



Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The GM
GAIL INDIA LIMITED
Jubilee Tower, B-35, 36 Sector - 1, Noida,,Gautam Buddha Nagar,Uttar
Pradesh-201014

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/GJ/IND2/221473/2019 dated 09 Feb 2022. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No.	EC22A002GJ189133
2. File No.	No.IA-J-11011/300/2019-IA-II(I)
3. Project Type	Expansion
4. Category	A
5. Project/Activity including Schedule No.	1(b) Offshore and onshore oil and gas exploration, development & production
6. Name of Project	Proposed Production Operations in Galiyana #1 well in the Block CB-ONN-2010/11" in an area of 21.10 Sq.km
7. Name of Company/Organization	GAIL INDIA LIMITED
8. Location of Project	Gujarat
9. TOR Date	14 Nov 2019

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 24/03/2022

(e-signed)
A.K Pateshwary
Director
IA - (Industrial Projects - 2 sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.

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PARIVESH

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and Virtuous Environment Single-Window Hub)



This has reference to your online proposal no. IA/GJ/IND2/221473/2019, dated 09th February, 2022 for environmental clearance to the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the Proposed Production Operations in Galiyana #1 well in the Block CB-ONN-2010/11 in an area of 21.10 Sq.km by M/s. Gail (India) Limited located at Survey No. 213, 215 Galiyana Village, Tarapur Taluk, Anand District, Gujarat.

3. All Crude oil projects are listed at S. No. 1(b) - Offshore and onshore oil and gas exploration, development & production of Schedule of Environmental Impact Assessment (EIA) Notification under Category 'A', and are appraised by Central Level by Expert Appraisal Committee (EAC).

4. The ToR has been issued by Ministry vide letter No. IA-J-11011/300/2019-IA II(I), dated 14.11.2019. Public Hearing for the proposed project has been conducted by Gujarat State Pollution Control Board, Dist. Anand vide dated 10.03.2021 at Open Plot Beside Hotel Momai, Vataman Tarapur Highway, Opp. Gujarat Gas Pump, Galiyana and chaired by Resident Additional Collector & Additional District Magistrate, Anand. The main issues raised during the public hearing are related to basic facilities for local public and CSR activities to be carried out in nearby villages. It was informed that no litigation is pending against the project.

5. Ministry had issued EC earlier vide letter no. J-11011/233/2013-IA II(I) dated 27.10.2015 to the existing project in favour of M/s. GAIL (India) Limited.

6. Details of Certified compliance report submitted by IRO, MoEF&CC, Gujarat vide letter No. J-11/26-2021-IROG NR dated 17.11.2021 and the compliance of EC recommendations was certified. Status of compliance is fully complied. Certified Compliance Report is found satisfactory by the EAC and recommended the proposal.

7. The details of products and capacity are as under: -

Production Profile:

Year	Oil Rate BBI/Day	Cum Oil BBI	Gas Rate Scf/Day	Cum Gas Scf	Water Rate BBI/Day	Pressure Psi
1	25	9125	1725	629625	0	1791
2	25	18250	1725	1259250	0	1723
3	25	27400	1730	1890600	0	1655
4	21	35156	1466	2425781	2	1592
5	18	41749	1246	2880685	3	1536
6	15	47338	1056	3266294	3	1487
7	13	52101	900	3594960	3	1446
8	11	56150	765	3874326	4	1408
9	9	59591	651	4111878	5	1372

10	8	62524	555	4314182	6	1337
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Equipment required for production facility

SI No	Service	Equipment details	Operating Conditions	Design conditions
1	Sucker Rod Pump (One)	Capacity: 50-75 BOPD	-	-
2	Finned Pipe Heat Exchanger (One)	Duty: 1.6 Kw MOC Pipe: CS; MOC Fin- Aluminum	Press: 1.05 barg Temp: 85 °C	Press: 3.5 barg Temp: 125 °C
3	Storage Tank (one)	Horizontal: 2.8 m x 8.3 m MOC:CS, internals: SS 316	Press: atm Temp: 85 °C	Press: FOW+1500 mm WC Temp: 125 °C
4	Crude Export Pump	Capacity: 250 m ³ /hr; Head: 40 mts MOC: CS	Press: atm Temp: 50 °C	-
5	Fire water tank	Capacity: 36m ³ (vertical) Size: 4.3 mts ID X 4.3 mts length MOC: CS	Press: atm Temp: ambient	Press: FOW+1500 mm WC Temp: 85 °C
6	Fire water pump	Diesel driven, horizontal Capacity: 72m ³ /hr. MOC: CS	Press: 10.5 barg Temp: ambient	-
7	PPD injection package	MOC: SS-304	-	-
8	Evaporation Pond	Existing concrete Raw water tank will be converted.	-	-

