

New Delhi, the 11 July, 2017

**DIRECTION**

**Subject: Direction, under Government of India (Ministry of Petroleum and Natural Gas) notification No.S.O.1391(E) dated 1<sup>st</sup> September, 2006, issued in exercise of powers under section 8 of the Oilfields (Regulation and Development) Act, 1948 (53 of 1948) read with rule 32 of the Petroleum and Natural Gas Rules, 1959 - Submission of data to DGH by National Oil Companies (NOCs) in respect of Nomination Fields – Form and manner of submission of Data relating to (a)Reservoir Management and (b)Discoveries and Development.**

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**No. DGH/NOC/Direction/Reservoir/1/2017. ----- WHEREAS** the Directorate General of Hydrocarbons, [hereinafter referred to as DGH], established under Government of India's Resolution No.O-20013/2/92-ONG.D.III dated 8<sup>th</sup> April, 1993, published in Part I, Section 1 of the Gazette of India (No.21) dated 22<sup>nd</sup> May, 1993, has been entrusted with discharge of review, monitoring, regulatory and advisory functions as specified in the said Resolution;

**2. AND WHEREAS** the Government of India, in the Ministry of Petroleum and Natural Gas, vide its notification No.S.O.1391(E) dated 1<sup>st</sup> September, 2006, issued in exercise of powers conferred by section 8 of the Oilfields (Regulation and Development) Act, 1948 (53 of 1948) read with rule 32 of the Petroleum and Natural Gas Rules, 1959 [published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) dated 1<sup>st</sup> September, 2006], has designated the Directorate General of Hydrocarbons (DGH) as the authority or agency to exercise the powers and functions of the Central Government with a view to promoting sound management of the hydrocarbon resources in the country having balanced regard for environmental safety, technological and economic aspects and has further entrusted DGH with specific functions relating to (a) monitoring upstream petroleum operations; (b) reviewing and monitoring exploration programmes and development plans for commercial discoveries of hydrocarbons; (c) reviewing the management of petroleum reservoirs by licensees and lessees and advising them on any action for proper management of the petroleum reservoirs; (d) asking for and maintaining all geo-scientific data, reports and information from licensees and lessees and storing and preserving data and samples pertaining to petroleum exploration, drilling, production and connected operations; etc.;

**3. AND WHEREAS** the Government of India, in the Ministry of Petroleum and Natural Gas, has, vide its letter No.12013/3/2009/ONG-III dated 4<sup>th</sup> September, 2009 and subsequent O.M. No.12013/3/2009/ONG-III (FTS-45927) dated 25<sup>th</sup> November, 2016 approved "Guidelines for management of Oil and Gas Resources for nomination fields of National Oil Companies (NOCs)" covering, *inter alia*, the review/monitoring of (i) Exploration Programmes; (ii) Discovery and Reporting of Reserves; (iii) Appraisal Plans; (iv) Declarations of Commerciality (DoC); (v) Development Plans/ Feasibility Reports; (vi) Reservoir management; etc.;

**4. AND WHEREAS** it has become necessary and expedient to lay down clear instructions on the manner of submission of data by NOCs to DGH and the formats and timelines for their submission, in relation to various activities undertaken by them in the Nomination Fields;

5. **NOW, THEREFORE**, in exercise of the powers conferred upon it under the Government of India (Ministry of Petroleum and Natural Gas) notification No.S.O.1391(E) dated 1<sup>st</sup> September, 2006, read with the Guidelines approved and conveyed by the Government of India (Ministry of Petroleum and Natural Gas) vide its communications dated 4<sup>th</sup> September, 2009 and 25<sup>th</sup> November, 2016, and in order to effectively discharge its functions under the Oilfields (Regulation and Development) Act, 1948 (53 of 1948) and the Petroleum and Natural Gas Rules, 1959 and under the aforesaid notification of the Central Government dated 1<sup>st</sup> September, 2006, and more particularly, in order to effectively monitor all discoveries, development activities and reservoir management in the areas/fields operated by National Oil Companies on Nomination basis, including the carrying out of Field Surveillance in such fields where it is considered appropriate by DGH, the Directorate General of Hydrocarbons (DGH) hereby directs that the National Oil Companies (NOCs) shall, with effect from the date of issuance of these Directions, submit the following data relating to Reservoir Management and relating to Discoveries and Development, to DGH, in accordance with the timelines indicated below and in the respective formats as indicated hereunder, namely:-

