

Environmental Monitoring Report

Semiannual Report (January to June 2021)
July 2021

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

Annex 1- Part 2

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



This environmental monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

ANNEX 1



Annexure.2

Weekly Environment Inspection Report

	AFCONS INFRASTRUCTURE LIMITED			
	WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST		Rev : 0	07/11/2020
	Doc. No. AFC/SHE/3570//F24		Pages :02	

Date: 30/6/21

WEEKLY ENVIRONMENTAL INSPECTION					
Report No		Inspection Date 30.06.2021		Inspected By Ashish Kumar	
Inspection Area Well Foundation					
Participants Ashish Kumar, Shubham, Shiv Batra, Kumar Ashish					
S NO	ITEM	OBSERVATION	REMARKS	ACTION BY DATE	BY WHOM
1.0	AIR POLLUTION				
1.1	Dust (Approach roads, adjacent roads, working area, cement handling etc.)	<input checked="" type="checkbox"/> Site Satisfactory <input type="checkbox"/> Site Dusty <input checked="" type="checkbox"/> Sprinkling carried out as required <input checked="" type="checkbox"/> Excavate removal within 2 days			
1.2	Generators	<input checked="" type="checkbox"/> Satisfactory <input checked="" type="checkbox"/> Maintenance regime followed <input type="checkbox"/> Black smoke <input type="checkbox"/> Leaking oil <input checked="" type="checkbox"/> Drip Pans not available	Drip Pan not available		
1.3	Vehicles	<input checked="" type="checkbox"/> Satisfactory <input checked="" type="checkbox"/> PUC certificate available <input type="checkbox"/> Black smoke <input checked="" type="checkbox"/> Wheel Washed /Cleaned <input type="checkbox"/> Leaking oil <input checked="" type="checkbox"/> Side of vehicle clear of mud <input checked="" type="checkbox"/> Material transported in closed manner			
1.4	Air Monitoring	<input checked="" type="checkbox"/> Carried out as per contract <input checked="" type="checkbox"/> Results reported as per contract <input checked="" type="checkbox"/> Remedial measures in place where required			
2.0	WATER POLLUTION				
2.1	Site Drains	Drainage system functional No Contamination Not blocked by debris/ garbage No indications of Oil spilled in drains Storage of chemical waste not nearby	N/A		
2.1	Site Drains	Storage of refuse/ excavate muck not near the drains	N/A		
2.2	Adjacent Drains	Not damaged No signs of pouring bentonite No signs of pouring Chemicals Signs of discharging Silt/ debris	N/A		
2.3	Separator Tanks	Tank not full of silt Tank regularly emptied	N/A		
3.0	NOISE POLLUTION				
3.1	Noise control measures	<input checked="" type="checkbox"/> All powered mechanical equipment's are sound reduced <input checked="" type="checkbox"/> Acoustic / enclosures constructed in areas of excessive noise <input checked="" type="checkbox"/> Equipment located and directed away from noise receptors			
3.2	Generators provided with acoustic enclosures	<input checked="" type="checkbox"/> Effective <input type="checkbox"/> Not effective <input type="checkbox"/> Not provide			
3.3	Noise monitoring	<input checked="" type="checkbox"/> Carried out as per Contract			

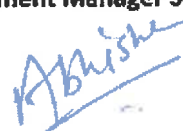
 <small>National Capital Region Transport Corporation</small>	AFCONS INFRASTRUCTURE LIMITED			
	WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST		Rev : 0	07/11/2020
	Doc. No. AFC/SHE/3570//F24		Pages :02	


		<input checked="" type="checkbox"/> Not exceeded baseline values <input checked="" type="checkbox"/> Remedial measures in place <input checked="" type="checkbox"/> Results evaluated statistically for inclusion in monthly report			
4.0	WASTE MANAGEMENT				
4.1	Waste management	<input checked="" type="checkbox"/> Chemical/ flammable/ corrosive/ construction related/ oil filters/ batteries <input checked="" type="checkbox"/> Hazardous <input checked="" type="checkbox"/> Other (specify)			
4.2	Storage containers and bins	<input checked="" type="checkbox"/> Adequate number and properly placed <input checked="" type="checkbox"/> Proper quantity <input checked="" type="checkbox"/> Emptied regularly <input checked="" type="checkbox"/> Labeling proper <input checked="" type="checkbox"/> No spillage on container surface noted			
4.3	Oil waste	<input checked="" type="checkbox"/> Drip pans available <input checked="" type="checkbox"/> No oil stains on the ground <input checked="" type="checkbox"/> Spill absorption material available <input checked="" type="checkbox"/> Waste oil poured into designated waste drums <input checked="" type="checkbox"/> Used oil filters not dumped into garbage bins			
4.4	Excavated muck	<input checked="" type="checkbox"/> Storage satisfactory/ properly secured <input checked="" type="checkbox"/> Dumping in authorized areas <input checked="" type="checkbox"/> No interference with nearby areas			
5.0	STORAGE				
5.1	Diesel storage	<input checked="" type="checkbox"/> Extensive diesel spillage on ground not visible <input checked="" type="checkbox"/> Dumping in authorized areas <input checked="" type="checkbox"/> No interference with nearby drainage			
6.0	ASTHETICS AND CLEANLINESS				
6.1	Housekeeping and hygiene	<input checked="" type="checkbox"/> Designated storage area for materials <input checked="" type="checkbox"/> Scraps/ brickbats/ rubbish/scattered at site <input checked="" type="checkbox"/> Proper space for handling waste <input checked="" type="checkbox"/> Area clean and dry <input checked="" type="checkbox"/> Stagnant water treated weekly <input checked="" type="checkbox"/> Proper stacking of drums <input checked="" type="checkbox"/> Barricades are clean, in line firmly secured and proper earthing <input checked="" type="checkbox"/> Water not allowed to accumulate in work area for any reason			
7.0	ROADS				
7.1	Access roads	<input checked="" type="checkbox"/> Satisfactory maintenance in urgent need of maintenance			
7.2	Public roads used by contractor	<input checked="" type="checkbox"/> Satisfactory maintenance <input checked="" type="checkbox"/> Repair not carried out			

Site Incharge Signature





Environment Manager Signature



 National Capital Region Transport Corporation	AFCONS INFRASTRUCTURE LIMITED			
	WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST		Rev : 0	07/11/2020
	Doc. No. AFC/SHE/3570//F24		Pages :02	

Date: 24/6/2021

WEEKLY ENVIRONMENTAL INSPECTION				
Report No		Inspection Date	Inspected By	
Inspection Area				
Participants				
S NO	ITEM	OBSERVATION	REMARKS	ACTION BY DATE BY WHOM
1.0	AIR POLLUTION			
1.1	Dust (Approach roads, adjacent roads, working area, cement handling etc.)	<input checked="" type="checkbox"/> Site Satisfactory <input checked="" type="checkbox"/> Site Dusty <input checked="" type="checkbox"/> Sprinkling carried out as required <input checked="" type="checkbox"/> Excavate removal within 2 days	Excavated material needed to remove within time. 30/6/21	Site Incharge
1.2	Generators	<input checked="" type="checkbox"/> Satisfactory <input checked="" type="checkbox"/> Maintenance regime followed <input checked="" type="checkbox"/> Black smoke <input checked="" type="checkbox"/> Leaking oil <input checked="" type="checkbox"/> Drip Pans not available		
1.3	Vehicles	<input checked="" type="checkbox"/> Satisfactory <input checked="" type="checkbox"/> PUC certificate available <input checked="" type="checkbox"/> Black smoke <input checked="" type="checkbox"/> Wheel Washed /Cleaned <input checked="" type="checkbox"/> Leaking oil <input checked="" type="checkbox"/> Side of vehicle clear of mud <input checked="" type="checkbox"/> Material transported in closed manner		
1.4	Air Monitoring	<input checked="" type="checkbox"/> Carried out as per contract <input checked="" type="checkbox"/> Results reported as per contract <input checked="" type="checkbox"/> Remedial measures in place where required		
2.0	WATER POLLUTION			
2.1	Site Drains	<input checked="" type="checkbox"/> Drainage system functional <input checked="" type="checkbox"/> No Contamination <input checked="" type="checkbox"/> Not blocked by debris/ garbage <input checked="" type="checkbox"/> No indications of Oil spilled in drains <input checked="" type="checkbox"/> Storage of chemical waste not nearby	M/A	
2.1	Site Drains	<input checked="" type="checkbox"/> Storage of refuse/ excavate muck not near the drains	M/A	
2.2	Adjacent Drains	<input checked="" type="checkbox"/> Not damaged <input checked="" type="checkbox"/> No signs of pouring bentonite <input checked="" type="checkbox"/> No signs of pouring Chemicals <input checked="" type="checkbox"/> Signs of discharging Silt/ debris	Sign of GM wash found at site	30/6/21 Site Incharge
2.3	Separator Tanks	<input checked="" type="checkbox"/> Tank not full of silt <input checked="" type="checkbox"/> Tank regularly emptied		
3.0	NOISE POLLUTION			
3.1	Noise control measures	<input checked="" type="checkbox"/> All powered mechanical equipment's are sound reduced <input checked="" type="checkbox"/> Acoustic / enclosures constructed in areas of excessive noise <input checked="" type="checkbox"/> Equipment located and directed away from noise receptors		
3.2	Generators provided with acoustic enclosures	<input checked="" type="checkbox"/> Effective <input checked="" type="checkbox"/> Not effective <input checked="" type="checkbox"/> Not provide		
3.3	Noise monitoring	<input checked="" type="checkbox"/> Carried out as per Contract		

