



NUMALIGARH
REFINERY
LIMITED
A GOVERNMENT OF INDIA UNDERTAKING
CIN : U11202AS1993GOI003893



Annexure - I

JUSTIFICATION FOR ROUTE SELECTION

In consideration of the Environment parameters, construction methodologies to be adopted for different terrain, design and engineering factors, availability of logistic support during construction, operation and maintenance of pipeline, various feasible routes were identify based on desktop study of relevant topographic maps of survey of India.

The study was subsequently supplemented with field reconnaissance and data collection along the feasible routes. Finally, the optimum route was arrived as after analyzing the various data and conducting in depth study of topographic maps based on field data.

Methodology of selection of pipeline route

Relevant topographic maps along the alternative routes were identified. After conducting a detail desktop study of the alternative routes on the topographic sheet the feasible routes were identified, this was subsequently supplemented with route reconnaissance data collection along the feasible routes for arriving at the optimum route.

Factors considered

While identify the various alternatives for selection of the optimum route, the following were considered:

- Demand and supply centre
- Compliance with environmental regulations
- Safety of people and property
- Shortest possible pipeline length
- Minimum number of bends
- Favorable ground profile for pipeline hydraulics
- Easy accessibility to pipeline routes during construction maintenance and operation.
- Location of pipeline facilities and access thereto
- Avoidance of Wild Life Sanctuaries, Mining protected and Reserved Forest, Archaeological, Defense establishment and other sensitive areas.
- Avoidance of unstable ground features
- Minimizing road, rail, rivers and flood prone areas.
- Avoidance of rocky stretches.
- Avoidance of areas reserved for planned further development.
- Flexibility for further expansion.

Based on the above details route surveys have been carried out to finalize the exact corridor for laying the pipeline.

Date:

Place: Paradip

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