ADITYA BIRLA

GRASIM

May 19, 2025

No.2034/Env-SFD/MOEF/RO/BPL/EC-40MW

Director
Ministry of Environment, Forest and Climate Change,
Regional Office (WZ),
E-5, Kendriya Paryavaran Bhawan,
E-5 Arera Colony, Link Road-3,
Ravishankar Nagar,
Bhopal – 462016

Sub: Submission Environment Clearance Compliance Report for the period from October 2024 to March 2025 for Grasim Industries Limited, 40 MW Thermal Power Plant, P.O. Birlagram, Nagda, District Ujjain – 456 331, M.P.

Ref: Environment Clearance Issued vide File No. J-13011/18/94-IA II

Dear Sir,

This has reference to above cited environment clearance & condition prescribed therein and provisions of Section 10 of EIA Notification, dated 2006.

We are enclosing with this letter Six Monthly point wise Environment Clearance Compliance Report and summary of monitoring results for the period from **October 2024 to March 2025** of Grasim Industries Limited, 40 MW Thermal Power Plant.

We are also sending the compliance report to MoEF&CC Regional Office, Bhopal through e-mail address on rowz.bpl-mef@nic.in.

Hope you will find the information provided in order, we shall be happy to furnish further details / clarifications, if required.

Thanking you,
Yours faithfully,

20.05.25

Shantanu A Kulkarni
President &Unit Head

CC:

1. **Ministry of Environment Forest & Climate Change, New Delhi**
2. **Central Pollution Control Board, Zonal Office, Bhopal**
3. **Madhya Pradesh Pollution Control Board – Bhopal**
4. **Assistant Director, Office of Textile Commissioner, Mumbai**

Enclosed: As Above

Grasim Industries Limited
Staple Fibre Division
Birlagram - 456 331, Nagda (M.P.) INDIA Tele: +91 7366 246760-64 Fax : +91 7366 246024, 244114
CIN : L17124MP1947PLC000410 Website : www.adityabirla.com E-mail : grasim-sfd.nagda@adityabirla.com
Regd. Office : P.O. Birlagram, Nagda - 456 331 (M.P.)

SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENT CLEARNACE FOR

GRASIM INDUSTIRES LIMITED, (40MW THERMAL POWER PLANT)
BIRLAGRAM, NAGDA – 456 331
DIST. UJJAIN (M.P.)

Submitted to:

Ministry of Environment Forest & Climate Change, (WR Office) Bhopal

Ministry of Environment Forest & Climate Change, New Delhi

Central Pollution Control Board, Zonal Office, Bhopal

Madhya Pradesh Pollution Control Board - Bhopal

Submitted by:

Grasim Industries Limited, (40MW Thermal Power Plant)

Birlagram, Nagda – 456 331

District: Ujjain (M.P.)

Period: OCTOBER 2024 – MARCH 2025

Submitted on: 1ST JUNE 2025

Compliance Status Report for "Environment Clearance" accorded by MoEF & CC for Grasim Industries Limited, 40 MW Thermal Power Plant, Birlagram, Nagda – 456 331 (M.P.)

Contents

List of Annexures

Compliance Status Report for "Environment Clearance" accorded by MoEF & CC for Grasim Industries Limited, 40 MW Thermal Power Plant, Birlagram, Nagda – 456 331 (M.P.)

Introduction

1. Grasim Industries Limited (GIL), incorporated on 25th Aug., 1947; is a flagship company of the Aditya Birla Group and India's pioneer in manufacturing of Viscose Staple Fibre (VSF) a man-made, biodegradable fibre with characteristics akin to cotton.

2. M/s. Grasim Industries Ltd. has four VSF Plants in India which are located at Nagda (Madhya Pradesh), Harihar (Karnataka), Kharach & Vilayat (Gujarat).

3. 40 MW Thermal Power Plant is coal based thermal power plant located at Birlagram, Nagda.

4. All the operation related permits, including Environmental Clearance from MOEF & CC and Consents to Establish (CTE) & Consent to Operate (CTO) has obtained from M.P. Pollution Control Board, Bhopal are in place.

5. Environmental quality monitoring in & around the Plant site is being carried out by M.P. Pollution Control Board, in-house Laboratory & NABL accredited laboratory on a regular basis.

6. 03 No. of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) along with other Environmental Parameter from Grasim Complex (SFD, EFD & CPP) displayed on LED Board at main gate of the Plant Premises.

7. Online Continuous Emission Monitoring System (CEMS) is installed at stack and connected with M.P. Pollution Control Board and CPCB, New Delhi.

8. Industry has completed ZLD Project as per stipulation given by MPPCB, CPCB, & MoEFCC, Bhopal on 30.09.2021.

9. A vast green belt is developed to curb the emission and also to improve environmental conditions in & around Grasim complex.

10. Point wise compliance status of Environmental Clearance for Grasim Industries Limited, 40MW Thermal Power Plant Fibre Division, Birlagram, Nagda is furnished herewith;

Environment Clearance
(Grasim Industries Limited, 40 MW Thermal Power Plant)
MOEF Ref. O.M. No: J-13011/18/94-IA. II dated 01.03.1995
Period - OCTOBER 2024 – MARCH 2025

