



हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड

(भारत सरकार का उपक्रम) रजिस्टर्ड ऑफिस : 17, जमशेदजी टाटा रोड, मुम्बई-400020

HINDUSTAN PETROLEUM CORPORATION LIMITED

(A Government of India Enterprise) REGISTERED OFFICE : 17, JAMSHEDJI TATA ROAD, MUMBAI-400 020

CIN-L23201MH1952GOI008858

GSTIN NO. 08AAACH1118B1ZC

दूरभाष / TELEPHONE : 0141-2554958, 2724718

एम.डी.पी.एल. परिचालन मुख्य कार्यालय,
M.D.P.L. OPNS. - HEAD OFFICE
डी-7, लालबहादुर नगर (पूर्व) जे.एल.एन. मार्ग,
D-7, Lal Bhadur Nagar (E), J.L.N. Marg,
मालवीय नगर, जयपुर- 302017
Malviya Nagar, Jaipur - 302017

Ref: HPCL/MDPL-PVPL/EC/2021-22/002

June 03, 2022

Deputy Director,
Ministry of Environment and Forests,
Region office (Central)
Kendriya Bhavan,
5th Floor, Sector-H,
Aliganj, Lucknow-226024.

Sub.: Environment Clearance from Ministry of Environment & Forests for expansion of system capacity of Mundra Delhi Pipeline (5 MMTPA to 8 MMTPA) and extension pipeline (280 KM) from Palanpur to proposed marketing Terminal near Vadodara by M/s. Hindustan Petroleum Corporation Ltd (HPCL).

Ref: EC Letter received vide Letter F.No. J-11011/18/2016-IA.II (I) dated 07.06.2017.

Dear Sir,

Reference is made to letter No. J-11011/18/2016-IA.II(I) dated 07.06.2017 from Ministry of Environment & Forests according environmental clearance to our subject project. As per clause xiii of General conditions, we are enclosing herewith a CD containing the following documents:

- I. Status of Point wise compliance of the stipulated environmental conditions as of 31.03.2022.
- II. Environment Monitoring Data for Quarter ending March 2022 for the Pipeline.

Since, above documents are to be submitted on half-yearly basis, in line with clause xiii of General conditions of EC letter, we will submit the next report by November'2022. Further, please note that in line with the mail from Monitoring Team of MoEF & CC, Compliance report has also been submitted on PARIVESH Web portal of MoEF & CC.

Thanking you,

Very truly yours,

Arvind Narula

Chief Manager-Safety & Security
MDPL-HO, Jaipur

Encl. As above

Name of the Project: MDPL Capacity Expansion & Palanpur Vadodara Extension Pipeline Project

Clearance Letter No. : F No.J-11011/18/2016-IA. II (I) dated 07.06.2017

Period of Compliance Report: October'21 to March'22

A. Specific Conditions:

| Sl No. | Condition | Compliance Status |
|---------------|---|---|
| i. | The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. | We confirm that adequate Stack height has been provided for all the DG sets as per CPCB standards & Acoustic enclosure is also provided to mitigate the noise pollution. |
| ii. | The project authority i.e. M/s Hindustan Petroleum Corporation Ltd. (HPCL) shall ensure restoration of the Right of Way to preconstruction level as soon as construction activity completed. To ensure prevention of soil erosion, backfilled areas should be properly compacted. | We confirm that we have restored the Right of the way to preconstruction level. Further compaction of backfilled area has also been ensured. |
| iii. | The design, material of construction, assembly, inspection, testing and safety aspects of operation and maintenance of pipeline and transporting the natural gas shall be governed by ASME/ANSI B 31.8/B31.4 and OISD standard 141. | We confirm that same has been complied with during design & would be complied with since commissioning of pipeline in November'19. |
| iv. | Annual safety audit shall be carried out for the initial three years by an independent agency and report submitted to this Ministry for ensuring the strict compliance of safety regulations on operation and maintenance. | It would be complied with strictly in Toto. |
| v. | The construction of pipeline particularly at the river and stream crossing shall be done during dry seasons to avoid disturbance of breeding seasons and soil erosion. The riverbed, embankments and dykes shall be restored adequately after installation of crossings. | We confirm that we have completed construction of crossings across river and streams i.e, Saraswati River at Chainage 34.309 Km, Sabarmati River at Ch. 106.358 Km, Mahi river at Ch. 218.847 Km, Narmada Main Canal at Ch. 160.236 Km & Sujlam Sufnam Spreading Line Canal at Ch. 101.833 Km during dry season to avoid disturbance of breeding seasons and soil |

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| | | erosion. Further, the riverbed, embankments and dykes have also been restored adequately after completion of crossings. |
| vi. | Pipeline wall thickness and minimum depth of burial at river crossings and casings at rails, major road crossings should be in conformity with ANSI/ASME requirements. | We confirm that we have complied with it during design as well as during construction at river/rail/major road crossings. |
| vii. | The company should follow Horizontal Drilling technique for laying of pipeline while passing through major rivers. | We confirm that we have complied with it during design & have employed the Horizontal drilling technique (HDD) during laying of pipeline while passing through major rivers, i.e, Saraswati River at Chainage 34.309 Km, Sabarmati River at Ch. 106.358 Km, Mahi river at Ch. 218.847 Km, Narmada Main Canal at Ch. 160.236 Km & Sujlam Suflam Spreading Line Canal at Ch. 101.833 Km. |
| viii. | The project authorities shall install SCADA system with dedicated optical fiber based telecommunication link for safe operation of pipeline and Leak Detection System. Additional sectionalizing valves in the residential areas and sensitive location shall be provided to prevent the leaking of gas going to the atmosphere in the event of pipeline failure. Intelligent pigging facility shall be provided for the entire pipeline system for internal corrosion monitoring. Coating and impressed current cathodic protection system shall be provided to prevent external corrosion. | We confirm that we have complied with the same during design as well as during construction of the pipeline. Additional 5 nos. of sectionalizing valve Stations have been constructed to prevent the leaking of finished petroleum products going to the atmosphere in the event of pipeline failure. Intelligent pigging facility has been provided for the entire pipeline system for internal corrosion monitoring. Cathodic protection system has also been provided to prevent external corrosion. |
| ix. | The project authorities shall patrol and inspect the pipeline regularly for detection of faults as per OISD guidelines and continuous monitoring of pipeline operation by adopting non-destructive method(s) of testing as envisaged in the EMP. Pearson survey and continuous potential survey shall be carried out at regular intervals to ensure the adequacy of cathodic protection system. | We confirm that it is being complied with by us regularly since the commissioning of Pipeline in November'19. |
| x. | Necessary approvals from Chief Controller of Explosives must be obtained before commission of project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented. It is necessary that integrated DMP should be in place as the pipeline is passing through four Districts. | PESO Construction approval obtained for laying PVPL on 06.04.17, for IPS at Pindwara on 10.11.17, IPS at Bhachau on 09.01.18, Palanpur on 09.01.18, IPS at Ghadkan on 16.01.18 & for Vadodara terminal on 23.01.18. |

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| | | <p>PESO Storage Licence for IPS, Ghadkan. IPS, Bachau & Amendment in Storage Licence for Palanpur Dispatch Station obtained on 14.05.19, 25.09.19 & 13.09.19 respectively. PESO Hook-up Commissioning approval for IPS, Bachau & IPS, Pindwara with MDPL obtained on 24.07.19. Commissioning approval for PVPL pipeline was obtained from PESO on 23.10.19. Storage Licence for Vadodara Terminal was obtained on 06.12.19. Storage License for Pindwara was obtained on 13.12.19</p> <p>On-site and Off-site DMP has been prepared and are being submitted to respective Authorities.</p> |
| xi. | The acoustic chambers/barriers should be provided for individual units wherever feasible in the compressor stations. | There are no Compressor Stations as part of this project. Hence, N/A. |
| xii. | The workers camp should have arrangement for safe drinking water, hygienic kitchen and sanitation facilities. The wastewater should be properly treated before disposal. | We confirm that we are providing safe drinking water, hygienic kitchen and sanitation facilities to the workers. |
| xiii. | The company shall obtain all requisite clearances for fire safety and explosives and shall comply with the stipulation made by the respective authorities. | We confirm that we have obtained all requisite clearances for fire safety and explosives and shall comply with the stipulation made by the respective authorities. |
| xiv. | PP shall spend 2% of project cost under Enterprises Social Commitment (ESC) activities for drinking water (RO) to schools, computer facility the school/colleges and solar panel to school/college/health centres, in the villages where the pipeline passing. PP shall also maintain the facilities. | <p>We confirm that we have implemented ESC plan @ 2% of project cost for provision of drinking water (RO) to schools, computer facility for the school/colleges and solar panel to school/college/health centers. During 2017-18, we have set up Computer labs at 8 schools in Kutch, Patan & Mehsana districts with total 30 nos. of Computers covering 1200 children in Gujarat, total expenditure of approx. Rs 31 Lakhs.</p> <p>MOU Signed with National Institute of Information Technology Foundation (NIIT Foundation) for digital literacy in Mehsana and Banaskantha districts with total 25 nos. of Computers covering 1000 students in Gujarat till March 2020, entire allocated Rs 26 Lakhs have been spent till 31.03.20.</p> |



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| | | <p>MOU Signed with Confederation of Indian Industry (CII) for Skill Development in Kheda, Anand and Vadodara districts with total of 500 beneficiaries to be covered till March 2020 & entire allocated Rs 50 lakhs have been spent till 31.03.20.</p> <p>We have also spent Rs 3.62 Lakhs for Drinking Water & Toilet facilities at Govt. Primary School No. 2, Chandisar, Banskantha during Apr-Sept'19.</p> <p>We spent Rs. 8.87 Lakhs for Potable drinking water, water storage tank, White boards, tables, cupboards, equipment of Sports/Play, Music equipment, Computer, etc in Government Schools in Siyavada and Vandariyapara in Gandhinagar District.</p> |
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B. General Conditions:

| Sl No. | Condition | Compliance Status |
|--------|---|---|
| i. | The project authorities must strictly adhere to the stipulations made by the State Pollution Control Boards, State Governments and any other statutory authority. | We confirm that we shall comply with all the stipulations made by the State Pollution Control Board (SPCB), State Governments and any other statutory authority. |
| ii. | No further expansion or modification in the pipeline shall be carried out without prior approval of the Ministry of Environment Forest and Climate Change. 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 to assess the adequacy of conditions imposed and to add additional environmental protection measures required. if any. | We confirm that we would strictly comply with the same. |
| iii. | The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where | We confirm that we have been complying with the same. M/s Ecosystem Resource Management Pvt Ltd, a reputed MOEF &CC approved Agency has been appointed to carry out ambient air quality management in |

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| | maximum ground level concentrations are anticipated. | consultation with SPCB's. We are also enclosing herewith the Monitoring Data for 4 rd Quarter of 2021-22 along with this report. |
| iv. | The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R.No. 826(E) dated 16 th November, 2009 shall be followed. | We confirm that we have been strictly complying with the same. |
| v. | 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 Environment (Protection) Act, 1986 Rules,1989 viz 75 dBA (daytime) and 70 dBA (nighttime). | We confirm that we have been strictly complying with Ambient noise levels as mandated. |
| vi. | Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemical shall be imparted. | We confirm that Training has been imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees are being undertaken on regular basis. |
| vii. | The company shall also comply with all the Environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management and risk mitigation measures relating to the project shall be implemented. | We confirm that we have been strictly complying with the same. All the recommendations made in the EIA/EMP in respect of environmental management and risk mitigation measures relating to the project are being implemented. |
| viii. | The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. ESC activities shall be undertaken by involving local villages and administration. | We confirm that we have been complying with the same by implementing ESC plan as indicated above in point xiv of Specific conditions. |
| ix. | The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment. | We confirm that we have been complying with the same by implementing ESC plan as indicated above in point xiv of Specific condition. |
| x. | A Separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. | Environment management cell is set up at Pipeline Projects office at Delhi headed by Ch. Manager-Co-ordination which carries out Environmental management and monitoring functions. M/s Ecosystem Resource Management Pvt Ltd, a reputed MOEF &CC approved Agency, having full-fledged laboratory facilities, for environment |

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| | | monitoring & Data collection at our project sites on a quarterly basis has been appointed to carry out environment monitoring for the Project. Environment Monitoring data for the last quarter is enclosed with this report. |
| xi. | The company shall earmark 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 earmarked for environment management/pollution control measures shall not be diverted for any other purpose. | We confirm that we have earmarked 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. Further, we confirm that the funds so earmarked for environment management/pollution control measures will not be diverted for any other purpose |
| xii. | A copy of clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad / Municipal Corporation. Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. | N/A, as we have not received any suggestions/representations from the mentioned Authorities while processing the proposal. |
| xiii. | 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 the SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company. | Complied. As part of the same, this compliance report is being sent to the respective Authorities. Regarding Environment monitoring, PO has been placed on M/s Ecosystem Resource Management Pvt Ltd, a reputed MOEF & CC approved Agency to carry out environment monitoring for the Project and the test results is being sent to the respective Authorities along with this report. A copy of Environmental Clearance and six monthly compliance status report has been posted on the website of the company. |
| xiv. | The environmental statement for each financial year ending 31 st 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. | We confirm that the Environment statement for the year ending 31.03.2022 for the operating location Palanpur and Vadodara has been Submitted. (Copy attached) |

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| xv. | <p>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 at http://moef.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 Regional office of the Ministry.</p> | <p>Copy of the advertisements published in Times of India, Ahmedabad in English, Gujrat Samachar (Ahmedabad, Vadodara, Surat, Bhavnagar, Kutch & Rajkot editions) in Gujrati, Rajasthan Patrika (Jaipur & Pali editions) in Hindi and Hindustan Times, Delhi in English, Mint, Delhi in English , Dainik Bhaskar (Panipat & Hisar editions) in Hindi on dated 11.06,17 have already been forwarded to the Regional offices vide our letter HPCL/MDPL-PVPL/EC/2017/001, 002 & 002 dated 22.06.17.</p> |
| xvi. | <p>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.</p> | <p>The date of financial Closure & final approval of the project: 16.09.16. Date of start of construction for the project: 20.06.17.</p> |

