level of workers. The following steps have been taken to prevent the spread of the virus among the personnel, provide care and to monitor the impact of the pandemic on the project works: -

- NCRTC built a Biosphere to help the employees working for NCRTC in the phase of COVID-19.
- A COVID-19 Committee was formed in the pandemic to provide help to the employees in need.
- A COVID center named "NIRMAYA" consisting of 10 beds, equipped with all the necessary equipment's was built at Sarai Kale Khan for the people working for NCRTC.
- Quarantine centres have been opened at site with facilities of beds, fans, separate toilet, kitchen and drinking water.
- Ensuring COVID appropriate behaviour as per directions issued by GOI, among staff and labour by knowledge dissemination during toolbox talks and awareness slogans/posters
- Sanitization of labour camps, office, and work sites twice a day
- Mandatory use of face masks
- Thermal scanning, hand sanitization and status of Arogya Setu app of labour and staff at entrance
- Special transport arrangements ensuring social distancing
- Checking of blood oxygen saturation level (SpO2) at site
- Availability of doctor, first aid and ambulance at site
- Encouraging social distancing at site and workplace
- Daily reporting of positive cases/symptomatic cases to avoid spread of Covid-19.
- Registration of workers and staff being carried out on CoWIN portal.
- Vaccination drive carried out and NCRTC staff, contractor's staff and labours are vaccinated mostly.
- Nukkad Nataks were arranged for awareness regarding the need for vaccination