Sr.	Conditions and Environmental Safeguards	Compliance Status
	M/s Grasim Industries Limited may refer to proposal dated 26.08.1994 on the subject mentioned above. The Proposal has been examined and accorded clearance from environmental angle subject to effective implementation of the following conditions and environmental safeguards:	Acknowledged
1	All the conditions stipulated by the State Pollution Control Board shall be implemented effectively.	Industry is complying the conditions laid down by state pollution Control Board and has valid consents & authorization issued by M.P. Pollution control board; • Consent under The Water (Prevention and Control of Pollution) Act, 1974 issued vide Letter No. AW-56442 dated 02.08.2022 valid up to 31.07.2025. • Consent under The Air (Prevention and Control of Pollution) Act 1981 issued vide letter no. AW-56442 dated 02.08.2022 valid up to 31.07.2025. • Authorization under the hazardous waste rule issued vide No.AWH-52040 dated 01.09.2020 valid up to 28.05.2025.
2	A stack height of not less than 76 meters shall be provided along with ports for stack monitoring	A stack of 76-meter height constructed and stack monitoring port has been provided for sampling. Online Continuous Monitoring System (CEMS) is also provided at stack and connected to M.P. Pollution Control Board and Central Pollution Control Board, New Delhi.
3	The Electrostatic precipitators having an efficiency of not less than 99.8% shall be installed.	Two High Efficiency Electrostatic Precipitators having three field each has been provided to boilers, which are

Sr.	Conditions and Environmental Safeguards	Compliance Status
		performing efficiently to meet particulate emission norms. Emission monitoring is done and reports are being submitted to Regional Officer, MoEF&CC, Bhopal regularly. The current status of ESP efficiency is 99.86 %
4	The particulate emission shall not exceed the prescribed limit of 350 mg/Nm3 at any time	Two High Efficiency Electrostatic Precipitators have been provided to boilers, which are performing efficiently to meet particulate emission norms. Emission monitoring is done and reports are submitted to Regional Officer, MoEF&CC, Bhopal regularly. Summary of emission monitoring report for reporting period is enclosed as **Exhibit -1**
5	Dust suppression and dust extraction devices shall be installed in the coal handling area to ensure the level of dust within prescribed limits	Complied, following measured has been taken to control dust pollution from coal storage and handling area; • Water Sprinkler System is provided at coal unloading points i.e. at Truck Tripler and Wagon Tripler • Water Sprinkler System has been provided at coal storage area • Coal is transferred through covered conveyer system. • Coal Storage is under shed. • Dust Suppression system is provided at al transfer point of coal conveyer. • Dust extraction system with bag filter is provided in coal crusher house • Thick plantation has been done around the coal storage area Dust level is monitored regular basis in coal handling area and monitoring results are well within the norms.
6	Closed circuit cooling with induced draft cooling tower shall be provided	Closed circuit cooling tower with induced draft has been provided.
7	The liquid effluents will be suitably treated to conform to the prescribed standards before being discharged into nallah. Efforts should be made to utilize the treated effluent to the maximum extent possible so as to conserve water.	Industry has a full-fledged common effluent treatment plant equipped with primary and secondary treatment facility based on activated sludge process. The treated waste water sent to ZLD plant for further treatment and

Sr.	Conditions and Environmental Safeguards	Compliance Status
		RO water utilized in manufacturing process. No treated effluent is being discharged. Images of common effluent treatment plant and ZLD plant is enclosed as Exhibit -2
8	An effective and workable plan of ash utilization starting with at least 20% utilization during the first year which may gradually increase by 10% every year so as to achieve 100% utilization by the end of the ninth year may be prepared and submitted. While disposing of the ash through sale to outside parties , it needs to be ensured that the ash is used in an environmentally compatible manner and does not pose any environmental hazard	Industry has installed fly ash collection system and achieved 100% utilization of fly ash in Cement & Brick Manufacturing Industry. Industry has been regularly submitting the Annual Implementation fly ash Report for compliance of the provisions of Fly Ash Notification. Last Annual Fly Ash Report is submitted vide our letter No. 1949/Env-SFD/PCB/BPL/Fly Ash on 16.04.2024.
9	Workers in the high noise area will be provided with ear protection devices.	Appropriate personal protective equipment's (PPEs) has been provided to employees based noise level at workplace and required noise insertion loss. Noise monitoring has been done regularly to identification of high noise area & adopt appropriate control measure.
10	Green belt of adequate width with suitably selected species should be raised all around the power plant as also around the ash dump area and coal handling area.	Green belt has been developed in industrial complex. Selected species for has been raised in power plant area and coal storage area. Images of green belt provided in power plant area is enclosed as **Exhibit -3.**
11	Regular monitoring of the air quality around the power plant may be carried out and records maintained. Periodic report of air quality may be submitted to this Ministry. Data on S02 emission should be rechecked and furnished to the ministry within three months.	Regular monitoring of the ambient air quality around the industrial campus (SFD, EFD & CPP) is being carried out on regular basis and record are being maintained. Industry has installed 03 (Three) Nos of Continuous Ambient Air Quality Monitoring system (CAAQMS) for Grasim (SFD, EFD & CPP) in consultation with M.P. Pollution Control Board for continuous monitoring of ambient air quality and monitoring results are being displayed on 6 feet X 12 feet LED display board at factory gate for public. Image of the LED display board is enclosed as **Exhibit -4**. Four ambient air quality monitoring station in all four directions of Grasim