	AFCONS INFRASTRUCTURE LIMITED			
	WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST		Rev : 0	07/11/2020
	Doc. No. AFC/SHE/3570//F24		Pages :02	



		<input checked="" type="checkbox"/> Not exceeded baseline values <input checked="" type="checkbox"/> Remedial measures in place <input checked="" type="checkbox"/> Results evaluated statistically for inclusion in monthly report			
4.0	WASTE MANAGEMENT				
4.1	Waste management	<input checked="" type="checkbox"/> Chemical/ flammable/ corrosive/ construction related/ oil filters/ batteries <input checked="" type="checkbox"/> Hazardous <input checked="" type="checkbox"/> Other (specify)			
4.2	Storage containers and bins	<input checked="" type="checkbox"/> Adequate number and properly placed <input checked="" type="checkbox"/> Proper quantity <input checked="" type="checkbox"/> Emptied regularly <input checked="" type="checkbox"/> Labeling proper <input checked="" type="checkbox"/> No spillage on container surface noted			
4.3	Oil waste	<input checked="" type="checkbox"/> Drip pans available <input checked="" type="checkbox"/> No oil stains on the ground <input checked="" type="checkbox"/> Spill absorption material available <input checked="" type="checkbox"/> Waste oil poured into designated waste drums <input checked="" type="checkbox"/> Used oil filters not dumped into garbage bins			
4.4	Excavated muck	<input checked="" type="checkbox"/> Storage satisfactory/ properly secured <input checked="" type="checkbox"/> Dumping in authorized areas <input checked="" type="checkbox"/> No interference with nearby areas			
5.0	STORAGE				
5.1	Diesel storage	<input checked="" type="checkbox"/> Extensive diesel spillage on ground not visible <input checked="" type="checkbox"/> Dumping in authorized areas <input checked="" type="checkbox"/> No interference with nearby drainage			
6.0	ASTHETICS AND CLEANLINESS				
6.1	Housekeeping and hygiene	<input checked="" type="checkbox"/> Designated storage area for materials <input checked="" type="checkbox"/> Scraps/ brickbats/ rubbish/scattered at site <input checked="" type="checkbox"/> Proper space for handling waste <input checked="" type="checkbox"/> Area clean and dry <input checked="" type="checkbox"/> Stagnant water treated weekly <input checked="" type="checkbox"/> Proper stacking of drums <input checked="" type="checkbox"/> Barricades are clean, in line firmly secured and proper earthing <input checked="" type="checkbox"/> Water not allowed to accumulate in work area for any reason			
7.0	ROADS				
7.1	Access roads	<input checked="" type="checkbox"/> Satisfactory maintenance <input checked="" type="checkbox"/> In urgent need of maintenance			
7.2	Public roads used by contractor	<input checked="" type="checkbox"/> Satisfactory maintenance <input checked="" type="checkbox"/> Repair not carried out			

Site Incharge Signature





Environment Manager Signature



	AFCONS INFRASTRUCTURE LIMITED			
	WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST		Rev : 0	07/11/2020
	Doc. No. AFC/SHE/3570//F24		Pages :02	

Date: 16/11/2021

WEEKLY ENVIRONMENTAL INSPECTION					
Report No		Inspection Date 16.06.2021		Inspected By Abhishek Verma	
Inspection Area Sandikale bham					
Participants Atul, Saurabh, Vikash Verma					
S NO	ITEM	OBSERVATION	REMARKS	ACTION BY DATE	BY WHOM
1.0	AIR POLLUTION				
1.1	Dust (Approach roads, adjacent roads, working area, cement handling etc.)	<input checked="" type="checkbox"/> Site Satisfactory <input type="checkbox"/> Site Dusty <input checked="" type="checkbox"/> Sprinkling carried out as required <input checked="" type="checkbox"/> Excavate removal within 2 days			
1.2	Generators	<input checked="" type="checkbox"/> Satisfactory <input checked="" type="checkbox"/> Maintenance regime followed <input type="checkbox"/> Black smoke <input type="checkbox"/> Leaking oil <input checked="" type="checkbox"/> Drip Pans not available			
1.3	Vehicles	<input checked="" type="checkbox"/> Satisfactory <input checked="" type="checkbox"/> PUC certificate available <input type="checkbox"/> Black smoke <input checked="" type="checkbox"/> Wheel Washed /Cleaned <input type="checkbox"/> Leaking oil <input type="checkbox"/> Side of vehicle clear of mud <input checked="" type="checkbox"/> Material transported in closed manner			
1.4	Air Monitoring	<input checked="" type="checkbox"/> Carried out as per contract <input checked="" type="checkbox"/> Results reported as per contract <input checked="" type="checkbox"/> Remedial measures in place where required			
2.0	WATER POLLUTION				
2.1	Site Drains	<input checked="" type="checkbox"/> Drainage system functional <input checked="" type="checkbox"/> No Contamination <input type="checkbox"/> Not blocked by debris/ garbage <input type="checkbox"/> No indications of Oil spilled in drains <input type="checkbox"/> Storage of chemical waste not nearby			
2.1	Site Drains	<input checked="" type="checkbox"/> Storage of refuse/ excavate muck not near the drains			
2.2	Adjacent Drains	<input checked="" type="checkbox"/> Not damaged <input type="checkbox"/> No signs of pouring bentonite <input type="checkbox"/> No signs of pouring Chemicals <input type="checkbox"/> Signs of discharging Silt/ debris			
2.3	Separator Tanks	<input type="checkbox"/> Tank not full of silt <input type="checkbox"/> Tank regularly emptied	MIA		
3.0	NOISE POLLUTION				
3.1	Noise control measures	<input checked="" type="checkbox"/> All powered mechanical equipment's are sound reduced <input checked="" type="checkbox"/> Acoustic / enclosures constructed in areas of excessive noise <input checked="" type="checkbox"/> Equipment located and directed away from noise receptors			
3.2	Generators provided with acoustic enclosures	<input checked="" type="checkbox"/> Effective <input type="checkbox"/> Not effective <input type="checkbox"/> Not provide			
3.3	Noise monitoring	<input checked="" type="checkbox"/> Carried out as per Contract			

 <small>National Capital Region Transport Corporation</small>	AFCONS INFRASTRUCTURE LIMITED			
	WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST		Rev : 0	07/11/2020
	Doc. No. AFC/SHE/3570//F24		Pages :02	



		<input checked="" type="checkbox"/> Not exceeded baseline values <input checked="" type="checkbox"/> Remedial measures in place <input checked="" type="checkbox"/> Results evaluated statistically for inclusion in monthly report			
4.0	WASTE MANAGEMENT				
4.1	Waste management	<input checked="" type="checkbox"/> Chemical/ flammable/ corrosive/ construction related/ oil filters/ batteries <input checked="" type="checkbox"/> Hazardous <input checked="" type="checkbox"/> Other (specify)	CAD work		
4.2	Storage containers and bins	<input checked="" type="checkbox"/> Adequate number and properly placed <input checked="" type="checkbox"/> Proper quantity <input checked="" type="checkbox"/> Emptied regularly <input checked="" type="checkbox"/> Labeling proper <input checked="" type="checkbox"/> No spillage on container surface noted			
4.3	Oil waste	<input checked="" type="checkbox"/> Drip pans available <input checked="" type="checkbox"/> No oil stains on the ground <input checked="" type="checkbox"/> Spill absorption material available <input checked="" type="checkbox"/> Waste oil poured into designated waste drums <input checked="" type="checkbox"/> Used oil filters not dumped into garbage bins	Drip pan not found oil spot found at ground.	29/6/21	Site Incharge
4.4	Excavated muck	<input checked="" type="checkbox"/> Storage satisfactory/ properly secured <input checked="" type="checkbox"/> Dumping in authorized areas <input checked="" type="checkbox"/> No interference with nearby areas			
5.0	STORAGE				
5.1	Diesel storage	<input checked="" type="checkbox"/> Extensive diesel spillage on ground not visible <input checked="" type="checkbox"/> Dumping in authorized areas <input checked="" type="checkbox"/> No interference with nearby drainage			
6.0	ASTHETICS AND CLEANLINESS				
6.1	Housekeeping and hygiene	<input checked="" type="checkbox"/> Designated storage area for materials <input checked="" type="checkbox"/> Scraps/ brickbats/ rubbish/scattered at site <input checked="" type="checkbox"/> Proper space for handling waste <input checked="" type="checkbox"/> Area clean and dry <input checked="" type="checkbox"/> Stagnant water treated weekly <input checked="" type="checkbox"/> Proper stacking of drums <input checked="" type="checkbox"/> Barricades are clean, in line firmly secured and proper earthing <input checked="" type="checkbox"/> Water not allowed to accumulate in work area for any reason			
7.0	ROADS				
7.1	Access roads	<input checked="" type="checkbox"/> Satisfactory maintenance <input checked="" type="checkbox"/> In urgent need of maintenance			
7.2	Public roads used by contractor	<input checked="" type="checkbox"/> Satisfactory maintenance <input checked="" type="checkbox"/> Repair not carried out			

