

### गेल (इंडिया) लिमिटेड

(भारत सरकार का उपक्रम - महारत्न कंपनी)

#### **GAIL (India) Limited**

(A Government of India Undertaking - A Maharatna Company)

No. GAIL/USAR/PDHPP/MOEFCC/HY/2024/01

पेट्रकेमिकला कॉम्पलेक्स, मु.उसर, पोंस्ट-मल्याण, तालुका - अलिबाग, जिला रायगड, महाराष्ट्र - 402 203

Petrochemical Complex At - Usar, Post - Malyan, Tal - Alibag, Dist - Raigad, Maharashtra - 402 203. GSTN: 27AAACG1209J3ZU

04.05.2024

To, Addl. Principal Chief Conservator of Forests (C), Ministry of Env., Forest and Climate Change Regional Office (WCZ), Ground Floor East Wing, New Secretariat Building, Civil Lines, Nagpur-440001

Ref.: F.No. J-11011/464/2017-IA-II(I) dated 13.10.2020

Subject: Submission of compliance status to the conditions of Environmental Clearance accorded for setting up of 500 KTA Propane dehydrogenation unit integrated with Polypropylene unit by M/s. GAIL (India) Limited at Usar Industrial Area, Village-Usar, Tehsil- Alibag, District- Raigad (Maharashtra)

Dear Sir,

Please find enclosed herewith compliance status to the conditions of Environmental Clearance accorded for setting up of 500 KTA Propane Dehydrogenation unit integrated with Polypropylene Unit to M/s. GAIL (India) Limited, Usar.

This project is under initial stage and the compliance is for the period of October 2023 to March 2024.

Thanking You,

Yours Truly,

Anup Gupta

Chief General Manager (PDH-PP Projects)

Enclosure: Half Yearly EC compliance (October 2023 to March 2024)

पंजीकृत कार्यालय :

गेल भवन, 16 भीकाएजी कामा प्लेस

नई दिल्ली - 110 066, इंडिया

REGD. OFFICE:

GAIL BHAWAN, 16 BHIKAIJI CAMA PLACE NEW DELHI - 110 066, INDIA. सीआईएन/ CIN L402200DL1984GOI018976

www.gailonline.co.in

	Lucia Marian III.	
	The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November, 2012 as amended time to time shall be followed.	Shall be complied with.
(xx)	Recommendations of mitigation measures from possible accident shall be implemented based on Risk Assessment studies conducted for worst case scenarios using latest techniques.	Shall be complied with.
Complia	nces of terms and conditions (B. General Conditions):	
(i)	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted and shall be complied with.
(ii)	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	Noted and shall be complied with.
(iii)	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Noted and shall be complied with.
(iv)	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	In line with the directions of District Administration, Agreements with respective Group Grampanchayat of villages in vicinity of the plant premises is being executed for implementation of CER Projects.
(v)	The company shall carmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so carmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	Noted and shall be complied with.
(vi)	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	Compled.
(vii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.	Complied and will be further ensured
(viii)	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	The proposed Project is under various stage of Design and tendering and submission of Enviornment Statement (Form-V) will be undertaken after Plant commercial operation.
(ix)	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Complied. Has been advertised on 20th October, 2020. A copy of same has been sent to MoEFCC Regional Office at Nagp.ir.
(x)	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	Noted and shall be complied with.
(xi)	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted.