**A. RESERVOIR PERFORMANCE AND MANAGEMENT IN RESPECT OF PRODUCING NOMINATION FIELDS**

NOCs shall submit to DGH, information pertaining to –

- (a) Reservoir production and water/gas injection performance for each Reservoir in the proforma at **Annexure-1A**, on half yearly basis, (i.e., on or before the twenty-fifth day of the month following each half year (i.e., on or before 25<sup>th</sup> October for the half year ending September and on or before 25<sup>th</sup> April for the half year ending March, respectively);
- (b) In-place volume and Reserves/Resources status of Oil/Gas in respect of each Reservoir/Field on a yearly basis (to be submitted within 7 days of approval of the Competent Authority) in the proforma at **Annexure-1B**;
- (c) Annual report on Reservoir Management performed during the year, reservoir-wise (to be submitted within two months of completion of Financial Year, i.e. on or before 31<sup>st</sup> May of each year);
- (d) Reports on Geo-cellular, Reservoir Modeling and Simulation studies, Redevelopment Plan, Long Term Production Profiles, special studies, Expert/Competent Person Reports, (CPR), any other reports relating to reservoir, prepared periodically (half yearly, annually, etc.) or at any other time (as and when considered necessary), as the case may be (to be submitted within 15 days of receipt of the Report);
- (e) <sup>1</sup>Third party Audit Reports on Oil/Gas In-place and Reserves/Resources conducted every three years or five years, as the case may be (to be submitted within 15 days of receipt of the Report); and
- (f) All presentations on Reservoir/Field performance review and any other information relating to Reservoir Performance and Management as may be required by DGH from time to time.

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<sup>1</sup> It is enjoined upon all the companies operating in Indian E&P sector to have their Oil & Gas Inplace and Reserves, audited by reputed National/ International agencies. The frequency of audits will be once every three years for field having an Oil + Oil equivalent of Gas (O+OEG) base of more than 5 MMT. For field whose O+OEG base is less than 5 MMT, such audits shall be held once every five years.

The submission of information as per (a), (b), (c), (d), (e) and (f) above shall be in addition to submission of Production and Reserves data well-wise/sand-wise to NDR in the formats devised by NDR, if any and within the time limits as applicable therefor.

## **B. DISCOVERIES IN NOMINATION FIELDS**

- (a) **Discovery Notification:** The NOC shall submit information regarding any new Discovery to DGH immediately upon such discovery, and shall also submit a detailed report to DGH/Government on the discovery as per **Format-A (Annexure-2)**, within **30 days** from the date of discovery.
- (b) If the NOC determines to conduct Drill Stem or Production Test, in open hole or through perforated casing, with regard to the exploration well, it shall notify the Government of the time of such test at least forty-eight (48) hours prior to the proposed test, and the Government shall have the right to have a representative present during such test.
- (c) **Potential Commercial Interest:** The NOC shall, within ninety **90 days** from the date of discovery, run tests to determine whether the discovery is of potential commercial interest and, within period of sixty (60) days after completion of such tests, submit a report to DGH, containing the data obtained from such tests and its analysis and interpretation thereof, together with a written notification, in **Format-B (Annexure-3)**, of whether the discovery is of potential commercial interest and merits appraisal.

In case the NOC finds the discovery to be of potential commercial interest, the NOC shall, submit to DGH an appraisal proposal/plan within 120 days from submission of 'Format B'. The appraisal proposal/plan should include:

- 1) Detailed analysis of discovery well(s) with Logging/Testing/G&G analysis supported by pay maps;
- 2) Number of wells required for appraisal along with subsurface locations;
- 3) Requirement of 2D/3D surveys and/or any other study.