Sr.	Conditions and Environmental Safeguards	Compliance Status
		complex (SFD, EFD & CPP) has been setup in consultation with CPCB & MPPCB. Regular monitoring of ambient air quality is being carried out and report is being submitted to MPPCB and CPCB and Regional Office of MoEF&CC. Monitoring results are well within the prescribed standards. Report of the reporting period is enclosed as **Exhibit -5.**
12	Status report on the compliance of pollution standards in respect of existing units may be furnished to this ministry within three months.	Emission and Discharge monitoring from existing units is being carried out and results are in compliance with regulation. Summary of emission monitoring report for reporting period is enclosed as **Exhibit -1** No treated effluent is being discharged. Images of common effluent treatment plant and ZLD plant is enclosed as **Exhibit -2**
13	Separate funds should be allocated for implementation of Environment protection measures along with item wise breakup. These cost should be included as part pf the project cost. The funds earmarked for environmental protection measures should not be diverted for other purposes.	separate fund was allocated for environmental protection in the project cost and item wise breakup is as follows; • Electrostatic Precipitator 2 Nos - Rs. 238 Lacs • Fly Ash handling system – Rs 45.38 Lacs. • Stack 76-Meter Height – Rs.63.13 Lacs • Dust Suppression System – Rs. 9.67 Lacs • Water Recycling System – Rs. 4.27 Lacs • Industry has installed Continuous Emission Monitoring System (CEMS) at Stacks - Rs. 26.43 Lacs.
14	The stipulated conditions will be monitored by our Regional Office, Located in Bhopal.	Acknowledged
15	A half yearly report on the status implementation of the stipulated conditions and environmental safeguards shall be submitted to this Ministry.	A half yearly compliance monitoring report is being submitted to MoEF&CC regularly. Industry has submitted last six monthly compliance report vide letter No. 1997/Env-

Sr.	Conditions and Environmental Safeguards	Compliance Status
		SFD/MoEF/RO/BPL/EC-40MW dated 24.05.2024 for the period from April 2024 to Sep 2024.
16	The conditions stipulated may be varied or new ones added of the clearance revoked if necessary on the interest of environment protection	Acknowledged
17	The stipulations will be implemented among others under the Water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 and the amendments made therein from time to time.	Acknowledged, compliance of all applicable regulatory requirement is being ensured.

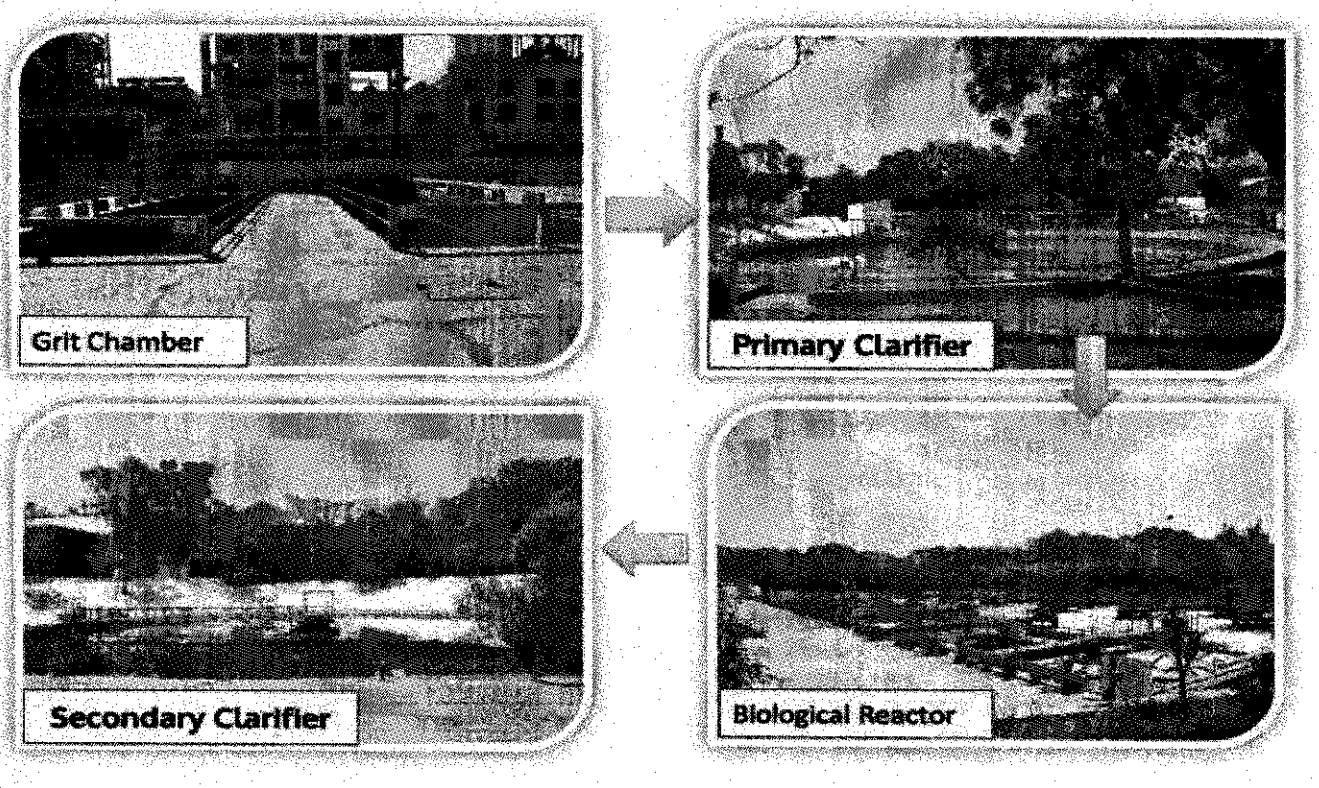
Exhibit - 1

SUMMARY EMISSION MONITORING REPORT

Month	Cross Sectional Area of Stack	Stack Temp.	Velocity	Flow	Emission Conc.	Emission	SO2	NOX
	m^2	°C	m/s	Nm^3/s	mg/Nm^3	kg/day	mg/Nm3	mg/Nm3
Oct-24	15.3	121	6.02	65.16	81	456	406	20.12
Nov-24	15.3	122	6.34	68.51	80	474	412	20.86
Dec-24	15.3	122	6.22	68.19	81	470	400	20.51
Jan-25	15.3	126	6.38	68.29	82	484	395	19.66
Feb-25	15.3	126	6.37	69.04	81	483	397	20.01
Mar-25	15.3	125	6.26	67.42	81	472	392	19.51

