## ***Appraisal Programme***

## ***TO-BE Process Flow Diagram***

## ***Submission of Appraisal Program***



Figure - Process Flow of Submission of Appraisal Programme

Step by step walkthrough of Submission of Appraisal Programme Process Flow:

1. **Operator**:
   * **Authentication and Access**: Logs into the system using a valid User ID and Password.
   * **Request Submission:** Fills and submits Appraisal Programme form
2. **System**:
   * **System Validation**: Checks if the submission was within 120 days of PCI.
   * **Error and Warning Alerts**: Provides warnings if there are errors or missing fields in the forms.
3. **PSC/PF Department (Nodal Officer)**:
   * **Nodal Officer Notification**: Receives notification about the submission of Appraisal Programme
   * **Technical Department Coordination**: Notifies the respective technical departments about the submission of Appraisal Programme.
   * **CF Department Coordination**: Notifies the respective CF department about the submission of Appraisal Programme

## ***Review of Appraisal Programme***



Figure - Process Flow for Review of Appraisal Programme

**Here’s the steps of the workflow to review the online form “Appraisal Programme” submitted by operator:**

The total timeline for this process is 15 days without queries. According to the workflow:

· Operator will fill the online Appraisal Programme form and submit it to the system.

· PSC/PF Department receives Appraisal Programme form from operator

§ Timeline: 2 days

§ Prerequisites:

- OCR

- Format-A & B submitted

- Oil/Gas/ANG

- Valid PEL

- Discovery within PEL or PML

§ Checks:

- Submitted within 120 days of discovery notification

- Included Appraisal WP&B

- Extension sought under MoPNG policy for submission of Appraisal WP&B

- Appraisal WP&B is in line with Appraisal Programme.

- Appraisal Period

· Technical departments & CF receives Appraisal Programme form for examination from PSC/PF. Technical departments must raise queries within 4 days & CF must raise queries within 3 days only. After that query option will be freezed.

· G&G department receives Appraisal Programme form for examination from PSC/PF

§ Prerequisites:

- Format-A & B of discovery well.

- Objective for appraisal.

- Nature of appraisal, appraisal area, map

- In case of revise appraisal plan supplement with justifications

§ Checks:

- Review the details of the discovery for which the appraisal plan is submitted along with Format-A & B of discovery well

- Review the proposed Appraisal Plan in terms of activities proposed like geoscientific data acquisition/ processing/ interpretations, technical studies, appraisal drilling or extended testing with particular reference to objective, quantum and target area of each such activity

- In depth analysis of the submission through study of base map(s) with synergy of geophysical, geological and petrophysical data / studies showing areas/ wells where activities are proposed to be carried out within the appraisal (discovery) area

· Drilling department receives Appraisal Programme form for examination from PSC/PF

§ Prerequisites:

- Technical data of well as per the template if drilling activity is planned

§ Checks:

- Check technical data of the well/s.

- If technical details of well/s are in order, then Appraisal Programme may be agreed.

- Else, query may be sought from operator until satisfactory replies are provided.

- In case replies/satisfactory replies are not provided by the operator the Appraisal Programme may NOT be agreed and same may be intimated to PSC for necessary action.

· Reservoir department receives Appraisal Programme form for examination from PSC/PF

§ Prerequisites:

- DST plans

§ Checks:

- Reservoir section checks for the DST plan which has already been provided.

· CF department receives Appraisal Programme form for examination from PSC/PF

§ Prerequisites:

- OC approval

- Approved Format C (DoC)

- **Assumes** concurrence from technical departments.

§ Checks:

- For current FY in which Appraisal Programme is to be submitted following points to be considered-

- In case WP&B-RE is already submitted then appraisal budget will be considered as an additional RE for current FY.

- In case WP&B-RE is to be submitted then appraisal budget to be provided in the WP&B-RE of current FY.

