

## Conquering Newer Horizons

NEF PROJECT, OIL INDIA LIMITED DULIAJAN - 786 602, ASSAM (INDIA) REGISTERED OFFICE: DULIAJAN दुलियाजान - ७८६ ६०२, असम (भारत) पंजीकृत कार्यालय: दुलियाजान Tel :0374-2807451 :0374-2807462 Fax :0374-2801799 E-mail :nef@oilindia.in

Date: 23.03.2015

Ref: NEF: 02/19 - 171/2015

To,

The Chief Conservator of Forest (Cons) & Nodal Officer (FCA), Department of Environment & Forests, Government of Arunachal Pradesh, Itanagar, Arunachal Pradesh

Sub: Forest Clearance proposal for diversion of 7.370 ha (originally proposed 2.981 ha for 'DML-1') of forestland for OIL's drilling location 'DML-2' (earlier named as DML-1) falling inside Borduria Village Forest Reserve (VRF), Deomali in Tirap District of Arunachal Pradesh

Sir,

This refers to our Forest Clearance proposal submitted towards drilling location 'DML-1' under OIL's Deomali Petroleum Exploration License (PEL) block in Arunachal Pradesh vide letter NEF:02/19-3031/2011 dated 05.07.2011. Subsequent to the receipt of the proposal, same was forwarded to the Divisional Forest Officer, Deomali Forest Division, Deomali, Arunachal Pradesh by your good office for their needful vide FOR: 429/Cons/2011/ 2248-50 dated 14.06.2013.

- 2.0 In the said proposal, it was proposed for diversion of 2.981 hectare of forestland for the location and it was indicated that the location falls in Namsang Social Forestry Area of Tirap District of Arunachal Pradesh. However, on final survey & demarcation of the site, it has been now found that the land area required for the location inclusive of approach road is 7.370 ha instead of 2.981 hectare proposed earlier. The increase in land area is primarily due to the hilly terrain of the locality. Further, on joint inspection of the site towards above along with forest officials from DFO, Deomali, it is revealed that the area actually falls under Borduria Village Forest Reserve (VRF), Deomali, but not in Namsang Social Forestry Area indicted earlier. Copy of letter No. DD/DD/ IND/04/2012/2190-91 dated 27.02.2015 received from DFO, Deomali in this regard is enclosed.
- 3.0 We wish to further inform you that earlier, Forest Clearance proposal for another location 'DML-2' falling in Namdang Reserve Forest under Changlang Social Forestry Division, Changlang, Arunachal Pradesh was put up along with 'DML-1'. However, on further G&G studies, it was decided to keep the said location in abeyance and accordingly, it was communicated to your good office during Oct'2014 to keep the aforesaid Forest Clearance proposal in abeyance vide letter NEF:02/19-886/2014 dated 13.10.2014 (copy enclosed). Consequently, the location 'DML-1' referred above has since been re-designated as 'DML-2'.

4.0 The area of 7.370 hectare of forestland required for location 'DML-2' (erstwhile DML-1, now designated as DML-2 as above) is shown in the attached map in the Scale of 1:50000, while purpose-wise break-up of the land requirement is as under -

Plinth including flare pit, camp, etc.

: 3.620 hectare

Approach Road

: 3.750 hectare

Total: 7.370 hectare

- View foregoing, we are again submitting herewith the Form-A with revised area (from 2.981 ha to 7.370 ha) along with all relevant annexures on undertakings and the maps as per Forest (Conservation) Act, 1980 for diversion of 7.370 hectare of forestland detailed above for drilling location 'DML-2' under OIL's Deomali PEL block and falling in Borduria Village Forest Reserve (VRF), Deomali in Tirap district of Arunachal Pradesh.
- 6.0 We request you to kindly grant the Forest Clearance and handover the aforesaid plot of land to OIL at the earliest so that the exploratory drilling activities for hydrocarbon exploration in Deomali PEL block area in Arunachal Pradesh can be taken up immediately.
- 7.0 We assure that in case the well is abandoned, the plot of land shall be returned back as per provision of the act.
- 8.0 We also confirm that OIL shall take adequate pollution control measures and necessary protections as per the provision of Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 while carrying out its drilling activities in the area.