Exhibit-2

Effluent Treatment Plant



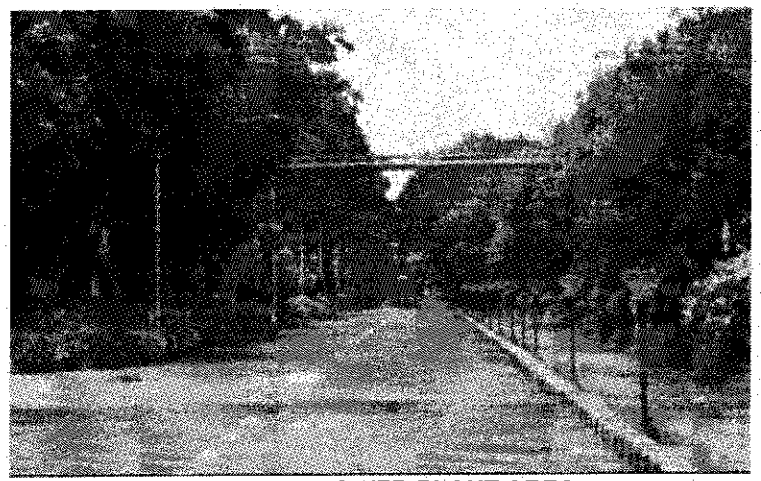
Zero Liquid Discharge plant.

Exhibit - 3

GLIMPS OF GREEN BELT DEVELOPED

POWER HOUSE GATE

PLANT OVERVIEW

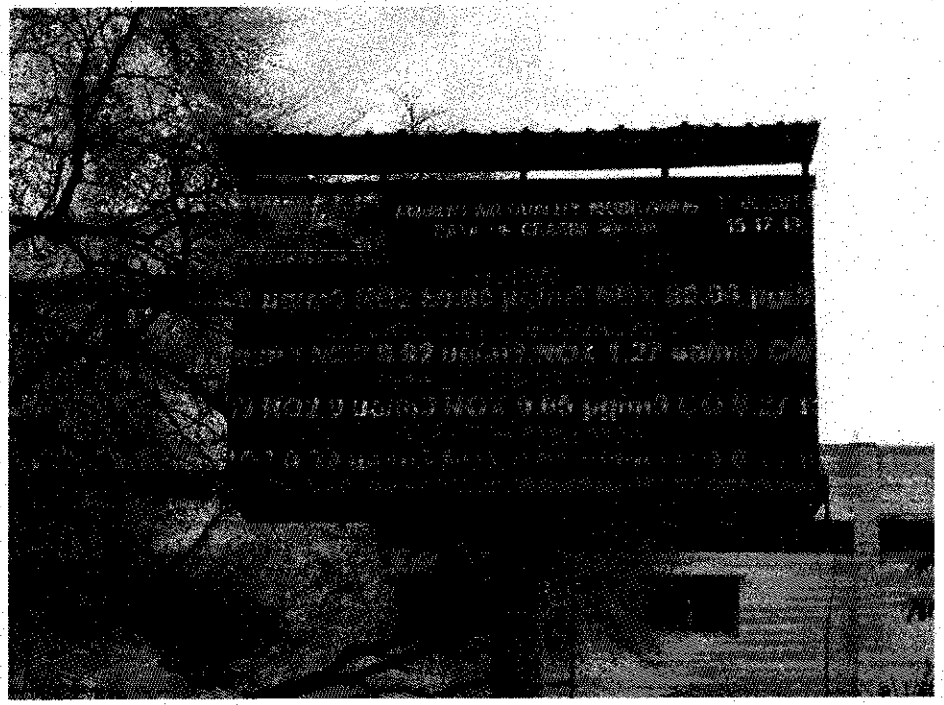


THERMAL POWER PLANT AREA

GREEN BELT

Exhibit-4

LED Display Board for CAAQMS
(at Factory Gate for General Public)



FORMAT - II A

Ambient air quality data at Nagda for the month of : October 2024

All results expressed as µg/m³

Direction	Hrs.	6 - 10				10 - 14				14 - 18				18 - 22				22 - 02				02 - 06				4Hrs Max.				24Hrs Avg.				8 Hrs Avg. PM10			8 Hrs Avg. PM2.5		
	Date	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	6-14	14-22	22-06	6-14	14-22	22-06
EAST	07.10.2024	20	19	18	17	18	18	17	20	15	16	19	16	18	17	20	18	17	20	16	19	18	21	19	18	20	21	20	20	17.5	18.5	18.2	18.0	47	46	48	26	27	25
	17.10.2024	22	19	18	20	18	20	19	17	20	14	17	19	18	17	20	17	17	19	17	19	19	21	21	18	22	21	21	20	19.0	18.3	18.7	18.3	46	46	45	27	28	26
	27.10.2024	17	15	18	21	15	18	17	17	19	19	19	20	20	18	16	17	19	17	16	19	16	14	20	18	20	19	20	21	18.0	16.8	18.0	18.7	47	46	44	28	25	27
WEST	07.10.2024	16	15	13	14	15	13	14	11	12	14	11	12	14	15	13	10	16	15	12	13	15	15	14	13	16	16	14	14	14.7	14.7	12.8	12.2	42	39	41	22	20	21
	17.10.2024	16	15	14	10	15	14	13	13	13	12	14	11	14	15	15	14	16	11	13	13	17	13	12	14	17	15	15	14	15.2	13.3	13.5	12.5	40	42	41	19	20	19
	27.10.2024	12	11	12	11	11	13	11	12	13	14	10	11	10	12	12	10	13	10	13	12	12	11	12	11	13	14	13	12	11.8	11.6	11.7	11.2	39	37	38	20	21	19
NORTH	08.10.2024	14	12	14	11	12	13	10	12	10	15	15	14	12	10	11	13	13	11	13	10	12	13	14	11	14	15	15	14	12.2	12.3	12.8	11.8	40	41	39	20	21	22
	18.10.2024	14	12	12	13	11	15	11	12	16	13	12	14	13	12	10	13	12	13	13	11	11	14	12	10	16	15	13	14	12.8	13.2	11.7	12.2	42	41	40	20	19	21
SOUTH	08.10.2024	20	20	20	18	19	17	19	21	21	19	18	20	20	20	17	17	18	17	18	16	22	16	19	21	22	20	20	21	20.0	18.2	18.5	18.8	47	48	46	27	25	26
	18.10.2024	19	18	17	20	18	14	20	18	17	20	19	22	20	18	21	19	17	21	22	22	19	17	18	20	20	21	22	22	18.3	18.0	19.5	20.2	46	47	45	28	26	27