- For subsequent FY, appraisal budget to be included in Work Programme and Budget (Please refer 2.1 for checks required in Work programme and budget)

- Cost of disallowed activity as vetted by technical department will not be considered in Appraisal Programme.

· Department ADGs

§ Timeline 2 days

§ In case examination is not complete by any of the technical departments and CF then technical departments and CF window will be freezed and respective ADGs will take the final decision on **Department Views and Approve Queries** **within 2 days** and forward to PSC/PF.

· PSC/PF

§ Timeline 2 days

§ Receives department views, consolidates queries and submits Appraisal Programme form for approval of its respective ADG.

§ PSC/PF Sends DGH Queries to Contractor & MoPNG

· Technical Meeting

§ Timeline 5 + 5 days

§ Operator shall within 5 working days prepare the response and present the same in a technical meeting to DGH where the GoI nominee from MoPNG may also be invited.

§ Post Technical meeting, the operator shall be given another 5 working days to submit his responses including the issues discussed in the technical meeting.

§ If any technical department still desires any further meeting post technical meeting, the same shall be scheduled within these 5 days.

· PSC/PF

§ Timeline 2 Days

§ PSC/PF receives responses along with necessary supporting documents from operator and submits Appraisal Programme form to the technical departments and CF department for their final comments.

· Technical departments, CF department must recommend / not recommend

§ Timeline 4 days Technical Departments

§ Timeline 3 days CF Department.

· PSC/PF

§ Receives department views, creates approval sheet (Draft MCR) for approval of ADG (E/D)

§ Timeline: 2 days

· ADG (E/D)

§ Timeline: 1 days

§ Prerequisites:

- Evaluation summary sheet with concurrence from all technical departments and CF department..

§ Receives the evaluated Appraisal Programme form and approval sheet (Draft MCR) for approval

· PSC/PF

§ Timeline: 1 days

§ Forward the draft MCR to operator for taking the consent

§ PSC/PF department to convene the MC

## ***List of User Stories***

| Sl. No. | Functionality | User Story | Description | Section |
| --- | --- | --- | --- | --- |
|  | Appraisal Program Submission | Work Program Submission | Operator submits the Appraisal Programme to DGH under PSC regime. | Section 1.3.1 |
|  | Appraisal Program Review | PSC/PF examines the Work Program | Nodal officer reviews the submitted Appraisal Programme | Section 1.3.2 |
|  | Appraisal Program Review | Technical Department examines Work Program | Technical Department reviews the submitted Appraisal Programme | Section 1.3.3 |
|  | Appraisal Program Review | CF Department examines Work Program | CF Department reviews the submitted Appraisal Programme | Section 1.3.3 |
|  | Appraisal Program Review | ADG (E/D) examines the Work Program | ADG (E/D) reviews the submitted Appraisal Programme | Section 1.3.3 |
|  | Appraisal Program Review | Operator responds to raised queries | Operator submits response to Consolidated Queries | Section 1.3.6 |