The appraisal plan including release of well(s) shall require prior approval of DGH. Adherence to the timelines for implementation of the appraisal plan would be monitored by DGH.

- (c) **Declaration of Commerciality (DoC):** Based on the outcome of the appraisal, the NOC shall, within 18 months from the date submission of Format-B, submit to DGH a report indicating whether discovery is commercially viable or not. In case the NOC finds that the discovery is commercially viable, the NOC shall submit to DGH, relevant data relating to such commercial discovery in **Format-C (Annexure-4)**.
- (d) **Field Development Plan/Feasibility Report:** If the NOC declares the Discovery a Commercial Discovery, then within **200 days** (for Oil)/ **365 days** (for Gas) of the declaration of the Discovery as a Commercial Discovery, the NOC shall submit to DGH for the purpose of review and advice by the Review Committee, a

comprehensive Field Development Plan (FDP)/Feasibility Report (FR) of the Commercial Discovery.

The Field Development Plan/Feasibility Report shall be in accordance with Good Petroleum Industry Practices and shall include, *inter alia*, the number of wells to be drilled, oil and gas in place, Reserves, Production profile under different scenarios, pressure maintenance strategy, measures to improve recovery factor, facilities required, fluid evacuation plan and techno economic analysis. It shall also address possible future EOR techniques envisaged for the field.

The NOC shall also follow the guidelines as detailed in **Annexure-5** (in respect of Reservoir Engineering Work) for preparation of Field Development Plan/Feasibility Report for the new discovery (and also for preparation of Redevelopment/ Revised Development Plan for the Existing fields).

After review of the Field Development Plan/Feasibility Report by the Review Committee, the NOC shall submit to DGH,-

- (i) within thirty days of final approval of the FDP/FR, the information on the approved Field Development Plan/Feasibility Report in **Format-D (Annexure-6)**; and
  - (ii) a monthly progress report on the implementation of such FDP/FR with a view to enabling DGH to review the same on a monthly basis. The progress report for each month shall be submitted to DGH on or before the **seventh** day of the following month.
- (e) **Discoveries made prior to 25.11.2016:** In respect of discoveries made prior to 25.11.2016 which are yet to be monetized, NOCs shall, on or before the seventh day of the month following each quarter (i.e., on or before 7<sup>th</sup> April, 7<sup>th</sup> July, 7<sup>th</sup> October and 7<sup>th</sup> January in respect of each quarter ending March, June, September and December, respectively), submit to DGH, a quarterly status report in the Format at **Annexure-7**. The provisions of sub-paras (b), (c), (d) and (e), relating to conduct of tests and submission of declaration of Potential Commercial Interest and Appraisal Proposals, Declaration of Commerciality, Field Development Plan/Feasibility Report, etc. , shall, mutatis mutandis, be applicable to such discoveries (i.e., from the stage at which they are on the date of issuance of these directions).
- (g) All data and reports, wherever applicable, shall be submitted electronically (online).
- (h) All data and reports, which are submitted to DGH by way of hard copies, shall also be submitted in electronic form (soft copies).

(Kanhaiya Kumar Jha)  
(HOD-Reservoir)