Site Incharge Signature

Vikash Verma

Environment Manager Signature

Abhishek

 National Capital Region Transport Corporation	AFCONS INFRASTRUCTURE LIMITED			
	WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST		Rev : 0	07/11/2020
	Doc. No. AFC/SHE/3570//F24		Pages :02	


Date: 09/06/2021

WEEKLY ENVIRONMENTAL INSPECTION					
Report No		Inspection Date 09/06/2021		Inspected By Ashish Kumar Verma	
Inspection Area DND					
Participants Sanata Prasad, Zubfikan Ahmed					
S NO	ITEM	OBSERVATION	REMARKS	ACTION BY DATE	BY WHOM
1.0	AIR POLLUTION				
1.1	Dust (Approach roads, adjacent roads, working area, cement handling etc.)	<input checked="" type="checkbox"/> Site Satisfactory <input checked="" type="checkbox"/> Site Dusty <input checked="" type="checkbox"/> Sprinkling carried out as required <input checked="" type="checkbox"/> Excavate removal within 2 days	CAD waste found	30/6/21	Site Incharge
1.2	Generators	<input checked="" type="checkbox"/> Satisfactory <input checked="" type="checkbox"/> Maintenance regime followed Black smoke Leaking oil <input checked="" type="checkbox"/> Drip Pans not available	Drip Pan not available.		
1.3	Vehicles	<input checked="" type="checkbox"/> Satisfactory <input checked="" type="checkbox"/> PUC certificate available Black smoke Wheel Washed /Cleaned Leaking oil <input checked="" type="checkbox"/> Side of vehicle clear of mud <input checked="" type="checkbox"/> Material transported in closed manner			
1.4	Air Monitoring	<input checked="" type="checkbox"/> Carried out as per contract <input checked="" type="checkbox"/> Results reported as per contract <input checked="" type="checkbox"/> Remedial measures in place where required			
2.0	WATER POLLUTION				
2.1	Site Drains	Drainage system functional No Contamination Not blocked by debris/ garbage No indications of Oil spilled in drains Storage of chemical waste not nearby	MIA		
2.1	Site Drains	Storage of refuse/ excavate muck not near the drains	MIA		
2.2	Adjacent Drains	Not damaged No signs of pouring bentonite No signs of pouring Chemicals Signs of discharging Silt/ debris	MIA		
2.3	Separator Tanks	Tank not full of silt Tank regularly emptied	MIA		
3.0	NOISE POLLUTION				
3.1	Noise control measures	<input checked="" type="checkbox"/> All powered mechanical equipment's are sound reduced <input checked="" type="checkbox"/> Acoustic / enclosures constructed in areas of excessive noise <input checked="" type="checkbox"/> Equipment located and directed away from noise receptors			
3.2	Generators provided with acoustic enclosures	<input checked="" type="checkbox"/> Effective Not effective Not provide			
3.3	Noise monitoring	<input checked="" type="checkbox"/> Carried out as per Contract			

 <small>National Capital Region Transport Corporation</small>	AFCONS INFRASTRUCTURE LIMITED			
	WEEKLY ENVIRONMENTAL INSPECTION CHECKLIST		Rev : 0	07/11/2020
	Doc. No. AFC/SHE/3570//F24		Pages :02	

		<input checked="" type="checkbox"/> Not exceeded baseline values <input checked="" type="checkbox"/> Remedial measures in place <input checked="" type="checkbox"/> Results evaluated statistically for inclusion in monthly report			
4.0	WASTE MANAGEMENT				
4.1	Waste management	<input checked="" type="checkbox"/> Chemical/ flammable/ corrosive/ construction related/ oil filters/ batteries <input checked="" type="checkbox"/> Hazardous <input checked="" type="checkbox"/> Other (specify)	All waste is collected & disposed as per legal requirement.		
4.2	Storage containers and bins	<input checked="" type="checkbox"/> Adequate number and properly placed <input checked="" type="checkbox"/> Proper quantity <input checked="" type="checkbox"/> Emptied regularly <input checked="" type="checkbox"/> Labeling proper <input checked="" type="checkbox"/> No spillage on container surface noted			
4.3	Oil waste	<input checked="" type="checkbox"/> Drip pans available <input checked="" type="checkbox"/> No oil stains on the ground <input checked="" type="checkbox"/> Spill absorption material available <input checked="" type="checkbox"/> Waste oil poured into designated waste drums <input checked="" type="checkbox"/> Used oil filters not dumped into garbage bins			
4.4	Excavated muck	<input checked="" type="checkbox"/> Storage satisfactory/ properly secured <input checked="" type="checkbox"/> Dumping in authorized areas <input checked="" type="checkbox"/> No interference with nearby areas			
5.0	STORAGE				
5.1	Diesel storage	<input checked="" type="checkbox"/> Extensive diesel spillage on ground not visible <input checked="" type="checkbox"/> Dumping in authorized areas <input checked="" type="checkbox"/> No interference with nearby drainage			
6.0	ASTHETICS AND CLEANLINESS				
6.1	Housekeeping and hygiene	<input checked="" type="checkbox"/> Designated storage area for materials <input checked="" type="checkbox"/> Scraps/ brickbats/ rubbish/scattered at site <input checked="" type="checkbox"/> Proper space for handling waste <input checked="" type="checkbox"/> Area clean and dry <input checked="" type="checkbox"/> Stagnant water treated weekly <input checked="" type="checkbox"/> Proper stacking of drums <input checked="" type="checkbox"/> Barricades are clean, in line firmly secured and proper earthing <input checked="" type="checkbox"/> Water not allowed to accumulate in work area for any reason	POOR Housekeeping	15/06/24	Site Incharge
7.0	ROADS				
7.1	Access roads	<input checked="" type="checkbox"/> Satisfactory maintenance <input checked="" type="checkbox"/> In urgent need of maintenance			
7.2	Public roads used by contractor	<input checked="" type="checkbox"/> Satisfactory maintenance <input checked="" type="checkbox"/> Repair not carried out			

Site Incharge Signature





Environment Manager Signature





Annexure-3

Monthly Environment Audit Report



	AFCONS INFRASTRUCTURE LIMITED			
	MONTHLY ENVIRONMENTAL INSPECTION AUDIT CHECKLIST		Rev : 0	07/11/2020
	Doc. No. AFC/SHE/3570/F25		Pages :01	

Project Location: Package - 6	Date & Time: 30.6.2021
Sub-contractor:	
Under Observation Column mark: "v" Acceptable, "X" Not Acceptable and "N/A" Not Applicable	



Sl. No.	Description	Observation	Action Required	Remark
1.0	Waste Management			
	Waste separated and stored in clearly marked receptacles.	✓		Color Coded Bins placed yes, Monthly Maint.
	Waste inventory maintained for all significant waste streams.	✓		
	Domestic waste disposed in a hygienic manner.	✓		
	Waste oil, solvents, and chemicals etc., stored in appropriate containers in a bonded area.	✓		
	Regulated waste collected by a licensed waste contractor.	✓		
	MSDS's available for chemical waste.	✓		
	Adequate waste receptacles available throughout the project.	✓		
	Site area litter free.	✓		
	Waste and scrap areas demarcated.	✓		
	Adequate capacity of the waste area.	✓		
	Waste bins cleared regularly.	✓		
	Company vehicle provided with rubbish bags (Wherever applicable).	✓		
	Drains being cleaned / cleared of waste materials.	✓		
	Waste items re-cycled where applicable.	✓		
2.0	Air Pollution			


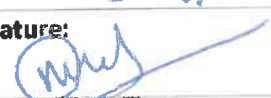
 <small>NATIONAL CAPITAL REGION TRANSPORT CORPORATION</small>	AFCONS INFRASTRUCTURE LIMITED		
	MONTHLY ENVIRONMENTAL INSPECTION AUDIT CHECKLIST	Rev : 0	07/11/2020
Doc. No. AFC/SHE/3570/F25		Pages :01	

	Dust suppression controls e.g., water spraying, implemented on exposed dust generating areas.	✓		
	Topsoil or fill material stockpiles covered or temporarily stabilized by grasses.	N/A		
	Vehicles adhere to project speed limits.	✓		
	Plant and vehicles uses on site are well maintained and regularly serviced.	✓		
	Engines are switched off when not in use.	✓		
	Covered containers for organic wastes.	N/A		
	Use of water to suppress dust on access routes, stockpiles.	✓		
	Cover the loads of vehicles transporting dusty materials.	✓		
	Establish containment areas and wind breaks around activities generating dust.	✓		
3.0	Water Contamination			
	Monitoring program in place for collected water before being released into waterways.	N/A		
	Prevention of run-off from entering water bodies.	✓		
	All conditions of pooling being managed (Water channelled away).	Under Construction		
	Stagnant pools of water as a result of the site conditions being managed.	N/A		
	Controls in place to prevent water contamination as a result of the site works.	✓		
	Septic tanks are frequently emptied.	✓		
	Proper concrete washout/wheel washout area provided.	Under Construction		
	Concrete washout/wheel washout area regularly cleaned and maintained.	— " —		
	Vehicle washing allowed at site.	X		Under Construction
	If yes, is there proper collection, treatment and disposal of waste water resulting from	N/A		


