

## FORM – 'A'


Form for seeking prior approval under Section 2 of Forest Conservancy Act, 1980

### PART-1

(To be filled up by user agency)

#### 1. Project Details

(i)	Short Narrative of the proposal and project/scheme for which the forest land is required	Hindustan Petroleum Corporation Limited intends to lay a 6" & 4" transportation of natural gas from City Gate Station to various CNG stations and other consumers like PNG (D), PNG Commercial, PNG Industrial for city gas distribution in the Geographical Area (GA) of Sonipat - Jind (Haryana).
(ii)	Map showing the required forest land, boundary of adjoining forest on a 1:50,000 Scale Map	Enclosed annexure-3
(iii)	Cost of Project	Rs. 520 Crores
(iv)	Justification for locating the project in forest area	The final route has been selected based on reconnaissance and detailed route survey.
(v)	Cost-Benefit Analysis	Enclosed Annexure-6
(vi)	Employment likely to be generated	Employment will be generated thru contractors during construction and operation .
2.	<b>Purpose wise break up of land required:</b>	
(a)	Forest Land in Ha.	2.23 Ha
(i)	Name of Reach	As per Checklist Serial No.
(ii)	P.F / R.F	Protected Forest
(iii)	Length (in Mts.), Width (in Mts.), Area (in Ha.),	<b>Length: - 37180.00 mtr. , Width: - 0.6 mtr., Area: - 2.23 Ha.</b>
(b)	Non-Forest land	NIL
3.	<b>Details of displacement of people due to the project, if any:</b>	
(i)	Number of families	NIL
(ii)	Number of Scheduled Casts/Scheduled Tribe families	NIL
(iii)	Rehabilitation plan (to be enclosed)	NIL

  
Sharampal  
Chief Manager - Project  
Hindustan Petroleum Corporation Limited  
CGD Sonipat - Jind GA

4.	Whether clearance under Environment (Protection) Act, 1986 required? (Yes/No)	Since No reserve forest area is involved in the project Hence environmental clearance is not required .
5.	Undertaking to bear the cost of raising and maintenance 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)	Check List- 22 & 23.
6.	Details of Certificate / documents enclosed as required under the instruction	Check List-1 : Sanction Letter from PNGRB. Check List-4 : Project Report Check List-7 : Details of forest area for diversion Check List-8 : Details of Non forest area involved in the proposal Check List-10: Justification of route selection Check List-11: Certificate for Minimum use of Forest Land Check List-22: Undertaking for compensatory afforestation Check List-23 : Undertaking for Net Present Value of the Area (NPV) Check List- 25 : Cost and Benefit Analysis Check List- 26 : Photocopy of G.T. Sheet 1:50000 Map

Place: .....

Date : .....

  
 (Signature of User Agency)

Office Seal  
 Dharampal  
 Chief Manager - Project  
 Hindustan Petroleum Corporation Limited  
 CGD Sonipat - Jind GA

## **CHECKLIST NUMBER: 04**

### **PROJECT REPORT**

Petroleum and Natural Gas Regulatory Board (PNGRB) released a public notice dated 11.04.2018 inviting bids for 86 Geographical Areas comprising of 174 districts under the 9th round of CGD Bidding.

HPCL put up a proposal to the Board for participating in 9th round of bidding for CGD network. Board in its 616<sup>th</sup> Board meeting held on 04.07.2018 accorded its approval to participate in 21 Geographical Areas with maximum capital outlay of Rs 10,000 Crore over 8 years of exclusivity period.

HPCL has become successful bidder in Sonipat (except area already authorized) and Jind Districts (Sonipat-Jind GA). PNGRB has directed vide Letter of Intent dated 10.08.2018 to submit Performance Bank Guarantee (PBG) for an amount of Rs 33 Crores. HPCL has submitted the PBG vide letter dated 04.09.2018. Thereafter PNGRB has authorized HPCL for Lay, Build and Operate CGD network in Jind - Sonipat GA vide letter dated 26.09.2018. Geographical area is spread in 4620 square kilometres where HPCL has committed installing 38 CNG stations, 98000 PNG connections through a wide spread Steel pipeline network of 1183 Inch-KMs over 8 years starting from Sep 2018.

It is pertinent to note that HPCL will be incurring CAPEX of around Rs. 520 crores over span of 8 years to meet the committed Work Programme. CAPEX of Rs 520 Crores to be considered for two periods: A. 1<sup>st</sup> - 5<sup>th</sup> years, B. 6-8 years.

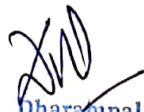
A detailed feasibility study (DPR) was conducted by M/s Tractebel Engie for demand assessment, estimation of capex and financial appraisal. According to the study the Project IRR (PIRR) is 16.08% and Equity IRR (EIRR) of 21.42%.

