



**GOVERNMENT OF INDIA  
MINISTRY OF ROAD TRANSPORT & HIGHWAYS**

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No.RW/TRI/Utility/5/2017-18

Office of the Regional Officer,  
Public Office Building,  
Thiruvananthapuram-695033  
Dated: 23.02.2018

**Invitation of public comments**

**Sub:- Proposal for permission to lay Natural Gas Pipe Line km 237/681 to km 280/615 (from Kothamangalam to Irumpanam Junction ) and from km 280/615 to km 286/448 ( from Irumapnam Junction to Kundannoor) on NH 85(Old NH 49) in the State of Kerala by Indian Oil-Adani Gas Pvt. Ltd- reg.**

The proposal is seeking permission to lay Natural Gas Pipe Line from km 237/681 to km 280/615( from Kothamangalam to Irumpanam Junction ) and from km 280/615 to km 286/448 ( from Irumapnam Junction to Kundannoor) on NH 85(Old NH 49) in the State of Kerala by Indian Oil-Adani Gas Pvt. Ltd submitted to this office vide Chief Engineer (NH), PWD Kerala letter dated 19.02.2018, in accordance with Ministry's latest guidelines dated 22.11.2016.

2. The proposal by the Indian Oil-Adani Gas Pvt. Ltd to lay the underground Natural Gas Pipe Line is as under:

Stretch in Km.	Length (Km.)	ROW (m)	Dist. Of Prop. Road cutting from centre of NH (m).
<b>RHS Side</b>			
From 237/681 to km 250/410 and from Km 250/664 to km 280/615 on NH 85(Old NH 49)	42.743	20	10
From km 280/615 to km 286/448 on NH 85(Old NH 49)	5.833	20	10

3. Indian Oil-Adani Gas Pvt. Ltd has furnished the undertakings mentioning that they undertake to shift the gas pipeline, if required by Highway Authority at any time for expansion of road at their own cost. A checklist describing the proposal is enclosed.

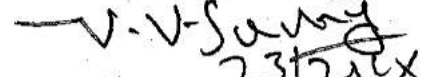
4. As per the guidelines issued by the Ministry vide letter No.RW/NH-33044/29/2015/S&R (R) dated 22.11.2016, the application will be made available for public comments and the comments will be invited within 30 days from the date of uploading in the Ministry's web site.

5. In view of above, comments of the public on the above proposal is invited to the below mentioned address:

The Regional Officer  
Ministry of Road Transport & Highways,  
Public Office Building, Opposite to museum,  
Thiruvananthapuram – 695033.

Encl: As above.

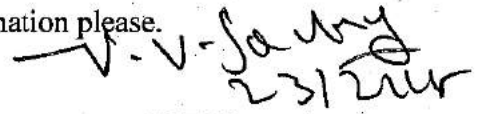
Yours faithfully,

  
(V.V. Sastry)

Regional Officer cum Highway  
Administrator

Copy to:

1. Senior Technical Director, NIC for uploading in the Ministry's website.
2. The Chief Engineer (NH), Kerala PWD for information please.
3. The Executive Engineer, NH Division, Muvattupuzha for information please.

  
(V.V. Sastry)

Regional Officer cum Highway  
Administrator

# CHECK-LIST

Guidelines for processing the proposal for accommodation of Public and Industrial Utility services along and across National Highway vested with PWD-NH Division

## Relevant Circulars

- 1) Ministry Circular No-NH-41 (58)/68 dated 31.01.1969
- 2) Ministry Circular No. NH-III/P/66/76 dated 18.11.1976
- 3) Ministry Circular No. RW/NJ-III/P/66/76 dated 01.05.1982
- 4) Ministry Circular No. RW/NH-11037/1/86/DOI (ii) dated 28.7.1993
- 5) Ministry Circular No. RW/NH-11037/1/86/DOI dated 19.1.1995
- 6) Ministry Circular No. RW/NH-34066/2/95/S&R dated 25.10.1999
- 7) Ministry Circular No. RW/NH-34066/7/2003 S&R (B) dated 17.09.2003
- 8) Ministry Circular No. RW/NH-33044/29/2015/S&R (R) dated 22.11.2016