 <small>National Capital Region Transport Corporation</small>	AFCONS INFRASTRUCTURE LIMITED		
	MONTHLY ENVIRONMENTAL INSPECTION AUDIT CHECKLIST	Rev : 0	07/11/2020
Doc. No. AFC/SHE/3570/F25		Pages :01	

	vehicle washing?			
	STP is provided for treatment of sewage.	X		Septic tank for domestic waste
	Is treated waste water is recycled/reused at project site?	✓		
4.0	Land Use/Soil Contamination			
	Drip trays used for in-field maintenance and refuelling of mobile plant.	✓		
	Chemicals/hydrocarbon storage areas bonded.	✓		
	Bonded areas of sufficient size to retain 110% of the volume of the largest tank.	✓		
	Are all hoses and accessories stored inside the bonded area?	N/A		
	Adequate spill management equipment/materials available.	✓		
	All generators sited on bonded, impermeable hard standings.	✓		
	Fuel farm plumbing in good condition and free from leaks.	✓		
	Oil farm storage area roofed to keep water out of the bonded area.	✓		
	Contaminated ground excavated and contaminated soil removed	✓		
	Contaminated soil remediated on site or removed from site by a licensed waste contractor.	✓		
5.0	Other Local environmental and community issues (Noise, vibration, odour, lighting)			
	Regular noise surveys conducted at receptors and recorded.	✓		weekly
	Measures being taken to reduce the noise levels within the workplace.	✓		
	Dust control measures adequate.	✓		
	Rumble removal adequately managed.	✓		





	AFCONS INFRASTRUCTURE LIMITED			
	MONTHLY ENVIRONMENTAL INSPECTION AUDIT CHECKLIST		Rev : 0	07/11/2020
Doc. No. AFC/SHE/3570/F25			Pages :01	

	Hazardous waste disposed properly as per the legal requirement and HLG procedures.	✓		
6.0	Energy and Material Consumption			
	Electricity consumption measured and recorded.	✓		
	Water consumption measured and recorded.	✓		
	Fuel consumption measured and recorded.	✓		
	Site established program to conserve energy and material usage (Fuel, Electricity, Water and Paper)	✓		
7.0	Is there any environmental incident observed during inspection?	Mon		
	If yes put a note here;			
Inspection by:	Environment Manager	Abhishek Verma	Signature: 	
Checked By:	Chief SHE Manager	Man Singh	Signature: 	

Monthly Environment Walk Observation & Compliance

S.No.	Location & Observation	Observation Photo	Compliance photo	Remarks
	5 th June (World Environment Day)		Good Practice (Tree Plantation on the occasion of World Environment Day)	

1	SKK Station: The tree found damaged by barricading board.	 <p>05/05/21 SKK Kaitiaki New Delhi South East Delhi India</p>	 <p>10/05/21 SKK Kaitiaki New Delhi South East Delhi India</p>	The tree protection zone has been defined by green net.
2	DND site: Tree found dry. No watering is done for the same.			Tree watering is been done on regular basis.

3	Well Foundation: Labour rest shed found without bins			Color coded bins provided.
4	Well Foundation: DG set found with black smoke; testing required.			Monitoring from third party has been done and reports found satisfactory.

5	Well Foundation: Oil spill found on the sandbags.			The oil soaked bag removed and new bags placed.
6	Well Foundation: Signages required for awareness near water body.			The signages has been displayed.

6	Well Foundation: Drinking water tank found silted.				The tank has been cleaned.
7	Well Foundation: Sand bags found unidentified.				The uses of sand bags has been displayed.

8	Well Foundation: Specific guidelines not displayed regarding working in eco- sensitive zone.			NGT guidelines for permission to work is displayed.
10	Well Foundation: Solid waste collected from site and accumulated near container area.			The Tie-up agency has removed the solid waste.

11	Well Foundation: Environment policy and C&D waste guideline needed to be displayed.			The CPCB Guideline and Policy has been displayed.
12	Well Foundation: The caution signages required near pond area.			The caution signages displayed.


ECOSTEPS LABORATORY PRIVATE LIMITED

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to

 M/s AFCONS Infrastructure Ltd
 B-156, 1st floor, Near Metro pillar-167
 New Ashok Nagar, Delhi-110036

Doc No.

Amend. No. & Amend. Date : 02 & 17.02.2018

Lab Reference No.

Issue Date : 24/06/2021

Your Reference

Email

(Page 1 of 1)

Sample Particulars: DG Noise Level testing was done at Ghazipur Casting Yard, Ghazipur, Delhi on 18/06/2021.

Type of sample	: DG Noise	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Testing Starting Date	: 18/06/2021
Sampling Done by	: Lab representative	Testing Completion Date	: 18/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Ghazipur Casting Yard	Sampling Method	: ELPL/III/SOP/37
Details of DG Set	Capacity- 250 KVA DG Serial No - 84522142 Make & Model- Cummins & 6L8.9TAA-G4		

Test Results

S.no.	Description	Unit	Result	Specification	Test Method
1.	Acoustic enclosure (Open Door) Sound level pressure	dB(A)	102.0	-	ELPL/III/SOP/37
2	Acoustic enclosure (Closed Door) Sound level pressure	dB(A)	73.9	75	ELPL/III/SOP/37
3	Insertion Loss	dB(A)	28.1	25	-

*****END OF REPORT*****

 Note – Noise Limit for DG Sets (up to 1000 KVA) manufactured on or after 1st January 2005 shall be 75 dB (A) at 1 meter from the enclosure surface, and having insertion loss minimum 25 dB (A).

 Analyzed By
 (Vikash Kumar)

 Checked By
 (Dr. Ramesh C. Tripathi)

 Authorized Signatory
 (Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

 Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663


ECOSTEPS LABORATORY PRIVATE LIMITED

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to

 M/s AFCONS Infrastructure Ltd
 B-156, 1st floor, Near Metro pillar-167
 New Ashok Nagar, Delhi-110036

 Doc No. : ELPL/IV/QF/20
 Amend. No. & Amend. Date : 02 & 17.02.2018
 Lab Reference No. : 210619023 E
 Issue Date : 24/06/2021
 Your Reference : AFCONS/3570/PM/
 QS/VO-37,
 dated-05/02/2021
 (Page 1 of 1)

Project: DM/CN/COR-OF/095 Package-6, New Delhi for NCRTC.

Sample Particulars: DG Stack monitoring was monitored at Ghazipur Casting Yard, Ghazipur, Delhi on 18/06/2021.

Type of sample	: DG Stack	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Analysis Starting Date	: 19/06/2021
Sampling Done by	: Lab representative	Analysis Completion Date	: 24/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Ghazipur Casting Yard	Sampling Method	: ELPL/III/SOP/32

DG Capacity	: 200 KW (250 KVA)
DG Serial Number	: 84522142
DG Make & Model	: Cummins & 6L8.9TAA-G4
Source of Emission	: Stack attached to DG Set
Type of fuel used	: HSD
Type of Stack	: Circular
Operating Schedule	: As per requirement
Diameter of Stack (m)	: 0.12
Height of Stack from Ground level (m)	: 4
Height of Stack from roof level (m)	: -
Time of sampling (minutes)	: 41
Ambient Temperature (k)	: 307
Stack Temperature (k)	: 482
Average velocity of flue emission (m/s)	: 9.76
Isokinetic flow rate (l/m)	: 24.6
Flue gas flow rate (m ³ /hr.)	: 397.2

S.no.	Test Parameters	Results	Units	Test Method	Emission Limits as per EP Rules
1.	Particulate Matter(PM)	0.16	g/kw-hr	IS 11255(P-1)	≤ 0.2
2.	Sulphur Dioxide(SO ₂)	0.35	g/kw-hr	IS 11255(P-2)	Not specified
3.	Oxides of Nitrogen(NO _x)	1.71	g/kw-hr	IS 11255(P-7)	≤ 4.0
4.	Hydrocarbon(HC) as CH ₄	0.28	g/kw-hr	IS 5182(P-17)	
5.	Carbon monoxide(CO)	0.58	g/kw-hr	IS 13270:1992	≤ 3.5

 Analyzed By
 (Vikash Kumar)

 Checked By
 (Dr. Ramesh C. Tripathi)

 Authorized Signatory
 (Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

 Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663

**ECOSTEPS LABORATORY PRIVATE LIMITED**

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT**Issued to**

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No. : ELPL/IV/QF/20
Amend. No. & Amend. Date : 02 & 17.02.2018
Lab Reference No. : 210619022 DN
Issue Date : 24/06/2021
Your Reference : Email

(Page 1 of 1)

Sample Particulars: DG Noise Level testing was done at Ghazipur Casting Yard, Ghazipur, Delhi on 18/06/2021.