## ***Functionality #1: Appraisal Programme or its revision***

## ***User Story #1: Operator submits the Appraisal Programme or its revision to DGH under PSC regime.***

|  |  |  |
| --- | --- | --- |
| Description | This use case is designed to illustrate the submission of Appraisal Programme by operator. | |
| Actor(s) | * Operator | |
| Detailed process flow | | |
| 1. The user will log into the IMS and navigate to the CMS. 2. The user will click on the 'Create Request' button. 3. The user will select the 'Block/Field', 4. The user will select Self Certification from 'Type of Submission' having options - 1. Normal Submission 2. Self-Certification 5. The user will select the Category-B from 'Process Category' having options 1. Category A 2. Category B 3. Category C 6. The user will select the ‘Appraisal Programme or its revision’ from 'Choose Request Type' from options of processes under Category B 7. The user will click on the proceed button 8. The user will fill all the necessary details of the Appraisal Programme or its revision in the form 9. The user will upload the necessary documents 10. Finally, the user will submit the form by clicking on the ‘Submit’ button 11. Upon successful submission, the unique request number will be generated by the system and notified to the operator along with the self-certificate 12. The user is able to see the list of submitted requests with their status and download the self-certificate | | |
| Pre-conditions | | * The user must have a valid user ID and password to log into the IMS. * Prefilled excel file if user wants to use it to pre-fill the online form. * The documents to be uploaded need to be scanned / generated digitally. |
| Post-conditions | | * All the mandatory fields are filled and validated as per their type * Unique Request Number has been generated. * Notification Email & SMS is sent to operator, PSC/PF Nodal officer of the respective block. * Self-Certificate and acknowledgement pdf is generated and sent to the operator in the notification email. |
| Business Rules | | * Only authorized users can log into the system and perform the request. * All data entries must comply with national data protection and privacy regulations. * Allowed File Type "pdf" and maximum allowed File Size "150 MB" for each document. These fields are parameterised in the system. * Request Number format given below: * The format of the Request Number: AP - yyyymmdd###### |

## ***Indicative User Interface***

A screenshot of a computer

AI-generated content may be incorrect.

## ***Input Fields***

| Sl No | Field Name | Basic Type | Mandatory? | Data Type | Enabled? | Data Source |
| --- | --- | --- | --- | --- | --- | --- |
|  | New Request Information | | | | |  |
| 1 | Choose Block/Field | Drop down list | Y | Alphabet | Y | Block Master |
| 2 | Type of Submission | Radio Button | Y | 1. Normal  2. Self-Certification | Y |  |
| 3 | Choose Process Category | Drop down list | Y | Alphabet | Y |  |
| 4 | Choose Request Type | Drop down list | Y | Alphabet | Y |  |

## ***User Actions***

| Sl No | Action Name | Action Type | Action |
| --- | --- | --- | --- |
| 1 | Proceed | Button | Redirects to selection of type of Appraisal Programme or its revision |

## ***Indicative User Interface***

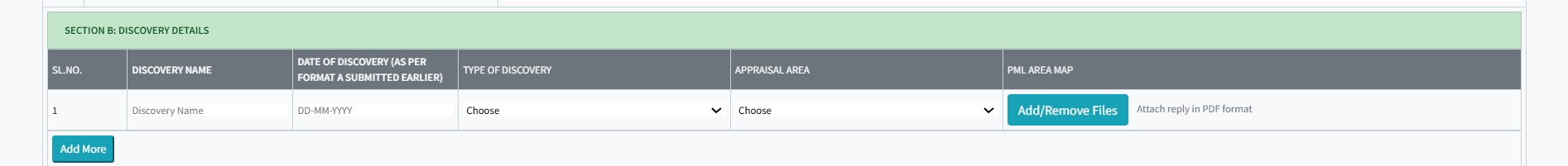
A screenshot of a computer

AI-generated content may be incorrect.

## ***Input Fields***

| Sl No | Field Name | Basic Type | Mandatory? | Data Type | Enabled? | Data Source |
| --- | --- | --- | --- | --- | --- | --- |
|  | Section A: Block Details | | | | |  |
| 1 | Name of Block | Text | Y | Alphabet | N | Block Master |
| 2 | Name of Contractor | Text | Y | Alphabet | N |
| 3 | **PI Partners & %ages** | **Text** | **Y** | **Alphabet** | **N** |
| 4 | Date of Signing of Contract | Text | Y | Date | N |
| 5 | **Category of Block** | **Text** | **Y** | **Alphabet**  **(Nomination/PSC/RSC)** | N |
|  | **Awarded Under** | **Text** | **Y** | **Alphabet**  **(If Nomination – Blank,**  **If PSC - Pre NELP, NELP 1-9,**  **If RSC - OALP 1-5, DSF, CBM)** | N |
| 6 | Block Type | Dropdown | Y | 1.Onshore  2.Offshore | N |
| 7 | Reference to PSC Article No. | Text | Y | Alphabet | Y |
| 8 | Phase of the Block | Dropdown | Y | 1.Appraisal  2.Extended Appraisal | Y |
| 8 | NELP Round | Text | Y | Alphabet | N |
| 9 | Exploration Period Validity | Text | Y | Date | N | PEL/PML Data |
| 10 | PEL Fees Paid Upto | Text | Y | Date | N |
| 11 | PEL Area Sq. Kms. | Text | Y | Number | N |
| 12 | PEL Validity | Text | Y | Date | N |
| 13 | Appraisal Period Start Date | Text | Y | Date | Y |  |
| 14 | Appraisal Period End Date | Text | Y | Date | Y |  |
| 15 | OCR Available | Checkbox | Y | True/False | Y |  |
| 16 | Upload OCR (if Yes is selected in S No. 15) | Browse Button | Y | Upload PDF file | Y |  |
| 17 | **Please provide justification for unavailability of OCR**  **(If No is selected in S No. 15)** | **Type or upload** | **Y** | **Alphabet or Pdf or excel file** | **Y** |  |