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TEST REPORT

AMBIENT AIR QUALITY MONITORING REPORT

TEST REPORT NO: QF/7.8/01 A/AMBIENT/HPCL-PVPL/Rev.0-01/03-2022

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|----------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur Pumping & Receiving Station, GIDC- Chandisar- Mota Road, Village- Chandisar , Tal- Palanpur, Dis- Banaskantha, Gujarat. |
| Sample Description | : Ambient Air Quality Monitoring |
| Sample Location | : Nr. Substation |
| Sample Collected On | : 07/03/2022 |
| Sample Received on | : 09/03/2022 |
| Sample Analyzed & Completion | : 09/03/2022 to 11/03/2022 |
| Sample Id No. | : ERM/EXT/2022/03/1335-A |
| Quantity/No. of Sample | : 1-1 No. filter papers for PM ₁₀ & PM _{2.5} (each), 1-1 No. of polyethelene bottle having approx. 30 ml exposed scrubbing media for SO ₂ & NO _x (each), gas in bladder for HC & CO and Charcoal tube for VOC/ 6 Nos. |
| Packing/ Seal | : Packed |
| Protocol (Purpose) | : As per work order |
| Instrument used | : Combo Sampler (Tag No. S-4) |
| Instrument Calibration status | : Valid |
| Average Ambient Temperature (°C) | : 27.1 |
| Average Wind speed (Km/hr) | : 3.3 |
| Average Humidity (%) | : 43.0 |
| Dominant wind direction | : N |
| Height from Ground Level (m) | : Approx. 3 m |
| Sampling Method | : As per the below table described for test method |
| Sample Collected & Provided By | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit as per NAAQS | Test Method |
|---------|---|-------------------|--------|-----------------------------|---|
| 1. | Particulate Matter (PM ₁₀) | µg/m ³ | 92.6 | 100 | IS 5182 (Part 23) : 2006 (Reaffirmed 2012) |
| 2. | Particulate Matter (PM _{2.5}) | µg/m ³ | 40.1 | 60 | WI/5.4/02-B/03, Issue No.1 : 2010 |
| 3. | Sulphur Dioxides (SO ₂) | µg/m ³ | 18.0 | 80 | IS 5182 (Part 2) : 2001 (Reaffirmed 2017) |
| 4. | Nitrogen Dioxides (NO _x) | µg/m ³ | 26.9 | 80 | IS 5182 (Part 6) : 2006 (Reaffirmed 2017) |
| 5. | Hydrocarbon (as CH ₄) | µg/m ³ | 342 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA (GC) |
| 6. | Carbon Monoxide (CO) | mg/m ³ | 1.0 | 4 | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |
| 7. | Volatile Organic Compound as BTX | µg/m ³ | 127 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA (GC) |

Remark: NAAQS-National Ambient Air Quality Standards: Schedule-VII, [Rule 3 (3B)] [Part-II sec.-3(i)] 16.11.2009

Note: (1) These results relate to the sample tested only.

(2) The report shall not be reproduced except in full without written approval of the laboratory.

S. Patel
CHEMIST

AME
CHECKED BY
(Haresh Ahir)

AUTHORISED SIGNATORY
(Sunilkumar Pandey)

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Vapi Branch : 131, Ashapura Complex, Near New Telephone Exchange Road, GIDC Vapi-396 195 Tel.: 0260-2970305 / 94262 63805

Vadodara Branch : 216. Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



TEST REPORT

AMBIENT AIR QUALITY MONITORING REPORT

TEST REPORT NO: QF/7.8/01 A/AMBIENT/HPCL-PVPL/Rev.0-01/03-2022

| | |
|---------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur Pumping & Receiving Station, GIDC- Chandisar-Mota Road, Village- Chandisar, Tal- Palanpur, Dis- Banaskantha, Gujarat. |
| Sample Description | : Ambient Air Quality Monitoring |
| Sample Location | : Nr. PVPL Building |
| Sample Collected On | : 07/03/2022 |
| Sample Received on | : 09/03/2022 |
| Sample Analyzed & Completion | : 09/03/2022 to 11/03/2022 |
| Sample Id No. | : ERM/EXT/2022/03/1335-B |
| Quantity/No. of Sample | : 1-1 No. filter papers for PM ₁₀ & PM _{2.5} (each), 1-1 No. of polyethelene bottle having approx. 30 ml exposed scrubbing media for SO ₂ & NO _x (each), gas in bladder for HC & CO and Charcoal tube for VOC/ 6 Nos. |
| Packing/ Seal | : Packed |
| Protocol (Purpose) | : As per work order |
| Instrument used | : Combo Sampler (Tag No. S-5) |
| Instrument Calibration status | : Valid |
| Average Ambient Temperature(°C) | : 27.1 |
| Average Wind speed (Km/hr) | : 3.3 |
| Average Humidity (%) | : 43.0 |
| Dominant wind direction | : N |
| Height from Ground Level (m) | : Approx. 3 m |
| Sampling Method | : As per the below table described for test method |
| Sample Collected & Provided By | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit as per NAAQS | Test Method |
|---------|---|-------------------|--------|-----------------------------|---|
| 1. | Particulate Matter (PM ₁₀) | µg/m ³ | 86.4 | 100 | IS 5182 (Part 23) : 2006 (Reaffirmed 2012) |
| 2. | Particulate Matter (PM _{2.5}) | µg/m ³ | 43.1 | 60 | WI/5.4/02-B/03, Issue No.1 : 2010 |
| 3. | Sulphur Dioxides (SO ₂) | µg/m ³ | 19.5 | 80 | IS 5182 (Part 2) : 2001 (Reaffirmed 2017) |
| 4. | Nitrogen Dioxides (NO _x) | µg/m ³ | 28.3 | 80 | IS 5182 (Part 6) : 2006 (Reaffirmed 2017) |
| 5. | Hydrocarbon (as CH ₄) | µg/m ³ | 282 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA (GC) |
| 6. | Carbon Monoxide (CO) | µg/m ³ | 1.12 | 4 | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |
| 7. | Volatile Organic Compound as BTX | µg/m ³ | 110 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA (GC) |

Remark: NAAQS-National Ambient Air Quality Standards: Schedule-VII, (Rule 3 (3B)) [Part-II sec.-3(i)] 16.11.2009

Note: (1) These results relate to the sample tested only

(2) The report shall not be reproduced except in full without written approval of the laboratory.

S.P. Patel
CHEMIST

AHC
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Vapi Branch : 131, Ashapura Complex, Near New Telephone Exchange Road, GIDC Vapi-396 195 **Tel.:** 0260-2970305 / 94262 63805

Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. **Tel.:** 0265-2321215, 2331215



TEST REPORT
AMBIENT NOISE LEVEL MONITORING REPORT
TEST REPORT NO: QF/7.8/01 A/NOISE /HPCL-PVPL/Rev.0-01/03-2022

| | |
|----------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur Pumping & Receiving Station, GIDC- Chandisar-Mota Road, Village- Chandisar , Tal- Palanpur, Dis- Banaskantha, Gujarat. |
| Sample Description | : Ambient Noise Level Monitoring |
| Sample Location | : Nr. PVPL Building |
| Date of Monitoring | : 07/03/2022 |
| Sample ID. No. | : ERM/EXT/2022/03/1335-C |
| Average Ambient Temperature (°C) | : 27.1 |
| Surrounding activity | : Man movement |
| Protocol (Purpose) | : As per work order |
| Sampling Method | : IS 9989-1981(Reaffirmed 2001) |
| Noise Level Monitored by | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No | Parameters | Unit | Test Results During Day Time | Test Method |
|--------|--|-------|------------------------------|-------------------------------------|
| 1. | Lmax | dB(A) | 74.1 | IS 9989 : 1981 (Reaffirmed 2001) |
| 2. | Lmin | dB(A) | 60.9 | IS 9989 : 1981 (Reaffirmed 2001) |
| 3. | Leq | dB(A) | 67.6 | IS 9989 : 1981 (Reaffirmed 2001) |
| 4. | CPCB Limits in dB(A) Leq (Industrial area) | dB(A) | 75 | -- |
| 5. | CPCB Limits in dB(A) Leq (Commercial area) | dB(A) | 65 | -- |
| 6. | CPCB Limits in dB(A) Leq (Residential area) | dB(A) | 55 | -- |
| 7. | CPCB Limits in dB(A) Leq (Silence Zone) | dB(A) | 50 | -- |

Remark: Day time- 7:00 am to 10:00 pm.

Note: The report shall not be reproduced except in full without written approval of the laboratory.

S. Patel
CHEMIST

AH
CHECKED BY
(Haresh Ahir)

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AUTHORISED SIGNATORY
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Bharuch Branch : Shop No. 7/8, Saffron City, Opp. Bharat Petrol Pump, Vill. Jolwa, Dahej - Bharuch Road, Bharuch. Mo.: 98250 94443

Vapi Branch : 131, Ashapura Complex, Near New Telephone Exchange Road, GIDC Vapi-396 195 Tel.: 0260-2970305 / 94262 63805

Vadodara Branch : 216. Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



Issue Date: 17/03/2022

TEST REPORT
STACK ANALYSIS REPORT
TEST REPORT NO: QF/7.8/01 A/STACK/HPCL-PVPL/Rev.0-01/03-2022

| | |
|------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur Pumping & Receiving Station, GIDC- Chandisar-Mota Road, Village- Chandisar, Tal- Palanpur, Dis- Banaskantha, Gujarat |
| Sample Description | : Stack Monitoring |
| Stack Attached to | : DG Set (320 KVA) |
| Date of Sampling | : 07/03/2022 |
| Sample Received on | : 09/03/2022 |
| Sample Analyzed & Completion | : 09/03/2022 to 11/03/2022 |
| Sample ID No. | : ERM/EXT/2022/03/1335-D |
| Quantity/No. of Sample | : 1 No. Thimble for PM, Approx.50 ml exposed absorbing solution (in Polyethylene Bottle) for SO ₂ approx. 50ml. exposed absorbing solution in PDA flask for NO _x , 1 no. of detector tube for CO / 4 Nos. |
| Protocol (Purpose) | : As per work order |
| Packing/ Seal | : Packed |
| Type of Fuel | : Diesel |
| Height of Stack (m) | : 11 (From ground level) |
| Dia. of stack (m) | : 0.10 |
| Sampling Procedure | : As Per the below table described for Test Method |
| Sample Collected By | : ERM - Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | CC&A Limit | Test Method |
|---------|---------------------------------------|--------------------|--------|------------|--|
| 1. | Temperature | °C | 122 | -- | IS 11255 (Part 3): 2008 |
| 2. | Velocity | m/s | 11.0 | -- | IS 11255 (Part 3): 2008 |
| 3. | Particulate of Matter (PM) | mg/Nm ³ | 86.1 | 150 | IS 11255 (Part 1) 1985/Reaffirmed 2014 |
| 4. | Sulphur Dioxide (SO ₂) | ppm | 20.2 | 100 | IS 11255 (Part 2) 1985/Reaffirmed 2014 |
| 5. | Oxides of Nitrogen (NO _x) | ppm | 28.6 | 50 | IS 11255 (Part 7) : 2005 |
| 6. | Carbon monoxide (CO) | mg/Nm ³ | 4.8 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA-Detector Tubes |

Note: The report shall not be reproduced except in full without written approval of the laboratory.

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(Haresh Ahir)

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Bharuch Branch : Shop No. 7/8, Saffron City, Opp. Bharat Petrol Pump, Vill. Jolwa, Dahej - Bharuch Road, Bharuch. Mo.: 98250 94443

Vapi Branch : 131, Ashapura Complex, Near New Telephone Exchange Road, GIDC Vapi-396 195 Tel.: 0260-2970305 / 94262 63805

Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



TEST REPORT

AMBIENT AIR QUALITY MONITORING REPORT

TEST REPORT NO: QF/7.8/01 A/AMBIENT/HPCL-SV-01/Rev.0-01/03-2022

| | |
|----------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur-Vadodara Pipeline Project, SV-01 Village- Meloj, Tehsil- Siddipur, District- Patan, Gujarat. |
| Sample Description | : Ambient Air Quality Monitoring |
| Sample Location | : Nr. Security Office |
| Sample Collected On | : 04/03/2022 |
| Sample Received on | : 09/03/2022 |
| Sample Analyzed & Completion | : 09/03/2022 to 11/03/2022 |
| Sample Id No. | : ERM/EXT/2022/03/1314 |
| Quantity/No. of Sample | : 1-1 No. filter papers for PM ₁₀ & PM _{2.5} (each), 1-1 No. of polyethelene bottle having approx. 30 ml exposed scrubbing media for SO ₂ & NO _x (each), gas in bladder for HC & CO and Charcoal tube for VOC/ 6 Nos. |
| Packing/ Seal | : Packed |
| Protocol (Purpose) | : As per work order |
| Instrument used | : Combo Sampler (Tag No. 5-7) |
| Instrument Calibration status | : Valid |
| Average Ambient Temperature (°C) | : 25.6 |
| Average Wind speed (Km/hr) | : 6.0 |
| Average Humidity (%) | : 39.0 |
| Dominant wind direction | : NNE |
| Height from Ground Level (m) | : Approx. 3 m |
| Sampling Method | : As per the below table described for test method |
| Sample Collected & Provided By | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit as per NAAQS | Test Method |
|---------|---|-------------------|--------|-----------------------------|---|
| 1. | Particulate Matter (PM ₁₀) | µg/m ³ | 82.0 | 100 | IS 5182 (Part 23) : 2006 (Reaffirmed 2012) |
| 2. | Particulate Matter (PM _{2.5}) | µg/m ³ | 39.6 | 60 | WI/5.4/02-B/03, Issue No.1 : 2010 |
| 3. | Sulphur Dioxides (SO ₂) | µg/m ³ | 18.1 | 80 | IS 5182 (Part 2) : 2001 (Reaffirmed 2017) |
| 4. | Nitrogen Dioxides (NO _x) | µg/m ³ | 24.0 | 80 | IS 5182 (Part 6) : 2006 (Reaffirmed 2017) |
| 5. | Hydrocarbon (as CH ₄) | µg/m ³ | 193 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA (GC) |
| 6. | Carbon Monoxide (CO) | mg/m ³ | 1.6 | 4 | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |
| 7. | Volatile Organic Compound as BTX | µg/m ³ | 76 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |

Remark: NAAQS-National Ambient Air Quality Standards: Schedule-VII, [Rule 3 (3B)] [Part-II sec.-3(i)] 16.11.2009

Note: (1) These results relate to the sample tested only.