Type of sample	: DG Noise	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Testing Starting Date	: 18/06/2021
Sampling Done by	: Lab representative	Testing Completion Date	: 18/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Ghazipur Casting Yard	Sampling Method	: ELPL/III/SOP/37
Details of DG Set	Capacity- 160 KVA DG Serial No - 06126434 Make & Model- Cummins & 6CTA-8.3-G1-I		

Test Results

S.no.	Description	Unit	Result	Specification	Test Method
1.	Acoustic enclosure (Open Door) Sound level pressure	dB(A)	101.3	-	ELPL/III/SOP/37
2	Acoustic enclosure (Closed Door) Sound level pressure	dB(A)	73.5	75	ELPL/III/SOP/37
3	Insertion Loss	dB(A)	27.8	25	-

*****END OF REPORT*****

Note - Noise Limit for DG Sets (up to 1000 KVA) manufactured on or after 1st January 2005 shall be 75 dB (A) at 1 meter from the enclosure surface, and having insertion loss minimum 25 dB (A).

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)



ECOSTEPS LABORATORY PRIVATE LIMITED
(Complete Test House for testing of Environmental Samples)
NABL Accredited and MoEF&CC Approved Laboratory
ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No. : ELPL/IV/QF/20
Amend. No. & Amend. Date : 02 & 17.02.2018
Lab Reference No. : 210619021 E
Issue Date : 24/06/2021
Your Reference : AFCONS/3570/PM/
QS/VO-37,
dated-05/02/2021
(Page 1 of 1)

Project: DM/CN/COR-OF/095 Package-6, New Delhi for NCRTC.

Sample Particulars: DG Stack monitoring was monitored at Ghazipur Casting Yard, Ghazipur, Delhi on 18/06/2021.

Type of sample	: DG Stack	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Analysis Starting Date	: 19/06/2021
Sampling Done by	: Lab representative	Analysis Completion Date	: 24/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Ghazipur Casting Yard	Sampling Method	: ELPL/III/SOP/32

DG Capacity : 128 KW (160 KVA)
DG Serial Number : 06126434
DG Make & Model : Cummins & 6CTA-8.3-G1-I
Source of Emission : Stack attached to DG Set
Type of fuel used : HSD
Type of Stack : Circular
Operating Schedule : As per requirement
Diameter of Stack (m) : 0.1
Height of Stack from Ground level (m) : 3
Height of Stack from roof level (m) : -
Time of sampling (minutes) : 42
Ambient Temperature (k) : 307
Stack Temperature (k) : 458
Average velocity of flue emission (m/s) : 9.06
Isokinetic flow rate (l/m) : 24.0
Flue gas flow rate (m³/hr.) : 256

S.no.	Test Parameters	Results	Units	Test Method	Emission Limits as per EP Rules
1.	Particulate Matter(PM)	0.16	g/kw-hr	IS 11255(P-1)	≤ 0.2
2.	Sulphur Dioxide(SO ₂)	0.46	g/kw-hr	IS 11255(P-2)	Not specified
3.	Oxides of Nitrogen(NO _x)	1.65	g/kw-hr	IS 11255(P-7)	≤ 4.0
4.	Hydrocarbon(HC) as CH ₄	0.26	g/kw-hr	IS 5182(P-17)	
5.	Carbon monoxide(CO)	0.76	g/kw-hr	IS 13270:1992	≤ 3.5

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663

**ECOSTEPS LABORATORY PRIVATE LIMITED**

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No. : ELPL/IV/QF/20
Amend. No. & Amend. Date : 02 & 17.02.2018
Lab Reference No. : 210619020 DN
Issue Date : 24/06/2021
Your Reference : Email

(Page 1 of 1)

Sample Particulars: DG Noise Level testing was done at Ghazipur Casting Yard, Ghazipur, Delhi on 18/06/2021.

Type of sample	: DG Noise	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Testing Starting Date	: 18/06/2021
Sampling Done by	: Lab representative	Testing Completion Date	: 18/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Ghazipur Casting Yard	Sampling Method	: ELPL/III/SOP/37
Details of DG Set	Capacity- 82.5 KVA DG Serial No - 84522144 Make & Model- Cummins & 6L8.9TAA-G4		

Test Results

S.no.	Description	Unit	Result	Specification	Test Method
1	Acoustic enclosure (Open Door) Sound level pressure	dB(A)	101.2	-	ELPL/III/SOP/37
2	Acoustic enclosure (Closed Door) Sound level pressure	dB(A)	73.4	75	ELPL/III/SOP/37
3	Insertion Loss	dB(A)	27.8	25	-

*****END OF REPORT*****

Note - Noise Limit for DG Sets (up to 1000 KVA) manufactured on or after 1st January 2005 shall be 75 dB (A) at 1 meter from the enclosure surface, and having insertion loss minimum 25 dB (A).

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663



ECOSTEPS LABORATORY PRIVATE LIMITED
(Complete Test House for testing of Environmental Samples)
NABL Accredited and MoEF&CC Approved Laboratory
ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No. : ELPL/IV/QF/20
Amend. No. & Amend. Date : 02 & 17.02.2018
Lab Reference No. : 210619019 E
Issue Date : 24/06/2021
Your Reference : AFCONS/3570/PM/
QS/WO-37,
dated-05/02/2021
(Page 1 of 1)

Project: DM/CN/COR-OF/095 Package-6, New Delhi for NCRTC.

Sample Particulars: DG Stack monitoring was monitored at Ghazipur Casting Yard, Ghazipur, Delhi on 18/06/2021.

Type of sample	: DG Stack	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Analysis Starting Date	: 19/06/2021
Sampling Done by	: Lab representative	Analysis Completion Date	: 24/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Ghazipur Casting Yard	Sampling Method	: ELPL/III/SOP/32

DG Capacity	: 66 KW (82.5 KVA)
DG Serial Number	: 84522144
DG Make & Model	: Cummins & 6L8.9TAA-G4
Source of Emission	: Stack attached to DG Set
Type of fuel used	: HSD
Type of Stack	: Circular
Operating Schedule	: As per requirement
Diameter of Stack (m)	: 0.15
Height of Stack from Ground level (m)	: 4
Height of Stack from roof level (m)	: -
Time of sampling (minutes)	: 44
Ambient Temperature (k)	: 307
Stack Temperature (k)	: 439
Average velocity of flue emission (m/s)	: 8.17
Isokinetic flow rate (l/m)	: 22.6
Flue gas flow rate (m ³ /hr.)	: 519.5

S.no.	Test Parameters	Results	Units	Test Method	Emission Limits as per EP Rules
1	Particulate Matter(PM)	0.15	g/kw-hr	IS 11255(P-1)	≤ 0.3
2	Sulphur Dioxide(SO ₂)	0.62	g/kw-hr	IS 11255(P-2)	Not specified
3	Oxides of Nitrogen(NO _x)	1.46	g/kw-hr	IS 11255(P-7)	≤ 4.7
4	Hydrocarbon(HC) as CH ₄	0.27	g/kw-hr	IS 5182(P-17)	
5	Carbon monoxide(CO)	0.62	g/kw-hr	IS 13270:1992	≤ 3.5

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663

**ECOSTEPS LABORATORY PRIVATE LIMITED**

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT**Issued to**

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No.**Amend. No. & Amend. Date****Lab Reference No.****Issue Date****Your Reference**

: ELPL/IV/QF/20
: 02 & 17.02.2018
: 210619018 DN
: 24/06/2021
: Email

(Page1of 1)

Sample Particulars: DG Noise Level testing was done at Sarai Kale Khan, near ISBT bus stand, Delhi on 18/06/2021.

Type of sample	: DG Noise	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Testing Starting Date	: 18/06/2021
Sampling Done by	: Lab representative	Testing Completion Date	: 18/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Sarai Kale Khan	Sampling Method	: ELPL/III/SOP/37
Details of DG Set	: Capacity- 40 KVA DG Serial No - 610.04410 Make & Model- Cummins & 53-8C4		

Test Results

S.no.	Description	Unit	Result	Specification	Test Method
1.	Acoustic enclosure (Open Door) Sound level pressure	dB(A)	100.1	-	ELPL/III/SOP/37
2	Acoustic enclosure (Closed Door) Sound level pressure	dB(A)	71.8	75	ELPL/III/SOP/37
3	Insertion Loss	dB(A)	28.3	25	-

*****END OF REPORT*****

Note – Noise Limit for DG Sets (up to 1000 KVA) manufactured on or after 1st January 2005 shall be 75 dB (A) at 1 meter from the enclosure surface, and having insertion loss minimum 25 dB (A).

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663


ECOSTEPS LABORATORY PRIVATE LIMITED

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No. : ELPL/IV/QF/20
Amend. No. & Amend. Date : 02 & 17.02.2018
Lab Reference No. : 210619017 E
Issue Date : 24/06/2021
Your Reference : AFCONS/3570/PM/
QS/WO-37,
dated-05/02/2021
(Page 1 of 1)

Project: DM/CN/COR-OF/095 Package-6, New Delhi for NCRTC.

Sample Particulars: DG Stack monitoring was monitored at Sarai Kale Khan, near ISBT bus stand, Delhi on 18/06/2021.