## ***Indicative User Interface***



## ***Input Fields***

| Sl No | Field Name | Basic Type | Mandatory? | Data Type | Enabled? | Data Source |
| --- | --- | --- | --- | --- | --- | --- |
|  | Section B: Discovery Details | | | | |  |
| 1 | Discovery Name | Text | N | Alphabet | N | Format A |
| 2 | Date of Discovery (As per Format A submitted earlier) | Text | N | Date | N | Format A |
| 3 | Type of discovery | Dropdown | N | Gas/Oil/Condensate/Gas+Condensate/Others | N | Format A |
| 4 | Appraisal Area | Dropdown | N | PEL/PML | Y |  |
| 5 | PML Area Map (Mandatory only when PML is chosen) | File Upload | N | PDF File of 150 MB | Y |  |

## ***User Actions***

| Sl No | Action Name | Action Type | Action |
| --- | --- | --- | --- |
|  | Add More | Button | Add row to add more discovery details |

## ***Indicative User Interface***

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

## ***Input Fields***

| Sl No | Field Name | Basic Type | Mandatory? | Data Type | Enabled? | Data Source |
| --- | --- | --- | --- | --- | --- | --- |
|  | Section C: Appraisal Programme | | | | |  |
|  | 1. G&G | | | | |  |
| 1.1 | Submit the details of the discovery for which the appraisal plan is submitted. Describe the discovery in terms of date of notification, date of submission of Potential Commercial Interest, encountered reservoirs with corresponding zone intervals (metre), formation name, hydrocarbon flow rate, bean size and flowing pressure [200 words]: | Attach reply in PDF format | N | PDF File | Y |  |
| 1.2 | Furnish the MC resolution that reviewed the location which has been notified as the said discovery [Step 1.1]: | Attach the copy of resolution in PDF format | N | PDF File | Y |  |
| 1.3 | Describe [200 words] the Appraisal Plan in terms of activities proposed like geoscientific data acquisition/ processing/ interpretations, technical studies, appraisal drilling or extended testing with particular reference to objective, quantum and target area of each such activity: | Provide the accompanying note in PDF format. | N | PDF File | Y |  |
| 1.4 | Read with the submission through Step 1.3, submit base map(s), showing areas/ wells where activities are proposed to be carried out within the appraisal (discovery) area: | Provide supporting maps in both PDF. | N | PDF File | Y |  |