	Compliance of Environmental Claurance conditions for the paried 1st Octo	har 2022 to 21st Manah 2024
	Compliance of Environmental Clearance conditions for the period 1st Octo ect: Setting up of 500 KTA Propane Dehydrogenation unit integrated with Polypropyl	
	Reference No.: F. No. J-11011/464/2017-IA-II(I) dated 13th October	
Compli	iances of terms and conditions (A. Specific Conditions):	THE STATE OF THE S
	The company shall comply with all the environmental protection measures and	
	safeguards proposed in the documents submitted to the Ministry. All the	
(i)	recommendations made in the EIA/EMP in respect of environmental	Shall be complied with.
	management, and risk mitigation measures relating to the project shall be implemented.	
	As already committed by the Project proponent, Zero Liquid Discharge shall be	ZLD is included in design and shall be
(ii)	ensured and no waste/treated water shall be discharged outside the premises. All the waste water to be collected and to be reused after treatment	implemented
ļ "	To control source and the fugitive emissions, suitable pollution control devices	
(iii)	shall be installed with different stacks to meet the prescribed norms as notified by MOEFCC 2012 for new refineries.	Shall be complied with.
	Total fresh water requirement shall not exceed 480 m3/hour to be met from	· · · · · · · · · · · · · · · · · · ·
(iv)	MIDC water supply. Necessary permission in this regard shall be obtained from	Noted and shall be complied with.
	the concerned regulatory authority.	The state of the s
(v)	Process effluent/any waste water shall not be allowed to mix with storm water.	Chall be seen that with
(1)	Storm water drain shall be passed through guard pond.	Shall be complied with.
	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame	
(vi)	arresters shall be provided on tank farm, and solvent transfer to be done through	Shall be complied with.
	pumps.  Process organic residue and spent carbon, if any, shall be sent to cement industries.	***************************************
:	ETP sludge, process inorganic & evaporation salt shall be disposed off to the	
(vii)	TSDF. The ash from boiler shall be sold to brick manufacturers/cement	Shall be complied with.
	industry	
(viii)	Regular VOC monitoring shall be done at vulnerable points.	Shall be complied with.
(-)	The oily sludge shall be subjected to melting pit for oil recovery and the residue	Shall be complied with during the
(ix)	shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper	operation phase of the Plant.
	leachate collection system.  Comprehensive water audit to be conducted on annual basis and report to the	
(x)	concerned Regional Office of MEF&CC. Outcome from the report to be	Shall be complied with during the
	implemented for conservation scheme.	operation phase of the Plant.
(xi)	Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water	Ct 111
	drainage system inside the factory premises.	Shall be complied with.
(xii)	The company shall undertake waste minimization measures as below: -	
	(a) Metering and control of quantities of active ingredients to minimize waste.	
<u> </u>	(b) Reuse of by-products from the process as raw materials or as raw material	
	substitutes in other processes.	r
	(c)Use of automated filling to minimize spillage.	Noted and shall be complied with as
	(d) Use of Close Feed system into batch reactors.	applicable.
<u> </u>	(e) Venting equipment through vapour recovery system.	
	(f) Use of high pressure hoses for equipment cleaning etc. to reduce wastewater	
	generation.  The green belt of 5-10 m width shall be developed in more than 33% of the total	
	project area, mainly along the plant periphery, in downward wind direction, and	
(xiii)	along road sides etc. Selection of plant species shall be as per the CPCB guidelines	Noted and Shall be complied with.
	in consultation with the State Forest Department.	
	,	In line with the directions of District
	As committed Rs. 20.77 crores shall be allocated for Corporate Environment	Administration, Agreements with
(xiv)	Responsibility (CER) shall be utilized for meeting the commitment of the issues of	respective Group Grampanchayat of
	public hearing. The CER plan shall be completed before commissioning of the expansion of the project.	villages in vicinity of the plant premises
	expansion of the project.	is being executed for implementation of
	A separate Environmental Management Cell (having qualified person with	CER Projects.
(xv)	Environmental Science/Environmental Engineering/specialization in the project area)	
(41)	equipped with full-fledged laboratory facilities shall be set up to carry out the	Shall be complied with.
	Environmental Management and Monitoring functions.	
(xvi)	The unit shall make the arrangement for protection of possible fire hazards during	
(XVI)	manufacturing process in material handling. Firefighting system shall be as per the norms.	Shall be complied with.
	Continuous online (24x7) monitoring system for stack emissions shall be installed	
	for measurement of flue gas discharge and the pollutants concentration, and the	
(xvii)	data to be transmitted to the CPCB and SPCB server. In case of the treated effluent	Shall be complied with.
	to be utilized for irrigation/gardening, real time monitoring system shall be	
	installed at the ETP outlet.	
	PP to set up occupational health Centre for surveillance of the worker's health	
(xviii)	within and outside the plant on a regular basis. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided	Shall be complied with.
	with required safety kits/mask for personal protection.	No.
	August 1	\ <del>\\\\</del>