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Vapi Branch : 131, Ashapura Complex, Near New Telephone Exchange Road, GIDC Vapi-396 195 Tel.: 0260-2970305 / 94262 63805

Vadodara Branch : 216. Race Course Tower. Gotri Road. Vadodara-390007. Tel.: 0265-2321215, 2331215



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Issue Date: 17/03/2022

TEST REPORT

AMBIENT NOISE LEVEL MONITORING REPORT

TEST REPORT NO: QF/7.8/01 A/NOISE /HPCL-SV-01/Rev.0-01/03-2022

| | |
|----------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur-Vadodara Pipeline Project, SV-01 Village- Meloj, Tehsil- Siddipur, District- Patan, Gujarat. |
| Sample Description | : Ambient Noise Level Monitoring |
| Sample Location | : Nr. Security Office |
| Date of Monitoring | : 04/03/2022 |
| Sample ID. No. | : ERM/EXT/2022/03/1315 |
| Average Ambient Temperature (°C) | : 25.6 |
| Surrounding activity | : Man movement |
| Protocol (Purpose) | : As per work order |
| Sampling Method | : IS 9989-1981 (Reaffirmed 2001) |
| Noise Level Monitored by | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No | Parameters | Unit | Test Results During Day Time | Test Method |
|--------|--|-------|------------------------------|-------------------------------------|
| 1. | Lmax | dB(A) | 67.8 | IS 9989 : 1981 (Reaffirmed 2001) |
| 2. | Lmin | dB(A) | 53.6 | IS 9989 : 1981 (Reaffirmed 2001) |
| 3. | Leq | dB(A) | 61.2 | IS 9989 : 1981 (Reaffirmed 2001) |
| 4. | CPCB Limits in dB(A) Leq (Industrial area) | dB(A) | 75 | -- |
| 5. | CPCB Limits in dB(A) Leq (Commercial area) | dB(A) | 65 | -- |
| 6. | CPCB Limits in dB(A) Leq (Residential area) | dB(A) | 55 | -- |
| 7. | CPCB Limits in dB(A) Leq (Silence Zone) | dB(A) | 50 | -- |

Remark: Day time- / 00 am to 10:00 pm.

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Vapi Branch : 131, Ashapura Complex, Near New Telephone Exchange Road, GIDC Vapi-396 195 **Tel.:** 0260-2970305 / 94262 63805

Vadodara Branch : 216. Race Course Tower, Gotri Road. Vadodara-390007. **Tel.:** 0265-2321215. 2331215



TEST REPORT

DRINKING WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO: QF/7.8/01 A/DRINKING WATER/HPCL-SV-01 /Rev.0-01/03-2022

| | |
|------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur-Vadodara Pipeline Project, SV-01 Village- Meloj, Tehsil- Siddipur, District- Patan, Gujarat. |
| Sample Description | : Drinking water |
| Sampling Point | : SV-01 Village-Meloj |
| Mode of sampling | : Grab |
| Sample Collected on | : 04/03/2022 |
| Sample Received on | : 09/03/2022 |
| Sample Analyzed & Completion | : 09/03/2022 to 14/03/2022 |
| Sample ID No. | : ERM/EXT/2022/03/1315 |
| Quantity/No. of Sample | : 2+2+1 Liters in polyethylene carboys and 250 ml in sterilized bottle/4 Nos. |
| Protocol (Purpose) | : As per work order |
| Packing/ Seal | : Packed |
| Sampling Method | : APHA 23 rd Edition- 2017 |
| Sample Collected By | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|-------------|---------------|-------------------------------------|-------------------|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 1. | pH at 25 °C | pH Unit | 7.12 | 6.5-8.5 | No relaxation | IS 3025 (Part 11):1983 (Reaffirmed 2017) |
| 2. | Color | Pt-Co Scale | BDL (DL- 5) | 5 | 15 | APHA, 23 rd Ed. - 2017, Part - 2000 Section : 2120-C Spectrophotometric -Single Wavelength Method) |
| 3. | Odour | -- | Agreeable | Agreeable | Agreeable | IS 3025 (Part-5):1983 (Reaffirmed 2012) |
| 4. | Taste | - | Agreeable | Agreeable | Agreeable | IS 3025(Part-8):1984 (Reaffirmed 2002) |
| 5. | Conductivity at 25 °C | µS/cm | 60 | -- | -- | APHA 23 rd Edition- 2017, Part-2000 Section:2510-B |
| 6. | Turbidity | NTU | BDL (DL- 0.1) | 1 | 5 | APHA 23 rd Ed. - 2017, Part 2000 Section: 2130-B |
| 7. | Total dissolved solids at 180 °C | mg/L | 42 | 500 | 2000 | IS 3025 (Part 16):1984 (Reaffirmed 2017) |
| 8. | Total Hardness as CaCO ₃ | mg/L | 12 | 200 | 600 | IS 3025 (Part 21):2009 (Reaffirmed 2014) |
| 9. | Calcium | mg/L | 2.0 | 75 | 200 | IS 3025 (Part 40):1991 (Reaffirmed 2014) |
| 10. | Magnesium | mg/L | 2 | 30 | 100 | IS 3025 (Part 46):1994 (Reaffirmed 2014) |
| 11. | Total Alkalinity (as CaCO ₃) | mg/L | BDL (DL- 25) | 200 | 600 | IS 3025 (Part 23):1986 (Reaffirmed 2014) |

Remark: BDL – Below Detection Limit, DL – Detection Limit.

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Page 2 of 2

Name of the Industry : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED.
Sample Collected on : 04/03/2022
Sample ID No. : ERM/EXT/2022/03/1315

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|--------------------|------------------|--|--|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 12. | Chloride | mg/L | 10 | 250 | 1000 | IS 3025 (Part 32):1988 (Reaffirmed 2014) Argentometric Method |
| 13. | Sulphate | mg/L | BDL (DL-1) | 200 | 400 | APHA 23 rd Ed. - 2017, Part-4000 Section : 4500-E SO ₄ ⁻² (Turbidity Method) |
| 14. | Sodium | mg/L | 8 | -- | -- | IS 3025 (Part 45):1993 (Reaffirmed 2014) Flame Photometric Method |
| 15. | Fluoride | mg/L | BDL (DL-0.1) | 1.0 | 1.5 | APHA 23 rd Ed. - 2017, Part 4000 Section: 4500-F-D, |
| 16. | Ammonia (as NH ₃ -N) | mg/L | BDL (DL-0.1) | 0.5 | No relaxation | IS 3025 (Part 34)-1988 (Reaffirmed 2014) Nesslerization Method |
| 17. | Nitrite Nitrogen | mg/L | BDL (DL-0.01) | -- | -- | IS 3025 (Part 34): 1988 (Colorimetric Method) |
| 18. | Nitrate Nitrogen (as NO ₃) | mg/L | BDL (DL-2.0) | 45 | No relaxation | IS 3025 (Part 34) - 1988 (Devadra Alloy Method) (Reaffirmed 2014) |
| 19. | Iron as Fe | mg/L | BDL (DL-0.05) | 0.3 | No Relaxation | IS 3025 (Part 53):2003 (Reaffirmed 2014)1,10 Phenanthroline method |
| 20. | E-Coli (MPN) | Present/ Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |
| 21. | Total Coliform (MPN) | Present/ Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |

Remark: BDL - Below Detection Limit, DL - Detection Limit

Note: (1) These results relate to the sample tested only.

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Vadodara Branch : 216. Race Course Tower. Gotri Road. Vadodara-390007. Tel.: 0265-2321215, 2331215



TEST REPORT

WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO: QF/7.8/01 A/WATER/HPCL-SV-01/Rev.0-01/03-2022

| | |
|------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur-Vadodara Pipeline Project, SV-01 Village- Meloj, Tehsil- Siddipur, District- Patan, Gujarat. |
| Sample Description | : Ground water |
| Sampling Point | : SV-01, Village-Meloj |
| Mode of sampling | : Grab |
| Sample Collected on | : 04/03/2022 |
| Sample Received on | : 09/03/2022 |
| Sample Analyzed & Completion | : 09/03/2022 to 14/03/2022 |
| Sample ID No. | : ERM/EXT/2022/03/1316 |
| Quantity/No. of Sample | : 2+2+1 Liters in polyethylene carboys and 250 ml in sterilized bottle/4 Nos. |
| Protocol (Purpose) | : As per work order |
| Packing/ Seal | : Packed |
| Sampling Method | : APHA 23 rd Edition – 2017 |
| Sample Collected By | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|-------------|-------------|-------------------------------------|-------------------|--|
| | | | | Acceptable Limit | Permissible Limit | |
| 1. | pH at 25 °C | pH Unit | 7.29 | 6.5-8.5 | No relaxation | IS 3025 (Part 11):1983 (Reaffirmed 2017) |
| 2. | Color | Pt-Co Scale | BDL (DL- 5) | 5 | 15 | APHA, 23 rd Ed. - 2017, Part - 2000 Section : 2120-C Spectrophotometric – Single Wavelength Method) |
| 3. | Odour | -- | Agreeable | Agreeable | Agreeable | IS 3025 (Part-5):1983 (Reaffirmed 2012) |
| 4. | Taste | | Agreeable | Agreeable | Agreeable | IS 3025(Part-8):1984 (Reaffirmed 2002) |
| 5. | Conductivity at 25 °C | µS/cm | 1286 | -- | -- | APHA 23 rd Edition- 2017, Part-2000 Section:2510-B |
| 6. | Turbidity | NTU | 0.5 | 1 | 5 | APHA 23 rd Ed. - 2017, Part 2000 Section: 2130-B |
| 7. | Total dissolved solids at 180 °C | mg/L | 842 | 500 | 2000 | IS 3025 (Part 16):1984 (Reaffirmed 2017) |
| 8. | Total Hardness as CaCO ₃ | mg/L | 328 | 200 | 600 | IS 3025 (Part 21):2009 (Reaffirmed 2014) |
| 9. | Calcium | mg/L | 72 | 75 | 200 | IS 3025 (Part 40):1991 (Reaffirmed 2014) |
| 10. | Magnesium | mg/L | 36 | 30 | 100 | IS 3025 (Part 46):1994 (Reaffirmed 2014) |
| 11. | Total Alkalinity (as CaCO ₃) | mg/L | 296 | 200 | 600 | IS 3025 (Part 23):1986 (Reaffirmed 2014) |

Remark: BDL – Below Detection Limit, DL – Detection Limit.

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Page 2 of 2

Name of the Industry : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED.
Sample Collected on : 04/03/2022
Sample ID No. : ERM/EXT/2022/03/1316

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|----------------|----------------|--|--|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 12. | Chloride | mg/L | 278 | 250 | 1000 | IS 3025 (Part 32):1988 (Reaffirmed 2014) Argentometric Method |
| 13. | Sulphate | mg/L | 56 | 200 | 400 | APHA 23 rd Ed. - 2017, Part-4000 Section : 4500-E SO ₄ ⁻² (Turbidity Method) |
| 14. | Sodium | mg/L | 166 | -- | -- | IS 3025 (Part 45):1993 (Reaffirmed 2014) Flame Photometric Method |
| 15. | Fluoride | mg/L | 0.7 | 1.0 | 1.5 | APHA 23 rd Ed. - 2017, Part 4000 Section: 4500-F-D, |
| 16. | Ammonia (as NH ₃ -N) | mg/L | BDL (DL - 0.1) | 0.5 | No relaxation | IS 3025 (Part 34)-1988 (Reaffirmed 2014) Nesslerization Method |
| 17. | Nitrite Nitrogen | mg/L | BDL (DL- 0.01) | -- | -- | IS 3025 (Part 34): 1988 (Colorimetric Method) |
| 18. | Nitrate Nitrogen (as NO ₃) | mg/L | 3.5 | 45 | No relaxation | IS 3025 (Part 34) - 1988 (Devadra Alloy Method) (Reaffirmed 2014) |
| 19. | Iron as Fe | mg/L | 0.26 | 0.3 | No Relaxation | IS 3025 (Part 53):2003 (Reaffirmed 2014)1,10 Phenanthroline method |
| 20. | E-Coli (MPN) | Present/Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |
| 21. | Total Coliform (MPN) | Present/Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |

Remark: BDL - Below Detection Limit, DL - Detection Limit

Note: (1) These results relate to the sample tested only.

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TEST REPORT

AMBIENT AIR QUALITY MONITORING REPORT

TEST REPORT NO: QF/7.8/01 A/AMBIENT/HPCL-SV-02/Rev.0-01/03-2022

| | |
|----------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur-Vadodara Pipeline Project, SV-02, Village- Gunchhali, District- Mehsana, Gujarat. |
| Sample Description | : Ambient Air Quality Monitoring |
| Sample Location | : Nr. Security Office |
| Sample Collected On | : 04/03/2022 |
| Sample Received on | : 09/03/2022 |
| Sample Analyzed & Completion | : 09/03/2022 to 11/03/2022 |
| Sample Id No. | : ERM/EXT/2022/03/1317 |
| Quantity/No. of Sample | : 1-1 No. filter papers for PM ₁₀ & PM _{2.5} (each), 1-1 No. of polyethelene bottle having approx. 30 ml exposed scrubbing media for SO ₂ & NO _x (each), gas in bladder for HC & CO and Charcoal tube for VOC/ 6 Nos. |
| Packing/ Seal | : Packed |
| Protocol (Purpose) | : As per work order |
| Instrument used | : Combo Sampler (Tag No. S-8) |
| Instrument Calibration status | : Valid |
| Average Ambient Temperature (°C) | : 25.6 |
| Average Wind speed (Km/hr) | : 6.0 |
| Average Humidity (%) | : 39.0 |
| Dominant wind direction | : NNE |
| Height from Ground Level (m) | : Approx. 3 m |
| Sampling Method | : As per the below table described for test method |
| Sample Collected & Provided By | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit as per NAAQS | Test Method |
|---------|---|-------------------|--------|-----------------------------|---|
| 1. | Particulate Matter (PM ₁₀) | µg/m ³ | 84.0 | 100 | IS 5182 (Part 23) : 2006 (Reaffirmed 2012) |
| 2. | Particulate Matter (PM _{2.5}) | µg/m ³ | 39.6 | 60 | WI/5.4/02-B/03, Issue No.1 : 2010 |
| 3. | Sulphur Dioxides (SO ₂) | µg/m ³ | 15.2 | 80 | IS 5182 (Part 2) : 2001 (Reaffirmed 2017) |
| 4. | Nitrogen Dioxides (NO _x) | µg/m ³ | 23.9 | 80 | IS 5182 (Part 6) : 2006 (Reaffirmed 2017) |
| 5. | Hydrocarbon (as CH ₄) | µg/m ³ | 188 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA (GC) |
| 6. | Carbon Monoxide (CO) | mg/m ³ | 1.2 | 4 | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |
| 7. | Volatile Organic Compound as BTX | µg/m ³ | 98 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |

Remark: NAAQS-National Ambient Air Quality Standards: Schedule-VII, [Rule 3 (3B)] [Part-II sec.-3(i)] 16.11.2009

Note: (1) These results relate to the sample tested only.