## Check list for getting approval for constructing underground Natural Gas Pipeline Network on NHland

L.N	Item	Information/Status	Remarks
1	General Information		
1.1	Name and Address of the Applicant/Agency	Ajay Pillai Asset Head IndianOil-Adani Gas Pvt. Ltd. II/309E, 4 <sup>th</sup> Floor, Andryan Arcade, NH Bypass, Maradu PO, Ernakulam Dist: 682 304	
1.2	National Highway Number	NH 85	
1.3	State	Kerala	
1.4	Location	Irumpanam - Kothamangalam	
	Chainage in Km	Length (Km)	ROW (m)
	Km 237.681 - 250.410 (RHS)	42.743	20
	Km 250.664 - 280.615 (RHS)		10
1.5	Defect Liability Period of last work undertaken in the stretch	Not under DLP except Irumpanam Jn. Ch: 280/615 which expired on 28.11.2018	LHS/RHS
1.6	Proposed location of utility line crossing the NH	Drawings Attached	
1.7	Proposal to acquire land	No acquisition of land to be done	
1.8	Whether proposal is in the same side where land is not to be acquired	No	
1.9	Details of already laid services, if any along the proposed route	KWA, BSNL, etc	
1.10	Number of existing lanes (2/4/8 lanes)	2 Lane	
1.11	Proposed number of lanes (2 lane with paved shoulders/4/6/8 lanes)	2 Lane	
1.12	Service road existing or not if yes, then which side	No	
1.13	Proposed service road	NA	
1.14	Whether proposal to lay gas pipeline is along service road or between the service road and main carriageway	End of the ROW	

IndianOil - Adani Gas Pvt.Ltd.  
Ernakulam, Kerala State.



1.15	Whether carrying of gas pipeline has been proposed on highway Bridges. If yes, then mention the methodology proposed for the same.	NA	
1.16	Whether carrying of gas pipeline has been proposed on the parapet/any part of the bridges. If yes, then mention the methodology proposed for the same.	NA	
1.17	If Crossing of the road involved, If yes, it shall be either encased in pipes or through structure or conduits specially built for that purpose at the expense of the agency owing the line	Yes	
	(a) Whether existing drainage structures are allowed to carry gas pipelines	No	
	(b) is it on a line normal to NH	NA	
	(c) Crossings shall not be too near the existing structures on the national highway, the minimum distance being 15 meter. What is the distance from the existing structures	Minimum distance followed	
	(d) the casing pipe (or conduit pipe in the case of electric / OPC cable) carrying the gas line shall be of steel, cast iron or reinforced cement concrete and have adequate strength and be large enough to permit ready withdrawal of the carrier pipe/cable. Mention type of casing.	Mild Steel Pipe as casing pipe	
	(e) Ends of the casing/conduit pipe shall be sealed from the outside, so that it does not act as a drainage path.	Yes	
	(f) The casing/conduit pipe should, as minimum extend from drain to drain in cuts and toe of slope toe of slope in the fills.	Yes	
	(g) The top of the casing/conduit pipe should be at least 1.2 meter below the surface of the road subject to being at least 0.3 m below the drain inverts. Mention the proposed details.	Drawing Attached	
	(h) Mention the methodology proposed for crossings of roads for the proposed gas pipeline. Crossing shall be by boring method (HDD) trenchless technology where the structure is in defect liability period (DLP)	Horizontal Directional Drilling Method	
	(i) The casing/Conduit pipe shall be installed with an even bewaring throughout its length and in such a manner as to prevent the formation of a waterway along it.	Yes	
	Document/Drawings enclosed with the proposal.	Yes	Remarks

 **Ajay Pillai**  
**DGM - ASSET HEAD**  
**IndianOil - Adani Gas Pvt.Ltd.**  
**Ernakulam, Kerala State.**




2.1	Cross section showing the size of trench for open trenching method (is it normal size of 1.2 m deep x 0.3m wide)	Enclosed	
	(i) Should not be greater than 60 cm wider than the outer diameter of the pipe		
	(ii) Located as close to the extreme edge of the right-of way as possible but not less than 15 meter from the centre-lines of the nearest carriageway.		
	(iii) Shall not be permitted to run along the National Highways when the road formation is situated in double cutting. Nor shall these be laid over the existing culverts and bridges.		
	(iv) These should be so laid that their top is at least 0.6 meter below the ground level so as not to obstruct drainage of the road land		
2.2	Cross section showing the size of pit and location of cable for HDD method	Enclosed	
2.3	Strip plan/Route Plan showing Gas pipe line, Chainage, width of ROW distance or proposed, cable form the edge of ROW, important miles stone, intersections, cross drainage works etc.	Enclosed	
2.4	Methodology for laying of showing Gas pipe line.		
2.4.1	Open trenching method: (Open trenching in bituminous surface will be allowed in utility corridor only where road is not under defect liability period (DLP) with proper justification for not using HDD). If yes, Methodology for laying of refilling of trench)	Enclosed	
	(a) Defect liability period of the stretch	Not under DLP except Irumpanam Jn. Ch. 280/615 which expired on 28.11.2018	
	(b) The trench width should be at least 30 cm but not more than 60 cm wider than the outer diameter of the pipe	Enclosed	
	(c) For filling of the trench, Bedding shall be to a depth of not less than 30 cm. It shall consist of granular material free of lumps, clods and cobbles and graded to yield a firm surface without sudden change in the bearing value. Unsuitable soil and rock edged should be excavated and replaced by selected material.	Yes	
	(d) The backfill shall be completed in two stages (i) side fill to the level of the top to the pipe and (ii) overfill to the bottom of the road crust.	Yes	
	(e) The side fill shall consist of granular material laid in 15 cm layers each consolidated by mechanical tampering and controlled addition of	Yes	

