



File No. J-11011/1/1989-IA II (I)
Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

Indira Paryavaran Bhawan,
Jal Wing, 3rd Floor, Aliganj,
Jor Bagh Road, New Delhi-110 003

Dated:04th August, 2021

To,

M/s Indian Oil Corporation Limited,
Pipelines Division, Indian Oil Bhawan,
A-1 Udyog Marg, Noida, Gautam Buddha Nagar,
Uttar Pradesh-201301

Sub: Replacement of both offshore pipelines from Narara bet to SPMs & interconnecting loop line between SPMs, Replacing & Relocating Pipe Line End Manifold (PLEM) and Installation of SPM buoy by M/s Indian Oil Corporation Limited located at Vadinar, Gujarat - Consideration of Environment & CRZ Clearance regarding.

Sir,

This has reference to your online proposal No. IA/GJ/IND2/201049/2019, dated 04th March, 2021 for environmental clearance & CRZ clearance to the above mentioned project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental & CRZ clearance to the project for Replacement of both offshore pipelines from Narara bet to SPMs & interconnecting loop line between SPMs, Replacing & Relocating Pipe Line End Manifold (PLEM) and Installation of SPM buoy by M/s Indian Oil Corporation Limited located at Vadinar, Gujarat.

3. All project activities (Oil & gas transportation pipeline) are listed at S.No. 6(a) of Schedule of Environment Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).

4. Standard ToR has been issued by Ministry vide letter No. J-11011/1/1989-IA.II (I); dated 18.06.2019. Public Hearing for the proposed project has been conducted by the Gujarat Pollution Control Board on 07.08.2020 and chaired by the District Collector & District Magistrate, Devbhumi Dwarka. No major issues were raised during the public hearing except some minor issues/appreciations like time of completion for the project, employment, help shall be given to farmers and fishermen regarding health sector & fishermen's equipment. It was informed that

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no litigation is pending against the proposal. There is no Litigation Pending against the proposal.

5. Ministry had issued EC earlier vide letter no. J-11011/1/1989-IA.II (I) dated 24.07.2012 to the existing project Handling of Additional Crude Oil (25 MMTPA to 50 MMTPA) through existing Single Point Mooring (SPM) System at Vadinar, Gujarat in favor of M/s Indian Oil Corporation Limited.

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

S. No	Product Details	Existing Quantity (MMTPA)	Proposed Quantity	Total Quantity
1	Crude Oil	50	0	50
	Total	50	0	50

7. Existing land area is 56.1 Ha (9.6 Ha in Forest and 46.5 Ha in Wildlife), additional 46 Ha (4.9 Ha in Forest and 41.1 Ha in wildlife) land will be used for proposed modernization. The estimated project cost is ₹ 1167 Crores including existing investment. Total capital cost earmarked towards environmental pollution control measures is ₹ 355 lakhs the Recurring cost (operation and maintenance) will be about ₹ 20 lakhs/ annum. Total Employment will be about 300 persons as direct & indirect during the construction phase only. Industry proposes to allocate Rs. 2.9 Crores towards Corporate Environment Responsibility.

8. PP informed that, there are Marine National Park / Marine Sanctuary (Narara Bet) and Eco-sensitive zone within 10 km distance from the project site. Proposed project site is located in the Gulf of Kutch on its southern shore at Vadinar.

- NBWL Clearance has been recommended during 61st meeting held on 18.02.2021.
- Forest Clearance has been recommended by State government and Stage - 1 Clearance from Regional Office, Bhopal is awaited.
- Ex-post facto permission under Section 29 of The Wildlife Protection Act, 1972 for 46.5 Ha land in Marine Sanctuary and Marine National Part has been issued vide letter no. WLP/160/32/B/238-9/2009-10 dated 23.04.2009.
- Deendayal Port Trust vide their letter dated 21.10.2019 had confirmed the suitability of proposed SPM coordinates from operational point of view and the SPM location was found suitable in light of proposed TSS also.

9. Ambient air quality monitoring was carried out at 6 locations during 01.10.2019 to 31.12.2019 and the baseline data indicates the ranges of concentrations as: PM10 (55- 97µg/m³), PM2.5 (25 - 45µg/m³), SO₂ (8 - 18µg/m³) and NO₂ (14 - 23µg/m³). AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.1µg/m³, 1.2µg/m³ and 0.7 µg/m³ with respect to PM10, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards

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(NAAQS).

10. Existing and proposed pipeline operation is water independent activities. Fresh water required for IOCL Vadinar unit is supplied by Deendayal Port Trust. Also, reverse osmosis plants are available in the maintenance vessels. Further, IOCL has a dedicated pipeline from Nayara to IOCL plant/colony for supply of Narmada river water from Gujarat Water Infrastructure Limited grid, which is used for routine purpose of Vadinar unit. Water requirement anticipated during pipeline laying will be met from above sources. During the operation stage, existing water requirement will remain unchanged. No additional fresh water requirement is proposed. The project of laying pipelines will be done by barges in the offshore region.

11. Temporary Power requirement of 5 kVA at Nararabet during shore pulling operation only will be fulfilled by the DG Set. For pipeline laying, sufficient power arrangements shall be available on the barge itself. No power required during operational phase.