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Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



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Issue Date: 17/03/2022

TEST REPORT

AMBIENT NOISE LEVEL MONITORING REPORT

TEST REPORT NO: QF/7.8/01 A/NOISE /HPCL-SV-02/Rev.0-01/03-2022

| | |
|----------------------------------|--|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur-Vadodara Pipeline Project, SV-02, Village- Gunchhali, District- Mehsana, Gujarat. |
| Sample Description | : Ambient Noise Level Monitoring |
| Sample Location | : Nr. Security Office |
| Date of Monitoring | : 04/03/2022 |
| Sample ID. No. | : ERM/EXT/2022/03/1318 |
| Average Ambient Temperature (°C) | : 25.6 |
| Surrounding activity | : Man movement |
| Protocol (Purpose) | : As per work order |
| Sampling Method | : IS 9989-1981(Reaffirmed 2001) |
| Noise Level Monitored by | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No | Parameters | Unit | Test Results During Day Time | Test Method |
|--------|--|-------|------------------------------|-------------------------------------|
| 1. | Lmax | dB(A) | 65.2 | IS 9989 : 1981 (Reaffirmed 2001) |
| 2. | Lmin | dB(A) | 51.6 | IS 9989 : 1981 (Reaffirmed 2001) |
| 3. | Leq | dB(A) | 61.0 | IS 9989 : 1981 (Reaffirmed 2001) |
| 4. | CPCB Limits in dB(A) Leq (Industrial area) | dB(A) | 75 | -- |
| 5. | CPCB Limits in dB(A) Leq (Commercial area) | dB(A) | 65 | -- |
| 6. | CPCB Limits in dB(A) Leq (Residential area) | dB(A) | 55 | -- |
| 7. | CPCB Limits in dB(A) Leq (Silence Zone) | dB(A) | 50 | -- |

Remark: Day time- 7:00 am to 10:00 pm.

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Vapi Branch : 131, Ashapura Complex, Near New Telephone Exchange Road, GIDC Vapi-396 195 Tel.: 0260-2970305 / 94262 63805

Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



TEST REPORT

DRINKING WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO: QF/7.8/01 A/DRINKING WATER/HPCL-SV-02 /Rev.0-01/03-2022

| | |
|------------------------------|--|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur-Vadodara Pipeline Project, SV-02, Village- Gunchhali, District- Mehsana, Gujarat. |
| Sample Description | : Drinking water |
| Sampling Point | : SV-02, Village- Gunchhall |
| Sampling Type | : Grab |
| Sample Collected on | : 04/03/2022 |
| Sample Received on | : 09/03/2022 |
| Sample Analyzed & Completion | : 09/03/2022 to 14/03/2022 |
| Sample ID No. | : ERM/EXT/2022/03/1319 |
| Quantity/No. of Sample | : 2+2+1 Liters in polyethylene carboys and 250 ml in sterilized bottle/4 Nos. |
| Protocol (Purpose) | : As per work order |
| Packing/ Seal | : Packed |
| Sampling Method | : APHA 23 rd Edition- 2017 |
| Sample Collected By | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|--------------|---------------|-------------------------------------|-------------------|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 1. | pH at 25 °C | pH Unit | 7.40 | 6.5-8.5 | No relaxation | IS 3025 (Part 11):1983 (Reaffirmed 2017) |
| 2. | Color | Pt.-Co Scale | BDL (DL- 5) | 5 | 15 | APHA, 23 rd Ed. - 2017, Part - 2000 Section : 2120-C Spectrophotometric -Single Wavelength Method] |
| 3. | Odour | - | Agreeable | Agreeable | Agreeable | IS 3025 (Part-5):1983 (Reaffirmed 2012) |
| 4. | Taste | - | Agreeable | Agreeable | Agreeable | IS 3025(Part-8):1984 (Reaffirmed 2002) |
| 5. | Conductivity at 25 °C | µS/cm | 69 | -- | -- | APHA 23 rd Edition- 2017, Part-2000 Section:2510-B |
| 6. | Turbidity | NTU | BDL (DL- 0.1) | 1 | 5 | APHA 23 rd Ed. - 2017, Part 2000 Section: 2130-B |
| 7. | Total dissolved solids at 180 °C | mg/L | 42 | 500 | 2000 | IS 3025 (Part 16):1984 (Reaffirmed 2017) |
| 8. | Total Hardness as CaCO ₃ | mg/L | 16 | 200 | 600 | IS 3025 (Part 21):2009 (Reaffirmed 2014) |
| 9. | Calcium | mg/L | 3 | 75 | 200 | IS 3025 (Part 40):1991 (Reaffirmed 2014) |
| 10. | Magnesium | mg/L | 2 | 30 | 100 | IS 3025 (Part 46):1994 (Reaffirmed 2014) |
| 11. | Total Alkalinity (as CaCO ₃) | mg/L | BDL (DL- 25) | 200 | 600 | IS 3025 (Part 23):1986 (Reaffirmed 2014) |

Remark: BDL – Below Detection Limit, DL – Detection Limit.

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Name of the Industry : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED.
Sample Collected on : 04/03/2022
Sample ID No. : ERM/EXT/2022/03/1319

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|-----------------|----------------|--|--|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 12. | Chloride | mg/L | 12 | 250 | 1000 | IS 3025 (Part 32):1988 (Reaffirmed 2014) Argentometric Method |
| 13. | Sulphate | mg/L | BDL (DL- 1) | 200 | 400 | APHA 23 rd Ed. - 2017, Part-4000 Section : 4500-E SO ₄ ⁻² (Turbidity Method) |
| 14. | Sodium | mg/L | 8 | -- | -- | IS 3025 (Part 45):1993 (Reaffirmed 2014) Flame Photometric Method |
| 15. | Fluoride | mg/L | BDL (DL- 0.1) | 1.0 | 1.5 | APHA 23 rd Ed. - 2017, Part 4000 Section: 4500-F-D, |
| 16. | Ammonia (as NH ₃ -N) | mg/L | BDL (DL- 0.1) | 0.5 | No relaxation | IS 3025 (Part 34)-1988 (Reaffirmed 2014) Nesslerization Method |
| 17. | Nitrite Nitrogen | mg/L | BDL (DL- 0.01) | -- | -- | IS 3025 (Part 34): 1988 (Colorimetric Method) |
| 18. | Nitrate Nitrogen (as NO ₃) | mg/L | BDL (DL- 2.0) | 45 | No relaxation | IS 3025 (Part 34) - 1988 (Devadra Alloy Method) (Reaffirmed 2014) |
| 19. | Iron as Fe | mg/L | BDL (DL- 0.05) | 0.3 | No Relaxation | IS 3025 (Part 53):2003 (Reaffirmed 2014)1,10 Phenanthroline method |
| 20. | E-Coli (MPN) | Present/ Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |
| 21. | Total Collform (MPN) | Present/ Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |

Remark: BDL - Below Detection Limit DL - Detection Limit

Note: (1) These results relate to the sample tested only.

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Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



TEST REPORT

WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO: QF/7.8/01 A/WATER/HPCL-SV-02/Rev.0-01/03-2022

| | |
|------------------------------|--|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur-Vadodara Pipeline Project, SV-02, Village- Gunchhali, District- Mehsana, Gujarat. |
| Sample Description | : Ground water |
| Sampling Point | : SV-02 Village- Gunchhali |
| Mode of sampling | : Grab |
| Sample Collected on | : 04/03/2022 |
| Sample Received on | : 09/03/2022 |
| Sample Analyzed & Completion | : 09/03/2022 to 14/03/2022 |
| Sample ID No. | : ERM/EXT/2022/03/1320 |
| Quantity/No. of Sample | : 2+2+1 Liters in polyethylene carboys and 250 ml in sterilized bottle/4 Nos. |
| Protocol (Purpose) | : As per work order |
| Packing/ Seal | : Packed |
| Sampling Method | : APHA 23 rd Edition – 2017 |
| Sample Collected By | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|--------------|---------------|-------------------------------------|-------------------|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 1. | pH at 25 °C | pH Unit | 7.06 | 6.5-8.5 | No relaxation | IS 3025 (Part 11):1983 (Reaffirmed 2017) |
| 2. | Color | Pt.-Co Scale | BDL (DL- 5) | 5 | 15 | APHA, 23 rd Ed. - 2017, Part - 2000 Section : 2120-C Spectrophotometric -Single Wavelength Method) |
| 3. | Odour | -- | Agreeable | Agreeable | Agreeable | IS 3025 (Part-5):1983 (Reaffirmed 2012) |
| 4. | Taste | -- | Agreeable | Agreeable | Agreeable | IS 3025(Part-8):1984 (Reaffirmed 2002) |
| 5. | Conductivity at 25 °C | µS/cm | 1118 | -- | -- | APHA 23 rd Edition- 2017, Part-2000 Section:2510-B |
| 6. | Turbidity | NTU | BDL (DL- 0.1) | 1 | 5 | APHA 23 rd Ed. - 2017, Part 2000 Section: 2130-B |
| 7. | Total dissolved solids at 180 °C | mg/L | 721 | 500 | 2000 | IS 3025 (Part 16):1984 (Reaffirmed 2017) |
| 8. | Total Hardness as CaCO ₃ | mg/L | 276 | 200 | 600 | IS 3025 (Part 21):2009 (Reaffirmed 2014) |
| 9. | Calcium | mg/L | 61 | 75 | 200 | IS 3025 (Part 40):1991 (Reaffirmed 2014) |
| 10. | Magnesium | mg/L | 30 | 30 | 100 | IS 3025 (Part 46):1994 (Reaffirmed 2014) |
| 11. | Total Alkalinity (as CaCO ₃) | mg/L | 268 | 200 | 600 | IS 3025 (Part 23):1986 (Reaffirmed 2014) |

Remark: BDL – Below Detection Limit, DL – Detection Limit.

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Page 2 of 2

Name of the Industry : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED.
Sample Collected on : 04/03/2022
Sample ID No. : ERM/EXT/2022/03/1320

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|----------------|----------------|--|--|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 12. | Chloride | mg/L | 216 | 250 | 1000 | IS 3025 (Part 32):1988 (Reaffirmed 2014) Argentometric Method |
| 13. | Sulphate | mg/L | 52 | 200 | 400 | APHA 23 rd Ed. - 2017, Part-4000 Section : 4500-E SO ₄ ²⁻ (Turbidity Method) |
| 14. | Sodium | mg/L | 129 | -- | -- | IS 3025 (Part 45):1993 (Reaffirmed 2014) Flame Photometric Method |
| 15. | Fluoride | mg/L | 0.7 | 1.0 | 1.5 | APHA 23 rd Ed. - 2017, Part 4000 Section: 4500-F-D, |
| 16. | Ammonia (as NH ₃ -N) | mg/L | BDL (DL - 0.1) | 0.5 | No relaxation | IS 3025 (Part 34)-1988 (Reaffirmed 2014) Nesslerization Method |
| 17. | Nitrite Nitrogen | mg/L | BDL (DL-0.01) | -- | -- | IS 3025 (Part 34): 1988 (Colorimetric Method) |
| 18. | Nitrate Nitrogen (as NO ₃) | mg/L | 3.2 | 45 | No relaxation | IS 3025 (Part 34) - 1988 (Devadra Alloy Method) (Reaffirmed 2014) |
| 19. | Iron as Fe | mg/L | 0.21 | 0.3 | No Relaxation | IS 3025 (Part 53):2003 (Reaffirmed 2014)1,10 Phenanthrolein method |
| 20. | E-Coli (MPN) | Present/Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |
| 21. | Total Coliform (MPN) | Present/Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |

Remark: BDL - Below Detection Limit, DL - Detection Limit

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Issue Date: 17/03/2022

TEST REPORT
AMBIENT AIR QUALITY MONITORING REPORT

TEST REPORT NO:QF/7.8/01 A/AMBIENT/HPCL-VRS/Rev.0-01/03-2022

| | |
|----------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Vadodara Receiving Station, Palanpur-Vadodara Pipeline, GIDC- Manjusar, Village- Asoj, Tal- Savli, Vadodara-391775, Gujarat. |
| Sample Description | : Ambient Air Quality Monitoring |
| Sample Location | : Nr. MCC Control Room |
| Sample Collected On | : 01/03/2022 |
| Sample Received on | : 03/03/2022 |
| Sample Analyzed & Completion | : 03/03/2022 to 05/03/2022 |
| Sample Id No. | : ERM/EXT/2022/03/1266 |
| Quantity/No. of Sample | : 1-1 No. filter papers for PM ₁₀ & PM _{2.5} (each), 1-1 No. of polyethelene bottle having approx. 30 ml exposed scrubbing media for SO ₂ & NO _x (each), gas in bladder for HC & CO and Charcoal tube for VOC/ 6 Nos. |
| Packing/ Seal | : Packed |
| Protocol (Purpose) | : As per work order |
| Instrument used | : Combo Sampler (Tag No. S-4) |
| Instrument Calibration status | : Valid |
| Average Ambient Temperature (°C) | : 25.8 |
| Average Wind speed (Km/hr) | : 5.0 |
| Average Humidity (%) | : 48.8 |
| Dominant wind direction | : NNW |
| Height from Ground Level (m) | : Approx. 3 m |
| Sampling Method | : As per the below table described for test method |
| Sample Collected & Provided By | : ERM- Mr. Krishna Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit as per NAAQS | Test Method |
|---------|---|-------------------|--------|-----------------------------|--|
| 1. | Particulate Matter (PM ₁₀) | µg/m ³ | 78.1 | 100 | IS 5182 (Part 23) : 2006 (Reaffirmed 2012) |
| 2. | Particulate Matter (PM _{2.5}) | µg/m ³ | 46.2 | 60 | WI/5.4/02-B/03, Issue No.1 : 2010 |
| 3. | Sulphur Dioxides (SO ₂) | µg/m ³ | 24.6 | 80 | IS 5182 (Part 2) : 2001 (Reaffirmed 2017) |
| 4. | Nitrogen Dioxides (NO _x) | µg/m ³ | 27.0 | 80 | IS 5182 (Part 6) : 2006 (Reaffirmed 2017) |
| 5. | Hydrocarbon (as CH ₄) | µg/m ³ | 176 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA (GC) |
| 6. | Carbon Monoxide (CO) | mg/m ³ | 0.86 | 4 | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |
| 7. | Volatile Organic Compound as BTX | µg/m ³ | 90 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |

Remark: NAAQS-National Ambient Air Quality Standards: Schedule-VII, [Rule 3 (3B)] [Part-II sec.-3(i)] 16.11.2009

Note: (1) These results relate to the sample tested only.

