

Report Number: ITS-ENV-2024-06-E
Date : 03 April, 2024

WORKPLACE ENVIRONMENTAL ASSESSMENT REPORT

Stack Air Emission Assessment (Generator)

Facility Name : IRIS Fabrics Limited.
Facility Address : Zirani Bazar, Kashimpur, Gazipur
GPS Coordinate : Latitude: 23.999265 | Longitude: 90.251186
Facility Tel : +8801817049518
Facility Contact : Mohammad Ahsan Alim – GM (Admin, HR & compliance)
Facility Email : admin@irisgroupbd.com
Description of Equipment : KANE975-Industrial Flue Gas Analyzer, Model No: UEi K975, ECOTECH, Model: ESS100
Data Collection Date & Time : 31 March 2024, 9:15 AM-2:25 PM (Running Condition)
Conducted By : Mohammad Waliullah & Kamrun Nahar

Description of Generators:

Key Information	Generator Description			
Machine	Gas Generator-1	Gas Generator-2	Diesel Generator-1	Diesel Generator-2
Location	Utility Area	Utility Area	Utility Area	Utility Area
Capacity	1287 KVA	1875KVA	770 KVA	770 KVA
Brand	Caterpillar	Caterpillar	Caterpillar	Caterpillar
Fuel Type	Gas	Gas	Diesel	Diesel

Key Information	Generator Description			
Machine	Diesel Generator-3	Diesel Generator-4	Diesel Generaor-5	Diesel Generator-6
Location	Utility Area	Utility Area	Utility area	Utility Area
Capacity	275 KVA	200 KVA	220 KVA	12 KVA
Brand	Volvo	Kohler	Max energy	Kohler
Fuel Type	Diesel	Diesel	Diesel	Diesel

Report Number: ITS-ENV-2024-06-E
Date : 03 April, 2024

Assessment Result:

Machine	SPM (mg/Nm ³)	NO _x (mg/Nm ³)	SO ₂ (mg/Nm ³)	CO (mg/Nm ³)	CO ₂ (%)	O ₂ (%)
Gas Generator-1	58	95	0	220	5.9	7
Gas Generator-2	62	97	0	225	7.2	8
Diesel Generator-1	172	72	0	327	12.2	11
Diesel Generator-2	121	68	0	345	11.5	13
Diesel Generator-3	127	82	0	312	15.2	12
Diesel Generator-4	162	78	0	230	14.2	14
Diesel Generator-5	171	62	0	215	11.4	13
Diesel Generator-6	168	57	0	272	13.2	11

Standard Requirement :

Standard	Installation year	SPM (mg/Nm ³)	NO _x (mg/Nm ³)	SO ₂ (mg/Nm ³)	CO (mg/Nm ³)	CO ₂ (%)	O ₂ (%)
Air Emission Control rules-2022	Before 2020	Oil-80 Coal-100	Oil and Natural Gas-200	Oil and coal-400	NF	NF	NF
	After 2020	Oil and coal-50	Oil and Natural Gas -400	Oil and coal-200	NF	NF	NF
IFC/World Bank Standard		50 or Up to 100 mg/m ³	200 (Spark Ignition) 400 (Duel Fuel) 1,600 (Compressor Ignition)	NF	NF	NF	15% (Gas, Liquid)

Abbreviation : SPM (Suspended Particulate Matter), PM10 (Respirable Dust Content), PM2.5 (Fine Particulate Matter), SO₂ (Sulphur-Di-Oxide), NO_x (Oxides of Nitrogen), CO (Carbon Monoxide), CO₂ (Carbon di-oxide), WB (World Bank).

Comment: Assessment result of stack air emission of generators shows that the concentrations of air quality parameters has been found within the acceptable limit.

Report Number: ITS-ENV-2024-06-E
Date : 03 April, 2024

Report prepared by



**Mohammad Waliullah
Auditor
Supplier Management
Business Assurance
ITS Labtest Bangladesh Ltd.**

Report authorized by



**Shoriful Islam
Head of Business Assurance
Supplier Management
Business Assurance
ITS Labtest Bangladesh Ltd.**