Type of sample	: DG Stack	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Analysis Starting Date	: 19/06/2021
Sampling Done by	: Lab representative	Analysis Completion Date	: 24/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Sarai Kale Khan	Sampling Method	: ELPL/III/SOP/32

DG Capacity : 32 KW (40 KVA)
DG Serial Number : 610.04410
DG Make & Model : Cummins & 53-8C4
Source of Emission : Stack attached to DG Set
Type of fuel used : HSD
Type of Stack : Circular
Operating Schedule : As per requirement
Diameter of Stack (m) : 0.1
Height of Stack from Ground level (m) : 4
Height of Stack from roof level (m) : -
Time of sampling (minutes) : 42
Ambient Temperature (K) : 307
Stack Temperature (K) : 368
Average velocity of flue emission (m/s) : 7.22
Isokinetic flow rate (l/m) : 23.8
Flue gas flow rate (m³/hr.) : 204

S.no.	Test Parameters	Results	Units	Test Method	Emission Limits as per EP Rules
1.	Particulate Matter(PM)	0.19	g/kw-hr	IS 11255(P-1)	≤ 0.3
2.	Sulphur Dioxide(SO ₂)	0.62	g/kw-hr	IS 11255(P-2)	Not specified
3.	Oxides of Nitrogen(NO _x)	1.50	g/kw-hr	IS 11255(P-7)	≤ 4.7
4.	Hydrocarbon(HC) as CH ₄	0.19	g/kw-hr	IS 5182(P-17)	
5.	Carbon monoxide(CO)	0.62	g/kw-hr	IS 13270:1992	≤ 3.5

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

 Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663


ECOSTEPS LABORATORY PRIVATE LIMITED

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT
Issued to

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No.
Amend. No. & Amend. Date
Lab Reference No.
Issue Date
Your Reference

ELPL/IV/QF/20

02 & 17.02.2018

210619016 DN

24/06/2021

Email

(Page 1 of 1)

Sample Particulars: DG Noise Level testing was done at Sarai Kale Khan, near ISBT bus stand, Delhi on 18/06/2021.

Type of sample	: DG Noise	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Testing Starting Date	: 18/06/2021
Sampling Done by	: Lab representative	Testing Completion Date	: 18/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Sarai Kale Khan	Sampling Method	: ELPL/III/SOP/37
Details of DG Set	Capacity- 40 KVA DG Serial No – 2012A97916 Make & Model- Cummins & X2.7TAA-G8		

Test Results

S.no.	Description	Unit	Result	Specification	Test Method
1.	Acoustic enclosure (Open Door) Sound level pressure	dB(A)	98.9	-	ELPL/III/SOP/37
2	Acoustic enclosure (Closed Door) Sound level pressure	dB(A)	70.8	75	ELPL/III/SOP/37
3	Insertion Loss	dB(A)	28.1	25	-

*****END OF REPORT*****

Note – Noise Limit for DG Sets (up to 1000 KVA) manufactured on or after 1st January 2005 shall be 75 dB (A) at 1 meter from the enclosure surface, and having insertion loss minimum 25 dB (A).

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)



ECOSTEPS LABORATORY PRIVATE LIMITED
(Complete Test House for testing of Environmental Samples)
NABL Accredited and MoEF&CC Approved Laboratory
ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036



Doc No. : ELPL/IV/QF/20
Amend. No. & Amend. Date : 02 & 17.02.2018
Lab Reference No. : 210619015 E
Issue Date : 24/06/2021
Your Reference : AFCONS/3570/PM/
QS/VO-37,
dated-05/02/2021
(Page 1 of 1)

Project: DM/CN/COR-OF/095 Package-6, New Delhi for NCRTC.

Sample Particulars: DG Stack monitoring was monitored at Sarai Kale Khan, near ISBT bus stand, Delhi on 18/06/2021.

Type of sample	: DG Stack	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Analysis Starting Date	: 19/06/2021
Sampling Done by	: Lab representative	Analysis Completion Date	: 24/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Sarai Kale Khan	Sampling Method	: ELPL/III/SOP/32

DG Capacity	: 32 KW (40 KVA)
DG Serial Number	: 2012A97916
DG Make & Model	: Cummins & X27TAA-G8
Source of Emission	: Stack attached to DG Set
Type of fuel used	: HSD
Type of Stack	: Circular
Operating Schedule	: As per requirement
Diameter of Stack (m)	: 0.1
Height of Stack from Ground level (m)	: 3
Height of Stack from roof level (m)	: -
Time of sampling (minutes)	: 60
Ambient Temperature (k)	: 307
Stack Temperature (k)	: 389
Average velocity of flue emission (m/s)	: 7.58
Isokinetic flow rate (l/m)	: 23.7
Flue gas flow rate (m ³ /hr.)	: 214.2

S.no.	Test Parameters	Results	Units	Test Method	Emission Limits as per EP Rules
1.	Particulate Matter(PM)	0.22	g/kw-hr	IS 11255(P-1)	≤ 0.3
2.	Sulphur Dioxide(SO ₂)	0.72	g/kw-hr	IS 11255(P-2)	Not specified
3.	Oxides of Nitrogen(NOx)	2.18	g/kw-hr	IS 11255(P-7)	≤ 4.7
4.	Hydrocarbon(HC) as CH ₄	0.21	g/kw-hr	IS 5182(P-17)	
5.	Carbon monoxide(CO)	0.69	g/kw-hr	IS 13270:1992	≤ 3.5

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)



Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663

**ECOSTEPS LABORATORY PRIVATE LIMITED**

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT**Issued to**

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036



Doc No. : ELPL/IV/QF/20
Amend. No. & Amend. Date : 02 & 17.02.2018
Lab Reference No. : 210619014 DN
Issue Date : 24/06/2021
Your Reference : Email

(Page 1 of 1)

Sample Particulars: DG Noise Level testing was done at Well Foundation Site near Yamuna River, Delhi on 19/06/2021.

Type of sample	: DG Noise	Sample Registration Date	: 19/06/2021
Sampling Date	: 19/06/2021	Testing Starting Date	: 19/06/2021
Sampling Done by	: Lab representative	Testing Completion Date	: 19/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Well Foundation Site	Sampling Method	: ELPL/III/SOP/37
Details of DG Set	Capacity- 125 KVA DG Serial No – P84356177 Make & Model- Cummins & 6BTAA5-9-613		

Test Results

S.no.	Description	Unit	Result	Specification	Test Method
1	Acoustic enclosure (Open Door) Sound level pressure	dB(A)	99.4	-	ELPL/III/SOP/37
2	Acoustic enclosure (Closed Door) Sound level pressure	dB(A)	72.6	75	ELPL/III/SOP/37
3	Insertion Loss	dB(A)	26.8	25	-

*****END OF REPORT*****

Note – Noise Limit for DG Sets (up to 1000 KVA) manufactured on or after 1st January 2005 shall be 75 dB (A) at 1 meter from the enclosure surface, and having insertion loss minimum 25 dB (A).

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)



Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663

**ECOSTEPS LABORATORY PRIVATE LIMITED**

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No.

Amend. No. & Amend. Date

Lab Reference No.

Issue Date

Your Reference

: ELPL/IV/QF/20

: 02 & 17.02.2018

: 210619013 E

: 24/06/2021

: AFCONS/3570/PM/

QS/VO-37,

dated-05/02/2021

(Page 1 of 1)

Project: DM/CN/COR-OF/095 Package-6, New Delhi for NCRTC.

Sample Particulars: DG Stack monitoring was monitored at Well Foundation Site near Yamuna River,
Delhi on 19/06/2021.

Type of sample	: DG Stack	Sample Registration Date	: 19/06/2021
Sampling Date	: 19/06/2021	Analysis Starting Date	: 19/06/2021
Sampling Done by	: Lab representative	Analysis Completion Date	: 24/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Well Foundation Site near Yamuna River	Sampling Method	: ELPL/III/SOP/32

DG Capacity	: 100 KW (125 KVA)
DG Serial Number	: P84356177
DG Make & Model	: Cummins & 6BTAA5-9-613
Source of Emission	: Stack attached to DG Set
Type of fuel used	: HSD
Type of Stack	: Circular
Operating Schedule	: As per requirement
Diameter of Stack (m)	: 0.1
Height of Stack from Ground level (m)	: 4
Height of Stack from roof level (m)	: -
Time of sampling (minutes)	: 43
Ambient Temperature (k)	: 305
Stack Temperature (k)	: 438
Average velocity of flue emission (m/s)	: 8.49
Isokinetic flow rate (l/m)	: 23.5
Flue gas flow rate (m ³ /hr.)	: 239.9

S.no.	Test Parameters	Results	Units	Test Method	Emission Limits as per EP Rules
1.	Particulate Matter(PM)	0.13	g/kw-hr	IS 11255(P-1)	≤ 0.2
2.	Sulphur Dioxide(SO ₂)	0.49	g/kw-hr	IS 11255(P-2)	Not specified
3.	Oxides of Nitrogen(NO _x)	1.34	g/kw-hr	IS 11255(P-7)	≤ 4.0
4.	Hydrocarbon(HC) as CH ₄	0.24	g/kw-hr	IS 5182(P-17)	
5.	Carbon monoxide(CO)	0.67	g/kw-hr	IS 13270:1992	≤ 3.5

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663


ECOSTEPS LABORATORY PRIVATE LIMITED

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT
Issued to

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No. : ELPL/IV/QF/20
Amend. No. & Amend. Date : 02 & 17.02.2018
Lab Reference No. : 210619012 DN
Issue Date : 24/06/2021
Your Reference : Email

(Page 1 of 1)

Sample Particulars: DG Noise Level testing was done at Well Foundation Site near Yamuna River, Delhi on 19/06/2021.