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Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



TEST REPORT

AMBIENT AIR QUALITY MONITORING REPORT

TEST REPORT NO: QF/7.8/01 A/AMBIENT/HPCL-VRS/Rev.0-01/03-2022

| | |
|---------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Vadodara Receiving Station, Palanpur-Vadodara Pipeline, GIDC- Manjusar, Village- Asoj, Tal- Savli, Vadodara-391775, Gujarat. |
| Sample Description | : Ambient Air Quality Monitoring |
| Sample Location | : Nr. Process Area |
| Sample Collected On | : 01/03/2022 |
| Sample Received on | : 03/03/2022 |
| Sample Analyzed & Completion | : 03/03/2022 to 05/03/2022 |
| Sample Id No. | : ERM/EXT/2022/03/1267 |
| Quantity/No. of Sample | : 1-1 No. filter papers for PM ₁₀ & PM _{2.5} (each), 1-1 No. of polyethelene bottle having approx. 30 ml exposed scrubbing media for SO ₂ & NO _x (each), gas in bladder for HC & CO and Charcoal tube for VOC/ 6 Nos. |
| Packing/ Seal | : Packed |
| Protocol (Purpose) | : As per work order |
| Instrument used | : Combo Sampler (Tag No. S-5) |
| Instrument Calibration status | : Calibrated |
| Average Ambient Temperature(°C) | : 25.8 |
| Average Wind speed (Km/hr) | : 5.0 |
| Average Humidity (%) | : 48.8 |
| Dominant wind direction | : NNW |
| Height from Ground Level (m) | : Approx. 3 m |
| Sampling Method | : As per the below table described for test method |
| Sample Collected & Provided By | : ERM- Mr. Krishna Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit as per NAAQS | Test Method |
|---------|---|-------------------|--------|-----------------------------|---|
| 1. | Particulate Matter (PM ₁₀) | µg/m ³ | 77.6 | 100 | IS 5182 (Part 23) : 2006 (Reaffirmed 2012) |
| 2. | Particulate Matter (PM _{2.5}) | µg/m ³ | 45.0 | 60 | WI/5.4/02 B/03, Issue No.1 : 2010 |
| 3. | Sulphur Dioxides (SO ₂) | µg/m ³ | 23.8 | 80 | IS 5182 (Part 2) : 2001 (Reaffirmed 2017) |
| 4. | Nitrogen Dioxides (NO _x) | µg/m ³ | 29.2 | 80 | IS 5182 (Part 6) : 2006 (Reaffirmed 2017) |
| 5. | Hydrocarbon (as CH ₄) | µg/m ³ | 186 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA (GC) |
| 6. | Carbon Monoxide (CO) | µg/m ³ | 0.80 | 4 | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |
| 7. | Volatile Organic Compound as BTX | µg/m ³ | 94 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |

Remark: NAAQS-National Ambient Air Quality Standards: Schedule-VII, [Rule 3 (3B)] [Part-II sec.-3(i)] 16.11.2009

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Vapi Branch : 131, Ashapura Complex, Near New Telephone Exchange Road, GIDC Vapi-396 195 Tel.: 0260-2970305 / 94262 63805

Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



ECOSYSTEM RESOURCE MANAGEMENT PVT. LTD.
ENVIRONMENT ENGINEERS & AUDITORS

MoEF & CC Recognised Laboratory under EPA 1986

Issue Date: 17/03/2022

TEST REPORT
STACK ANALYSIS REPORT

TEST REPORT NO:QE/7.8/01 A/STACK /HPCL-VRS/Rev.0-01/03-2022

| | |
|------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Vadodara Receiving Station, Palanpur-Vadodara Pipeline, GIDC- Manjusar, Village- Asoj, Tal- Savli, Vadodara-391775, Gujarat. |
| Sample Description | : Stack Monitoring |
| Stack Attached to | : DG Set (160 KVA) |
| Date of Sampling | : 01/03/2022 |
| Sample Received on | : 03/03/2022 |
| Sample Analyzed & Completion | : 03/03/2022 to 05/03/2022 |
| Sample ID No. | : ERM/EXT/2022/03/1268 |
| Quantity/No. of Sample | : 1 No. Thimble for PM, Approx.50 ml exposed absorbing solution (in Polyethylene Bottle) for SO ₂ approx. 50ml. exposed absorbing solution In PDA flask for NO _x , 1 no. of detector tube for CO / 4 Nos. |
| Protocol (Purpose) | : As per work order |
| Packing/ Seal | : Packed |
| Type of Fuel | : Diesel |
| Height of Stack (m) | : 10 (From ground level) |
| Dia. of stack (m) | : 0.15 |
| Sampling Procedure | : As Per the below table described for Test Method |
| Sample Collected By | : ERM - Mr. Krishna Patel and Team |

| Sr. No. | Parameters | Unit | Result | CC&A Limit | Test Method |
|---------|---------------------------------------|--------------------|--------|------------|--|
| 1. | Temperature | °C | 112 | -- | IS 11255 (Part 3): 2008 |
| 2. | Velocity | m/s | 12.1 | | |
| 3. | Particulate of Matter (PM) | mg/Nm ³ | 92.9 | 150 | IS 11255 (Part 1) 1985/Reaffirmed 2014 |
| 4. | Sulphur Dioxide (SO ₂) | ppm | 30.1 | 100 | IS 11255 (Part 2) 1985/Reaffirmed 2014 |
| 5. | Oxides of Nitrogen (NO _x) | ppm | 26.0 | 50 | IS 11255 (Part 7) : 2005 |
| 6. | Carbon monoxide (CO) | mg/Nm ³ | 5.6 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA-Detector Tubes |

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Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



ECOSYSTEM RESOURCE MANAGEMENT PVT. LTD.
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Issue Date: 17/03/2022

TEST REPORT

AMBIENT NOISE LEVEL MONITORING REPORT

TEST REPORT NO: QF/7.8/01 A/NOISE /HPCL-VRS/Rev.0-01/03-2022

| | |
|----------------------------------|--|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Vadodara Receiving Station, Palanpur-Vadodara Pipeline, GIDC- Manjusar, Village- Asoj, Tal- Savli, Vadodara-391775, Gujarat. |
| Sample Description | : Ambient Noise Level Monitoring |
| Sample Location | : Nr. D.G Set |
| Date of Monitoring | : 01/03/2022 |
| Sample ID. No. | : ERM/EXT/2022/03/1269 |
| Average Ambient Temperature (°C) | : 25.8 |
| Surrounding activity | : Man movement |
| Protocol (Purpose) | : As per work order |
| Sampling Method | : IS 9989-1981(Reaffirmed 2001) |
| Noise Level Monitored by | : ERM- Mr. Krishna Patel and Team |

| Sr. No. | Parameters | Unit | Test Results | Test Method |
|---------|--|-------|--------------|-------------------------------------|
| 1. | Lmax | dB(A) | 69.1 | IS 9989 : 1981 (Reaffirmed 2001) |
| 2. | Lmin | dB(A) | 62.6 | IS 9989 : 1981 (Reaffirmed 2001) |
| 3. | Leq | dB(A) | 65.1 | IS 9989 : 1981 (Reaffirmed 2001) |
| 4. | CPCB Limits in dB(A) Leq (Industrial area) | dB(A) | 75 | -- |
| 5. | CPCB Limits in dB(A) Leq (Commercial area) | dB(A) | 65 | -- |
| 6. | CPCB Limits in dB(A) Leq (Residential area) | dB(A) | 55 | -- |
| 7. | CPCB Limits in dB(A) Leq (Silence Zone) | dB(A) | 50 | -- |

Remark: Day time- 7:00 am to 10:00 pm.

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Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



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Issue Date: 17/03/2022

TEST REPORT
AMBIENT NOISE LEVEL MONITORING REPORT
TEST REPORT NO: QF/7.8/01 A/NOISE/HPCL-VRS/Rev.0-01/03-2022

| | |
|----------------------------------|--|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Vadodara Receiving Station, Palanpur-Vadodara Pipeline, GIDC- Manjusar, Village- Asoj, Tal- Savli, Vadodara-391775, Gujarat. |
| Sample Description | : Ambient Noise Level Monitoring |
| Sample Location | : Nr. Process area |
| Date of Monitoring | : 01/03/2022 |
| Sample ID. No. | : ERM/EXT/2022/03/1269 |
| Average Ambient Temperature (°C) | : 25.8 |
| Surrounding activity | : Machine operation |
| Protocol (Purpose) | : As per work order |
| Sampling Method | : IS 9989-1981(Reaffirmed 2001) |
| Noise Level Monitored by | : ERM- Mr. Krishna Patel and Team |

| Sr. No | Parameters | Unit | Test Results During Day Time | Test Method |
|--------|--|-------|------------------------------|-------------------------------------|
| 1. | Lmax | dB(A) | 65.4 | IS 9989 : 1981 (Reaffirmed 2001) |
| 2. | Lmin | dB(A) | 54.9 | IS 9989 : 1981 (Reaffirmed 2001) |
| 3. | Leq | dB(A) | 62.0 | IS 9989 : 1981 (Reaffirmed 2001) |
| 4. | CPCB Limits in dB(A) Leq (Industrial area) | dB(A) | 75 | -- |
| 5. | CPCB Limits in dB(A) Leq (Commercial area) | dB(A) | 65 | -- |
| 6. | CPCB Limits in dB(A) Leq (Residential area) | dB(A) | 55 | -- |
| 7. | CPCB Limits in dB(A) Leq (Silence Zone) | dB(A) | 50 | -- |

Remark: Day time- 7:00 am to 10:00 pm.

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Vapi Branch : 131, Ashapura Complex, Near New Telephone Exchange Road, GIDC Vapi-396 195 Tel.: 0260-2970305 / 94262 63805

Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



TEST REPORT

WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO: QF/7.8/01 A/WATER/HPCL-VRS/Rev.0-01/12-2021

| | |
|------------------------------|--|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Vadodara Receiving Station, Palanpur-Vadodara Pipeline, GIDC- Manjusar, Village- Asoj, Tal- Savli, Vadodara-391775, Gujarat. |
| Sample Description | : Ground water |
| Sampling Point | : Bore well- Outside Control Room |
| Mode of sampling | : Grab |
| Sample Collected on | : 01/03/2022 |
| Sample Received on | : 03/03/2022 |
| Sample Analyzed & Completion | : 03/03/2022 to 04/03/2022 |
| Sample ID No. | : ERM/EXT/2022/03/1270 |
| Quantity/No. of Sample | : 2+2+1 Liters in polyethylene carboys and 250 ml in sterilized bottle/4 Nos. |
| Protocol (Purpose) | : As per work order |
| Packing/ Seal | : Packed |
| Sampling Method | : APHA 23 rd Edition - 2017 |
| Sample Collected By | : ERM- Mr. Krishna Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|--------------|-------------|-------------------------------------|-------------------|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 1. | pH at 25 °C | pH Unit | 7.62 | 6.5-8.5 | No relaxation | IS 3025 (Part 11):1983 (Reaffirmed 2017) |
| 2. | Color | Pt.-Co Scale | BDL (DL- 5) | 5 | 15 | APHA, 23 rd Ed. - 2017, Part - 2000 Section : 2120-C Spectrophotometric -Single Wavelength Method) |
| 3. | Odour | -- | Agreeable | Agreeable | Agreeable | IS 3025 (Part-5):1983 (Reaffirmed 2012) |
| 4. | Taste | -- | Agreeable | Agreeable | Agreeable | IS 3025(Part-8):1984 (Reaffirmed 2002) |
| 5. | Conductivity at 25 °C | µS/cm | 1892 | -- | -- | APHA 23 rd Edition- 2017, Part-2000 Section:2510-B |
| 6. | Turbidity | NTU | 0.6 | 1 | 5 | APHA 23 rd Ed. - 2017, Part 2000 Section: 2130-B |
| 7. | Total dissolved solids at 180 °C | mg/L | 1202 | 500 | 2000 | IS 3025 (Part 16):1984 (Reaffirmed 2017) |
| 8. | Total Hardness as CaCO ₃ | mg/L | 389 | 200 | 600 | IS 3025 (Part 21):2009 (Reaffirmed 2014) |
| 9. | Calcium | mg/L | 74 | 75 | 200 | IS 3025 (Part 40):1991 (Reaffirmed 2014) |
| 10. | Magnesium | mg/L | 50 | 30 | 100 | IS 3025 (Part 46):1994 (Reaffirmed 2014) |
| 11. | Total Alkalinity (as CaCO ₃) | mg/L | 396 | 200 | 600 | IS 3025 (Part 23):1986 (Reaffirmed 2014) |

Remark: BDL – below Detection Limit, DL – Detection Limit.

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Page 2 of 2

Name of the Industry : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED.
Sample Collected on : 01/03/2022
Sample ID No. : ERM/EXT/2022/03/1270

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|-----------------|----------------|--|--|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 12. | Chloride | mg/L | 403 | 250 | 1000 | IS 3025 (Part 32):1988 (Reaffirmed 2014) Argentometric Method |
| 13. | Sulphate | mg/L | 106 | 200 | 400 | APHA 23 rd Ed. - 2017, Part-4000 Section : 4500-E SO ₄ ⁻² (Turbidity Method) |
| 14. | Sodium | mg/L | 256 | -- | -- | IS 3025 (Part 45):1993 (Reaffirmed 2014) Flame Photometric Method |
| 15. | Fluoride | mg/L | 0.6 | 1.0 | 1.5 | APHA 23 rd Ed. - 2017, Part 4000 Section: 4500-F-D, |
| 16. | Ammonia (as NH ₃ -N) | mg/L | BDL (DL - 0.1) | 0.5 | No relaxation | IS 3025 (Part 34)-1988 (Reaffirmed 2014) Nesslerization Method |
| 17. | Nitrite Nitrogen | mg/L | BDL (DL- 0.01) | -- | -- | IS 3025 (Part 34): 1988 (Colorimetric Method) |
| 18. | Nitrate Nitrogen (as NO ₃) | mg/L | 3.2 | 45 | No relaxation | IS 3025 (Part 34) - 1988 (Devadra Alloy Method) (Reaffirmed 2014) |
| 19. | Iron as Fe | mg/L | 0.28 | 0.3 | No Relaxation | IS 3025 (Part 53):2003 (Reaffirmed 2014)1,10 Phenanthroline method |
| 20. | E-Coli (MPN) | Present/ Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |
| 21. | Total Coliform (MPN) | Present/ Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |

Remark: BDL – below Detection Limit, DL – Detection Limit.

Note: (1) These results relate to the sample tested only.

