



OFFICE OF THE DIVISIONAL FOREST OFFICER, REDHAKHOL DIVISION.

Mobile No-9437054951

E-mail-dforedhakhhol@gmail.com

Memo No. 821 /Dt 09/02/2024

To

The Conservator of Forests,
Sambalpur Circle, Sambalpur.

Sub: - Jagdishpur-Haldia-Bokaro-Dhamra Pipeline(JHBDPL) , Odisha Phase-2 Project
of GAIL.
Proposal No- FP/OR/Others/46243/2020

A proposal submitted by the General Manager, (Const), GAIL India Limited, Bhubaneswar for laying out of natural Gas Pipeline in Redhakhhol Division in district of Sambalpur over 7.2598 Ha of Revenue Forest land.

1. Brief Description:-

GAIL (India) Limited, India's principal Gas Transmission and Marketing Company, was set up by the Government of India in August 1984 to create gas sector infrastructure for sustained development of the Natural gas sector in the country. The 1800-km Hazira-Vijaipur-Jagdishpur (HVJ) pipeline became operational in 1989. During 1991-93, three LPG plants were constructed and some regional pipelines acquired, enabling GAIL to begin its regional gas distribution in various parts of India.

GAIL (India) Limited, is India's flagship Natural Gas company, integrating all aspects of the Natural Gas value chain (including Exploration & Production, Processing, Transmission, Distribution and Marketing) and its related services. In a rapidly changing scenario, GAIL is spearheading the move to a new era of clean fuel industrialization, creating a quadrilateral of green energy corridors that connect major consumption center in India with major Gas Fields, LNG terminals and other cross border gas sourcing points. GAIL is also expanding its business to become a player in the International Market.

M/s. GAIL (India) Limited envisages to strengthen local gas grid network in any state / U.T. of India via authorization by MoPNG. GAIL (India) Limited (GAIL), a Public Sector Undertaking (PSU) company is also one of the leading companies in the field of Natural Gas transmission pipeline. GAIL has taken a lead in developing energy transportation infrastructure and connecting major natural gas supply sources and

demand markets. GAIL is first company in India to transport natural gas on open access basis and is a pure natural gas transmission company. The company has developed requisite expertise and confidence with proven project management competencies.

GAIL has been awarded authorization by Ministry of Petroleum and Natural Gas to lay a network of gas pipeline and associated facilities for the transportation of natural gas to fulfill the requirement of various consumers in the states of Eastern UP, Bihar, Jharkhand, Odisha, & West Bengal.

In view of this M/s GAIL (India) Limited, is planning to lay a pipeline for transportation of natural gas from Jagdishpur to Haldia and Dhamra along with various spur pipelines through the Jagdishpur-Haldia-Bokaro-Dhamra Gas pipeline (JHBDPL).

Gail (India) Limited (GAIL) has proposed to lay Jagdishpur- Haldia-Bokaro – Dhamra Natural Gas Pipeline (JHBDPL) Project under Authorization from MoPNG (Ministry of Petroleum and Natural Gas), Govt. of India. The Jagdishpur-Haldia-Bokaro-Dhamra Pipeline (JHBDPL) Project of GAIL is a part of the Prime Minister Urja Ganga Project. The approximate length of the JHBDPL pipeline is 2600 kms and passes through the various parts of Eastern UP, Bihar, Jharkhand, Odisha & West Bengal.

GAIL (India) Limited has been authorized by Govt. of India vide letter dated 14.03.2016 to lay, Build and Operate a cross country Gas pipeline from Jagdishpur to Haldia (WestBengal) / Dhamra (Odisha) including associated Spur Pipe lines. The said pipeline shall be passing through the states of U.P., Bihar, Jharkhand, West Bengal and Odisha for supply and distribution of Natural Gas / RLNG to various industries and City Gas Distribution networks. Accordingly, GAIL has to start pre-project activities immediately and pipeline is scheduled to be completed by 2021.

The proposed Jagdishpur-Haldia-Bokaro-Dhamra Pipeline alongwithspurlines will be laid across forest land falling along / across the ROU (Right of Use) and various utilities such as roads, canals, rivers etc. The said pipeline shall be laid at the minimum depth of 1.2 mts. below NGL (Natural ground level) .

The Jagdishpur-Haldia-Bokaro-Dhamra Pipeline (JHBDPL) Project is being executed in Odisha in two parts.

