<u>Justification for locating the project in forest area</u> (Certificate regarding alternatives examined for linear project)

Certified that following alternatives detailed as below and also shown in enclosed map on Annexure __ have been examined in detailed and have come to conclusion that the alternatives No 1 is the most suitable for forestry point of view and the Forest land required for the project in Alternative No. 1 is lesser than the Alternatives Nos 2 & 3.

Alternatives Explored for Jagdishpur-Haldia-Bokaro-Dhamra Pipeline (JHBDPL) Project of GAIL (INDIA) LIMITED in Odisha State (BAPL Odisha Phase- II)					
Description	Status of land	Length in meter	Width in meter	Area in Sqm	Area in Ha.
Alternate-1	Forest	65403.60	10	654036.00	65.4036
Total		65403.60		654036.00	65.4036
Alternate-2	Forest	155752.00	10	1557520.00	155.75
Total		155752.00		1557520.00	155.75
Alternate-3	Forest	97647.00	10	976470.00	97.65
Total		97647.00		976470.00	97.65

The other alternatives (Alternative-2 & Alternative-3) are being rejected on grounds of as follows: -

- 1. Alternative 2 & 3 involves more forest area 155.75 and 97.65 hectares respectively to be diverted which is more than the alternative-1.
- 2. In Alternative -2 the pipeline will be in close proximity to the sensitive sanctuary area. Laying of natural gas pipeline in the sanctuary sensitive area is technically not feasible involving safety of the pipeline.
- 3. The terrain in Alternative Route-2 and 3 is hilly where laying of pipeline pose several construction challenges.
- 4. Alternative -2 passes near to the area where most of the lands are non-agriculture land and pipeline cannot be laid in NA lands as per P&MP Act'1962.

FCA Proposal for Jagdishpur-Haldia-Bokaro-Dhamra Pipeline (JHBDPL) Project of GAIL

5. Though the overall length (Forest area and Non-forest area) of the pipeline is more in

Alternative-2 which increases the project cost.

Alternative -3 passes in close proximity to populated areas and most of the lands are also

non-agriculture land; pipeline cannot be laid in NA lands as per P&MP Act'1962.

Number of railway crossings in Alternative route-3 are more (3 nos) in comparison to

alternative -1 and 2.

8. Number of turning points (TPs) in Alternative 2 and 3 are more that needs bends etc

which will add-on to the cost of the project.

Looking into the above, it is imperative for JHDPL natural gas pipeline passing in

Odisha in Alternative-1 is more apt technically and safety in comparison to the other two

alternatives viz. Alternative-2 and Alternative-3.

Date: 21.01.2021 Place:Bhubneshwar

M/s GAIL (India) Limited

Gadadhar Kandhapani

मसमयंभक (निर्माण)/General Manager (Const.) केस (इंडिया) लिग्टिंड / GAIL (India) Limited. 610-612, उरुकल सिम्नेचर, माझल, इनएव-5 610-612, Ukai Signature, Pahala, NH-5 भुवनस्वर-752101, Bhubaneswar-752101