*Remedy*



	moisture to 95% of the Proctor's Density. Over fill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or pending will not be permitted.		
	(f) The road crust shall be built to the same strength as the existing crust on either side of the trench. Care shall be taken to avoid the formation of a dip at the trench.	Yes	
	(g) The excavation shall be protected by flagman, signs and barricades, and red lights during night hours.	Yes	
	(h) If required, a diversion shall be constructed at the expenses of agency owing the utility line.	Yes	
2.4.2	Horizontal Directional Drilling (HDD) Method	Yes	
2.4.3	Methodology for laying of pipe line through CD Works and method of laying. In cases where the carrying of gas pipeline on the bridge becomes inescapable.	Nil	
3	Draft License Agreement signed by two witness	Enclosed	
3.1	The license fee estimate as per Ministry's guidelines issued vide circular no. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016	After Sanction	
4	Whether performance Bank guarantee as per the Ministry's Circular No. RW/NH-33044/29/2015/S & R ( R ) dated 22.11.2016 is obtained/undertaking attached.	After Sanction	
4.1	Confirmation of BG has been obtained or not as per MoRTH/NHAI guidelines.	Yet to receive	
5	Affidavit/undertaking form the Application for the following is to be furnished.		
5.1	Undertaking for not to Damage to other utility, if damaged then pay the losses either to MoRTH/NHAI/PWD or to the concerned agency as decided by MoRTH.	Enclosed	
5.2	Undertaking for renewal of Bank Guarantee as and when asked by MoRTH/NHAI	Enclosed	
5.3	Undertaking for confirming all standard condition of MoRTH circular No. RW/NH-33044/29/2015S&R(R) dt 22.11.2016	Enclosed	
	Undertaking for Indemnity against all damages and claims.	Enclosed	

 Ajay Bula  
 DGM & ASSET HEAD  
 IndianOil - Adani Gas Pvt.Ltd.  
 Ernakulam, Kerala State.

 R. Manoj



5.5	Undertaking for management of traffic movement during laying of gas line without hampering the traffic.	Enclosed	
5.6	Undertaking that prior approval of the MoRTH/NHAI/PWD shall be obtained before undertaking any work for installation, shifting or repairs, or alterations to the gas pipeline located in the National Highway right-of-ways.	Enclosed	
5.7	Undertaking that expenditure, if any, incurred by MoRTH/NHAI/PWD for repairing any damage caused to the National Highway by the laying, maintenance or shifting of the Gas supply pipe line will be borne by the agency owing the line.	Enclosed	
5.8	Undertaking that text of the license deed is as per verbatim of MoRTH format (issued vide Ministry's circular no. RW/NH-33044/29/2015/S&R (R) dated 22.11.2016	Enclosed	
5.9	Undertaking that the applicant has obtained various safety clearances from the representative authorities such as Directorate of Electricity, Chief Controller of Explosives, Petroleum and Explosive safety Organizations, State /Central Pollution Control Board and any other statutory clearances as applicable, before applying to Highway Administration.	Enclosed	
5.10	Undertaking that the utility line shall be shifted by the utility agency at the cost of the agency owing the utility line, if the MoRTH/NHAI/PWD consider it necessary in future to shift the utility line for expansion of road.	Enclosed	
6	Who will sign the agreement on behalf of Natural Gas pipe line agency?	IndianOil-Adani Gas Pvt. Ltd.	
	Power of Attorney to sign the agreement is available or not.	Available	
7	Certificate from EE - PWD NH as per the format.		