## BUILDING & ROAD, MATERIAL, SOIL, ENVIRONMENTAL & CALIBRATION TESTING LAB

Himmat, Jammu-180 015, J&K (UT), Indi

¥91-191-2455597

🖾 info@nitya ab.com 🚳 www.nityalab.co

#### Test Report .

Issued To

**GAIL India Limited** 

PDH-PP Project

At & Post-Usar, Tal: Alibag Distt. Raigad-402203

ULR No. :

TC636624000002213F

Test Report Date:

27/03/2024

Sample Particulars

Nature of the Sample

Date of Sampling

Purpose of Monitoring

Parameter Tested

Instrument Used

Place of Monitoring

**Ambient Noise** 

16/03/2024

To Check the Pollution Load

Noise Level, Leg dB (A)\*

Sound Level Meter

Near Lab

Analysis Report

Sr. No.	Location	Test Result dB(A) Day Time	Test Result dB(A) Night-time	Test Method
Permissible Limit	in *dB(A) LeqFor Industrial Area	75 dB(A)	70 dB(A)	•
1 Near La	b	71.8	57.1	IS 9989

\*dB (A) Leq denotes the time weighted average of the level of sound in decibel on scale 'A' which is relatable to human hearing.

CPCB = Central Pollution Control Board

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq		
, , , , , , , , , , , , , , , , , , ,		Day Time (6AM - 10PM)	Night Time (10FM - 06AM)	
А	Industrial Area	75	70	
В	Commercial Area	65	55	
С	Residential Area	55	45	
D	Silence Zone	50 '	40	



(AUTHORISED SIGNATORY)

RAVINDER MITTAL)

#### **CORPORATE OFFICE & CENTRAL LABORATORIES:**



### NITYA LABORATORIES

43, Sector-A1 Ext., Bhalla Enclave, Chanr Himmat, Jammu-180 015, J&K (UT), Indi

周+91-191-2465597

TC636624000002212F

27/03/2024

📷 info@nityalab.com 🕲 www.nityalab.co

### BUILDING & ROAD, MATERIAL, SOIL, ENVIRONMENTAL & CALIBRATION TESTING LAB

#### **Test Report**

Issued To GAIL India Limited

Sample Particulars
Nature of the Sample

Time of Sampling (Hrs)

Sample Received at Lab

Purpose of Monitoring

Monitoring Conducted By

Ambient Temperature (°C)

Sampling Duration (Hrs.)

Avg. Flow Rate of Air for RDS (m3/min)

Avg. Flow Rate of Air for FPS (m3/hr)

Method of Sampling

Sampling Location

Date of Sampling

Test Started on

Test Completed

PDH-PP Project

At & Post-Usar, Tal: Alibag

Distt. Raigad-402203

ULR No. :

Test Report Date:

Ambient Air Quality Monitoring 16/03/2024

04:20PM

19/03/2024

19/03/2024

26/03/2024

To Check the Pollution Load

IS 5182 (Part 14)