Year-wise CAPEX Requirement based on the DPR is as below:

Year	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	Period 19-24	Period 25-27
CAPEX (Rs- Cr)	23.81	103.42	100.46	83.32	49.88	56.91	52.30	49.80	360.90	159.01

A detail break-up item wise is given below: *Rs. Crore*

Year	1 <sup>st</sup> Yr	2 <sup>nd</sup> Yr	3 <sup>rd</sup> Yr	4 <sup>th</sup> Yr	5 <sup>th</sup> Yr	6 <sup>th</sup> Yr	7 <sup>th</sup> Yr	8 <sup>th</sup> Yr
CGS & CGD	23.02	86.01	75.09	64.47	34.95	52.16	40.35	40.14
CNG - Reg	0.00	8.28	12.27	9.70	7.34	2.83	7.14	5.77
CNG - Un Reg	0.00	5.82	9.88	6.48	5.97	1.89	4.77	3.85
Soft Costs (IDC+ Contingency)	0.79	3.31	3.22	2.68	1.62	0.04	0.04	0.04
Year wise CAPEX	23.81	103.42	100.46	83.32	49.88	56.91	52.30	49.80
Cumulative CAPEX	23.81	127.24	227.70	311.02	360.90	417.81	470.11	519.91

  
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Chief Manager - Project  
Hindustan Petroleum Corporation Limited  
CGD Sonipat - Jind GA



### **Project Features**

The project includes laying, building, expanding and operating the CGD network in the geographical area of Jind and Sonipat district (excluding the area already authorized). HPCL will have marketing exclusivity in the GA for 8 years and network exclusivity for 25 years. The estimated cost of the project for 8 years is about Rs. 520 crores. The estimated cost is based on the DPR. The estimated Project IRR is 16.08%.

### **Acquisition for CGS Station Land**

Three City Gate Stations have been considered by our EPMC M/s Tractebel, so as to feed the demand of GA (Geographical areas) while minimizing the cost of steel pipeline required to reach these charge areas.

### **Location of City Gate Stations:**

- **CGS-1 at Tap-Off Point: Nahara -SV-2 (Gail) near kharkhoda, from Dadri Bawana-Nangal Pipeline of M/s GAIL.**
- **CGS-2 at Tap off point: IOCL SV-4, Dehra from Dadri- Panipat Pipeline of M/s IOCL.(Typical drawing from M/s Tractebel -Annexure-(1.a))**
- **CGS-3 at Tap off point: GIGL SV-2006, Bal Jatan from Mehsana- Bhatinda Pipeline of M/s GIGL.**

### **Obligation of HPCL and Consequences**

As mentioned above, HPCL has committed installing 38 CNG stations, 98000 PNG connections through a wide spread Steel pipeline network of 1183 Inch-KMs in 8 years starting from Sep 2018. The year wise break-up of the target is as mentioned below:

Description of Work	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Total
CNG Stations	0	6	6	6	6	6	6	4	38
PNG Connections	0	9800	9800	9800	9800	19600	19600	19600	98000
Inch-Kms	59	177	237	237	118	118	118	118	1183

As per the PNGRB regulation, in the event of failure to meet the commitment of each year, penalty will be of Rs. 750/- per each PNG connections, Rs.20 lakhs for each CNG stations and Rs. 1.5 Lacs per inch-km on CGD entity (HPCL).

### **Business opportunity and profitability**

CGD is an upcoming and potential business proposition for HPCL. Government of India has planned to increase the share of natural gas in the energy mix from current 6% to 15% by 2030. As part of our business strategy, it was decided to participate in 9<sup>th</sup> round of bidding for CGD Network.

Though CGD business has long gestation period, given the recent thrust of Government of India and active support the pace of development of CGD environment in the country has been accelerated. CGD business also makes up for the revenue loss from liquid fuel business of HPCL in totality.

The estimated cost of the project for 8 years is about Rs. 520 crores.

**For Hindustan Petroleum Corporation Limited**

  
**Dharampal**

**Chief Manager- Projects**

**Chief Manager - Project**

**Hindustan Petroleum Corporation Limited**

**CGD Sonipat - Jind GA**

**JUSTIFICATION FOR ROUTE SELECTION**

In consideration of the requirement of Environment parameters, construction methodologies to be adopted for different terrain encountered, design and engineering factors, availability of logistic support during construction, operation and maintenance of pipeline, and various feasible routes were identified 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 various alternative pipeline 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 identifying the various alternatives for selection of the optimum route 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
- Accessibility to pipeline route during construction maintenance and operation
- Location of pipeline facilities and access thereto
- Avoidance of mining protected and reserved forest archaeological 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 future development
- Flexibility for future expansion

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

  
**For Hindustan Petroleum Corporation Limited**

**Dharampal**  
**Chief Manager – Projects**  
Dharampal  
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Hindustan Petroleum Corporation Limited  
CGD Sonipat - Jind GA

## Check List Serial Number:-08

### Statement showing detail of Non-forest area involved in the proposal

SI No.	District	Division	Village Name	Location	Non Forest area Involved in the proposal Ha.	Remarks
1	NIL					

Place: .....