12. Details of process emissions generation and its management:

Since the project activities are confined to intertidal and subtidal segments impact on the air environment will be very minimal during both the construction and the operational phase of the project and also project activity doesn't involve any air pollution contributing factors.

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

No discharge of sewage or any other effluent will be permitted. Rules and regulations of MARPOL 73/78 will be strictly followed by the pipeline laying barge and other marine vessels engaged during the construction phase.

14. The company regularly submits half yearly compliance report for prior EC obtained to the concerned authority.

15. The proposal was considered by the EAC in its 32nd meeting held on 18th March, 2021 in the Ministry, wherein the project proponent and their consultant M/s Indian Oil Corporation Limited and Indomer Coastal Hydraulics (P) Ltd., presented the EIA/EMP report as per the ToR. The Committee found the EIA/EMP report complying with the ToR and **recommended** the project for grant of environmental clearance subject to comments from CRZ division & submission of Stage I Forest 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

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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.

18. The Committee noted that as per the extant rules of the Ministry, the projects involving Environmental & CRZ clearance needs to be examined as per the CRZ Notification, 2011/2019. The Committee has taken cognizance of the recommendations of the GCZMA for CRZ clearance.

19. 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 & CRZ Clearance subject to clearance by the CRZ division of the Ministry. CRZ Division has stated that, "Based on the recommendation of GCZMA and documents submitted by project proponent, the CRZ division may have no issue for the instant project to be cleared from CRZ perspective." The said recommendations of EAC and CRZ division are subject to the submission of stage I forestry clearance as per the MoEF&CC O.M. dated 09/09/2011, 18/05/2012 and 19/06/2014 pertaining to grant of EC which involves forest land.

20. The environmental clearance & CRZ 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.

21. 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 & CRZ clearance to the project for **Replacement of both offshore pipelines from Narara bet to SPMs & interconnecting loop line between SPMs, Replacing & Relocating Pipe Line End Manifold (PLEM) and Installation of SPM buoy by M/s Indian Oil**

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Corporation Limited located at Vadinar, 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). Environmental Clearance is subject to Forest Clearance (as per Forest Conservation Act, 1980), NBWL clearance (The Wildlife Protection Act, 1972) & CRZ Clearance (as per CRZ Notification 2011/2019). Project proponent shall comply with all the conditions stipulated in all the above clearances/NOC issued and commencement of operations shall be done after issuance of all clearances as mentioned above.
- (ii). Project proponent shall implement the Coral Management Plan, Mangrove Management Plan, Conservation Plan for Schedule -I species and all other plans related to various clearances within the stipulated time frame.
- (iii). Certified compliance report issued by Regional Office for prior EC obtained shall be submitted within three (03) months to Ministry.
- (iv). The project authority 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.
- (v). SCADA system shall be installed with dedicated optical fiber based telecommunication link for safe operation of pipeline and leak detection system.
- (vi). Intelligent pigging facilities 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.
- (vii). All the recommendations mentioned in the risk assessment report shall be implemented and Emergency response plan shall be based on guideline prepared by OISD.
- (viii). Requisite Onsite and Offsite Disaster Management Plans will be prepared and implemented.
- (ix). The company shall obtain all requisite clearances for fire safety and shall comply with the stipulation made by the respective authorities.
- (x). The construction of pipelines through the waterbodies shall be avoided during the rainy season/ breeding seasons of aquatic animals.
- (xi). The riverbed, embankments and dykes shall be restored adequately after installation of crossings.

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- (xii). For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xiii). Annual safety audit shall be carried out for the initial three years by an independent agency (OISD/PNGRB/DGMS etc.) and report submitted to this Ministry for ensuring the strict compliance of safety regulations on operation and maintenance.
- (xiv). Pipeline wall thickness and minimum depth of burial at river crossings and casings at rails, major road crossings shall be in conformity with ANSI/ASME requirements.
- (xv). The PP shall follow horizontal drilling technique for laying of pipeline while passing through major rivers.
- (xvi). The project authorities shall install SCADA/GPS 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.
- (xvii). The project authorities shall patrol and inspect the pipeline regularly for detection of faults as per OISD/ PNGRB 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.
- (xviii). Necessary approvals from Chief Controller of Explosives must be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans shall be prepared and implemented.
- (xix). As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.
- (xx). The acoustic chambers/barriers should be provided for individual units wherever feasible in the compressor stations.
- (xxi). The workers camp should have arrangement for safe drinking water, hygienic kitchen and sanitation facilities.

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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

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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.

22. 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.

23. 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.

24. 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.

25. 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

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the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

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

Ashok Kr. Pateshwary
04/08/2021

(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 Chief Conservator of Forests (Western Zone), Ministry of Environment & Forests, Regional Office, E-5, Arera Colony, Link Road -3, Bhopal - 462 016 (M P)
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, Devbhumi Dwarka, Gujarat
7. Guard File/Monitoring File/Parivesh portal/Record File

Ashok Kr. Pateshwary
04/08/2021

(Ashok Kr. Pateshwary)
Director

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