  
**DGM & ASSET HEAD**  
**IndianOil - Adani Gas Pvt.Ltd.**  
**Ernakulam, Kerala State.**

  
**EXECUTIVE ENGINEER**  
**NH (2) DIVISION**  
**NOVATTUPUZHA**



### CHECK-LIST

**Guidelines for processing the proposal for accommodation of Public and Industrial Utility services along and across National Highway vested with PWD-NH Division**

#### Relevant Circulars

- 1) Ministry Circular No-NH-41 (58)/68 dated 31.01.1969
- 2) Ministry Circular No. NH-III/P/66/76 dated 18.11.1976
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1.2	National Highway Number	NH 85	
1.3	State	Kerala	
1.4	Location	Kundannoor - Irumpanam	
	Chainage in Km	Length (Km)	ROW (m)
	Km 280.615 - 286.448 (RHS)	5.833	20
			Distance of Proposed Utility from Centre of NH
			10
			LHS/RHS
			RHS
1.5	Defect Liability Period of last work undertaken in the stretch	Not under DLP except Irumpanam Jn. Ch: 280/615 which expired on 28.11.2018.	
1.6	Proposed location of utility line crossing the NH	Drawings Attached	
1.7	Proposal to acquire land	No acquisition of land to be done	
1.8	Whether proposal is in the same side where land is not to be acquired.	No	
1.9	Details of already laid services, if any along the proposed route	KWA, BSNL, etc	
1.10	Number of existing lanes (2/4/8 lanes)	2 Lane	
1.11	Proposed number of lanes (2 lane with paved shoulders/4/6/8 lanes)	2 Lane	
1.12	Service road existing or not if yes, then which side	No	
1.13	Proposed service road	NA	
	Whether proposal to lay gas pipeline is after the service road or between the service road and main carriageway	End of the ROW	

**Ajay Pillai**  
**ASSET HEAD**  
IndianOil-Adani Gas Pvt.Ltd.  
Ernakulam, Kerala State.

**Rajma**  
**EXECUTIVE ENGINEER**



1.15	Whether carrying of gas pipeline has been proposed on highway Bridges. If yes, then mention the methodology proposed for the same.	NA	
1.16	Whether carrying of gas pipeline has been proposed on the parapet/any part of the bridges. If yes, then mention the methodology proposed for the same.	NA	
1.17	If Crossing of the road involved, If yes, it shall be either encased in pipes or through structure or conduits specially built for that purpose at the expense of the agency owing the line	Yes	
	(a) Whether existing drainage structures are allowed to carry gas pipelines	No	
	(b) Is it on a line normal to NH	NA	
	(c) Crossings shall not be too near the existing structures on the national highway, the minimum distance being 15 meter. What is the distance from the existing structures	Minimum distance followed	
	(d) the casing pipe (or conduit pipe in the case of electric / OFC cable) carrying the gas line shall be of steel, cast iron, or reinforced cement concrete and have adequate strength and be large enough to permit ready withdrawal of the carrier pipe/cable. Mention type of casing.	Mild Steel Pipe as casing pipe	
	(e) Ends of the casing/conduit pipe shall be sealed from the outside, so that it does not act as a drainage path.	Yes	
	(f) The casing/conduit pipe should, as minimum extend from drain to drain in cuts and toe of slope toe of slope in the fills.	Yes	
	(g) The top of the casing/conduit pipe should be at least 1.2 meter below the surface of the road subject to being at least 0.3 m below the drain inverts. Mention the proposed details.	Drawing Attached	
	(h) Mention the methodology proposed for crossings of roads for the proposed gas pipeline. Crossing shall be by boring method (HDD) trenchless technology where the structure is in defect liability period (DLP)	Horizontal Directional Drilling Method	
	(i) The casing/Conduit pipe shall be installed with an even bewaring throughout its length and in such a manner as to prevent the formation of a waterway along it.	Yes	
	Document/Drawings enclosed with the proposal.	Yes	



2.1	Cross section showing the size of trench for open trenching method (is it normal size of 1.2 m deep x 0.3m wide)		
	(i) Should not be greater than 60 cm wider than the outer diameter of the pipe	Enclosed	
	(ii) Located as close to the extreme edge of the right-of way as possible but not less than 15 meter from the centre-lines of the nearest carriageway.		
	(iii) Shall not be permitted to run along the National Highways when the road formation is situated in double cutting. Nor shall these be laid over the existing culverts and bridges.		
	(iv) These should be so laid that their top is at least 0.6 meter below the ground level so as not to obstruct drainage of the road land		
2.2	Cross section showing the size of pit and location of cable for HDD method	Enclosed	
2.3	Strip plan/Route Plan showing Gas pipe line, Chainage, width of ROW distance or proposed, cable form the edge of ROW, important miles stone, intersections, cross drainage works etc.	Enclosed	
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2.4.1	Open trenching method (Open trenching in bituminous surface will be allowed in utility corridor only where road is not under defect liability period (DLP) with proper justification for not using HDD). If yes, Methodology for laying of refilling of trench)	Enclosed	
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	(b) The trench width should be at least 30 cm but not more than 60 cm wider than the outer diameter of the pipe.	Enclosed	
	(c) For filling of the trench, Bedding shall be to a depth of not less than 30 cm. It shall consist of granular material free of lumps, clods and cobbles and graded to yield a firm surface without sudden change in the bearing value. Unsuitable soil and rock edged should be excavated and replaced by selected material.	Yes	
	(d) The backfill shall be completed in two stages (i) side fill to the level of the top to the pipe and (ii) overfill to the bottom of the road crust.	Yes	
	(e) The side fill shall consist of granular material laid in 15 cm layers each consolidated by mechanical	Yes	