Thanking you,

Yours faithfully, OIL INDIA LIMITED

Enclo: Letters referred above and duly filled up Form-A with relevant documents (5 sets)

(S N Singh) Executive Director (E&D)

#### Copy:

- Chief Conservator of Forests, SAC, Deomali, Arunachal Pradesh
- ii. Divisional Forest Officer, Deomali Forest Division, Deoamli, Arunachal Pradesh

(S N Singh)

Executive Director (Executive Dir DULLAJAN 786 602, ASSAM

### FORM-'A'

### Form for seeking prior approval under Section -2 of the proposals by the State Governments and other authorities.

### PART-I (To be filled up by the user agency)

### Project Details:

- and Project / scheme for which forestland is required
- Short narrative of the proposal: Oil India Limited (OIL) is a Public Sector Undertaking (PSU) of Govt. of India engaged in exploration, production and transportation of crude oil & natural gas. As a part of its exploratory drilling activities in its Deomali Petroleum Exploration License (PEL) block in Arunachal Pradesh, an area of 7.370 hectare of forestland is required for its drilling location named as 'Loc. DML-2' falling inside Borduria Village Forest Reserve, Deomali, Tirap District, Arunachal Pradesh.
- Map showing the required forestland boundary of adjoining forest on a 1:50, 000 scale map
- Topo-sheet in 1:50000 scale showing the PEL block & the location.

- iii. Cost of the Project
- : Rs. 50.00 Crores (approx)
- iv. Justification for locating the project in forest area.
- : Oil & natural gas (hydrocarbons), formed from organic matter from dead plants & animals and found deep under the earth, take millions of years to form & require a specific set of thermodynamic conditions (pressure and temperature). Accordingly, they are found in specific places on the earth only. Exploration of such hydrocarbons are carried out through extensive Geological studies & various surveys viz. gravity survey, magnetic survey, seismic survey, etc. and subsequent interpretation of the data so acquired from such surveys. The drilling location 'DML-2' has been identified to be a potential area of hydrocarbon resources after such extensive studies and as such, it is not possible to change the site.
- Cost benefit analysis (to be enclosed)
- : Enclosed vide Annexure-IV (A&B)
- vi. Employment likely to be generated
- : There will be indirect generation of jobs for the local youths during the site preparations as well as drilling phase for peripheral jobs in unskilled category. There is also possibility of jobs being generated and growth of ancillary industries if hydrocarbon is commercially produced. However, the exact number of jobs going to be created in the project cannot be computed.

2.0 Purpose-wise break-up of the total : i. Plinth land required.

: 3.620 hectare

ii. Approach Road

: 3.750 hectare

Total: 7.370 hectare

3.0 Details of displacement of people due to the project, if any?

: Not applicable

Number of families i.

Not applicable

ii. Number of Schedule castes / Schedule tribes families

Not applicable

iii. Rehabilitation plan (to be enclosed)

Not applicable

4.0 Whether clearance under Environment (Protection) Act, 1986 required? Yes /No

: Yes

5.0. Undertaking to bear the cost of raising and maintenances of compensatory afforestation and / or penal compensatory afforestation as well as cost for protection and regeneration of Safety Zone, etc. as per the scheme prepared by the State Government (undertaking to be enclosed)

- Undertaking to pay NPV, cost of CA, etc. enclosed (Annex. I & II)
  - 1. Net present Value 7.370 hectare @ Rs. 9.39 Lakh/ha (Rs. 9,39,000 x 7.370) :-

Rs. 69,20,000.00 (approx.)

2. Cost of Compensatory Afforestation 7.370 hectare @ Rs. 38,989.81/ha (Rs. 38,989.81 x 7.370 x 2):-

Rs. 5,75,000.00 (approx.)

Total: Rs. 74,95,000.00 (approx.)

- 6.0 Details of certificates / documents enclosed as required under the instruction
- : i. Map as in Sl. No. 1.0 (ii) above.
  - ii. Undertaking vide Annex. I & II as in Sl. No. 5.0 above.
  - iii. Confirmation on barest minimum land requirement (Annex. III).
  - iv. Cost Benefit analysis [Annex. IV(A&B)]
  - v. Plinth coordinates & area with map [Annex. V(A&B)]

Date: 23.03.2015 Place: DULIAJAN



((S N Singh) EXECUTIVE DIRECTOR (E&D) OIL INDIA LIMITED, DULIAJAN

State serial No. of proposal..... (To be filled up by the Nodal officer with date of receipt)

Annexure - I

TO WHOM IT MAY CONCERN

We do hereby undertake to bear the cost of raising and

maintenance of compensatory afforestation and/or penal

compensatory afforestation as well as cost for protection and

re-generation of Safety Zone, etc. as per the scheme prepared by

the State Government for diversion of 7.370 hectare of forestland

for Oil India Limited's drilling location named as Loc. DML-2 falling

inside Borduria Village Forest Reserve, Deomali, Tirap District,

Arunachal Pradesh.