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Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



TEST REPORT

DRINKING WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO: QF/7.8/01 A/DRINKING WATER/HPCL-VRS /Rev.0-01/03-2022

| | |
|------------------------------|--|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Vadodara Receiving Station, Palanpur-Vadodara Pipeline, GIDC- Manjusar, Village- Asoj, Tal- Savli, Vadodara-391775, Gujarat. |
| Sample Description | : Drinking water |
| Sampling Point | : Pantry building |
| Mode of sampling | : Grab |
| Sample Collected on | : 01/03/2022 |
| Sample Received on | : 03/03/2022 |
| Sample Analyzed & Completion | : 03/03/2022 to 08/03/2022 |
| Sample ID No. | : ERM/EXT/2022/03/1271 |
| Quantity/No. of Sample | : 2+2+1 Liters in polyethylene carboys and 250 ml in sterilized bottle/4 Nos. |
| Protocol (Purpose) | : As per work order |
| Packing/ Seal | : Packed |
| Sampling Method | : APHA 23 rd Edition- 2017 |
| Sample Collected By | : ERM- Mr. Krishna Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|--------------|---------------|-------------------------------------|-------------------|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 1. | pH at 25 °C | pH Unit | 7.80 | 6.5-8.5 | No relaxation | IS 3025 (Part 11):1983 (Reaffirmed 2017) |
| 2. | Color | Pt.-Co Scale | BDL (DL- 5) | 5 | 15 | APHA, 23 rd Ed. - 2017, Part - 2000 Section : 2120-C Spectrophotometric -Single Wavelength Method) |
| 3. | Odour | -- | Agreeable | Agreeable | Agreeable | IS 3025 (Part-5):1983 (Reaffirmed 2012) |
| 4. | Taste | -- | Agreeable | Agreeable | Agreeable | IS 3025(Part-8):1984 (Reaffirmed 2002) |
| 5. | Conductivity at 25 °C | µS/cm | 138 | -- | -- | APHA 23 rd Edition- 2017, Part-2000 Section:2510-B |
| 6. | Turbidity | NTU | BDL (DL- 0.1) | 1 | 5 | APHA 23 rd Ed. - 2017, Part 2000 Section: 2130-B |
| 7. | Total dissolved solids at 180 °C | mg/L | 86 | 500 | 2000 | IS 3025 (Part 16):1984 (Reaffirmed 2017) |
| 8. | Total Hardness as CaCO ₃ | mg/L | 32 | 200 | 600 | IS 3025 (Part 21):2009 (Reaffirmed 2014) |
| 9. | Calcium | mg/L | 10 | 75 | 200 | IS 3025 (Part 40):1991 (Reaffirmed 2014) |
| 10. | Magnesium | mg/L | 2 | 30 | 100 | IS 3025 (Part 46):1994 (Reaffirmed 2014) |
| 11. | Total Alkalinity (as CaCO ₃) | mg/L | 30 | 200 | 600 | IS 3025 (Part 23):1986 (Reaffirmed 2014) |

Remark: BDL – below Detection Limit, DL – Detection Limit.

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Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



Name of the Industry : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED.
Sample Collected on : 01/03/2022
Sample ID No. : ERM/EXT/2022/03/1271

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|----------------|----------------|--|--|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 12. | Chloride | mg/L | 24 | 250 | 1000 | IS 3025 (Part 32):1988 (Reaffirmed 2014) Argentometric Method |
| 13. | Sulphate | mg/L | 8 | 200 | 400 | APHA 23 rd Ed. - 2017, Part-4000 Section : 4500-E SO ₄ ⁻² (Turbidity Method) |
| 14. | Sodium | mg/L | 16 | -- | -- | IS 3025 (Part 45):1993 (Reaffirmed 2014) Flame Photometric Method |
| 15. | Fluoride | mg/L | BDL (DL- 0.1) | 1.0 | 1.5 | APHA 23 rd Ed. - 2017, Part 4000 Section: 4500-F-D, |
| 16. | Ammonia (as NH ₃ -N) | mg/L | BDL (DL- 0.1) | 0.5 | No relaxation | IS 3025 (Part 34)-1988 (Reaffirmed 2014) Nesslerization Method |
| 17. | Nitrite Nitrogen | mg/L | BDL (DL- 0.01) | -- | -- | IS 3025 (Part 34): 1988 (Colorimetric Method) |
| 18. | Nitrate Nitrogen (as NO ₃) | mg/L | BDL (DL- 2.0) | 45 | No relaxation | IS 3025 (Part 34) – 1988 (Devadra Alloy Method) (Reaffirmed 2014) |
| 19. | Iron as Fe | mg/L | BDL (DL- 0.05) | 0.3 | No Relaxation | IS 3025 (Part 53):2003 (Reaffirmed 2014)1,10 Phenanthroline method |
| 20. | E-Coli (MPN) | Present/Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |
| 21. | Total Coliform (MPN) | Present/Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |

Remark: BDL – below Detection Limit, DL – Detection Limit

Note: (1) These results relate to the sample tested only.

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TEST REPORT

AMBIENT AIR QUALITY MONITORING REPORT

TEST REPORT NO: QF/7.8/01 A/AMBIENT/HPCL-IPS/Rev.0-01/03-2022

| | |
|--------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur-Vadodara Pipeline Project, Ghadkan-Intermediate Pigging Station, Survey NO: 83, 84,85, Village- Ghadkan Tal- Prantij District- Sabarkantha, Gujarat. |
| Sample Description | : Ambient Air Quality Monitoring |
| Sample Location | : Nr. Security cabin |
| Sample Collected On | : 03/03/2022 |
| Sample Received on | : 04/03/2022 |
| Sample Analyzed & Completion | : 04/03/2022 to 07/03/2022 |
| Sample Id No. | : ERM/EXT/2022/03/1292 |
| Quantity/No. of Sample | : 1-1 No. filter papers for PM ₁₀ & PM _{2.5} (each), 1-1 No. of polyethelene bottle having approx. 30 ml exposed scrubbing media for SO ₂ & NO _x (each), gas in bladder for HC & CO and Charcoal tube for VOC/ 6 Nos. |
| Packing/ Seal | : Packed |
| Protocol (Purpose) | : As per work order |
| Instrument used | : Combo Sampler (Tag No. S-4) |
| Instrument Calibration status | : Valid |
| Ambient Temperature (°C) | : 27.3 |
| Average Wind speed (Km/hr) | : 6.3 |
| Average Humidity (%) | : 36.5 |
| Dominant wind direction | : NW |
| Height from Ground Level (m) | : Approx. 3 m |
| Sampling Method | : As per the below table described for test method |
| Sample Collected & Provided By | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit as per NAAQS | Test Method |
|---------|---|-------------------|--------|-----------------------------|--|
| 1. | Particulate Matter (PM ₁₀) | µg/m ³ | 80.6 | 100 | IS 5182 (Part 23) : 2006 (Reaffirmed 2012) |
| 2. | Particulate Matter (PM _{2.5}) | µg/m ³ | 44.1 | 60 | WI/5.4/02-B/03, Issue No.1 : 2010 |
| 3. | Sulphur Dioxides (SO ₂) | µg/m ³ | 32.9 | 80 | IS 5182 (Part 2) : 2001 (Reaffirmed 2017) |
| 4. | Nitrogen Dioxides (NO _x) | µg/m ³ | 41.2 | 80 | IS 5182 (Part 6) : 2006 (Reaffirmed 2017) |
| 5. | Hydrocarbon (as CH ₄) | µg/m ³ | 176 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA (GC) |
| 6. | Carbon Monoxide (CO) | mg/m ³ | 0.40 | 4 | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |
| 7. | Volatile Organic Compound as BTX | µg/m ³ | 72 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |

Remark: NAAQS-National Ambient Air Quality Standards: Schedule-VII, [Rule 3 (3B)] [Part-II sec.-3(i)] 16.11.2009

Note: (1) These results relate to the sample tested only.

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Issue Date: 17/03/2022

TEST REPORT

AMBIENT AIR QUALITY MONITORING REPORT

TEST REPORT NO: QF/7.8/01 A/AMBIENT/HPCL-IPS/Rev.0-01/03-2022

| | |
|--------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED, Palanpur-Vadodara Pipeline Project, Ghadkan-Intermediate Pigging Station, Survey NO: 83, 84,85, Village- Ghadkan Tal- Prantij District- Sabarkantha, Gujarat. |
| Sample Description | : Ambient Air Quality Monitoring |
| Sample Location | : Nr. Process Area |
| Sample Collected On | : 03/03/2022 |
| Sample Received on | : 04/03/2022 |
| Sample Analyzed & Completion | : 04/03/2022 to 07/03/2022 |
| Sample Id No. | : ERM/EXT/2022/03/1293 |
| Quantity/No. of Sample | : 1-1 No. filter papers for PM ₁₀ & PM _{2.5} (each), 1-1 No. of polyethelene bottle having approx. 30 ml exposed scrubbing media for SO ₂ & NO _x (each), gas in bladder for HC & CO and Charcoal tube for VOC/ 6 Nos. |
| Packing/ Seal | : Packed |
| Protocol (Purpose) | : As per work order |
| Instrument used | : Combo Sampler (Tag No. S-5) |
| Instrument Calibration status | : Valid |
| Ambient Temperature(°C) | : 27.3 |
| Average Wind speed (Km/hr) | : 6.3 |
| Average Humidity (%) | : 36.5 |
| Dominant wind direction | : NW |
| Height from Ground Level (m) | : Approx. 3 m |
| Sampling Method | : As per the below table described for test method |
| Sample Collected & Provided By | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit as per NAAQS | Test Method |
|---------|---|-------------------|--------|-----------------------------|---|
| 1. | Particulate Matter (PM ₁₀) | µg/m ³ | 74.3 | 100 | IS 5182 (Part 23) : 2006 (Reaffirmed 2012) |
| 2. | Particulate Matter (PM _{2.5}) | µg/m ³ | 40.1 | 60 | WI/5.4/02-B/03, Issue No.1 : 2010 |
| 3. | Sulphur Dioxides (SO ₂) | µg/m ³ | 33.9 | 80 | IS 5182 (Part 2) : 2001 (Reaffirmed 2017) |
| 4. | Nitrogen Dioxides (NO _x) | µg/m ³ | 44.0 | 80 | IS 5182 (Part 6) : 2006 (Reaffirmed 2017) |
| 5. | Hydrocarbon (as CH ₄) | µg/m ³ | 201 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA (GC) |
| 6. | Carbon Monoxide (CO) | µg/m ³ | 0.49 | 4 | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |
| 7. | Volatile Organic Compound as BTX | µg/m ³ | 98 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA |

Remark: NAAQS-National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (38)] [Part-II sec.-3(i)] 16.11.2009

Note: (1) These results relate to the sample tested only.

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Vadodara Branch : 216. Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



TEST REPORT

STACK ANALYSIS REPORT

TEST REPORT NO: QF/7.8/01 A/STACK /HPCL-IPS/Rev.0-01/03-2022

| | |
|------------------------------|--|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur-Vadodara Pipeline Project, Ghadkan-Intermediate Pigging Station, Survey NO: 83, 84,85, Village- Ghadkan Tal- Prantij District- Sabarkantha, Gujarat. |
| Sample Description | : Stack Monitoring |
| Stack Attached to | : DG Set (320 KVA) |
| Date of Sampling | : 03/03/2022 |
| Sample Received on | : 04/03/2022 |
| Sample Analyzed & Completion | : 04/03/2022 to 07/03/2022 |
| Sample ID No. | : ERM/EXT/2022/03/1294 |
| Quantity/No. of Sample | : 1 No. Thimble for PM, Approx. 50 ml exposed absorbing solution (in Polyethylene Bottle) for SO ₂ approx. 50ml. exposed absorbing solution in PDA flask for NO _x , 1 no. of detector tube for CO / 4 Nos. |
| Protocol (Purpose) | : As per work order |
| Packing/ Seal | : Packed |
| Type of Fuel | : Diesel |
| Height of Stack (m) | : 11 (From ground level) |
| Dia. of stack (m) | : 0.08 |
| Sampling Procedure | : As Per the below table described for Test Method |
| Sample Collected By | : ERM - Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | CC&A Limit | Test Method |
|---------|---------------------------------------|--------------------|--------|------------|--|
| 1. | Temperature | °C | 101 | -- | IS 11255 (Part 3): 2008 |
| 2. | Velocity | m/s | 13.1 | -- | |
| 3. | Particulate of Matter (PM) | mg/Nm ³ | 89.7 | 150 | IS 11255 (Part 1) 1985/Reaffirmed 2014 |
| 4. | Sulphur Dioxide (SO ₂) | ppm | 30.3 | 100 | IS 11255 (Part 2) 1985/Reaffirmed 2014 |
| 5. | Oxides of Nitrogen (NO _x) | ppm | 26.0 | 50 | IS 11255 (Part 7) : 2005 |
| 6. | Carbon monoxide (CO) | mg/Nm ³ | 4.9 | -- | Methods of Air Sampling & Analysis 3 rd Edition AWMA, APHA-Detector Tubes |

Note: (1) These results relate to the sample tested only.

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Issue Date: 17/03/2022

TEST REPORT

AMBIENT NOISE LEVEL MONITORING REPORT

TEST REPORT NO: QF/7.8/01 A/NOISE /HPCL-IPS/Rev.0-01/03-2022

| | |
|---------------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur-Vadodara Pipeline Project, Ghadkan-Intermediate Piggling Station, Survey NO: 83, 84,85, Village- Ghadkan Tal- Prantij District- Sabarkantha, Gujarat. |
| Sample Description | : Ambient Noise Level Monitoring |
| Sample Location | : Nr. D.G Set |
| Date of Monitoring | : 03/03/2022 |
| Sample ID. No. | : ERM/EXT/2022/03/1295 |
| Ambient Temperature (^o C) | : 27.3 |
| Surrounding activity | : Man movement |
| Protocol (Purpose) | : As per work order |
| Sampling Method | : IS 9989-1981(Reaffirmed 2001) |
| Noise Level Monitored by | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No | Parameters | Unit | Test Results During Day Time | Test Method |
|--------|---|-------|------------------------------|----------------------------------|
| 1. | Lmax | dB(A) | 67.8 | IS 9989 : 1981 (Reaffirmed 2001) |
| 2. | Lmin | dB(A) | 52.1 | IS 9989 : 1981 (Reaffirmed 2001) |
| 3. | Leq | dB(A) | 63.6 | IS 9989 : 1981 (Reaffirmed 2001) |
| 4. | CPCB Limits in dB(A) Leq (Industrial area) | dB(A) | 75 | -- |
| 5. | CPCB Limits in dB(A) Leq (Commercial area) | dB(A) | 65 | -- |
| 6. | CPCB Limits in dB(A) Leq (Residential area) | dB(A) | 55 | -- |
| 7. | CPCB Limits in dB(A) Leq (Silence Zone) | dB(A) | 50 | -- |

Remark: Day time- 7:00 am to 10:00 pm.

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Issue Date: 17/03/2022

TEST REPORT
AMBIENT NOISE LEVEL MONITORING REPORT
TEST REPORT NO: QF/7.8/01 A/NOISE/HPCL-IPS/Rev.0-01/03-2022

Name of the Industry : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED.
Palanpur-Vadodara Pipeline Project, Ghadkan-Intermediate Pigging Station, Survey NO: 83, 84,85, Village- Ghadkan Tal- Prantij District- Sabarkantha, Gujarat.
Sample Description : Ambient Noise Level Monitoring
Sample Location : Nr. Process area
Date of Monitoring : 03/03/2022
Sample ID. No. : ERM/EXT/2022/03/1296
Ambient Temperature (°C) : 27.3
Surrounding activity : Machine operation
Protocol (Purpose) : As per work order
Sampling Method : IS 9989-1981(Reaffirmed 2001)
Noise Level Monitored by : ERM- Mr. Bhavesh Patel and Team

| Sr. No | Parameters | Unit | Test Results During Day Time | Test Method |
|--------|---|-------|------------------------------|----------------------------------|
| 1. | Lmax | dB(A) | 64.8 | IS 9989 : 1981 (Reaffirmed 2001) |
| 2. | Lmin | dB(A) | 52.0 | IS 9989 : 1981 (Reaffirmed 2001) |
| 3. | Leq | dB(A) | 61.6 | IS 9989 : 1981 (Reaffirmed 2001) |
| 4. | CPCB Limits in dB(A) Leq (Industrial area) | dB(A) | 75 | -- |
| 5. | CPCB Limits in dB(A) Leq (Commercial area) | dB(A) | 65 | -- |
| 6. | CPCB Limits in dB(A) Leq (Residential area) | dB(A) | 55 | -- |
| 7. | CPCB Limits in dB(A) Leq (Silence Zone) | dB(A) | 50 | -- |

Remark: Day time- 7:00 am to 10:00 pm.