**Annexure-1A**

**Proforma for submission of Information Half Yearly on  
Reservoir Performance Monitoring**

**Company:**                      **Asset:**                      **Field:**

**Reservoir:**                      **Period:**

**a) For Oil Reservoir**

Sr. No.	Parameters	Remarks
1	Year of start of production/ Water Injection/ Gas Injection	
2	Avg. Actual/Plan Oil Rate (bopd)	
3	Avg. Gas Rate (MMscmd)	
4	Cumulative OilRecovered (%) till date/ Expected Ultimate Recovery (%)	
5	Cumulative Gas Recovered (%) till date	
6	Avg. Exploitation Index (Annual Oil Production/STOIIP) till date	
7	Current Exploitation Index (Annual Oil Production/STOIIP)	
8	Initial Reservoir Pressure (psia)	
9	Current Reservoir Pressure (psia)	
10	Annual decline rate (%)	
11	Current avg. GOR (V/V)	
12	Current avg. Water Cut (%)	
13	Avg. Actual/Plan Water Injection Rate (bwpd)	
14	Avg. Actual/Plan Gas Injection Rate (MMscmd)	
15	Instantaneous Voidage Replacement Ratio (fraction) Actual/Plan	
16	Cumulative Voidage Replacement Ratio (fraction) Actual/Plan	
17	Cumulative Water Injection/ Pore Volume of the Reservoir	
18	Total no. of wells drilled in the field	
19	No. of wells on production	
20	No. of wells on artificial lift	
21	No. of wells on water & gas injection	
22	No. of wells flowing above GOR 2000 (V/V)	
23	No. of non-flowing oil wells for any specific reason	
24	No. of observation wells	
25	No. of sick wells	
26	No. of abandoned wells	

**b) For Gas Reservoir**

Sr. No.	Parameters	Remarks
1	Year of start of production	
2	Avg. Gas Rate Actual/Plan (MMscmd/MMscfd)	
3	Avg. Condensate Rate Actual/Plan (bcpd)	
4	Cumulative Gas Recovered (%) till date/ Expected Ultimate Recovery (%)	
5	Cumulative Condensate Recovered (%) till date/ Expected Ultimate Recovery (%)	
6	Avg. Exploitation Index (Annual Production/GIIP) till date	
7	Current Exploitation Index (Annual Production/GIIP)	
8	Initial Reservoir Pressure (psia)	
9	Current Reservoir Pressure (psia)	
10	Current water production (bbl/MMscf)	
11	Total no. of wells drilled in the field	
12	No. of wells on production	
13	No. of non-flowing gas wells for any specific reason	
14	No. of observation wells	
15	No. of sick wells	
16	No. of abandoned wells	



Cumulative Production: ----- MMscm 2P Ultimate Reserves: ----- MMscm

Total Inplace	Discovered	Commercial	OIIP (STOIIP) & GIIP CATEGORY			Project Category	Comments
			DEVELOPED RESERVES				
			1P	2P	3P		
			UNDEVELOPED INPLACE				
			1P	2P	3P		
		Constraints/Sub-commercial	CONTINGENT INPLACE			Project Category	Comments
			Low	Best Estimate	High		

**Note:**

- i. Associated Gas (solution gas) and Gas Cap gas & Free Gas (both non-associated gas) volumes should be mentioned categorically.
- ii. For presentation/comparison/reference, 2P Inplace and 2P Reserves can be considered.

**FORMAT-A**

(To be submitted to the DGH / Govt prior to announcing to public a New Discovery, by the operator in a Nomination PEL/PML in which a New Discovery is being made but where the Potential Commercial Interest of the Discovery is yet to be established)

To,  
MOPNG/DGH  
.....  
.....

Sub: Submission of information about a New Discovery in the PEL/PML.....

Sir,

In pursuance of Guidelines/ Directions issued by Govt / DGH vide order No. ....being the authorized signatory for and on behalf of M/s... (Name of the Operator) hereby notify that we have made a New Discovery on.....(date), in the Nomination PEL/PML ....., and the potential commercial interest of the said discovery is yet to be established. The required information about the New Discovery (Name if any) is here by furnished in the prescribed format as under.

- 1. PEL/PML name (Nomination) :
- 2. Name of the Operator :
- 3. Area of the PEL/PML (sq km) :
- 4. Name of the location / well :
- 5. Drilled depth of the well :
- 6. Number of hydrocarbon interesting zones with geological age/formation :
- 7. Zone and perforated interval tested :
- 8. Results of MDT (if any) :
- 9. Results of DST (if any) :
  - a. Production Rate (all fluids)
  - b. Well head pressure / temperature
  - c. Pressure transient studies results
- 10. Fluid properties :

- A) It is certified that till the date stated below we have not announced to public any information on Oil and / or Gas finds relating to the above discovery and we undertake to restrict our announcement of the aforesaid information only after getting Govt approval.
- B) After ensuring that the information required as per the above format was available with us we have disclosed information related to this New Discovery on ..... (date) to

..... (Name of relevant statute or law) a copy of which was endorsed to DGH / Govt. simultaneously.