Date: .....

  
**Dharampal**  
**Chief Manager- Projects**  
Dharampal  
Chief Manager - Project  
Hindustan Petroleum Corporation Limited  
CGD Sonipat - Jind GA

Countersigned By:-

**Deputy Conservator of Forest,  
Jind Forest Division  
Jind**

## CHECK LIST SERIAL NUMBER: 11

### CERTIFICATE FOR MINIMUM USE OF FOREST LAND

This is to certify that the area involved in the proposal is unavoidable and barest minimum forest area i.e. **2.23 ha.** Area is proposed for Diversion.

Place: .....

Date: .....



**Dharampal**  
**Chief Manager- Projects**

**Dharampal**  
**Chief Manager - Project**  
**Hindustan Petroleum Corporation Limited**  
**CGD Sonipat - Jind GA**

Countersigned By:-

**Deputy Conservator of Forest,**  
**Jind Forest Division**  
**Jind**



**CHECK LIST SERIAL NUMBER: 22**

**UNDERTAKING FOR PAYMENT OF COST OF  
COMPENSATORY AFFORESTATION**

We Hindustan Petroleum Corporation Limited hereby, undertake to pay the entire amount for compensatory with reference to the forest area diverted.

For .....as per prevailing wage rates at the time of plantation.

Place: .....

Date: .....

  
**Dharampal**  
**Chief Manager- Projects**  
**Dharampal**  
**Chief Manager - Project**  
**Hindustan Petroleum Corporation Limited**  
**CGD Sonipat - Jind GA**

Countersigned By:-

**Deputy Conservator of Forest,**  
**Jind Forest Division**  
**Jind**




**CHECK LIST SERIAL NUMBER: 23**

**UNDERTAKING FOR PAYMENT OF NET PRESENT VALUE OF FOREST  
AREA**

It is to certify that we Hindustan Petroleum Corporation Limited have applied for diversion of **2.23 ha** of forest area for the purpose of laying Finished Petroleum Product pipeline. We hereby, undertake to pay the net present value NPV of the above forest land and in case of any upward revision of rates of NPV, the user agency will pay the amount of differential NPV.

Place: .....

Date: .....

  
**Dharampal**  
**Chief Manager- Projects**  
Dharampal  
Chief Manager - Project  
Hindustan Petroleum Corporation Limited  
CGD Sonipat - Jind GA

Countersigned By:-

**Deputy Conservator of Forest,  
Jind Forest Division  
Jind**

**CHECK LIST SERIAL NUMBER: - 25**

**COST AND BENEFIT ANALYSIS**

Undertaking to bear the cost of raising & Maintenance of Compensatory afforestation & / or penal compensatory afforestation as well as cost for protection & regeneration of Safety Zone etc, as per the scheme prepared by the State Government.

Place: .....

Date: .....



**Dharampal**  
**Chief Manager- Projects**

**Dharampal**  
**Chief Manager - Project**  
**Hindustan Petroleum Corporation Limited**  
**CGD Sonipat - Jind GA**

Countersigned By:-

**Deputy Conservator of Forest,**  
**Jind Forest Division**  
**Jind**

**CHECKLIST NUMBER: 07****Hindustan Petroleum Corporation Limited****Details of Protected Forest to be Diverted District Jind****Forest Details (Jind - Narwana Section)**

<b>A. Protected along National Highway-352 (Jind - Narwana) to be Diverted for Jind City to Narwana</b>						
<b>Sr. No.</b>	<b>Name of the Forest Land</b>	<b>Forest Length (mtr)</b>	<b>Width (mtr)</b>	<b>Forest Land in Sqmt</b>	<b>Forest Land in Ha.</b>	<b>Remarks</b>
1	National Highway-352 (upto Patiala Chowk)	1322.00	0.6	793.20	0.08	
2	National Highway-352 (Patiala Chowk to Narwana)	35858.00	0.6	21514.80	2.15	
<b>Total Protected Forest Land Area in Hectare</b>		<b>37180.00</b>		<b>22308.00</b>	<b>2.23</b>	

<b>Total Protected Forest area in Jind =</b>	<b>37180.00</b>	<b>22308.00</b>	<b>2.23</b>	<b>Ha.</b>
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Place: .....  
Date: .....



**Dharampal**  
**Chief Manager- Projects**

**Dharampal**  
**Chief Manager - Project**  
**Hindustan Petroleum Corporation Limited**  
**CGD Sonapat - Jind GA**