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TEST REPORT

DRINKING WATER SAMPLE ANALYSIS REPORT

TEST REPORT NO:QF/7.8/01 A/DRINKING WATER/HPCL-IPS /Rev.0-01/03-2022

| | |
|------------------------------|---|
| Name of the Industry | : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED. Palanpur-Vadodara Pipeline Project, Ghadkan-Intermediate Piging Station, Village- Ghadkan Tal- Prantij District- Sabarkantha, Gujarat. |
| Sample Description | : Drinking water |
| Sampling Point | : IPS- Ghadkan |
| Mode of sampling | : Grab |
| Sample Collected on | : 03/03/2022 |
| Sample Received on | : 04/03/2022 |
| Sample Analyzed & Completion | : 04/03/2022 to 09/03/2022 |
| Sample ID No. | : ERM/EXT/2022/03/1297 |
| Quantity/No. of Sample | : 2+2+1 Liters in polyethylene carboys and 250 ml in sterilized bottle/4 Nos. |
| Protocol (Purpose) | : As per work order |
| Packing/ Seal | : Packed |
| Sampling Method | : APHA 23 rd Edition- 2017 |
| Sample Collected By | : ERM- Mr. Bhavesh Patel and Team |

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|--------------|----------------|-------------------------------------|-------------------|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 1. | pH at 25 °C | pH Unit | 7.23 | 6.5-8.5 | No relaxation | IS 3025 (Part 11):1983 (Reaffirmed 2017) |
| 2. | Color | Pt.-Co Scale | BDL (DL- 5) | 5 | 15 | APHA, 23 rd Ed. - 2017, Part - 2000 Section : 2120-C Spectrophotometric -Single Wavelength Method) |
| 3. | Odour | -- | Agreeable | Agreeable | Agreeable | IS 3025 (Part-5):1983 (Reaffirmed 2012) |
| 4. | Taste | -- | Agreeable (DL) | Agreeable | Agreeable | IS 3025(Part-8):1984 (Reaffirmed 2002) |
| 5. | Conductivity at 25 °C | µS/cm | 52 | -- | -- | APHA 23 rd Edition- 2017, Part-2000 Section:2510-B |
| 6. | Turbidity | NTU | BDL (DL- 0.1) | 1 | 5 | APHA 23 rd Ed. - 2017, Part 2000 Section: 2130-B |
| 7. | Total dissolved solids at 180 °C | mg/L | 36 | 500 | 2000 | IS 3025 (Part 16):1984 (Reaffirmed 2017) |
| 8. | Total Hardness as CaCO ₃ | mg/L | 8 | 200 | 600 | IS 3025 (Part 21):2009 (Reaffirmed 2014) |
| 9. | Calcium | mg/L | 2 | 75 | 200 | IS 3025 (Part 40):1991 (Reaffirmed 2014) |
| 10. | Magnesium | mg/L | 2 | 30 | 100 | IS 3025 (Part 46):1994 (Reaffirmed 2014) |
| 11. | Total Alkalinity (as CaCO ₃) | mg/L | BDL (DL- 25) | 200 | 600 | IS 3025 (Part 23):1986 (Reaffirmed 2014) |

Remark: BDL – Below Detection Limit, DL – Detection Limit.

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Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



Name of the Industry : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED.
Sample Collected on : 03/03/2022
Sample ID No. : ERM/EXT/2022/03/1297

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|-----------------|----------------|--|--|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 12. | Chloride | mg/L | 10 | 250 | 1000 | IS 3025 (Part 32):1988 (Reaffirmed 2014) Argentometric Method |
| 13. | Sulphate | mg/L | BDL (DL- 1) | 200 | 400 | APHA 23 rd Ed. - 2017, Part-4000 Section : 4500-E SO ₄ ²⁻ (Turbidity Method) |
| 14. | Sodium | mg/L | 8 | -- | -- | IS 3025 (Part 45):1993 (Reaffirmed 2014) Flame Photometric Method |
| 15. | Fluoride | mg/L | BDL (DL- 0.1) | 1.0 | 1.5 | APHA 23 rd Ed. - 2017, Part 4000 Section: 4500-F-D, |
| 16. | Ammonia (as NH ₃ -N) | mg/L | BDL (DL - 0.1) | 0.5 | No relaxation | IS 3025 (Part 34)-1988 (Reaffirmed 2014) Nesslerization Method |
| 17. | Nitrite Nitrogen | mg/L | BDL (DL- 0.01) | -- | -- | IS 3025 (Part 34): 1988 (Colorimetric Method) |
| 18. | Nitrate Nitrogen (as NO ₃) | mg/L | BDL (DL- 2.0) | 45 | No relaxation | IS 3025 (Part 34) - 1988 (Devadra Alloy Method) (Reaffirmed 2014) |
| 19. | Iron as Fe | mg/L | BDL (DL- 0.05) | 0.3 | No Relaxation | IS 3025 (Part 53):2003 (Reaffirmed 2014)1,10 Phenanthroline method |
| 20. | E-Coli (MPN) | Present/ Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |
| 21. | Total Coliform (MPN) | Present/ Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |

Remark: BDL – Below Detection Limit DL – Detection Limit.

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TEST REPORT
WATER SAMPLE ANALYSIS REPORT
TEST REPORT NO:QF/7.8/01 A/WATER/HPCL-IPS/Rev.0-01/03-2022

Name of the Industry : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED.
Palanpur-Vadodara Pipeline Project, Ghadkan-Intermediate Pigging
Station, Survey NO: 83, 84,85, Village- Ghadkan Tal- Prantij
District- Sabarkantha, Gujarat.

Sample Description : Ground water
Sampling Point : IPS- Ghadkan
Mode of sampling : Grab
Sample Collected on : 03/03/2022
Sample Received on : 04/03/2022
Sample Analyzed & Completion : 04/03/2022 to 09/03/2022
Sample ID No. : ERM/EXT/2022/03/1298
Quantity/No. of Sample : 2+2+1 Liters in polyethylene carboys and 250 ml in sterilized bottle/4 Nos.
Protocol (Purpose) : As per work order
Packing/ Seal : Packed
Sampling Method : APHA 23rd Edition – 2017
Sample Collected By : ERM- Mr. Bhavesh Patel and Team

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|--------------|-------------|-------------------------------------|-------------------|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 1. | pH at 25 °C | pH Unit | 7.68 | 6.5-8.5 | No relaxation | IS 3025 (Part 11):1983 (Reaffirmed 2017) |
| 2. | Color | Pt.-Co Scale | BDL (DL- 5) | 5 | 15 | APHA, 23 rd Ed. - 2017, Part - 2000 Section : 2120-C Spectrophotometric -Single Wavelength Method) |
| 3. | Odour | -- | Agreeable | Agreeable | Agreeable | IS 3025 (Part-5):1983 (Reaffirmed 2012) |
| 4. | Taste | -- | Agreeable | Agreeable | Agreeable | IS 3025(Part-8):1984 (Reaffirmed 2002) |
| 5. | Conductivity at 25 °C | µS/cm | 1261 | -- | -- | APHA 23 rd Edition- 2017, Part-2000 Section:2510-B |
| 6. | Turbidity | NTU | 0.6 | 1 | 5 | APHA 23 rd Ed. - 2017, Part 2000 Section: 2130-B |
| 7. | Total dissolved solids at 180 °C | mg/L | 812 | 500 | 2000 | IS 3025 (Part 16):1984 (Reaffirmed 2017) |
| 8. | Total Hardness as CaCO ₃ | mg/L | 304 | 200 | 600 | IS 3025 (Part 21):2009 (Reaffirmed 2014) |
| 9. | Calcium | mg/L | 58 | 75 | 200 | IS 3025 (Part 40):1991 (Reaffirmed 2014) |
| 10. | Magnesium | mg/L | 39 | 30 | 100 | IS 3025 (Part 46):1994 (Reaffirmed 2014) |
| 11. | Total Alkalinity (as CaCO ₃) | mg/L | 279 | 200 | 600 | IS 3025 (Part 23):1986 (Reaffirmed 2014) |

Remark: BDL – Below Detection Limit, DL – Detection Limit.

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Page 2 of 2

Name of the Industry : M/s. HINDUSTAN PETROLEUM CORPORATION LIMITED.
Sample Collected on : 03/03/2022
Sample ID No. : ERM/EXT/2022/03/1298

| Sr. No. | Parameters | Unit | Result | Standard Limit As Per IS 10500:2012 | | Test Method |
|---------|--|----------------|----------------|--|--|---|
| | | | | Acceptable Limit | Permissible Limit | |
| 12. | Chloride | mg/L | 252 | 250 | 1000 | IS 3025 (Part 32):1988 (Reaffirmed 2014) Argentometric Method |
| 13. | Sulphate | mg/L | 52 | 200 | 400 | APHA 23 rd Ed. - 2017, Part-4000 Section : 4500-E SO ₄ ²⁻ (Turbidity Method) |
| 14. | Sodium | mg/L | 145 | -- | -- | IS 3025 (Part 45):1993 (Reaffirmed 2014) Flame Photometric Method |
| 15. | Fluoride | mg/L | 0.3 | 1.0 | 1.5 | APHA 23 rd Ed. - 2017, Part 4000 Section: 4500-F-D, |
| 16. | Ammonia (as NH ₃ -N) | mg/L | BDL (DL - 0.1) | 0.5 | No relaxation | IS 3025 (Part 34)-1988 (Reaffirmed 2014) Nesslerization Method |
| 17. | Nitrite Nitrogen | mg/L | BDL (DL- 0.01) | -- | -- | IS 3025 (Part 34): 1988 (Colorimetric Method) |
| 18. | Nitrate Nitrogen (as NO ₃) | mg/L | 3.8 | 45 | No relaxation | IS 3025 (Part 34) – 1988 (Devadra Alloy Method) (Reaffirmed 2014) |
| 19. | Iron as Fe | mg/L | 0.20 | 0.3 | No Relaxation | IS 3025 (Part 53):2003 (Reaffirmed 2014)1,10 Phenanthroline method |
| 20. | E-Coli (MPN) | Present/Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |
| 21. | Total Coliform (MPN) | Present/Absent | Absent | Shall not be detectable in 100 ml sample | Shall not be detectable in 100 ml sample | APHA 23 rd Edition, 2017 Part-9000 Section : 9221 B & C |

Remark: BDL – Below Detection Limit, DL – Detection Limit.

Note: (1) These results relate to the sample tested only.

(2) The report shall not be reproduced except in full without written approval of the laboratory.

S. Patel
CHEMIST

AH
CHECKED BY
(Haresh Ahir)

Sunilkumar Pandey
AUTHORISED SIGNATORY
(Sunilkumar Pandey)

Regd. Off.: Office Floor, Ashoka Pavillion-A, Opp. Kapadia Health Club, New Civil Road, SURAT-395 001.

Telefax : 91 - 261 - 2236223 Phone : 84605 45050

e-mail : eco@ecoshrpad.com Website : www.ecosystemindia.com CIN No.: U72200GJ2000PTC038265

Bharuch Branch : Shop No. 7/8, Saffron City, Opp. Bharat Petrol Pump, Vill. Jolwa, Dahej - Bharuch Road, Bharuch. Mo.: 98250 94443

Vapi Branch : 131, Ashapura Complex, Near New Telephone Exchange Road, GIDC Vapi-396 195 Tel.: 0260-2970305 / 94262 63805

Vadodara Branch : 216, Race Course Tower, Gotri Road, Vadodara-390007. Tel.: 0265-2321215, 2331215



हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड

(भारत सरकार का उपक्रम) रजिस्टर्ड ऑफिस : १७, जमशेदजी टाटा रोड, मुंबई ४०० ०२०

HINDUSTAN PETROLEUM CORPORATION LIMITED

(A GOVERNMENT OF INDIA ENTERPRISE) REGISTERED OFFICE : 17, JAMSHEDJI TATA ROAD, MUMBAI 400 020

एच पी सी एल, पालनपुर वडोदरा पाइपलाइन, वडोदरा रिसिप्ट स्टेशन, गाँव: आसोज-पिलोल,

पिलोल रेल्वे स्टेशन/सावली-मंजूसर जी आई डी सी के पास, जिला : वडोदरा 391775, गुजरात. फोन : 7069003072, 3073

HPCL-Palanpur Vadodara Pipeline, Vadodara Receipt Station, Village : Asoj-Pilol, Near Pilol Railway Station,

Beside Savli-Manjusr GIDC, District : Vadodara 391775, Gujarat. Ph. : 7069003072, 3073

Date: 11.04.2022

To,

The Member Secretary,
Gujarat Pollution Control Board,
Paryavaran Bhavan,
Sector 10A
Gandhinagar – 382010

Sub: Submission of Annual Return (PCB ID – 51262) in Form No. 4 for financial year 2021-22

Sir,

With reference to above subject, in this connection we are herewith submitting Annual Report (form No. 4) along with required details for your ready reference.

Hope the above details are as per your requirements.