*[Signature]*  
EXECUTIVE ENGINEER

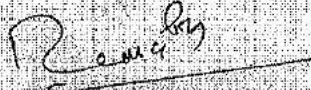


	tampering and controlled addition of moisture to 95% of the Proctor's Density. Over fill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or ponding will not be permitted.		
	(f) The road crust shall be built to the same strength as the existing crust on either side of the trench. Care shall be taken to avoid the formation of a dip at the trench.	Yes	
	(g) The excavation shall be protected by flagman, signs and barricades, and red lights during night hours.	Yes	
	(h) If required, a diversion shall be constructed at the expenses of agency owing the utility line.	Yes	
2.4.2	Horizontal Directional Drilling (HDD) Method	Yes	
2.4.3	Methodology for laying of pipe line through CD Works and method of laying. In cases where the carrying of gas pipeline on the bridge becomes inescapable.	Nil	
3	Draft License Agreement signed by two witness	Enclosed	
3.1	The license fee estimate as per Ministry's guidelines issued vide circular no. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016	After Sanction	
4	Whether performance Bank guarantee as per the Ministry's Circular No. RW/NH-33044/29/2015/S & R ( R ) dated 22.11.2016 is obtained/undertaking attached.	After Sanction	
4.1	Confirmation of BG has been obtained or not as per MoRTH/NHAI guidelines.	Yet to receive	
5	Affidavit/undertaking form the Application for the following is to be furnished		
5.1	Undertaking for not to Damage to other utility, if damaged then pay the losses either to MoRTH/NHAI/PWD or to the concerned agency as decided by MoRTH.	Enclosed	
5.2	Undertaking for renewal of Bank Guarantee as and when asked by MoRTH/NHAI	Enclosed	
5.3	Undertaking for confirming all standard condition of MoRTH circular No. RW/NH-33044/29/2015S&R(R) dt 22.11.2016	Enclosed	
	Undertaking for Indemnity against all damages and claims.	Enclosed	



5.5	Undertaking for management of traffic movement during laying of gas line without hampering the traffic.	Enclosed	
5.6	Undertaking that prior approval of the MoRTH/NHAI/PWD shall be obtained before undertaking any work for installation, shifting or repairs, or alterations to the gas pipeline located in the National Highway right-of-ways.	Enclosed	
5.7	Undertaking that expenditure, if any, incurred by MoRTH/NHAI/PWD for repairing any damage caused to the National Highway by the laying, maintenance or shifting of the Gas supply pipe line will be borne by the agency owing the line.	Enclosed	
5.8	Undertaking that text of the license deed is as per verbatim of MoRTH format (issued vide Ministry's circular no. RW/NH-33044/29/2015/S&R (R) dated 22.11.2016	Enclosed	
5.9	Undertaking that the applicant has obtained various safety clearances from the representative authorities such as Directorate of Electricity, Chief Controller of Explosives, Petroleum and Explosive safety Organizations, State /Central Pollution Control Board and any other statutory clearances as applicable, before applying to Highway Administration.	Enclosed	
5.10	Undertaking that the utility line shall be shifted by the utility agency at the cost of the agency owing the utility line, if the MoRTH/NHAI/PWD consider it necessary in future to shift the utility line for expansion of road.	Enclosed	
6	Who will sign the agreement on behalf of Natural Gas pipe line agency?	IndianOil-Adani Gas Pvt. Ltd.	
	Power of Attorney to sign the agreement is available or not	Available	
7	Certificate from EE - PWD NH as per the format.		

  
**DGM & ASSET HEAD**  
 IndianOil - Adani Gas Pvt.Ltd.  
 Ernakulam, Kerala State.

  
**EXECUTIVE ENGINEER**  
 RD (S) DIVISION  
 MUVATTUPUZHA