Near Lab

1.12

0.99

Mr. Shubham Gautam

29

24 Hrs.

**Analysis Report** 

rameters	Test Results	Standard Limit	Duration	Test Method
rticulate Matter (PM <sub>2 5</sub> ), μg/m <sup>3</sup>	43.16	60	24 hrs	40CFR Appendix L Part 53 CPCB Guidelines
rticulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	84.60	100	24 hrs	IS:5182(P-23)
lphur Dioxide (as SO <sub>2</sub> ), μg/m³	22.50	80	24 hrs	IS:5182(P-2)
rogen Dioxide (as NO <sub>2),</sub> ug/m³	31.10	100	24 hrs	IS:5182(P-6)
one (as O₃), ug/m³*	32.50	100	8 hrs	IS:5182(P-9)
ad (as Pb), µg/ m³°	ND	1	24 hrs	NL/SOP/AAQ-11
rbon Monoxide (as CO), mg/m³	1.24	2	8 hrs	IS:5182 (P-10)
imonia (as NH <sub>3</sub> ), ug/m <sup>3</sup>	47.60	400	24 hrs	Method of Air Sampling & Analys s CPCB Guidelines
kel (as Ni), ng/m³⁺	ND	20	Annual	NUSOPIAAQ-13
senic (as As), ng/m³*	ND	6	Annual	NL/SOP/AAQ-12
nzo(a)pyrene (as BAP), ng/m³'	ND	1	Annual	IS:5182 (P-12)
nzene (C <sub>6</sub> H <sub>6</sub> ), ug/m <sup>3</sup> *	ND	5	Annual	IS:5182 (P-11)
nzene (Ce	sHe), ug/m³*	sH <sub>6</sub> ), ug/m <sup>3*</sup> ND	sH <sub>6</sub> ), ug/m <sup>3*</sup> ND 5	11232

\*NAAQS - National Ambient Air Quality Standards, Schedule-VII, [Rule 3 (3B)], [Part-li-sec-3(ii)] 16 11.2009



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#### **CORPORATE OFFICE & CENTRAL LABORATORIES:**



### BUILDING & ROAD, MATERIAL, SOIL, ENVIRONMENTAL & CALIBRATION TESTING LAB

### NITYA LABORATORIES

43, Sector-A1 Ext., Bhalla Enclave, Chanr Himmat, Jammu-180 015, J&K (UT), Indi-

**3**+91-191-2465597

info@nityalab.com @ www.nityalab.co

#### **Test Report**

Issued To

**GAIL India Limited** 

PDH-PP Project

At & Post-Usar, Tal: Alibag Distt. Raigad-402203 ULR No. .

TC6366240C0002221F

Test Report Date:

27/03/2024

Sample Particulars

Nature of the Sample

Date of Sampling

Purpose of Monitoring

Parameter Tested

Instrument Used

Place of Monitoring

Ambient Noise

16/03/2024

To Check the Pollution Load

Noise Level, Leg dB (A)\*

Sound Level Meter

Fire Station

**Analysis Report** 

Sr. No.	Location	Test Result dB(A)  Day Time	Test Result d3(A) Night Time	Test Method	
Permissib	ole Limit in *dB(A) LeqFor Industrial Area	75 dB(A)	70 dB(A)		
1	Fire Station	. 70.5	62.9	IS 9989	

\*dB (A) Leq denotes the time weighted average of the level of sound in decibel on scale 'A' which is relatable to human hearing.

CPCB = Central Pollution Control Board

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits	dB (A) Leq
	1	Day Time (6AM – 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45
D	Silence Zone	50	40



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NOTE: The inscreasory succepts the responsively for content of report. The results contained is this text report included only to the sample tested. Text report that into the reproduced except in full, without market an approvable if the inspression of the results report in the rep

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**№** +91-191-2455597

info@nitya ab.com @ www.nityalab.co

## BUILDING & ROAD, MATERIAL, SOIL, ENVIRONMENTAL & CALIBRATION TESTING LAB

#### Test Report

issued To GAIL India Limited

PDH-PP Project

At & Post-Usar, Tal: Alibaq Distt. Raigad-402203

ULR No.

TC6366240000D2220F

Test Report Date:

27/03/2024

#### Sampl∋ Particulars

Nature of the Sample

Date of Sampling

Time of Sampling (Hrs)

Sample Received at Lab

Test Started on

Test Completed

Purpose of Monitoring

Method of Sampling

Sampling Location

Avg. Flow Rate of Air for RDS (m3/min)

Avg. Flow Rate of Air for FPS (m3/hr)

Monitoring Conducted By

Ambient Temperature (°C) Sampling Duration (Hrs.)