Part-1: Dhamra- Angul Pipeline (DAPL).



Part-2: Bokaro- Angul Pipeline (BAPL) Odisha Section.

1) The DhamraAngul Pipeline (DAPL) is a part of Jagdishpur-Haldia-Bokaro-Dhamara Pipeline (JHBDPL). The JHBDPL is the part of Pradhan MantriUrja Ganga Project being executed by GAIL (India) Ltd., a Central Government Maharatna Company for uninterrupted supply of the environment friendly natural gas to various Industries, domestic consumption and CNG fuel for vehicle etc. The Dhamra-Angul underground pipeline which is a linear project will pass through various villages in eight districts of Odisha involving 12.2282 ha forest land and 1051.8811 ha of non- forest land. The stage-I/in principal approval for Dhamra Angul Pipeline (DAPL) Section is already obtained.

2) The present proposal is for laying of underground natural gas pipeline along with Optical Fiber Cable (OFC) from Bokaro to Angul (Odisha section). The Bokaro-Angul Natural gas pipeline (BAPL) Odisha Section by GAIL (India) Ltd. involves 65.4036 ha of forest land and 657.0659 ha of non- forest land passing through 212 villages in Odisha section. This BAPL Odisha section involves 07 forest divisions namely Rourkela, Sundargarh, Jharsuguda, Rairakhol, Bamara, Deogarh and Angul and 05 Districts namely Sundergarh, Jharsuguda, Sambalpur, Deogarh and Angul. The starting point of Bokaro-Angul Pipeline (BAPL) Odisha section is village Bankuba, Tehsil Biramitrapur District Sundargarh latitude N 22°26' 51.7673" and Longitude E 84°46'12.0843" and end point is village Budhapankha Tehsil Banarpal district Angul latitude N 20°52' 54.286" and Longitude E 85°15'7.687" length of pipeline is 296.105 km.

2- Justification

The criteria for route selection are

- Optimum distance between source of supply and consumer location (demand points)
- Avoidance of Wild Life Sanctuaries, Reserved Forest, Mining area and Defense establishment to the best possible.
- Avoidance rocky marshy and low-lying areas
- Safety of people and environment
- Easy access to route during construction and operation.

The route was selected based on least disturbance to environment, forest, human habitation and aquatic bodies. It avoids National Parks and Wild Life Sanctuaries.



The selected route is optimized considering the above factors and connectivity between supply source and consumer location.

3- Maps

Maps		
1	Location Map (Topo sheet)	
A	F45M5	1:50000
B	F45M6	1:50000
2	DGPS & Cadastral Maps	
a	Sheet No-1-Cadastral Map of Kandhal Mouza and DGPS Map of Kandhal Mouza	16"=1 Mile 1:5,000
b	Sheet No-2-Cadastral Map of Kandhal Mouza and DGPS Map of Kandhal Mouza	16"=1 Mile 1:3,960
c	Sheet No-2-Cadastral Map of Ambjhari Mouza and DGPS Map of Ambjhari Mouza	16"=1 Mile 1:3,960
d	Cadastral Map of Jamukhol (Nutan) and DGPS map of Jamukhol (Nutan)	16"=1 Mile 1:2,500
e	Sheet No-2-Cadastral Map of Jamukhol (Nutan) Mouza and DGPS Map of Jamukhol (Nutan) Mouza	16"=1 Mile 1:3,960
f	Sheet No-3-Cadastral Map of Ambjhari Mouza and DGPS Map of Ambjhari Mouza	16"=1 Mile 1:2,000
g	Sheet-2-Cadastral Map of Salebhata Mouza and DGPS Map of Salebhata Mouza	16"=1 Mile 1:3,960
h	Cadastral Map of Keutaberni Mouza and DGPS Map of Keutaberni Mouza	16"=1 Mile 1:3,960
i	Sheet No.2-Cadastral Map of Kunjamura Mouza and DGPS Map of Kunjamura Mouza	16"=1 Mile 1:3,500
j	Sheet No.4-Cadastral Map of Kunjamura Mouza and DGPS Map of Kunjamura Mouza	16"=1 Mile 1:2,500
k	Sheet No.2-Cadastral Map of Pratappur Mouza and DGPS Map of Pratappur Mouza	16"=1 Mile 1:2,500
l	Sheet No-2-Cadastral Map of Dhauragoth Mouza and DGPS Map of Dhauragoth Mouza	16"=1 Mile 1:2,500
m	Sheet No-3-Cadastral Map of Jamujhori Mouza and DGPS Map of Jamujhori Mouza	16"=1 Mile 1:3,960
n	Sheet No-3-Cadastral Map of Baghabar Mouza and DGPS Map of Baghabar Mouza	16"=1 Mile 1:3,960