8. Existing land area is 18,243 m² (4.51 Acres). No additional land will be used for proposed expansion. Industry will develop greenbelt in an area of 3% i.e. 547.3 m² out of total area of the project. The estimated project cost is Rs. 5.3 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 132.8 lakhs and the Recurring cost (operation and maintenance) will be about Rs. 4.95 lakhs per annum. Total Employment will be 10 persons as direct and 0 persons as indirect after expansion. Industry proposes to allocate Rs. 4 lakhs on Public Hearing Commitment towards Enterprise Social Commitment.

9. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km radius from the project site. Water bodies: Canal ~0.01 km(S), Sabarmati R ~1.04 km (WNW), Limbasi Branch ~3.0 km (SE), Navido Nadi ~5.50 km (SE), Limbasi Distributary ~7.15 (N), Kenwal Talav ~7.20 km (ESE), Selva Nala ~8.34 km (WSW), Alang Canal ~ 8.6 km (ESE), Rohini Vishakha ~9.75 km (SSE), Chikhliya Vishakha ~9.92 km (ESE), Kenwal Pravishakha ~10.0 km (ESE).

10. Ambient air quality monitoring was carried out at 8 locations during December 2019 to February 2020 and average baseline data indicates the ranges of concentrations as: PM₁₀ (53.8 – 63.55 µg/m³), PM_{2.5} (31.85 – 38.17 µg/m³), SO₂ (8.72 – 12.14 µg/m³) and NO₂ (17.73 – 24.63 µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.07µg/m³, 0.04µg/m³ and 0.38 µg/m³ with respect to PM, SO_x, and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

2. Total water requirement is 16 m³/day of which fresh water requirement of 16 m³/day will be met from Private Tankers.

During production operation water will be required only for domestic uses and periodic fire water make-up. Potable and non-potable water for domestic uses will be sourced from third party suppliers about 1 KLD (More than 99% of the Project Life).

During workover operations for well maintenance, water requirement will increase to about 15 KLD [15 KLD requirement is only for initial 7 days of workover operation to make the well production-ready. (Less than 1% of the project life)], which will be sourced from third party suppliers through tankers.

Effluent of 7.2 KLD quantities will be sent to Evaporation Pond and other sludge will be sent to TSDF.

Wastewater treatment and Disposal Management as follows:

Description	Proposed (KLPD)	Treatment
Domestic (During Production Operation)	0.9	Septic tanks and soak pits
Operational Work (Workover Operation that will be done only in the initial 7 days at the beginning of the project.)	7.2	Will be taken to evaporation pit for solar evaporation. Sludge will be sent to TSDF.

11. Power requirement after expansion will be 1000 kVA including existing 0 KVA and will be met from Grid power supply. Existing unit has 0 No of DG sets capacity is used as standby during power failure. Proposed unit has 2 No of DG sets capacity will be used as standby during power failure. Stacks (height 30 m ARL) will be provided as per CPCB norms.

12. Details of process emissions generation and its management:

There will be no process emission generation due to the proposed project.

13. Details of Solid waste/Hazardous waste generation and its management:

Solid Waste (Operation Phase):

Municipal solid waste:

S.No	Waste type	Quantity (kg/day)	Disposal method
1	Organic	2.7	Will be collected and sent to local Municipal Bins
2	Inorganic	1.8	Will be collected and sent to GPCB authorized recyclers

Hazardous Waste Management:

S. No	Hazardous Waste type	Quantity	Method of Disposal
1	5.1 - Used /Spent Oil	2 KLPA	Collected in barrels and sent to GPCB authorized recyclers.
2	33.1-Empty barrels/containers/linerscontaminated with hazardous chemicals/wastes	150 nos./Annum	Sent to GPCB Authorized Recyclers.
3	2.2 – sludge containing oil	2 KLPA	Collected in barrels and sent to GPCB authorized recyclers

14. During deliberations EAC sought the following information /commitments from PP:

- As canal is passing at a distance of 0.01 km to the proposed site; at least 500 m distance shall be maintained from the river for proposed production operations. Further, no effluent shall be discharged into it.
- PP shall allocate Rs. 25 Lakhs towards CER which shall be spent on installation of RO plant for providing Drinking Water to nearby Villages. Further, operational expenditure after installation of RO plant shall be met by PP. All works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.