Type of sample	: DG Noise	Sample Registration Date	: 19/06/2021
Sampling Date	: 19/06/2021	Testing Starting Date	: 19/06/2021
Sampling Done by	: Lab representative	Testing Completion Date	: 19/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Well Foundation Site	Sampling Method	: ELPL/III/SOP/37
Details of DG Set	Capacity- 40 KVA DG Serial Number – 2011A94715 Make & Model- Cummins & X2.7TAA-G8		

Test Results

S.no.	Description	Unit	Result	Specification	Test Method
1	Acoustic enclosure (Open Door) Sound level pressure	dB(A)	98.2	-	ELPL/III/SOP/37
2	Acoustic enclosure (Closed Door) Sound level pressure	dB(A)	71.2	75	ELPL/III/SOP/37
3	Insertion Loss	dB(A)	27.0	25	-

*****END OF REPORT*****

Note – Noise Limit for DG Sets (up to 1000 KVA) manufactured on or after 1st January 2005 shall be 75 dB (A) at 1 meter from the enclosure surface, and having insertion loss minimum 25 dB (A).

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)



**ECOSTEPS LABORATORY PRIVATE LIMITED**

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No. : ELPL/IV/QF/20
Amend. No. & Amend. Date : 02 & 17.02.2018
Lab Reference No. : 210619011 E
Issue Date : 24/06/2021
Your Reference : AFCONS/3570/PM/
QS/VO-37,
dated-05/02/2021
(Page1 of 1)

Project: DM/CN/COR-OF/095 Package-6, New Delhi for NCRTC.

Sample Particulars: DG Stack monitoring was monitored at Well Foundation Site near Yamuna River,
Delhi on 19/06/2021.

Type of sample	: DG Stack	Sample Registration Date	: 19/06/2021
Sampling Date	: 19/06/2021	Analysis Starting Date	: 19/06/2021
Sampling Done by	: Lab representative	Analysis Completion Date	: 24/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Well Foundation Site near Yamuna River	Sampling Method	: ELPL/III/SOP/32

DG Capacity	: 32 KW (40 KVA)
DG Serial Number	: 2011A94715
DG Make & Model	: Cummins & X27TAA-G8
Source of Emission	: Stack attached to DG Set
Type of fuel used	: HSD
Type of Stack	: Circular
Operating Schedule	: As per requirement
Diameter of Stack (m)	: 0.1
Height of Stack from Ground level (m)	: 3
Height of Stack from roof level (m)	: -
Time of sampling (minutes)	: 44
Ambient Temperature (k)	: 305
Stack Temperature (k)	: 392
Average velocity of flue emission (m/s)	: 7.38
Isokinetic flow rate (l/m)	: 22.9
Flue gas flow rate (m ³ /hr.)	: 208.6

S.no.	Test Parameters	Results	Units	Test Method	Emission Limits as per EP Rules
1.	Particulate Matter(PM)	0.16	g/kw-hr	IS 11255(P-1)	≤ 0.3
2.	Sulphur Dioxide(SO ₂)	0.65	g/kw-hr	IS 11255(P-2)	Not specified
3.	Oxides of Nitrogen(NO _x)	1.78	g/kw-hr	IS 11255(P-7)	≤ 4.7
4.	Hydrocarbon(HC) as CH ₄	0.23	g/kw-hr	IS 5182(P-17)	
5.	Carbon monoxide(CO)	0.70	g/kw-hr	IS 13270:1992	≤ 3.5

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663

Annexure-5

DG Stack Monitoring Report



ECOSTEPS LABORATORY PRIVATE LIMITED
(Complete Test House for testing of Environmental Samples)
NABL Accredited and MoEF&CC Approved Laboratory
ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to	Doc No.	: ELPL/IV/QF/20
M/s AFCONS Infrastructure Ltd	Amend. No. & Amend. Date	: 02 & 17.02.2018
B-156, 1st floor, Near Metro pillar-167	Test Report No.	: 210619028 W
New Ashok Nagar, Delhi-110036	Issue Date	: 24/06/2021
	Your Reference	: AFCONS/3570/PM/ QS/NO-37, dated-05/02/2021

Project: DM/CN/COR-OF/095 Package-6, New Delhi for NCRTC


Sample Particulars: Ground water sample was Collected from New Ashok Nagar, Delhi on 18/06/2021.

Type of sample	: Ground water	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Analysis Starting Date	: 19/06/2021
Sampling Done by	: Lab Representative	Analysis Completion Date	: 24/06/2021
Quantity received	: 500 ml approx.	Tests Required	: Mentioned below
Sample's Location	: Ashok Nagar	Sampling Method	: ELPL/III/SOP/85

Page 2 of 2

S.No.	Test Parameters	Units	Results	IS 10500 : 2012	Test Method
				Permissible Limit in the Absence of Alternate source, max.	
Microbiological Parameter					
1	Total Coliform	MPN/100 ml	Absent	Absent	IS 1622:1981
*****END OF REPORT*****					

*****END OF REPORT*****


Analyzed By
(Sana Ahmad)


Checked By
(Dr. Ramesh C. Tripathi)


Authorized Signatory
(Purushottam Kumar Sharma)

**ECOSTEPS LABORATORY PRIVATE LIMITED**

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No.

Amend. No. & Amend. Date

Test Report No.

Issue Date

Your Reference

: ELPL/IV/QF/20

: 02 & 17.02.2018

: 210619028 W

: 24/06/2021

: AFCONS/3570/PM/
QSWO-37,
dated-05/02/2021

Project: DM/CN/COR-OF/095 Package-6, New Delhi for NCRTC

Sample Particulars: Ground water sample was Collected from New Ashok Nagar, Delhi on
18/06/2021.

Type of sample	: Ground water	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Analysis Starting Date	: 19/06/2021
Sampling Done by	: Lab Representative	Analysis Completion Date	: 24/06/2021
Quantity received	: 2 Ltr. approx.	Tests Required	: Mentioned below
Sample's Location	: Ashok Nagar	Sampling Method	: ELPL/III/SOP/20

Page 1 of 2

S.No.	Test Parameters	Units	Results	IS 10500 : 2012		Test Method
				Acceptable Limit, max.	Permissible Limit in the Absence of Alternate source, max.	
1	Color	Hazen	BDL(DL-5.0)	5	15	IS 3025 (Pt-04)
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Pt-05)
3	pH	-	7.14	6.5-8.5	No relaxation	IS 3025 (Pt-11)
4	Taste	-	Agreeable	Agreeable	Agreeable	IS 3025 (Pt-08)
5	Turbidity	NTU	BDL(DL-1.0)	1	5	IS 3025 (Pt-10)
6	Total Dissolved Solids	mg/l	588	500	2000	IS 3025 (Pt-16)
7	Calcium as Ca	mg/l	96.2	75	200	IS 3025 (Pt-40)
8	Chloride as Cl	mg/l	113.5	250	1000	IS 3025 (Pt-32)
9	Free Residual Chlorine	mg/l	BDL(DL-0.05)	0.2*	1*	IS 3025 (Pt-26)
10	Sulphate as SO ₄	mg/l	32.5	200	400	IS 3025 (Pt-24)
11	Total Hardness as CaCO ₃	mg/l	392	200	600	IS 3025 (Pt-21)
12	Magnesium as Mg	mg/l	36.9	30	100	APHA 23 rd Ed 3500B
13	Fluoride as F	mg/l	0.32	1.0	1.5	APHA 23 rd Ed. 4500F
14	Iron as Fe	mg/l	0.52	1.0	No relaxation	IS 3025 (Pt-53)
15	Total Alkalinity as CaCO ₃	mg/l	240	200	600	IS 3025 (Pt-23)

*****END OF REPORT*****

BDL: Below Detection Limit
DL: Detection Limit

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663



ECOSTEPS LABORATORY PRIVATE LIMITED
(Complete Test House for testing of Environmental Samples)
NABL Accredited and MoEF&CC Approved Laboratory
ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to	Doc No.	: ELPL/IV/QF/20
M/s AFCONS Infrastructure Ltd	Amend. No. & Amend. Date	: 02 & 17.02.2018
B-156, 1st floor, Near Metro pillar-167	Test Report No.	: 210619027 W
New Ashok Nagar, Delhi-110036	Issue Date	: 24/06/2021
	Your Reference	: AFCONS/3570/PM/
		QSWO-37,
		dated-05/02/2021

Project: DM/CN/COR-OF/095 Package-6, New Delhi for NCRTC

Sample Particulars: Ground water sample was Collected from Ghazipur Casting Yard, Ghazipur, Delhi on 18/06/2021.