Note: In case information of this New Discovery has been made under provision 'B', the Operator shall furnish information in this format within 3 days of the date of making such announcement.

**Authorized signatory**

**Name of the Operator**

**Date:**

**Place:**

**FORMAT – B**

(To be submitted by the Operator to the DGH / Govt. that the discovery declared as per format – A in a Nomination PEL/PML, is found to be of potential commercial interest and merits appraisal)

To,

MOPNG/DGH

.....

.....

Sub: Submission of information about a New Discovery in the PEL/PML .....

Sir,

In pursuance of Guidelines/ Directions issued by Govt / DGH vide order No. ...., I (name of the authorized signatory for and on behalf of M/s..... (Name of the Operator) hereby notify that based on the data obtained from the tests conducted and / or a drill stem and or production test and analysis and interpretation thereof, the Discovery declared on .....(date) after following the procedure set out for this purpose, in our opinion is of Potential Commercial Interest and Merits Appraisal. The required information about the Potentiality of the Discovery is furnished in the prescribed format as under:

- 1. PEL/PML name (Nomination) :
- 2. Name of the Operator :
- 3. Area of the PEL/PML (Sq Km) :
- 4. Name of the location / well :
- 5. Name of the Discovery (if any) :
- 6. Drilled depth of the well :
- 7. Number of hydrocarbon interesting zones with Geological age / formation :
- 8. Zone and perforated interval tested :
- 9. Result of MDT (if any) :
- 10. Result of DST (if any) :
- a. Production Rate (all fluids) :
- b. Well head pressure / temperature :
- c. Pressure transient studies results :
- 11. Fluid properties :
- 12. Fluid Contact (if any) :
- 13. Oil & Gas In-place (Proved & Probable category) :
- 14. Areal extent of the pool / field :
- 15. Appraisal plan, where proposed :

A) It is also certified that till the date stated below we have not announced to public any information on the above mentioned Discovery except that information in Format-A submitted on \_\_\_\_\_ and we undertake to restrict our announcement of the aforesaid information only as the information given above

**Or**

B) After ensuring that the information required as per the above format was available with the operator, we have disclosed information related to this Discovery on \_\_\_\_\_ (date) to \_\_\_\_\_ (name the statutory authority or authorities) in pursuance of our obligation under \_\_\_\_\_ (name the relevant statute or law). A copy of which was simultaneously endorsed to DGH and the Government (copy enclosed for ready reference).

Note: In case information of this Discovery has been made under provision 'B', the Operator shall furnish information in this format within 3 days of the date of making such disclosure.

**Authorized signatory**

**Name of the Operator**

**Date:**

**Place:**

**FORMAT-C**

(To be submitted by the Operator to DGH / Govt. after the appraisal is completed and the discovery is declared as commercial and needs development for exploration of oil and gas, in a Nomination PEL/PML)

To,

1. The Government of India
2. The Review Committee

.....  
 .....

Sub: Submission of information about Commercial Discovery for PEL/PML .....

Sir,

In pursuance of Guidelines/ Directions issued by Govt / DGH vide order No. ...., I (name of the authorized signatory for and on behalf of M/s..... (Name of the Operator) hereby notify that the Discovery notified on ..... (dated) of Potential Commercial Interest, based on the further operations through appraisal, the Discovery is found a Commercial Discovery and needs development, details of which as per the prescribed format are given as under:

