

## NEW DEVELOPMENTS IN THE OIL AND GAS SECTOR

The Oil and Natural Gas Commission has located significant offshore gas resources about 30 km from Amalapuram coast in the Krishna-Godavari (KG) Basin. The discovery is a part of the ONGC's exploration campaign at location VA-1A in Block KG-OS-DW-IV in the KG Basin (*Oil Asia*, v 25, no 2, 2005, p 47). Several gas bearing sand horizons have been identified between 1962 m and 2182 m depth with an estimated pay thickness of 42 m.

These newly discovered fields are to be brought into production in an integrated fashion along with the nearby known structures by mid-2006. The drilled and potential gas resources in these offshore blocks are estimated to be around 4 TCF.

In another significant development, M/s Cairn Energy has formally named its 2004 discovered oil fields in the Barmer district of Rajasthan as the *Bhagyam Field* (18 km NW of Mangala) and the *Vijaya Field* (a few kilometres southeast of Mangala) in a formal ceremony on 4<sup>th</sup> April, 2005 (*Oil Asia*, v 25, no 2, p 41). M/s Cairn Energy has so far invested more than Rs 1200 crores and drilled more than 60 exploration wells with 10 hydrocarbon discoveries in the Barmer district of Rajasthan (*op cit*).

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## IMPACT OF MINING ON ENVIRONMENT\*

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### EXTENDED ABSTRACT

Unlike other industries, mining industry is restricted to places where mineral/ore deposits are located. Mining industry is the backbone for many other industries like steel, cement, jewellery, fertilizer etc. Hence the need for mining. Many of the ore/mineral deposits are generally located in the forest and hilly areas and at times both in plain and undulated terrains. As such mining leads to land degradation and the dust produced during mining, drilling, blasting, loading, transportation and ore sizing etc., causes air pollution, water pollution, sound or noise pollution. Mining also has an impact on the life pattern of fauna, flora and human life near the mining area. Large scale ambitious exploitation of these minerals and ores have catastrophic effect on the environment. Man has destroyed many hill ranges, forest area, sea shore, imbalanced the ocean environment (petroleum mining, manganese nodules), changed the course of natural paths and courses of streams and rivers. Some of the hazards and effects of mining on

environment, i.e. land degradation, air pollution, water pollution, sound pollution and cultural and social ill effects due to both open cast and underground mining were highlighted in my lecture. Though, we cannot bring back the original land pattern, the impact on environment can be brought down.

Some suggested solutions are proper planning in the exploration process by defining the ore/mineral bearing areas so that minimum area is targeted for mining, to implement improved techniques in drilling and blasting to minimize pollution of air and sound. Proper drainage system and treatment, back filling and refilling of the mined area and tree plantation on dumps etc. is also called for. Social awareness and an amicable relation between the mining authorities and local people involved in the mining industries is important. An awareness required among the people is to realize that nature is precious and hence to preserve and respect it.

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