## ***Input Fields***

| Sl No | Field Name | Basic Type | Mandatory? | Data Type | Enabled? | Data Source |
| --- | --- | --- | --- | --- | --- | --- |
|  | Section C: Appraisal Programme | | | | |  |
|  | * 1. Furnish the following information in the prescribed format: | | | | |  |
| 1.5.1 | List out the wells in the contract area (block) with well name, surface latitude, surface longitude, subsurface latitude, subsurface longitude, drilled depth(metre), status (oil, gas, oil+gas or abandoned) and specify the discovery well: | Attach list in Microsoft-Excel | N | Excel File | Y |  |
| 1.5.2 | Scaled base map showing all drilled wells and operational area: | Attach map in PDF format | N | PDF File | Y |  |
| 1.5.3 | Scaled top structure map of the reservoir(s) to be appraised showing all drilled wells with status and appraisal(discovery) area demarcated: | Attach map in PDF format | N | PDF File | Y |  |
| 1.5.4 | List out seismic 2D and/or 3D data with quantum, nature, vintage and coverage polygon coordinates: | Attach list in Microsoft-Excel | N | Excel File | Y |  |
| 1.5.5 | Scaled seismic coverage map (2D and/or 3D) vis-à-vis operational and proposed appraisal area: | Attach map in PDF format | N | PDF File | Y |  |
| 1.5.6 | List out nature of seismic/ well datasets used in the Appraisal Plan like amplitude, attributes, inversion, velocity, time-depth relationship: | Attach list in Microsoft-Excel | N | Excel File | Y |  |
| 1.5.7 | Suitably scaled seismic sections along inline, crossline and along discovery and offset wells: | Attach map in PDF format | N | PDF File | Y |  |
| 1.5.8 | Suitably scaled well log correlation along discovery and offset wells: | Attach map in PDF format | N | PDF File | Y |  |
| 1.5.9 | List out the wells used in the Appraisal Plan and also those proposed: | Attach list in Microsoft-Excel | N | Excel File | Y |  |
| 1.5.10 | List out total number of reservoirs envisaged and specify the ones considered for the appraisal: | Attach list in Microsoft-Excel | N | Excel File | Y |  |
| 1.5.11 | Scaled representative well log section showing the reservoir zones, suitably annotated with legend - one well per sheet: | Attach map in PDF format | N | PDF File | Y |  |
| 1.5.12 | Submit petrophysical summation table showing zone details and petrophysical parameters for discovery well: | Attach list in Microsoft-Excel | N | Excel File | Y |  |
| 1.5.13 | Scaled top structure map, superimposed with gross thickness/ seismic attribute map and drilled/ proposed wells, all suitably annotated with legend: | Attach map in PDF format | N | PDF File | Y |  |

## ***Input Fields***

| Sl No | Field Name | Basic Type | Mandatory? | Data Type | Enabled? | Data Source |
| --- | --- | --- | --- | --- | --- | --- |
|  | Section C: Appraisal Programme | | | | |  |
|  | * 1. Volumetric estimation (if submitted): | | | | |  |
| 1.6.1 | Approach used for volumetric estimation | Dropdown | N | Map based/well-based approach/Other | Y |  |
| 1.6.2 | If other option is chosen in1.6.1 then state what estimation approach has been used [200 words]? Provide all data supporting such estimate | Attach reply in PDF format. Data in Petrel-compatiple format | N | Multiple Files | Y |  |

| Sl No | Field Name | Basic Type | Mandatory? | Data Type | Enabled? | Data Source |
| --- | --- | --- | --- | --- | --- | --- |
|  | Section C: Appraisal Programme | | | | |  |
|  | * 1. Submit the following data/ information specific to the Appraisal programme: | | | | |  |
|  | 1.7.1 Submit well details for each well | | | | |  |
| 1.7.1.1 | Well Name | Text | Y | Alphabet+Number | Y |  |
| 1.7.1.2 | Well Completion Report (WCR) | Submit reports | Y | Multiple Files | Y |  |
|  | Is Included Within WCR? | | | | |  |
| 1.7.1.2.1 | Formation Evaluation Report | Dropdown + Submit reports in PDF format | Y | Yes/No  +  PDF File | Y |  |
| 1.7.1.2.2 | List Out Well Deviation Survey Data For Inclined Wells | Dropdown +  Attach list in Microsoft-Excel | Y | Yes/No  +  Excel File | Y |  |
| 1.7.1.2.3 | Well-Wise Raw Logs (Both Basic And Advanced) | Dropdown +  Submit in PDF, LAS and DLIS format | Y | Yes/No  +  PDF & Excel Files | Y |  |
| 1.7.1.2.4 | If Used, Submit Reports Of Advanced Logs | Dropdown +  Submit reports in PDF format | Y | Yes/No  +  PDF File | Y |  |
| 1.7.1.2.5 | If Used, Well-Wise And Reservoir Zonewise Formation Tester Reports | Dropdown +  Submit reports in PDF and Microsoft-Excel format | Y | Yes/No  +  PDF & Excel Files | Y |  |
| 1.7.1.2.6 | Well-Wise Processed Logs | Dropdown +  Submit in PDF and LAS format | Y | Yes/No  +  PDF & LAS Files | Y |  |
| 1.7.1.2.7 | Well Test Report | Dropdown +  Submit report in PDF format | Y | Yes/No  +  PDF File | Y |  |