ND: Not Detectable Tr. : Tracess

FORMAT - II B

Ambient air quality data at Nagda for the month of : October 2024

Sampling location	Month & Year	SO_2 µg/m³				NO_2 µg/m³				CS_2 µg/m³				H_2S µg/m³				PM10 microgram/M3					PM2.5 microgram/M3				
		n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	G.M.	n	A.M.	S.D.	Peak	G.M.
EAST Fabrication Shop	Oct. 2024	18	18.2	1.8	22	18	17.9	2.1	21	18	18.3	1.4	21	18	18.3	1.3	21	9	46	1.2	48	46	9	27	1.1	28	27
WEST Vishnu Bhawan	Oct. 2024	18	13.9	1.9	17	18	13.3	1.7	16	18	12.7	1.8	15	18	11.9	1.4	14	9	40	1.7	42	40	9	20	1.0	22	20
NORTH Labour Club	Oct. 2024	12	12.5	1.6	16	12	12.8	1.4	15	12	12.3	1.5	15	12	12.9	1.4	14	6	41	1.0	42	40	6	21	1.0	22	20
SOUTH Dairy	Oct. 2024	12	19.2	1.5	22	12	18.1	1.9	21	12	19.3	1.5	22	12	19.5	1.8	22	6	47	1.0	48	46	6	27	1.0	28	26

A.M.=Arithmetic mean S.D.=Standard Deviation, G.M.=Geometric mean, n=number of observation

Note: Norms for SO2, NO2, PM10 & PM2.5 as per National Ambient Air Quality Standards and Permissible limit for CS2 = 100 µg/m3 and H2S = 150 µg/m3

FORMAT - II A

Ambient air quality data at Nagda for the month of : November-2024
All results expressed as Microgram/M3

Direction	Hrs.	6 - 10				10 - 14				14 - 18				18 - 22				22 - 02				02 - 06				4Hrs. Max.				24Hrs Avg				8 Hrs.Avg. PM10			8 Hrs.Avg. PM2.5		
	Date	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	6-14	14-22	22-06	6-14	14-22	22-06
EAST	05.11.2024	20	17	15	17	19	15	18	16	20	19	16	13	21	15	19	14	18	20	14	16	15	16	16	15	21	20	19	17	18.8	17.0	16.3	15.2	44	46	46	26	27	25
	19.11.2024	18	15	16	19	15	17	18	17	16	10	17	20	19	14	20	18	17	19	19	17	18	18	17	19	19	19	20	20	17.2	15.5	17.8	18.3	47	48	46	27	26	28
WEST	05.11.2024	9	10	9	12	10	12	10	11	14	11	9	10	11	12	10	11	14	10	11	12	13	11	10	12	14	12	11	12	11.8	11.0	9.8	11.3	44	45	43	26	25	24
	19.11.2024	16	18	17	10	18	15	16	11	17	16	14	10	19	14	18	12	20	17	15	10	21	19	19	12	21	19	19	12	18.5	16.5	16.5	10.8	41	42	40	21	21	22
NORTH	07.11.2024	14	12	12	14	11	14	14	11	15	12	12	13	13	12	9	13	14	10	13	11	15	14	11	12	15	14	14	14	13.7	12.3	11.8	12.3	42	40	42	22	21	20
	21.11.2024	15	12	14	10	10	13	13	10	11	11	12	14	12	14	11	9	13	11	10	11	10	12	12	12	15	14	14	14	11.8	12.2	12.0	11.0	39	40	38	21	22	21
SOUTH	07.11.2024	20	18	17	19	18	17	20	18	17	20	19	21	18	19	21	20	19	21	18	20	19	19	22	19	20	21	22	21	18.5	19.0	19.5	19.5	47	45	46	28	27	26
	21.11.2024	18	17	17	21	19	20	22	20	15	21	18	17	17	16	19	18	21	18	20	19	20	19	19	21	21	21	22	21	18.3	18.5	19.2	19.3	47	46	44	27	28	26

BDL : Below detectable Limit Tr. : Traces ND: Not Detectedble

FORMAT - II B

Ambient air quality data at Nagda for the month of : November-2024

Sampling location	Month & Year	SO2 microgram/M3				NO2 microgram/M3				CS2 microgram/M3				H2S microgram/M3				PM10 microgram/M3					PM2.5 microgram/M3				
		n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	G.M.	n	A.M.	S.D.	Peak	G.M.
EAST Fabrication Shop	November-2024	12	18.0	1.9	21	12	16.3	2.6	20	12	17.1	1.7	20	12	16.8	2.0	20	6	46	1.2	48	46	6	27	1.0	28	26
WEST Vishnu Bhawan	November-2024	12	15.2	3.8	21	12	13.8	3.1	19	12	13.2	3.6	19	12	11.1	0.9	12	6	43	1.7	45	42	6	23	2.0	26	23
NORTH Labour-Club	November-2024	12	12.8	1.8	15	12	12.3	1.2	14	12	12.2	1	14	12	11.7	1.5	14	6	40	1.5	42	40	6	21	0.7	22	21
SOUTH Dairy	November-2024	12	18.4	1.6	21	12	18.8	1.5	21	12	19.3	1.6	22	12	19.4	1.3	21	6	46	1.1	47	46	6	27	0.8	28	27

A.M.=Arithmetic mean, S.D.=Standard Deviation, G.M.=Geometric mean,n=number of observation.