1. PEL/PML name (Nomination) :
2. Name of the Operator :
3. Area of the PEL/PML (Sq Km) :
4. Name of the Field :
5. No. of wells drilled :
6. Date of declaration of Commercial Discovery :
7. Number of hydrocarbon interesting zones with Geological age/formation :
8. Zone and perforated interval tested :
9. Results of MDT (if any) (zone thickness, fluid properties etc) :
10. Results of DST (if any) :
  - a. Well production potential / AOFP :
  - b. Reservoir properties :
  - c. Reservoir Pressure & Temperature :
11. Fluid properties / PVT properties :
12. Fluid contact (if any) :
13. Oil & Gas In-place (Proved, Probable & Possible categories) :
14. Recoverable (Ultimate Reserves) (Proved, Probable and Possible categories)
15. Expected production profile of oil and gas (BOPD / MMSCFD) :

- 16. Aerial extent of the pool / field :
- 17. Likely date of submission of development plan :
- 18. Expected development expenditure :
- 19. Likely facility to be employed :

- A) It is also certified that till the date stated below we have not announced to public any information on the above mentioned Discovery except that information in Format-A & B submitted on \_\_\_\_\_ and \_\_\_\_\_ respectively and we undertake to restrict our announcement of the aforesaid information only as the information given above
- B) After ensuring that the information required as per the above format was available with the operator, we have disclosed information related to this Discovery on \_\_\_\_\_ (date) to \_\_\_\_\_ (name the statutory authority or authorities) in pursuance of our obligation under \_\_\_\_\_ (name the statutory authority or authorities) in pursuance of our obligation under \_\_\_\_\_ (name the relevant statute or law), a copy of which was simultaneously endorsed to DGH and the Government (copy enclosed for ready reference).

Note: In case information of this Discovered has been made under provision 'B', the Operator shall furnish information in this format within 3 days of the date of making such disclosure.

**Authorized signatory**

**Name of the Operator**

**Date:**

**Place:**

**Reservoir Engineering Work: Guidelines for Preparation of Field Development  
/Redevelopment Plan**

Sr. No.	Description	2P/OIIP/STOIP (MMbbl) /GIIP (Bscm) Field/ Reservoir	2P Reserves MMBbl (O+OEG)	Required/ Preferred
1.	<p>a. Decline Curve Analysis (DCA): Well wise reserves estimate of existing wells &amp; total reservoir based on past sustained performance and extending the DCA parameters on new development wells in 2P STOIP area. <b><u>(Not applicable in case of 1<sup>st</sup> time/Initial development)</u></b></p> <p>b. Material Balance Studies (using well model preferred)andFORGAS &amp;P/Z vs.Gp (for gas reservoirs) is to be performed in conjunction with DCA.</p> <p>The above studies need to be supported by Bubble Maps.<b>Maximum three new development wells per reservoir/hydro-dynamically connected reservoirs in the field can be considered based on the these studies provided there is an improvement in Exploitation Index &amp; Recovery Factor; otherwise Sr. No. 3 is to be followed.</b></p>	Oil: <80 Gas: <5		Required/ (Sr. No. 2&3 Preferred but not Binding)  (1a. is not applicable for Initial Development Case)
2.	2D Geological Maps based 3D-3Phase Reservoir Model, History Matched (in new reservoir there will be no history) 3D-3Phase Numerical Simulation Study & Forecast for reservoir/ hydro-dynamically connected reservoirs.	Oil: 80 to 120 Gas: 5 to 7.5		Required / (Sr. No. 3 Preferred but not Binding)
3.	Full Field Geo-Cellular Model (FFGM), Full Field Reservoir Model (FFRM), History Matched (in new reservoir there will be no history) 3D-3Phase Numerical Simulation Study & Forecast for	Oil : >120 Gas :>7.5		Required

	<p>reservoir/ hydro-dynamically connected reservoirs.</p> <p>The above statements assumes that:</p> <ul style="list-style-type: none"> <li>• FFRM scale-up is valid and preserves the pore volume, internal architecture, and the effects of heterogeneity.</li> <li>• Aquifer influx and gas cap size are modeled correctly.</li> <li>• PVT properties are characterized and represented correctly.</li> <li>• SCAL data is used to enhance and validate model predictions, where applicable.</li> <li>• There are no errors in reported production history.</li> </ul>			
4.	<p>For offshore semi-deep, deep &amp; ultra-deep-water fields, new and redevelopment of the reservoir will be strictly based:</p> <p>Full Field Geo-Cellular Model (FFGM), Full Field Reservoir Model (FFRM), History Matched (in new reservoir there will be no history) 3D-3Phase Numerical Simulation Study &amp; Forecast for reservoir/ hydro-dynamically connected reservoirs.</p>	--	--	Required