Type of sample	: Ground water	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Analysis Starting Date	: 19/06/2021
Sampling Done by	: Lab Representative	Analysis Completion Date	: 24/06/2021
Quantity received	: 500 ml approx.	Tests Required	: Mentioned below
Sample's Location	: Mixing Plant	Sampling Method	: ELPL/III/SOP/85

Page 2 of 2

S.No.	Test Parameters	Units	Results	IS 10500 : 2012	Test Method
				Permissible Limit in the Absence of Alternate source, max.	
Microbiological Parameter					
1.	Total Coliform	MPN/100 ml	Absent	Absent	IS 1622:1981
*****END OF REPORT*****					

*****END OF REPORT*****


Analyzed By
(Sana Ahmad)


Checked By
(Dr. Ramesh C. Tripathi)


Authorized Signatory
(Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663

**ECOSTEPS LABORATORY PRIVATE LIMITED**

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT**Issued to**

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No.

Amend. No. & Amend. Date

Test Report No.**Issue Date****Your Reference**

: ELPL/IV/QF/20

: 02 & 17.02.2018

: 210619027 W

: 24/06/2021

: AFCONS/3570/PM/
QS/WO-37,
dated-05/02/2021

Project: DM/CN/COR-OF/095 Package-6, New Delhi for NCRTC

Sample Particulars: Ground water sample was Collected from Ghazipur Casting Yard, Ghazipur,
Delhi on 18/06/2021.

Type of sample	: Ground water	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Analysis Starting Date	: 19/06/2021
Sampling Done by	: Lab Representative	Analysis Completion Date	: 24/06/2021
Quantity received	: 2 Ltr. approx.	Tests Required	: Mentioned below
Sample's Location	: Mixing Plant	Sampling Method	: ELPL/III/SOP/20

Page 1 of 2

S.No.	Test Parameters	Units	Results	IS 10500 : 2012		Test Method
				Acceptable Limit, max.	Permissible Limit in the Absence of Alternate source, max.	
1	Color	Hazen	BDL(DL-5.0)	5	15	IS 3025 (Pt-04)
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Pt-05)
3	pH	-	7.62	6.5-8.5	No relaxation	IS 3025 (Pt-11)
4	Taste	-	Unagreeable	Agreeable	Agreeable	IS 3025 (Pt-08)
5	Turbidity	NTU	BDL(DL-1.0)	1	5	IS 3025 (Pt-10)
6	Total Dissolved Solids	mg/l	2798	500	2000	IS 3025 (Pt-16)
7	Calcium as Ca	mg/l	176.4	75	200	IS 3025 (Pt-40)
8	Chloride as Cl	mg/l	1487.2	250	1000	IS 3025 (Pt-32)
9	Free Residual Chlorine	mg/l	BDL(DL-0.05)	0.2*	1*	IS 3025 (Pt-26)
10	Sulphate as SO ₄	mg/l	386.4	200	400	IS 3025 (Pt-24)
11	Total Hardness as CaCO ₃	mg/l	1080	200	600	IS 3025 (Pt-21)
12	Magnesium as Mg	mg/l	155.5	30	100	APHA 23 rd Ed.3500B
13	Fluoride as F	mg/l	0.89	1.0	1.5	APHA 23 rd Ed. 4500F
14	Iron as Fe	mg/l	0.48	1.0	No relaxation	IS 3025 (Pt-53)
15	Total Alkalinity as CaCO ₃	mg/l	176	200	600	IS 3025 (Pt-23)

*****END OF REPORT*****

BDL: Below Detection Limit
DL: Detection Limit

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663

Annexure-4





Ground water Test Report

18	Well Foundation: Pond flow blocked by making a way from mid of the pond.			The Pipe lying work done to maintain flow of the pond.
19	Well Foundation: TM wash found near pond area.			The waste concrete removed, and area recovered.

Abhishek

17	<p>Well Foundation: Boom pacer concrete wash found near pond area, damaging flora & fauna of pond.</p>			<p>The concrete removed area recovered.</p>
----	---	---	--	--

15	Well Foundation: Sand bags purpose not defined near site.			Sand bags use has been displayed.
16	Well Foundation: TM wash found near green area.			The concrete has been cleaned from that area.

13	Well Foundation: The labour canteen found with PCC, which is not allowed in Flood plain area.			The PCC broken and dispatched in IL&FS Shastri Park (C&D Premises).
14	Well Foundation: The C&D waste found at varies places at well section.			All waste collected and disposed.

**ECOSTEPS LABORATORY PRIVATE LIMITED**

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT

Issued to

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No.

Amend. No. & Amend. Date

Lab Reference No.

Issue Date

Your Reference

ELPL/IV/QF/20

02 & 17.02.2018

210619025 E

24/06/2021

AFCONS/3570/PM/

QS/WO-37,

dated-05/02/2021

(Page1of 1)

Project: DM/CN/COR-OF/095 Package-6, New Delhi for NCRTC.

Sample Particulars: DG Stack monitoring was monitored at Ghazipur Casting Yard, Ghazipur, Delhi
on 18/06/2021.

Type of sample	: DG Stack	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Analysis Starting Date	: 19/06/2021
Sampling Done by	: Lab representative	Analysis Completion Date	: 24/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Ghazipur Casting Yard	Sampling Method	: ELPL/III/SOP/32

DG Capacity	: 200 KW (250 KVA)
DG Serial Number	: 84522144
DG Make & Model	: Cummins & 6L8.9TAA-G4
Source of Emission	: Stack attached to DG Set
Type of fuel used	: HSD
Type of Stack	: Circular
Operating Schedule	: As per requirement
Diameter of Stack (m)	: 0.15
Height of Stack from Ground level (m)	: 4
Height of Stack from roof level (m)	: -
Time of sampling (minutes)	: 41
Ambient Temperature (k)	: 307
Stack Temperature (k)	: 455
Average velocity of flue emission (m/s)	: 9.24
Isokinetic flow rate (l/m)	: 24.7
Flue gas flow rate (m ³ /hr.)	: 587.5

S.no.	Test Parameters	Results	Units	Test Method	Emission Limits as per EP Rules
1.	Particulate Matter(PM)	0.12	g/kw-hr	IS 11255(P-1)	≤ 0.2
2.	Sulphur Dioxide(SO ₂)	0.53	g/kw-hr	IS 11255(P-2)	Not specified
3.	Oxides of Nitrogen(NO _x)	1.37	g/kw-hr	IS 11255(P-7)	≤ 4.0
4.	Hydrocarbon(HC) as CH ₄	0.28	g/kw-hr	IS 5182(P-17)	
5.	Carbon monoxide(CO)	0.72	g/kw-hr	IS 13270:1992	≤ 3.5

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663

**ECOSTEPS LABORATORY PRIVATE LIMITED**

(Complete Test House for testing of Environmental Samples)

NABL Accredited and MoEF&CC Approved Laboratory

ISO 9001 : 2015 & OHSAS 18001 Certified

TEST REPORT**Issued to**

M/s AFCONS Infrastructure Ltd
B-156, 1st floor, Near Metro pillar-167
New Ashok Nagar, Delhi-110036

Doc No.

Amend. No. & Amend. Date

Lab Reference No.

Issue Date

Your Reference

ELPL/IV/QF/20

02 & 17.02.2018

210619026 DN

24/06/2021

Email

(Page 1 of 1)

Sample Particulars: DG Noise Level testing was done at Ghazipur Casting Yard, Ghazipur, Delhi on 18/06/2021.

Type of sample	: DG Noise	Sample Registration Date	: 19/06/2021
Sampling Date	: 18/06/2021	Testing Starting Date	: 18/06/2021
Sampling Done by	: Lab representative	Testing Completion Date	: 18/06/2021
Quantity received	: 01 Sample	Tests Required	: Mentioned below
Sample's Location	: Ghazipur Casting Yard	Sampling Method	: ELPL/III/SOP/37
Details of DG Set	Capacity- 250 KVA DG Serial No - 84522144 Make & Model- Cummins & 6L8.9TAA-G4		

Test Results

S.no.	Description	Unit	Result	Specification	Test Method
1.	Acoustic enclosure (Open Door) Sound level pressure	dB(A)	101.8	-	ELPL/III/SOP/37
2	Acoustic enclosure (Closed Door) Sound level pressure	dB(A)	73.6	75	ELPL/III/SOP/37
3	Insertion Loss	dB(A)	28.2	25	-

*****END OF REPORT*****

Note – Noise Limit for DG Sets (up to 1000 KVA) manufactured on or after 1st January 2005 shall be 75 dB (A) at 1 meter from the enclosure surface, and having insertion loss minimum 25 dB (A).

Analyzed By
(Vikash Kumar)

Checked By
(Dr. Ramesh C. Tripathi)

Authorized Signatory
(Purushottam Kumar Sharma)

Laboratory: D-79, Ground Floor, Sector-6, Noida-201301, Uttar Pradesh (India)

Email: bd@ecostepslab.com | www.ecostepslab.com | Ph.: +91 120 4333226, 9958149985

CIN-U93000DL2014PTC267663