Note: Norms for SO2 ,NO2 , PM10 & PM2.5 as per National Ambient Air Quality Standards and Permissible limit for CS2 = 100 µg/m3 and H2S = 150 µg/m3

FORMAT - II A

Ambient air quality data at Nagda for the month of : December-2024

All results expressed as Microgram/M3

Direction	Hrs	6 - 10				10 - 14				14 - 18				18 - 22				22 - 02				02 - 06				4Hrs Max.				24Hrs Avg				8 Hrs.Avg PM10			8 Hrs.Avg PM2.5		
	Date	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	6-14	14-22	22-06	6-14	14-22	22-06
EAST	04.12.2024	19	18	14	17	16	16	15	16	17	14	18	18	18	18	17	13	15	19	13	15	13	17	14	13	19	19	18	18	16.3	17.0	15.2	15.3	48	27	45	26	47	28
	17.12.2024	19	18	15	19	20	16	21	15	18	15	19	15	17	19	20	18	20	20	18	19	17	17	16	20	20	20	21	20	18.5	17.5	18.2	17.7	47	25	48	26	45	26
WEST	04.12.2024	12	10	12	11	14	13	10	13	11	14	13	10	13	12	14	11	12	11	10	12	15	12	11	14	15	14	14	14	12.8	12.0	11.7	11.8	38	22	40	23	39	21
	17.12.2024	17	16	12	14	15	12	13	13	12	14	12	13	14	15	15	14	16	13	12	13	15	17	14	11	17	17	15	14	14.8	14.5	13.0	13.0	42	21	40	20	41	21
NORTH	08.12.2024	12	15	12	15	10	10	10	9	12	15	9	10	12	12	15	14	14	14	13	12	11	12	15	15	14	15	15	15	11.8	13.0	12.3	12.5	43	20	41	21	42	21
	20.12.2024	14	12	14	11	12	12	10	12	11	15	15	14	12	10	11	13	13	11	13	10	12	13	14	11	14	15	15	14	12.3	12.2	12.8	11.8	41	19	39	21	40	22
	25.12.2024	10	11	10	10	12	12	13	9	11	9	12	12	9	10	10	11	11	10	11	10	10	12	9	12	12	12	13	12	10.5	10.7	10.8	10.7	40	20	38	22	41	21
SOUTH	06.12.2024	19	18	17	19	18	15	14	14	19	14	15	17	19	14	18	18	20	16	19	17	14	14	15	14	20	16	19	19	18.2	14.8	16.3	16.5	45	24	46	26	45	25
	20.12.2024	20	20	20	18	19	17	19	22	21	16	20	20	19	20	17	17	18	17	18	16	22	16	19	21	22	20	20	22	19.8	17.7	18.8	19.0	47	27	45	25	46	26
	25.12.2024	16	15	17	16	16	16	16	16	17	19	17	20	14	17	16	17	19	18	14	15	17	16	16	19	19	19	17	20	16.8	16.8	16.0	17.5	46	26	47	27	45	25

FORMAT - II B

Ambient air quality data at Nagda for the month of : December-2024

Sampling location	Month & Year	SO2 microgram/M3				NO2 microgram/M3				CS2 microgram/M3				H2S microgram/M3				PM10 microgram/M3					PM2.5 microgram/M3				
		n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	G.M.	n	A.M.	S.D.	Peak	G.M.
EAST																											
Fabrication Shop	Dec. 2024	12	17.4	2.0	20	12	17.3	1.7	20	12	16.7	2.5	21	12	16.5	2.3	20	6	40	10.0	48	39	6	33	9.2	47	32
WEST																											
Vishnu Bhawan	Dec. 2024	12	13.8	1.8	17	12	13.3	2.0	17	12	12.3	1.5	14	12	12.4	1.3	14	6	34	8.8	42	33	6	28	8.9	41	26
NORTH																											
Labour-Club	Dec. 2024	18	11.6	1.3	14	18	11.9	1.8	15	18	12.0	2.0	15	18	11.7	1.9	15	9	33	9.8	43	32	9	28	9.3	42	27
SOUTH																											
Dairy	Dec. 2024	18	18.3	2.0	22	18	16.4	1.8	20	18	17.1	1.3	20	18	17.7	2.2	22	9	39	9.6	47	38	9	32	9.3	46	31

A.M.=Arithmetic mean, S.D.=Standard Deviation, G.M.=Geometric mean,n=number of observation, ND = Not Detected

** Norms for SO2 ,NO2 & SPM as per NAAQM Standard and Premissible limit for CS2 = 100 µg/m3 and H2S = 150 µg/m3

FORMAT - II A

Ambient air quality data at Nagda for the month of : January-2025
All results expressed as Microgram/M3