4. Forest land:-

The forest land involved for laying out gas pipeline in Jagdishpur-Haldia-Bokaro-Dhamra Pipeline(JHBDPL) , Odisha Phase-2 Project of GAIL is furnished below.



Division	Forest land involved (Ha)						Non Forest Land Area (Ha.)	Grand Total (Ha.)
	RF	PF	Revenue Forest	Sabik kisam Forest	DLC Forest	Total Area		
						(Ha.)		
Rairakhol	0	0	3.495	3.6673	0.0975	7.2598	20.8062	28.066
Grand Total	0	0	3.495	3.6673	0.0975	7.2598	20.8062	28.066

5. Flora and Fauna:-

Tree species which are commonly noticed in the proposed area are Sal (Shorea Robusta), Dhaura (Anogeisus latifolia), Asan (Terminalia tomentosa), Mahul (Madhuca Indica), Jamun (Syzigium Cumini), Veru (Choloroxylon Swietenia), Bhalia (semecarpus anacardium), etc. The fauna noticed in the area are wildlife like, Spotted deer, rabbit, Sambar, Civet cat, Wild boar, Hare, Squirrels, snakes, Wood peckers, etc are seen in the forest land proposed for diversion but their populations are thin. Birds like common doves, Cuckoo, crow, Hornbill, etc are seen. Common reptiles and lizards like common garden lizards, different types of snakes, are seen in the area. Occasional movement of elephants is noticed especially from November to end of December every year during crop harvesting season.

6. Tree enumeration:-

The tree enumeration list for the trees standing in Revenue Forests is enclosed.

7. Environmental Clearance:-

State Pollution Control Board, Odisha has conveyed its consent to lay out gas pipelines under ground for transportation of natural gas over a length of 762 Kms (Jagdishpur-Haldia and Bokaro-Dhamra Natural Gas Pipeline (JHBDPL Phase-II) passing through 13 districts(Sundergarh, Jharsuguda, Deogarh, Sambalpur, Angul, Dhenkanal, Khordha, Cuttack, Bhadrak, Kendrapada, Jagatsingpur, Puri).

8. Cost benefit Analysis:-

The Cost Benefit analysis for the above project submitted by User Agency is enclosed.

9. Compensatory A forestation:-

The User Agency has submitted undertaking that the Compensatory Afforestation in lieu of forest land will be taken up in Lamra PRF of Jamankira Range of Bamra WL Division. Further, the User Agency has submitted undertaking to pay the entire amount for Compensatory Afforestation in lieu of the total forest area proposed for laying out gas pipelines for Jagdishpur-Haldia-Bokaro-Dhamra Pipeline(JHBDPL), Odisha Phase-2 Project of GAIL..

10. Forest Right Act Certificate:-

The User Agency has submitted undertaking to furnish Forest Right Act Certificate.

11. Resettlement & Rehabilitation:-

There will be no displacement of any human habitation so the rehabilitation and resettlement plan is not requirement for this project.

12. wild life Management:-

There is no rare/ endangered /unique species of fauna is seen in the area. But the movement of elephants is seen in the area.

13. Net present Value:-

The User Agency has submitted undertaking to pay Net Present value (NPV) of the forest land to be diverted for the above project.

14. Violation.

No violation has been committed by the User Agency under FC, Act-1980.

15. Others:-

- (i) Site inspection report of DFO, Rairakhol Division is enclosed.
- (ii) Part-II is enclosed.

16. Recommendation:-

In view of the above, 7.2598 ha Revenue Forest proposed for laying out gas pipeline for Jagdishpur-Haldia-Bokaro-Dhamra Pipeline(JHBDPL), Odisha Phase-2 Project of



GAIL. in Rairakhol Forest Division is recommended for diversion in favour of General Manager, (Const), GAIL India Limited, Bhubaneswar .


Divisional Forest Officer,
Rairakhol Division.
DFO
Rairakhol Forest Division