Ambient Air Quality Monitoring

16/03/2024

04:50 PM

19/03/2024

19/03/2024

26/03/2024

To Check the Pollution Load

IS 5182 (Part 14)

Fire Station

1.12

0.99

Mr. Shubham Gautam

29

24 Hrs.

Analysis Report

Sr. No.	Parameters	Test Results	Standard Limit	Duration	Test Method
1.	Particulate Matter (PM <sub>2 5</sub> ), μg/m <sup>3</sup>	43.90	60	24 hrs	400FR Appendix L Part 53 CPCB Guidelines
2.	Particulate Matter (PM10), µg/m3	84.50	100	24 hrs	IS:5182(P-23) .
3.	Sulphur Dioxide (as SO <sub>2</sub> ), μg/m <sup>3</sup>	26.20	80	24 hrs	IS:5182(P-2)
4.	Nitrogen Dioxide (as NO <sub>2),</sub> ug/m <sup>3</sup>	33.20	100	24 hrs	IS:5182(P-6)
5.	Ozone (as O <sub>3</sub> ), ug/m <sup>3</sup> *	29.80	100	8 hrs	IS:5182(P-9)
6.	Lead (as Pb), µg/ m³°	ND	1	24 hrs	NL/SOP/AAQ-11
7.	Carbon Monoxide (as CO), mg/m <sup>3</sup>	1.48	. 2	8 hrs	IS:5182 (P-10)
8.	Ammonia (as NH <sub>3</sub> ), ug/m <sup>3</sup>	43.50	400	24 hrs	Method of Air Sampling & Analysis CPCB Guidelines
9.	Nickel (as Ni), ng/m³*	ND	20	Annual	NL/SOP/AAQ-13
10.	Arsenic (as As), ng/m³*	ND	6	Annual	NL <sup>1</sup> SOP/AAQ-12
11.	Benzo(a)pyrene (as BAP), ng/m³*	ND	1	Annual	IS:5182 (P-12)
12.	Benzene (C₀H₀), ug/m³*	ND	5	Annual	-IS:5182 (P-11)



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#### Test Report

Issued To

**GAIL India Limited** 

PDH-PP Project

At & Post-Usar, Tal: Alibag Distt. Raigad-402203

BUILDING & ROAD, MATERIAL, SOIL, ENVIRONMENTAL & CALIBRATION TESTING LAB

ULR No. :

TC636624000002217F

Test Report Date:

27/03/2024

Sample Particulars

Nature of the Sample

Date of Sampling

Purpose of Monitoring

Parameter Tested

Instrument Used

Place of Monitoring

Ambient Noise

23/12/2023

To Check the Pollution Load

Noise Level, Leg dB (A)\*

Sound Level Meter

Admin Building

Analysis Report

Permissible Limit	Location in *dB(A) LeqFor Industrial Area	Test Result dB(A) Day Time 75 dB(A)	Test Result dB(A) Night Time 70 dB(A)	Test Method
1 Admin E	Building	70.6	63.3	IS 9989

\*dB (A) Leq denotes the time weighted average of the level of sound in decibel on scale 'A' which is relatable to human hearing.

CPCB = Central Pollution Control Board

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	dB (A) Leq	
		Day Time (6AM – 10PM)	Night Time (10PM - 06AM)
A	Industrial Area	75	70
В	Commercial Area	65	55
С	Residential Area	55	45 ू
D	Silence Zone	50	40



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## BUILDING & ROAD, MATERIAL, SOIL, ENVIRONMENTAL & CALIBRATION TESTING LAB

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43, Sector-A1 Ext., Bhalla Enclave, Chann-Himmat, Jammu-180 015, J&K (UT), India

図+91-191-2465597

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#### **Test Report**

Issued To GAIL India Limited

PDH-PP Project

At & Post-Usar, Tal: Alibag Distt. Raigad-402203 ULR No.