**Note:**

- i. The InitialField Development Plan/Redevelopment Plan should meet all the points from Sr. No. 1 to 4 as case(s) may be applicable.
- ii. Naming of first FDP and subsequent FDP documents should be in number order, such as Field Development Plan and then FDP Rev1, FDP Rev2 -----.
- iii. The above criteria arein addition to the G&G and other data requirements.
- iv. Industry standard softwarescommonly used namely, Petrel/ Petrel RE, Eclipse, CMG, VIP, MBal,FORGAS, OFM, Kappa, PanSystem, Prosper, PipeSimetc. are recommended for Reservoir Engineering & Petroleum Engineering Studies.
- v. All data relating to above studies including FFGM and FFRM, History Matched & Forecast models should be made available to DGH as & when required.

**FORMAT – D**

(To be submitted to DGH / Govt after development plan is approved by Govt / DGH in a Nomination PEL/PML)

To,

MOPNG/DGH

.....

.....

Sub: Submission of information about a New Discovery in the PEL/PML.....

Sir,

In pursuance of Guidelines/ Directions issued by Govt/DGH vide order No....., I..... being the authorized signatory for and on behalf of M/s... (Name of the Operator) hereby notify that the Discovery notified on..... (date) was found to be of Potential Commercial interest and was declared as Commercial Discovery on.....(date). Based on the further operations Development Plan was made which has been approved by the Govt/DGH on .....(date), details of which as per the prescribed format are given as under:

1. PEL/PML Name (Nomination) :
2. Name of the Operator :
3. Area of the PEL/PML (Sq Km) :
4. Name of the Field :
5. Date of discovery of the field :
6. No. of wells drilled :
7. Number of hydrocarbon interesting zones with geological age / formation :
8. Results of reservoir studies :
  - a. Well Production potentials
  - b. Reservoir properties
  - c. Fluid properties / Fluid contact (if any)
  - d. Drive mechanism
9. Oil & gas in place (proved, probable & possible categories) :
10. Recoverable (ultimate Reserves) :
 

(proved, Probable and possible categories)
11. Areal extent of the pool / field :
12. No. of wells to be drilled under the development plan :
13. Expected production profile (BOPD/MMSCFD) :
14. Techno – economics (CAPEX, OPEX, IRR, NPV etc) :
15. Likely date of start of production :
16. Potential IOR/EOR techniques to be employed :

A. It is also certified that till the date stated below we have not announced to public any information on the above mentioned Discovery except that information in Format-A, B & C submitted on ..... (date) we undertake to restrict our announcement of the aforesaid information only after getting Govt. approval

**Or**

B. After ensuring that the information required as per the above format was available with us, we have disclosed information related to this New Discovery on ..... (date) to ..... (Name of Statute of law), a copy of which was endorsed to DGH / Govt simultaneously.

Note: In case information of this New Discovery has been made under provision "B", the Operator shall furnish information in this format 3 days before the date of making such announcement.

**Authorized signatory**

**Name of the Operator**

**Date:**

**Place:**

Status of discoveries yet to be monetized

S. No.	Asset/ Basin	Discovery details				In-place Hydrocarbon		Ultimate Reserves		PML Status					No. of wells drilled	Oil / Gas wells	FR/Development Plan				Remarks	
		Name	Date	Type (Oil/Gas)	DOC approval date	OIL, MMT	Gas, BCM	OIL, MMT	Gas, BCM	Name	Area (sq. km.)	Applied on	Granted on	Valid upto			Submitted on	Scheduled completion	Implementation/ completion status %	Expected production commencement date		

\* should exclude 63 fields identified for bidding under Discovered Small Field policy