ISSUES IN CBM & COAL MINING OPERATION

Directorate General of Hydrocarbons
New Delhi
PRESENTATION HIGHLIGHTS

- Existing CBM Licensing Policy.
- Issues in CBM Exploration.
- Way Forward.
Coal resources in the country classified in 4 categories:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Category</th>
<th>Licensing Policy</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Areas of coal / lignite deposits upto 300 mtr. depth within mining lease</td>
<td>Approval of MOC required before inviting application</td>
<td>“No” Area</td>
</tr>
<tr>
<td>2.</td>
<td>Areas of coal / lignite deposits upto 300 mtr. depth without mining lease</td>
<td>Approval of MOC required before inviting application</td>
<td>“No” Area</td>
</tr>
<tr>
<td>3.</td>
<td>Areas of coal / lignite deposits below 300 mtr.</td>
<td>Concurrence of MOC required before inviting application for CBM exploration</td>
<td>“Yes” Area</td>
</tr>
<tr>
<td>4.</td>
<td>Areas with working mines</td>
<td>Right of exploitation of CBM with coal companies</td>
<td>“No” Area</td>
</tr>
</tbody>
</table>
### CBM Exploration Area

**A. Gondwana Basins**

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Area (sq.km.)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;300</td>
<td>15000</td>
<td>“No” Area</td>
</tr>
<tr>
<td>&gt;300</td>
<td>21000</td>
<td>“Yes” Area</td>
</tr>
</tbody>
</table>

**B. Tertiary Lignite Basins**

- **Shallow**
  - Depth: 2000
  - Area: 2000
  - Remarks: “No” Area
- **Deep**
  - Depth: 14000
  - Area: 14000
  - Remarks: “Yes” Area

**Total CBM Exploration Area** = 35,000 Sq.km. (Yes Area)

**Total Area Offered so far** = 15,000 Sq.km.
Multi tier CBM licensing system.

Without MOC’s concurrence no area can be taken up for CBM exploration.

Under Existing System

- DGH identifies areas in consultation with GSI / CIL / CMPDIL.
- Further demarcation / reduction of the identified area done by Coal Companies / CMPDIL.
- Approval taken from coal companies under which jurisdiction these area falls.
- Approval of Joint Committee (JC) of MOP&NG and MOC.
- Award of CBM blocks
CBM is an associate of coal.

Coal administered by Ministry of Coal.

As per the prevalent practice, all mining rights for all minerals in vertical horizon belong to the party having the lease / licence.

Different companies / operators cannot undertake coal mining and CBM operation together within the same vertical horizons.

Practical and administrative difficulties due to involvement of two Ministries.

Exclusion of large areas in and around the mines for CBM exploration.

CBM and oil & gas operations in the same block not permitted.
Formation of Mineral Exploration & Energy Committee.

Constitution of Task Force to accelerate CBM exploration.

Policy guidelines and regulatory framework for simultaneous

- Coal mining and CBM operation.
- CBM and Oil & Gas Exploration in the same area

Synergy between coal producers and CBM operators.

A policy for leasing depth-wise mining / prospecting rights.
DRAINAGE OF METHANE
AHEAD OF COAL MINING
• CBM operation ahead of mining operations:
  • Increases mine safety.
  • Generates income from gas sales.
  • Generates income from carbon credits.

• Production of CBM, ahead of coal mining operation is the preferred gas drainage technique in many coal-producing countries including USA Australia and China.

• India has excellent prospects for CBM production from active and future coal mining areas, because of favorable geology and presence of multiple and thick coal seams in many basins.
CMM drainage techniques:

- Underground drilling
- Ventilation air utilization
- GOB wells recovery
- Dymaxion drilling and completion technique
Advantages:

- Not tied to mining schedules – can drain coal seams ahead of mining.
- Does not hinder mining operation.
- Water removal ahead of mining.
- Give real information i.e. faults, coal thickness, rolls etc. ahead of mining.
- CMM operators and coal mines cooperate for mutual benefit.
ACTION PLAN:

- Take up CBM drainage in areas where mining to start after 4-5 years.
- CBM production from coal seams occurring beyond 300m.
- Mining operators to be active participant in this activity.
- Regular interaction for safe operations.
- Constitution of a task force

  - For evaluation of CBM resources in the coal mining areas,
  - delineation of prospective CBM blocks for offer
thank you