Date: 23.03.2015

Place: DULIAJAN

(S N Singh)

EXECUTIVE DIRECTOR (E&D) OIL INDIA LIMITED, DULIAJAN

Annexure - II

### TO WHOM IT MAY CONCERN

We do hereby undertake the following -

- (i) To bear the cost of raising & maintenance of Compensatory Afforestation (CA) plantation for double the area of land proposed for diversion for Loc. DML-2 falling inside Borduria Village Forest Reserve, Deomali, Tirap District, Arunachal Pradesh.
- (ii) Payment of Net Present Value (NPV).

(S N Singh)

EXECUTIVE DIRECTOR (E&D) OIL INDIA LIMITED, DULIAJAN

Date: 23.03.2015 Place: <u>DULIAJAN</u>

<u>Annexure – III</u>

## TO WHOM IT MAY CONCERN

We do hereby confirm & certify that the requirement of 7.370 hectare of forestland falling inside Borduria Village Forest Reserve, Deomali, Tirap District, Arunachal Pradesh proposed for diversion is unavoidable and barest minimum for OIL's drilling location 'DML-2' under Deomali Petroleum Exploration License (PEL) block in Arunachal Pradesh.

Date: 23.03.2015

Place: DULIAJAN

(S N Singh)

EXECUTIVE DIRECTOR (E&D)
OIL INDIA LIMITED, DULIAJAN

## PARAMETERS FOR EVAUATION OF LOSS OF FOREST

[Proforma - AnnexureVI(b)]

## [Loc. DML-2 under Deomali Petroleum Exploration License (PEL)]

| S1<br>No.  | Parameters  | Hydrocarbon Exploration Project  |  |
|--|---|--|--|
| 1  | Loss of value of timber, fuelwood and minor forest produce on an annual basis, including loss of man-hours per annum of people who derived livelihood and wages from the harvest of these commodities.                                      | out by concerned forest authorities.   |  |
| 2  | Loss of animal husbandry<br>productivity, including loss of<br>fodder   |  |  |
| 3  | Cost of human resettlement  | NIL - there is no displacement or any oustees involved.  |  |
| 4  | Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railways etc.) on forest land, or which would require forest land if these facilities were diverted due to the project | administrative infrastructure in the area.   |  |
| microclimate upsetting ecological balance)  Considering the environmental value hectare of fully stocked forest (density Rs.126.74 lacs to accrue over a per years (as per thumb rule followed Dept.) and the forest density of the area as 0.2, total environment Rs. 17.40 Crore |   | Total Environmental Loss: 1.87 Crore  Considering the environmental value for of one hectare of fully stocked forest (density 1.0) as Rs.126.74 lacs to accrue over a period of 50 years (as per thumb rule followed in Forest Dept.) and the forest density of the project area as 0.2, total environment loss is |  |
| 6  | Suffering to oustees  | NIL - there is no displacement or any oustees involved.  |  |

# PARAMETERS FOR EVALUATION OF BENEFIT NOTWINSTANDING LOSS OF FOREST

[Proforma - AnnexureVI(c)]

| 61   | SI  |   |  |  |  |
|--|---|---|--|--|--|
| No.  | Parameters  | Hydrocarbon Exploration Project   |  |  |  |
| 1  | Increase in productivity attributed to the specific project   | The Deomali Petroleum License (PEL) area is located within the proven petroliferous Assam-Arakan Basin. Several oil & gas producing fields viz. Digboi, Kharsang, Kumchai, etc. have been established in the same belt so far. Since the subject project is an Exploratory Project, the actual hydrocarbon reserve of the PEL area can be projected only after carrying out necessary exploratory drilling activities. However, the resource potential (risked) of Loc. DML-2 is estimated to be 0.20 BCM which amounts to approx. Rs 1050 Crore in present market value. |  |  |  |
| 2  | Benefits to economy   | If commercial discovery is established in the well, it will contribute significantly to the national economy as above.  |  |  |  |
| 3  | No. of population benefited   | In case commercial discovery is established there will be lot of direct as well as indirect job/business opportunities especially for the local people. Additionally, OIL will take underelopment projects for the area under in CSR policy.  |  |  |  |
| 4 Employment potential  In case commercial discording Plant which will provide opportunities for the local number of small scale bus |   | In case commercial discovery is established, Development Drilling Plan will be taken up which will provide good employment opportunities for the local people. Additionally, number of small scale business opportunities will also grow up in the area.  |  |  |  |
| 5  | Cost of acquisition of facility on non-forest land wherever feasible  | NIL - there is no displacement or resettlement/ rehabilitation involved.  |  |  |  |
| 6  | Loss of (a) Agriculture & (b) Animal Husbandry production due to diversion of forest land.                          | There is no eminent loss on agriculture & animal husbandry production due to diversion of forest land.  |  |  |  |
| 7  | Cost of rehabilitating the displaced persons as different from compensatory amounts given for displacement          | NIL - there is no displacement or resettlement/ rehabilitation involved.  |  |  |  |
| 8  | Cost of supply of free fuel wood<br>to workers residing in or near<br>forest area during period of<br>construction. | NIL - there is no human population in & around the area.  |  |  |  |