## ***User Actions***

| Sl No | Action Name | Action Type | Action |
| --- | --- | --- | --- |
| 1.7.1 | Add More | Button | Add row to add more wells and their details |

## ***Input Fields***

| Sl No | Field Name | Basic Type | Mandatory? | Data Type | Enabled? | Data Source |
| --- | --- | --- | --- | --- | --- | --- |
|  | Section C: Appraisal Programme | | | | |  |
|  | * 1. Submit the following data/ information specific to the Appraisal programme: | | | | |  |
| 1.7.2 | List out well wise general data like well course, drilled depth, kelly bush, formation/marker top depth in metre: | Attach list in Microsoft-Excel | N | Excel File | Y |  |
| 1.7.3 | 2D seismic data: | Submit data in SEG-Y format | N | SEG-Y File | Y |  |
| 1.7.4 | 3D seismic cube in PSTM/PSDM (Time and Depth): | Submit data in SEG-Y format | N | SEG-Y File | Y |  |
| 1.7.5 | All seismic horizons interpreted: | Submit data in ASCII format | N | ASCII File | Y |  |
| 1.7.6 | All faults/ discontinuities interpreted: | Submit data in Petrel-compliant format | N | Petrel File | Y |  |
| 1.7.7 | All seismic attribute maps: | Submit data in ASCII format | N | ASCII File | Y |  |
| 1.7.8 | Velocity model: | Submit data in SEG-Y and ASCII format | N | SEG-Y & ASCII Files | Y |  |
| 1.7.9 | Seismic inversion cube, if used: | Submit data in SEG-Y format | N | SEG-Y File | Y |  |
| 1.7.10 | Seismic inversion cross-plots, if used: | Submit graph in PDF and Microsoft-Excel format | N | PDF & Excel Files | Y |  |
| 1.7.11 | AVO/AVA analysis, if used: | Submit report in PDF format | N | PDF File | Y |  |
| 1.7.12 | For map-based volumetric approach, place an index note on the approach [200 words]. Submit top structure and gross thickness maps. | Submit all maps in ASCII format and note/ justification in PDF format. | N | ASCII & PDF File | Y |  |
| 1.7.13 | For well-based volumetric approach, place an index note on the approach [200 words]. Submit well sections of all wells considered showing zone intervals, thickness (gross and net) along with supporting maps showing the area of assessment [200 words]: | Submit all maps in ASCII format and note/ justification in PDF format. | N | ASCII & PDF File | Y |  |
| 1.7.14 | Submit a brief on geology of the area describing tectonics, depositional environment, stratigraphy, reservoir development and petroleum system with particular reference to Indian and/or global analogy [500 words]: | Submit note in PDF format | N | PDF File | Y |  |
| 1.7.15 | If used, submit reports of core studies/ special core analysis, petrographic/ sedimentological/ bio-stratigraphic studies or the like if any: | Submit reports in PDF format | N | PDF Files | Y |  |

**WIP**