TC636624000002216F

Test Report Date:

27/03/2024

#### Sample Particulars

Nature of the Sample

Date of Sampling

Time of Sampling (Hrs)

Sample Received at Lab

Test Started on

Test Completed

Purpose of Monitoring

Method of Sampling

Sampling Location

Avg. Flow Rate of Air for RDS (m3/min)

Avg. Flow Rate of Air for FPS (m3/hr)

Monitoring Conducted By

Ambien: Temperature (°C) Sampling Duration (Hrs.) Ambient Air Quality Monitoring

23/12/2023

03:30 PM

19/03/2024

19/03/2024

26/03/2024

To Check the Pollution Load

IS 5182 (Part 14)

Admin Building

1.40

1.10

Mr. Shubham Gautam

27

24 Hrs.

**Analysis Report** 

Sr. Na.	Parameters	Test Results	Standard Limit	Duration	Test Method
1.	Particulate Matter (PM25), µg/m³	35.80	60	24 hrs	40CFR Appendix L Part 53 CPCB Guidelines
2.	Particulate Matter (PM <sub>10</sub> ), µg/m <sup>3</sup>	87.80	100	24 hrs	IS:5182(P-23)
3.	Sulphur Dioxide (as SO <sub>2</sub> ), µg/m <sup>3</sup>	25.10	· 80	24 hrs	IS:5182(P-2)
4.	Nitrogen Dioxide (as NO <sub>2),</sub> ug/m <sup>3</sup>	34.40	100	24 hrs	IS:5182(P-6)
5.	Ozone (as O <sub>3</sub> ), ug/m <sup>3</sup>	35.80	100	8 hrs	IS:5182(P-9)
6.	Lead (as Pb), µg/ m³*	ND	1	24 hrs	NL/SOP/AAQ-11
7.	Carbon Monoxide (as CO), mg/m <sup>3</sup>	1.26	2	8 hrs	IS:5182 (P-10)
8.	Ammonia (as NH₃), ug/m³	48.20	400	24 hrs	Method of Air Sampling & Analysis CPCB Guidelines
9.	Nickel (as Ni), ng/m³*	ND	20	Annual	NL/SOP/AAQ-13
10.	Arsenic (as As), ng/m³′	ND,	. 6	Annual	NL/SOP/AAQ-12
11.	Benzo(a)pyrene (as BAP), ng/m³*	ND	1	Annual	IS:5182 (P-12)
12.	Benzene (C <sub>6</sub> H <sub>6</sub> ), ug/m <sup>3*</sup>	ND	5	Annual	IS:5182 (P-11)

Remark: "NAAQS - National Ambient Air Quality Standards, Schedule VII (Rule 3 (38)), [Part-II-sec -3(i)] 16 11 2009

\_/ \\_\_\ TC-6366 (AUTHORISED SIGNATORY)
(RAVINDER MITTAL)

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#### **CORPORATE OFFICE & CENTRAL LABORATORIES:**



Himmat, Jammu-180 015, J&K (UT), Indi-

info@nityalab.com @ www.nityalab.co

#### Test Report

issued To

**GAIL India Limited** 

PDH-PP Project

At & Post-Usar, Tal: Alibag Distt. Raigad-402203

BUILDING & ROAD, MATERIAL, SOIL, ENVIRONMENTAL & CALIBRATION TESTING LAB

ULR No

TC636624000002215F

Test Report Date:

27/03/2024

Sample Particulars

Nature of the Sample

Date of Sampling

Purpose of Monitoring

Parameter Tested

Instrument Used

Place of Monitoring

**Ambient Noise** 

16/03/2024

To Check the Pollution Load

Noise Level, Leg dB (A)\*

Sound Level Meter

Near Sub Station

Analysis Report

Sr. No. Loc Permissible Limit in *dB(A) LeqF	ation or Industrial Area	Test Result dB(A) Day Time 75 dB(A)	Test Result dB(A) Night-time 70 dB(A)	Fest Method
Near Sub Station		71.4	62.1	IS 9989

\*dB (A) Leq denotes the time weighted average of the level of sound in decibel on scale 'A' which is relatable to human hearing. CPCB = Central Pollution Control Board