(S N Singh) Executive Director (E&D)

## COORDINATES & FOREST AREA FOR LOC. DML-2

### 1.0 Coordinates (Ref. map vide Annex. V(B)] -

|   |             | Points       | Latitude      | Longitude     |
|---|-------------|--------------|---------------|---------------|
| 1 | Loc DML-2   | Staked point | 27º 05' 40.2" | 95º 26' 43.0" |
| 2 | Plinth area | A            | 27º 05' 44.0" | 95º 26' 40.5" |
|   |             | В            | 27º 05' 42.1" | 95º 26' 47.4" |
|   |             | С            | 270 05' 37.1" | 95º 26' 45.8" |
|   |             | D            | 27º 05' 39.5" | 95º 26' 36.7" |
|   |             | E            | 27º 05' 41.7" | 95º 26' 37.4" |
|   |             | F            | 270 05' 41.1" | 95º 26' 39.5" |
|   |             | A            | 27º 05' 44.0" | 95º 26' 40.5" |

## 2.0 Break-up of area: plinth & approach road -

| S1.<br>No. | Description                            | Area in hectare |
|------------|--|-----------------|
| 1          | Plinth including flare pit, camp, etc. | 3.620           |
| 2          | Approach Road                          | 3.750           |
|            | Total                                  | 7.370           |

### 3.0 Approach Road details -

|   | Coordinates - Start Point End Point |               | Latitude      | Longitude     |
|---|-------------------------------------|---------------|---------------|---------------|
| 1 |                                     | 27º 05' 25.5" | 95º 26' 27.9  |               |
|   |                                     | End Point     | 27º 05' 41.1" | 95º 26' 39.5" |
| 2 | Length of road                      |               | 1250 m        |               |
| 3 | Width of road (average)             |               | 30            | m             |
| 4 | Total area                          |               | 3.750 ha      |               |

(S N Singh) Executive Director (E&D)

### For reference only, if any: Coordinates in X-Y

## COORDINATES (In X-Y) & FOREST AREA FOR LOC. DML-2

### 1.0 Coordinates (Ref. map vide Annex. V(B)] -

|   |             | Points       | X           | Y           |
|---|-------------|--------------|-------------|-------------|
| 1 | Loc DML-2   | Staked point | 3282426.013 | 1046749.287 |
| 2 | Plinth area | A            | 3282350.617 | 1046860.712 |
|   |             | В            | 3282544.736 | 1046812.570 |
|   |             | С            | 3282506.222 | 1046657.274 |
|   |             | D .          | 3282253.867 | 1046719.859 |
|   |             | E            | 3282270.717 | 1046787.801 |
|   |             | F            | 3282328.953 | 1046773.358 |
|   |             | A            | 3282350.617 | 1046860.712 |

## 2.0 Break-up of area: plinth & approach road -

| Sl.<br>No. | Description                            | Area in hectare |
|------------|--|-----------------|
| 1          | Plinth including flare pit, camp, etc. | 3.620           |
| 2          | Approach Road                          | 3.750           |
|            | Total                                  | 7.370           |

## 3.0 Approach Road details -

|   | - 18                        |             | X           | Y           |
|---|-----------------------------|-------------|-------------|-------------|
| 1 | Coordinates - Start Point   | 3282028.946 | 1046278.993 |             |
|   |                             | End Point   | 3282328.953 | 1046773.358 |
| 2 | Length of road              |             | 1250 m      |             |
| 3 | 3 Width of road (average) 3 |             | m           |             |
| 4 | Total area                  |             | 3.75        | 60 ha       |