Dire-	Hrs.	6 - 10				10 - 14				14 - 18				18 - 22				22 - 02				02 - 06				4Hrs Max				24Hrs Avg				8 Hrs.Avg. PM10			8 Hrs.Avg. PM2.5		
ction	Date	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	6-14	14-22	22-06	6-14	14-22	22-06
AST	05.01.2025	12	15	20	16	15	12	15	14	11	10	14	15	17	12	17	18	18	17	19	17	14	14	12	13	16	17	20	18	14.5	13.3	16.2	15.5	44	45	44	27	26	27
	19.01.2025	16	14	14	15	17	15	16	14	15	17	20	18	15	17	16	20	14	14	19	17	18	19	17	20	18	19	20	20	16.2	16.0	17.0	17.3	47	48	47	26	27	26
VEST	05.01.2025	11	14	15	12	9	16	11	10	15	17	10	9	14	15	11	12	17	13	13	10	16	18	14	11	17	18	15	12	13.7	15.5	12.3	10.7	40	39	40	20	21	20
	19.01.2025	14	13	15	11	14	15	12	10	15	16	13	9	17	16	14	13	18	13	13	10	17	16	14	12	18	16	15	13	15.8	14.8	13.5	10.8	41	40	40	22	21	22
IORTH	06.01.2025	10	13	12	14	12	10	10	10	12	11	10	12	11	12	12	13	14	14	13	11	13	13	11	13	14	14	13	14	12.0	12.2	11.3	12.2	42	41	42	22	20	21
	20.01.2025	14	12	11	15	10	10	10	9	11	15	10	10	12	12	15	14	14	14	13	12	11	11	14	15	14	15	15	15	12.0	12.3	12.2	12.5	42	40	42	21	20	21
OUTH	06.01.2025	18	17	20	16	14	16	18	15	15	17	16	19	19	18	17	19	19	18	18	19	18	14	19	17	19	18	20	19	17.2	16.7	18.0	17.5	47	46	46	24	25	24
	20.01.2025	18	14	18	18	19	15	17	14	19	17	15	17	19	14	19	18	17	17	19	17	20	16	16	17	20	17	19	18	18.7	15.5	17.3	16.8	46	45	46	25	26	25

IDL : Below detectable Limit Tr. : Tracess ND: Not Detectedble

FORMAT - II B

Ambient air quality data at Nagda for the month of : January-2025

Sampling location	Month & Year	SO2 microgram/M3				NO2 microgram/M3				CS2 microgram/M3				H2S microgram/M3				PM10 microgram/M3					PM2.5 microgram/M3				
		n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	G.M.	n	A.M.	S.D.	Peak	G.M.
AST Fabrication Shop	January-2025	12	15.3	2.2	18	12	14.7	2.5	19	12	16.6	2.5	20	12	16.4	2.2	20	6	46	1.6	48	46	6	27	0.5	27	26
VEST Vishnu Bhawan	January-2025	12	14.8	2.5	18	12	15.2	1.6	18	12	12.9	1.6	15	12	10.8	1.2	13	6	40	0.6	41	40	6	21	0.8	22	21
NORTH Labour Club	January-2025	12	12.0	1.4	14	12	12.3	1.5	15	12	12.3	2	15	12	12.3	1.9	15	6	42	0.8	42	41	6	21	0.7	22	21
SOUTH Dairy	January-2025	12	17.9	1.7	20	12	16.1	1.4	18	12	17.7	1.4	20	12	17.2	1.5	19	6	46	0.6	47	46	6	25	0.7	26	25

A.M.=Arithmetic mean, S.D.=Standard Deviation, G.M.=Geometric mean,n=number of observation.
Note: Norms for SO2 ,NO2 , PM10 & PM2.5 as per National Ambient Air Quality Standards and Permissible limit for CS2 = 100 µg/m3 and H2S = 150 µg/m3

FORMAT - II A

Ambient air quality data at Nagda for the month of : February 2025

All results expressed as µg/m^3

Direction	Hrs.	6 - 10				10 - 14				14 - 18				18 - 22				22 - 02				02 - 06				4Hrs Max.				24Hrs Avg				8 Hrs.Avg. PM10			8 Hrs.Avg. PM2.5		
	Date	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	SO_2	NO_2	CS_2	H_2S	6-14	14-22	22-06	6-14	14-22	22-06
EAST	05.02.2026	18	18	14	15	20	20	15	18	19	17	19	17	23	15	19	19	22	17	17	18	18	16	14	19	23	20	19	19	20.0	17.2	16.3	17.7	45	44	45	25	26	25
	19.02.2025	19	18	15	19	20	16	21	15	18	15	19	15	17	19	20	18	20	20	18	19	17	17	16	20	20	20	21	20	18.5	17.5	18.2	17.7	47	48	45	25	26	26
	26.02.2025	18	14	19	20	15	15	20	17	17	17	18	16	20	16	19	15	21	19	17	16	19	12	15	17	21	19	20	20	18.3	15.5	18.0	16.8	45	46	45	27	26	27
WEST	05.02.2026	14	14	15	12	12	12	12	13	12	13	15	16	13	14	11	16	13	13	13	15	11	14	12	10	14	14	15	16	12.5	13.3	13.0	13.7	42	41	42	21	20	21
	19.02.2025	10	12	13	10	14	10	12	11	15	13	14	13	12	11	11	12	11	13	13	10	15	12	10	11	15	13	14	13	12.8	11.8	12.2	11.2	41	40	42	21	22	20
	26.02.2025	11	15	12	13	13	14	15	14	14	12	14	11	15	16	11	15	12	15	11	14	14	13	14	10	15	16	15	15	13.2	14.2	12.8	12.8	40	39	40	21	20	21
NORTH	06.02.2025	11	14	14	12	10	13	11	10	13	11	14	10	11	12	12	12	12	13	10	13	14	12	12	11	14	14	14	13	11.8	12.5	12.2	11.3	40	41	40	22	23	22
	20.02.2025	10	13	12	11	14	12	10	11	12	11	11	15	15	12	14	13	9	14	13	12	12	11	15	13	15	14	15	15	12.0	12.2	12.5	12.5	42	41	42	20	21	20
SOUTH	06.02.2025	20	17	14	13	20	15	13	11	15	18	12	12	13	19	14	16	14	18	16	15	15	15	12	13	20	19	16	16	16.2	17.0	13.5	13.3	47	46	47	27	26	27
	20.02.2025																									BDL	BDL	BDL	BDL	BDL	#DIV/0!	BDL	BDL						