Thanking You,

Your Sincerely,

For, HINDUSTAN PETROLEUM CORPORATION LTD,

Authorised Signatory

Encl: Akhilesh Khadiya
वरिष्ठ स्टेशन प्रबंधक
Sr. Station Manager
वडोदरा रिसिप्ट स्टेशन
Vadodara Receipt Station
पालनपुर-वडोदरा पाइपलाइन
Palapur-Vadodara Pipeline
हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड
Hindustan Petroleum Corporation Limited

FORM 4

[See rules 5(6) and 22(2)]

**FORM FOR FILING ANNUAL RETURNS
BY THE OCCUPIER OR OPERATOR OF FACILITY**

[to be submitted by occupier/operator of disposal facility to State Pollution Control Board/ Pollution Control Committee by 30th June of every year for the preceding period April to March]

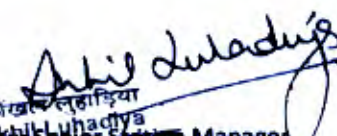
| | | | | | |
|----|--|--|--------------------------------|------------------------|---------------------------|
| 1. | Name and address of the generator/ operator of facility | HINDUSTAN PETROLEUM CORPORATION LIMITED Vadodara Receiving Station Palanpur Vadodara Pipeline Village Asoj Near Bombardier, GIDC, Manjusar-Vadodara, Gujarat – 391775 | | | |
| 2. | Name of the authorised person and full address with telephone and fax number | AKHIL LUHADIYA Vadodara Receiving Station Palanpur Vadodara Pipeline Village Asoj Near Bombardier, GIDC, Manjusar-Vadodara, Gujarat – 391775 | | | |
| 3. | Description of hazardous waste | Type of Hazardous waste | Physical form with description | Chemical form | |
| | | a) Nil | Nil | Nil | |
| | | b) | | | |
| 4. | Quantity of hazardous wastes (in MTA) | Type of Hazardous waste | Quantity (in Tonnes / KL) | | |
| | | a) Nil | Nil | | |
| | | b) | | | |
| 5. | Description of Storage | : Stored in adequate storage Area | | | |
| 6. | Description of Treatment | : Nil | | | |
| 7. | Details of transportation | Name & address of consignee | Mode of packing | Mode of transportation | Date of transportation |
| | | Nil | Nil | Nil | Nil |
| 8. | Details of disposal of hazardous waste | Name & address of consignee | Mode of packing | Mode of transportation | Date of transportation |
| | | Nil | Nil | Nil | Nil |
| 9. | Quantity of useful Materials sent back to the manufacturers* and others# | Name and type of material sent back to | | | Quantity (in Tonnes / KL) |
| | | manufacturers | | | Nil |
| | | Others# | | | Nil |

*Delete whichever is not applicable

enclose list of other agencies.

Date: 11.04.2022

Place: Vadodara

Signature: 
 Designation: Sr. Station Manager
 Vadodara Receiving Station
 Palanpur-Vadodara Pipeline
 Hindustan Petroleum Corporation Limited



हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड

(भारत सरकार का उपक्रम) रजिस्टर्ड ऑफिस : १७, जमशेदजी टाटा रोड, मुंबई ४०० ०२०

HINDUSTAN PETROLEUM CORPORATION LIMITED

(A GOVERNMENT OF INDIA ENTERPRISE) REGISTERED OFFICE : 17, JAMSHEDJI TATA ROAD, MUMBAI 400 020

एच पी सी एल, पालनपुर वडोदरा पाइपलाइन, वडोदरा रिसिप्ट स्टेशन, गाँव: आसोज-पिलोड,

पिलोड रेल्वे स्टेशन/सावली-मंजूसर पी आई डी सी के पास, जिला : वडोदरा 391775, गुजरात. फोन : 7069003072, 3073

HPCL-Palanpur Vadodara Pipeline, Vadodara Receipt Station, Village : Asoj-Piloi, Near Piloi Railway Station,

Beside Savli-Manjuser GIDC, District : Vadodara 391775, Gujarat. Ph. : 7069003072, 3073

Date: 11.04.2022

To,

The Member Secretary,
Gujarat Pollution Control Board,
Paryavaran Bhavan,
Sector 10A
Gandhinagar - 382010

Sub: Submission of Environmental Statement in Form No. 5 for financial year 2021-22

Sir,

With reference to above subject, In this connection we are herewith submitting Environmental Statement (form No.5) along with required details for your ready reference.

Hope the above details are as per your requirements.

Thanking You,

Your Sincerely,

For, HINDUSTAN PETROLEUM CORPORATION LTD,

Authorised Signatory

अखिल लुहाडिया

Anil K. Bhagdiya

वरिष्ठ स्टेशन प्रबंधक

Sr. Station Manager

वडोदरा रिसिप्ट स्टेशन

Vadodara Receipt Station

पालनपुर-वडोदरा पाइपलाइन

Palapur-Vadodara Pipeline

हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड

Hindustan Petroleum Corporation Limited

FORM - V
(See Rule 14)

From,

HINDUSTAN PETROLEUM CORPORATION LIMITED
Vadodara Receiving Station
Palanpur Vadodara Pipeline
Village Asoj Near Bombardier, GIDC,
Manjusar-Vadodara, Gujarat - 391775

To,

Gujarat Pollution Control Board,
Paryavaran Bhavan,
Sector 10A
Gandhinagar - 382010

Environmental Statement for the financial year ending on 31 March 2022

PART - A

- | | | |
|---|---|---|
| 1. Name and address of the owner/ occupier of the industry operation or process | : | AKHIL LUHADIYA Vadodara Receiving Station Palanpur Vadodara Pipeline Village Asoj Near Bombardier, GIDC, Manjusar-Vadodara, Gujarat - 391775 |
| Industry Category - | | |
| 2. Primary - (STC Code) | : | --L.S.I-- |
| Secondary - (STC Code) | | |
| 3. Production capacity Units | : | Receiving of Petroleum Products |
| 4. Year of Establishment | : | 2019 |
| 5. Date of the Last Environmental Statement submitted | : | 11.05.2021 |

* Submission of Environmental Statement is in accordance with the provision of Rule - 14 of the Environment (Protection) Amendment Rules, 1993 of the Environment (Protection) Act, 1986 (29 of 1986) published vide Notification dated 22-4-1993 G. S. R. 386 (E) in the Gazette of India - Extraordinary - Part - II Section - 3 Subsection (i), No. 155 dated 28-4-1993 by the Ministry of Environment and Forests, Government of India; Read with the Notification dated 13-2-1993 G. S. R. 329 (E) of the Gazette of India - Extraordinary Part - II Section - 3 Subsection (i) No. 120 dated 13-3-1993.

"Every person carrying on an industry, operation or process requiring consent under Section -25 of the water (Prevention & Control of Pollution) Act, 1974 (6 of 1974) or under section- 21 of the Air (Prevention & Control of Pollution) Act, 1981 (14 of 1981) or both authorization under the Hazardous Wastes (Management & Handling) Rules, 1989 Published under the Environ (Protection) Act, 1986 (29 of 1986) shall submit an Environmental Statement for the financial year ending the 31st March in Form V to the concerned State Pollution Control Board on or before the Thirtieth day of September every year, beginning 1993."

PART – B

Water and Raw Material Consumption

- 1) Water Consumption m³/day
 - a) Process (Other) – Nil
 - b) Cooling - Nil
 - c) Domestic – 0.9 KL/day

| Name of Product | Process water consumption per unit of product output | |
|-----------------|--|-----------------------------------|
| | During the Previous Financial Year | During the Current Financial Year |
| | NA | NA |

- 2) Raw Material Consumption

| Name of Raw Material | Name of Product | Process water consumption per unit of product output | |
|----------------------|-----------------|--|-----------------------------------|
| | | During the Previous Financial Year | During the Current Financial Year |
| NA | NA | NA | NA |

- Industry may use codes if disclosing details of raw material would violate contractual obligation, otherwise all industries have to name the raw materials used.

PART – C

Pollution Discharged to Environment / unit of output
(Parameter as specified in the consent issued)

| Pollutants | Quantity of Pollutant Discharged (mass/day) | Concentration of Pollutant Discharges (mass/volume) | Percentage of variation from Prescribed Standards with reasons |
|------------|---|---|--|
| a) Water | NA | NA | NA |
| b) Air | NA | NA | NA |

PART – D

HAZARDOUS WASTES

[As specified under Hazardous Wastes (management and handling) Rules, 1989]

| Hazardous Wastes | Total Quantity (Kg.) | |
|--------------------------------------|------------------------------------|-----------------------------------|
| | During the Previous Financial Year | During the Current Financial Year |
| a) From Process | NIL | NIL |
| b) From Pollution Control facilities | NIL | NIL |

PART – E

SOLID WASTES

| Hazardous Wastes | Total Quantity (Kg.) | |
|---|------------------------------------|-----------------------------------|
| | During the Previous Financial Year | During the Current Financial Year |
| a) From Process | NIL | NIL |
| b) From Pollution Control facilities | NIL | NIL |
| c) (1) Quantity Recycled or re-utilised within the Unit | NA | NA |
| (2) Sold | NA | NA |
| (3) Disposed | NA | NA |

PART – F

Please specify the characterization (in terms of composition and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

■ **NIL SOLID WASTE GENERATION.**

PART – G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

NOT APPLICABLE

PART – H

Additional Measures and investment proposal for environmental protection including abatement of pollution / prevention of pollution.

NOT APPLICABLE

PART – I

Any other particulars for improving the quality of environment.

NOT APPLICABLE

Date: 11.04.2022


(Signature of a person carrying out an industry -
operation or process)
Akhil Luhadiya
Sr. Station Manager
વડોદરા રિસિપ્ટ સ્ટેશન
Vadodara Receipt Station
પાલનપુર-વડોદરા પાઇપલાઇન
Palapur-Vadodara Pipeline
હિન્દુસ્તાન પેટ્રોલિયમ કોર્પોરેશન લિમિટેડ
Hindustan Petroleum Corporation Limited
Name : **AKHIL LUHADIYA**
Designation : Senior Station Manager
Address : Hindustan Petroleum Corporation Limited
Vadodara Receiving Station
Palanpur Vadodara Pipeline
Village Asoj Near Bombardier, GIDC,
Manjusar-Vadodara, Gujarat – 391775

| Water Consumption in HPCL PVPL Vadodara (2021-22) | | |
|---|---------------------------------|--------------------------------------|
| Month | Domestic Water Consumption (KL) | Water Consumed in Fire Fighting (KL) |
| April | 24.4 | NA |
| May | 32.8 | NA |
| June | 31.6 | NA |
| July | 30.1 | NA |
| August | 32.6 | NA |
| September | 33.5 | NA |
| October | 30.8 | NA |
| November | 28.4 | NA |
| December | 30.9 | NA |
| January | 17.5 | NA |
| February | 16.8 | NA |
| March | 20.8 | NA |
| Consumption per Day | 0.9 KL/day | 0 |



हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड

(भारत सरकार का उपक्रम) रजिस्टर्ड ऑफिस : १७, जमशेदजी टाटा रोड, मुंबई ४०० ०२०

HINDUSTAN PETROLEUM CORPORATION LIMITED

(A GOVERNMENT OF INDIA ENTERPRISE) REGISTERED OFFICE : 17, JAMSHEDJI TATA ROAD, MUMBAI 400 020

एच पी सी एन, पालनपुर वडोदरा पाइपलाइन, वडोदरा रिसिप्ट स्टेशन, गाँव: आसोज-पिलोल,

पिलोल रेल्वे स्टेशन/सावली-मंजूसर जी आई डी सी के पास, जिला : वडोदरा 391775, गुजरात. फोन : 7069003072, 3073

HPCL-Palanpur Vadodara Pipeline, Vadodara Receipt Station, Village : Asoj-Pilol, Near Pilol Railway Station,
Beside Savli-Manjuser GIDC, District : Vadodara 391775, Gujarat. Ph. : 7069003072, 3073

To,

Date: 05.04.2022

Gujarat Pollution Control Board
Parivesh Bhawan, Aatmajyoti Ashram Road,
Opp. VMC Ward Office no. 10,
Subhanpura – Vadodara
Gujarat – 390023

Sub.: Half Yearly Battery Return (October 2021 – March 2022)

Dear Sir,

Please find attached here with the following return as per Batteries (Management & Handling) Rules 2001.

Half yearly return for half year ending (October 2021 – March 2022) in Form VIII prescribed under Clause 10(2) (ii) of Rule 10 under Batteries (Management & Handling) Rules, 2001.

Kindly acknowledge the same.

Thanking You.

Very Truly Yours,

Akhil Luhadiya
Sr. Station Manager
HPCL, PVPL - Vadodara

12/04/2022.
G. P. C. Board
GERI Compound
Race Course, Vadodara

FORM-VIII

[See Rule 10(2)(ii)]

FORM FOR FILING RETURNS FOR BULK CONSUMERS OF BATTERIES[To be submitted by bulk consumer to the State Board by 30th June (for the period October-March) and 31st December (for the period April-September) every year]

| | | |
|----|---|--|
| 1. | Name and address of the bulk consumer | Hindustan Petroleum Corporation Limited Palanpur Vadodara Pipeline – Vadodara Receiving Station, Village Asoj, Near Bombardier, GIDC, Manjusar – Vadodara – 391775 (Gujarat) |
| 2. | Name of the authorized person and complete address with telephone and fax numbers | Shri. Akhil Luhadiya, Sr Station Manager – Operations, Hindustan Petroleum Corporation Limited, Palanpur Vadodara Pipeline, Vadodara Receipt Station, Village Asoj, Near Bombardier, GIDC, Manjusar – Vadodara – 391775 (Gujarat) Mob no.: 9602672222 |
| 3. | Number of new batteries of different categories purchased from the manufacturer/importer /dealer or any other agency during October-March and April-September Category: (i) Automotive (a) four wheeler (b) two wheeler (ii) Industrial (a) UPS (b) Motive power (c) Stand-by (iii) Others | (i) No. of Batteries: NIL (ii) Approximate weight (in Metric Tones): NIL |
| 4. | Number of used batteries of categories mentioned in Sr. No.3 and Tonnage of scrap sent to manufacturer/importer/dealer/ registered recycler/or any other agency to whom the used battery scrap was sent* | (i) No. of Batteries: NIL (ii) Approximate weight (in Metric Tones): NIL |

*Enclose list of manufacturer/importer/dealer/ registered recycler/or any other agency to whom the used battery scrap was sent. - NIL

Place: Vadodara

Date: 05.04.2022

Signature of the Authorized Person

Akhil Luhadiya
Akhil Luhadiya
Sr Station Manager
Operations
Palanpur-Vadodara Pipeline
Hindustan Petroleum Corporation Limited
Vadodara Receiving Station
Village Asoj, Near Bombardier, GIDC,
Manjusar – Vadodara – 391775 (Gujarat)

Details of CSR Activities Carried out by HPCL in Pipeline ROU 2021-22

| SN | Pipeline | Location Name | CSR Proposed (Village / Place) | No. of CSR Proposals | Title of CSR Proposed (Project / Items) | CSR Completed (Month / Date) | Expenditure (Lakhs) |
|--------------------------|-----------------|----------------------|--|-----------------------------|--|-------------------------------------|----------------------------|
| 5 | PVPL | Vadodara | Clean Drinking Water Facility, Water Cooler and other amenity / equipment viz. White boards, Computer, Table, Chairs, Storage cupboards, Book Shelves, showcase, Public Announcement system, Sports Equipment, Music equipment at Govt. Schools in Shiyavada and Vandariyapara-Vitthalpura District: Gandhinagar | 1 | Providing necessary equipments & facilities in Govt. Schools | March'2022 | 8.87 |
| TOTAL EXPENDITURE | | | | | | | 8.87 |