



JUSTIFICATION

Laying of underground Oil & Gas Pipelines along Upper Dehing Reserve Forest portion of Duliajan- Digboi Road, Assam

Pipeline-1: 8-Inch diameter Duliajan-Digboi Crude Oil Pipeline:

35 km long, 8-Inch diameter Crude Oil Pipeline with capacity of 0.65 MMTPA from Pump Station-1 Duliajan to Digboi refinery terminal is delivering required crude oil as feedstock for Digboi Refinery since 1954. After more than six decades of operation, the aging pipeline needs immediate replacement for safe and reliable operation as well as to comply with present industrial and statutory norms of Petroleum Pipeline operation.

The existing route of the pipeline is along Duliajan-Digboi road on the left side (viewing from Duliajan end) with portion of it through Upper Dehing Reserve Forest from Kathalguri to Kenduguri Road (approx. 16.4 km). The Pipeline was laid prior to enactment of Forest Conservation Act 1980.

For the pipeline replacement project, the source and designation points of the pipeline remains Pump station-1 Duliajan and Digboi Refinery terminal. Minimal detours have been taken at Duliajan, Bhadoi Pachali and Digboi end to avoid populated areas. In the Forest portion of the route from Kathalguri to Balijan, pipeline is intended to be laid on the right side of the road (viewed from Duliajan end).

Cable route for Current Cathodic Protection system:

To comply with statutory norms, the buried pipeline will be cathodically protected to protect from corrosion using Impressed Current Cathodic Protection system. Anode bed required for the system is intended to be installed centrally at Jorajan Location inside Upper Dehing Reserve Forest, at approximately 414-meter perpendicular distance from the pipeline. Anode bed will be connected to the pipes through cables to be laid underground through a narrow cable route.

Pipeline 2: 18 inch diameter Kushijan-Duliajan Natural Gas Pipeline:

The state of Assam is in huge demand of rich natural gas for utilizing in various downstream industries. Shortfall of pipeline network and the availability of minimum facility to distribute the indigenously produced gas are major bottleneck for its end utilization. By laying the proposed 18-inch pipeline will carry the natural gas produced in the Dirok fields which will be primarily supplied to Brahmaputra Cracker and Polymer Limited (BCPL) through Central Gas Gathering Station (CGGS) at Duliajan and it will facilitate enhancement of gas production as well.

The pipeline will be routed from Kushijan GGS to CGGS Duliajan mostly along Duliajan-Digboi Road. Kushijan to Kathalguri portion of the pipeline will be passing through Upper Dehing Reserve Forest.

The feasible routes for the pipelines were scouted through desktop and reconnaissance survey along three different routes from source to destination station. The comparative route alignment has been presented in following table. The Route-1 finalized for the laying of pipeline, there is involvement of PF /RF :- 13.430 ha.

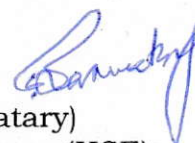
Table-1: Comparative Statement of Route Alignment

S. No.	Description	Unit	Route-1	Route-2	Route-3
1	Bee Line	kms	16.373	17.667	17.667
2	Total Route Length	kms	16.373	35.608	41.739
3	Angle Point	Nos	90	230	308
4	Forest	kms	18.181	13.369	27.545
5	No. of Hilly/Boulder Crosses	Nos	3	2	2
6	No of Village	Nos	3	8	8
7	National Highway	Nos	0	1	1
9	Metal Road/SH Crossing	Nos	3	4	5
10	River & Nala Crossing	Nos	2	3	5
11	Railway Crossing	Nos	NIL	3	2

Date :30.03.2021

Place: Duliajan

OIL INDIA LIMITED



(S. Basumatary)

Chief General Manager (HSE)

&

Nodal officer(EC,FC,NBWL)

For Resident Chief Executive

Nodal Officer (EC/FC/NBWL)

OIL INDIA LIMITED