ND: Not Detectedble Tr. : Tracess

FORMAT - II B

Ambient air quality data at Nagda for the month of : February 2025

Sampling location	Month & Year	SO_2 µg/m^3				NO_2 µg/m^3				CS_2 µg/m^3				H_2S µg/m^3				PM10 microgram/M3					PM2.5 microgram/M3				
		n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	G.M	n	A.M.	S.D.	Peak	G.M
EAST Fabrication Shop	Feb. 2025	18	18.9	1.9	23	18	16.7	2.0	20	18	17.5	2.1	21	18	17.4	1.7	20	9	46	1.2	48	46	9	26	0.7	27	26
WEST Vishnu Bhawan	Feb. 2025	18	12.8	1.5	15	18	13.1	1.4	16	18	12.7	1.5	15	18	12.6	2.0	16	9	41	1.0	42	41	9	21	0.6	22	21
NORTH Labour-Club	Feb. 2025	12	11.9	1.8	15	12	12.3	1.0	14	12	12.3	1.6	15	12	11.9	1.4	15	6	41	0.8	42	41	6	21	1.1	23	21
SOUTH Dairy	Feb. 2025	12	16.2	2.8	20	12	17.0	1.5	19	12	13.5	1.4	16	12	13.3	1.7	16	6	47	0.5	47	0	6	27	0.5	27	0

A.M.=Arithmetic mean, S.D.=Standard Deviation, G.M.=Geometric mean,n=number of observation.

Note: Norms for SO2 ,NO2 , PM10 & PM2.5 as per National Ambient Air Quality Standards and Permissible limit for CS2 = 100 µg/m3 and H2S = 150 µg/m3

FORMAT - II A

Ambient air quality data at Nagda for the month of : March-2025
All results expressed as Microgram/M3

Dire-ction	Hrs.	6 - 10				10 - 14				14 - 18				18 - 22				22 - 02				02 - 06				4Hrs Max				24Hrs Avg				8 Hrs.Avg PM10			8 Hrs.Avg PM2.5		
	Date	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	SO2	NO2	CS2	H2S	6-14	14-22	22-06	6-14	14-22	22-06
EAST	06.03.2025	15	16	12	18	18	19	14	15	19	20	18	13	20	15	19	18	21	17	17	20	17	18	19	17	21	20	19	20	18.3	17.5	16.5	16.8	46	45	46	26	25	26
	20.03.2025	20	17	17	17	17	16	20	14	19	15	19	17	17	19	19	18	20	18	18	20	18	19	17	18	20	19	20	20	18.5	17.3	18.3	17.3	46	47	46	26	25	26
WEST	06.03.2025	11	12	14	14	13	13	12	15	12	12	13	16	14	14	12	10	13	15	13	12	12	12	14	11	14	15	14	16	12.5	13.0	13.0	13.0	40	41	40	22	21	22
	20.03.2025	15	13	14	12	12	10	12	11	14	13	10	13	12	12	9	10	11	13	13	10	14	11	12	12	15	13	14	13	13.0	12.0	11.7	11.3	42	40	42	22	21	21
NORTH	07.03.2025	9	15	12	10	11	12	11	12	14	11	13	13	11	12	12	12	13	13	14	13	12	10	11	14	14	15	14	14	11.7	12.2	12.2	12.3	41	40	41	23	22	23
	21.03.2025	14	14	11	12	12	12	10	11	12	10	11	15	15	12	14	13	10	9	13	14	11	12	12	12	15	14	14	15	12.3	11.5	11.8	12.8	41	42	41	21	20	21
SOUTH	07.03.2025	18	16	15	12	16	17	13	15	14	18	12	12	13	20	14	14	14	18	16	15	19	14	13	16	19	20	16	16	16.0	17.2	13.8	14.0	47	45	47	28	27	26
	21.03.2025	15	14	12	13	15	15	13	13	12	14	14	12	14	15	14	12	16	16	12	13	14	15	14	14	16	16	14	14	14.3	14.8	13.2	12.8	45	44	45	25	24	25

BDL : Below detectable Limit **Tr. :** Tracess **ND:** Not Detectedble

FORMAT - II B

Ambient air quality data at Nagda for the month of : March-2025

Sampling location	Month & Year	SO2 microgram/M3				NO2 microgram/M3				CS2 microgram/M3				H2S microgram/M3				PM10 microgram/M3					PM2.5 microgram/M3				
		n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	n	A.M.	S.D.	Peak	G.M.	n	A.M.	S.D.	Peak	G.M.
EAST Fabrication Shop	March-2025	12	18.4	1.7	21	12	17.4	1.6	20	12	17.4	2.2	20	12	17.1	2.1	20	6	46	0.8	47	46	6	26	0.5	26	26
WEST Vishnu Bhawan	March-2025	12	12.8	1.2	15	12	12.5	1.3	15	12	12.3	1.5	14	12	12.2	1.9	16	6	41	0.9	42	41	6	22	0.5	22	21
NORTH Labour-Club	March-2025	12	12.0	1.7	15	12	11.8	1.6	15	12	12.5	1	14	12	12.6	1.3	15	6	41	0.6	42	41	6	22	1.1	23	22
SOUTH Dairy	March-2025	12	15.2	2.1	19	12	16.0	1.8	20	12	13.5	1.2	16	12	13.4	1.3	16	6	46	1.1	47	45	6	26	1.0	27	25

A.M.=Arithmetic mean, S.D.=Standard Deviation, G.M.=Geometric mean,n=number of observation.

Note: Norms for SO2 ,NO2 , PM10 & PM2.5 as per National Ambient Air Quality Standards and Permissible limit for CS2 = 100 µg/m3 and H2S = 150 µg/m3