Note: The Noise Ambient Air Quality Standards are given for reference

Area Code	Category of Area	Limits dB (A) Leq		
toda, r delanina del propinsi del constitución de la consti		Day Time (6AM – 10PM)	Night Time (10RM - 06AM)	
А	Industrial Area	75	70	
В	Commercial Area	65	70	
С	Residential Area	55	55	
D	Silence Zone	50	45	
	1 3.31.00 23.10	20	40	



(AUTHORISED SIGNATORY)

(RAVINDER MITTAL)

#### **CORPORATE OFFICE & CENTRAL LABORATORIES:-**



### NITYA LABO

43, Sector-A1 Ext., Bhalla Enclave, Chanr Himmat, Jammu-180 015, J&K (UT), India

**3**+91-191-2465597

📷 info@nityalab.com 🕲 www.nityalab.cor

## BUILDING & ROAD, MATERIAL, SOIL, ENVIRONMENTAL & CALIBRATION TESTING LAB

#### **Test Report**

Issued To GAIL India Limited

PDH-PP Project

At & Post-Usar, Tal: Alibag

Distt. Raigad-402203

ULR No. :

TC636624000002214F

Test Report Date:

27/03/2024

Sample Particulars

Nature of the Sample

Date of Sampling

Time of Sampling (Hrs)

Sample Received at Lab

Test Started on

Test Completed

Purpose of Monitoring

Method of Sampling

Sampling Location

Avg. Flow Rate of Air for RDS (m3/min)

Avg. Flow Rate of Air for FPS (m3/hr) Monitoring Conducted By

Ambient Temperature (°C)

Sampling Duration (Hrs.)

Ambient Air Quality Monitoring

16/03/2024

03:10 PM

19/03/2024

19/03/2024

26/03/2024

To Check the Pollution Load

IS 5182 (Part 14)

Near Sub Station

1.10

1.00

Mr. Shubham Gautam

29

24 Hrs.

Analysis Report

Sr. No.	Parameters	Test Results	Standard Limit	Duration	Test Method
1.	Particulate Matter (PM <sub>2.5</sub> ), µg/m <sup>3</sup>	42.73	60	24 hrs	40CFR Appendix L Part 53 CPCB Guidelines
2.	Particulate Matter (PM <sub>10</sub> ), μg/m <sup>3</sup>	87.80	100	24 hrs	IS:5182(P-23)
3.	Sulphur Dioxide (as SO <sub>2</sub> ), µg/m <sup>3</sup>	19.40	80	24 hrs	IS:5182(P-2)
4.	Nitrogen Dioxide (as NO <sub>2),</sub> ug/m <sup>3</sup>	26,10	100	24 hrs	IS:5182(P-6)
5.	Ozone (as O <sub>3</sub> ), ug/m <sup>3</sup>	31.10	100	8 hrs	IS:5182(P-9)
6.	Lead (as Pb), µg/ m³·	ND	1	24 hrs	NL/SOP/AAQ-11
7.	Carbon Monoxide (as CO), mg/m <sup>3</sup>	1.05	2	8 hrs	IS:5182 (P-10)
8.	Ammonia (as NH <sub>3</sub> ), ug/m <sup>3</sup>	48.20	400	24 hrs	Methoc of Air Sampling & Analysis CPCB Guidelines
9.	Nickel (as Ni), ng/m³′	ND	20	Annual	NL/SOP/AAQ-13
10.	Arsenic (as As), ng/m³*	ND	6	Annual	NL/SOP/AAQ-12
11.	Benzo(a)pyrene (as BAP), ng/m³*	ND	1	Annual	IS:5182 (P-12)
12.	Benzene (C <sub>6</sub> H <sub>6</sub> ), ug/m³*	ND	5	Annual	IS:5182 (P-11)

Remark:

\*NAAQS - National Ambient Air Quality Standards; Schedule-Vil. [Rule-3 [34]] ] [24(-1)-sec-3(i)] 16 11.2009

(AUTHORISED SIGNATORY)

(RAVINDER MITTAL)

TC-6366

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