PP agreed to the commitment sought above. Therefore, the commitments sought are being imposed as specific conditions.

15. The proposal was considered by the EAC in its 51st meeting held on 23rd - 25th February, 2022 in the Ministry, wherein the project proponent and their consultant M/s. Hubert Enviro Care System (P) Ltd., presented the case. The Committee **recommended** the project for grant of environmental clearance.

16. The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

17. The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

18. The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

19. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for **Proposed Production Operations in Galiyana #1 well in the Block CB-ONN-2010/11 in an area of 21.10 Sq.km by M/s. Gail (India) Limited located at Survey No. 213, 215 Galiyana Village, Tarapur Taluk, Anand District, Gujarat**, under the provisions of the EIA Notification, 2006, and the

amendments therein, subject to compliance of the terms and conditions as under:-

A. Specific Condition:

- (i). As canal is passing at a distance of 0.01 km to the proposed site; at least 500 m distance shall be maintained from the river for proposed production operations. Further, no effluent shall be discharged into it.
- (ii). The company shall 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.
- (iii). No pipelines or its part shall be laid in the Forest land/Protected Area without prior permission/approval from the Competent Authority.
- (iv). Total fresh water requirement shall not exceed 16 m³/day will be met from Private Tankers. Prior permission shall be obtained from the concerned regulatory authority.
- (v). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises. Mobile ETP coupled with RO shall be installed to reuse the treated water in drilling system. Size of the waste shall be equal to the hole volume+ volume of drill cutting and volume of discarded mud if any. Two feet free board may be left to accommodate rain water. There shall be separate storm water channel and rain water shall not be allowed to mix with waste water. Alternatively, if possible pit less drilling be practiced instead of above.
- (vi). During production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- (vii). The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- (viii). Approach road shall be made pucca to minimize generation of suspended dust.
- (ix). The project proponent shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.

- (x). The company shall construct the garland drain to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated.
- (xi). Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.
- (xii). Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- (xiii). The project proponent shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At fixed installations or plants use of ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- (xiv). The project proponent shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with personal H₂S detectors in locations of high risk of exposure along with self-containing breathing apparatus.
- (xv). Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations.
- (xvi). On completion of the project, necessary measures shall be taken for safe plugging of wells with secured enclosures to restore the drilling site to the original condition. The same shall be confirmed by the concerned regulatory authority from environment safety angle. In case of hydrocarbon not found economically viable, a full abandonment plan shall be implemented for the drilling site in accordance with the applicable DGH / Indian Petroleum Regulations.
- (xvii). PP proposed to allocate Rs. 25 Lakhs towards CER which shall be spent on installation of RO plant for providing Drinking Water to nearby Villages. Further, operational expenditure after installation of RO plant shall be met by PP. All works under CER Plan shall be implemented in consultation with District Collector before the commissioning of project.
- (xviii). No lead acid batteries shall be utilized in the project/site.

- (xix). Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xx). Oil content in the drill cuttings shall be monitored and report & shall sent to the Ministry's Regional Office.
- (xxi). The project proponent shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.

B. General Condition:

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iii) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (v) 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.

- (vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (viii) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- (ix) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at <https://parivesh.nic.in/>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (x) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- (xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

20. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

21. Concealing factual data or submission of false/fabricated data and

failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

22. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

23. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

24. This issues with the approval of the competent authority.

(Ashok Kr. Pateshwary)
Director

Copy to: -

1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar - 382 010 (Gujarat)
2. The Regional Officer, Ministry of Env., Forest and Climate Change, Integrated Regional Office, Gandhi Nagar, A wing- 407 & 409, Aranya Bhawan, Near CH-3 Circle, Sector-10 A, Gandhi Nagar-382010
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
4. The Member Secretary, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043 (Gujarat)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
6. The District Collector, Anand, Gujarat
7. Guard File/Monitoring File/Parivesh portal/Record File

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