

PKGM-1  
Pamph.

No. J-11011/50/2001-IA II  
Government of India  
Ministry of Environment & Forests  
I.A.Division

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Paryavaran Bhavan, CGO Complex,  
Lodi Road, New Delhi-110003

Tele No. 4363973

Dated September 17, 2001

To,

The Chairman & Managing Director,  
Cairn Energy India Pvt. Ltd.  
Wellington Plaza, 2<sup>nd</sup> Floor,  
90 Anna Salai,  
Chennai-600002.

**Sub:** Exploratory Drilling of 8 wells for oil and gas in the PKGM-1 offshore block in East coast of India in the Bay of Bengal, by M/s Cairn Energy India Pvt. Limited.

Sir,

This has reference to your letter No. HSEO7RSPL18 dated 13<sup>th</sup> July, 2001 along with project documents including EIA/EMP report, Public hearing report, NOC from APSPCB and subsequent clarification furnished vide your letter dated 27<sup>th</sup> August, 2001 on the above mentioned subject. Ministry of Environment and Forests has carefully examined your application. It is noted that the project is envisaged to carry out exploratory/ appraisal drilling of 8 wells in the PKGM-1 off-shore block located in the East Godavari District in Bay of Bengal. It is also noted that there will be no commercial exploitation of hydrocarbons at this stage. It is also noted that the Andhra Pradesh SPCB has issued NOC for the project on 17<sup>th</sup> December, 2000 and the Public Hearing Panel has recommended the case in the meeting held on 10<sup>th</sup> October, 2000. Total cost of the project is Rs.170 crores.

2.0. The Ministry of Environment and Forests hereby accords environmental clearance under EIA Notification dated 27<sup>th</sup> January, 1994 subject to strict compliance of the following conditions:-

**A. SPECIFIC CONDITIONS:**

- (i) The Schedule for commencement by the drilling operation should be intimated at least one month in advance to the Wildlife Warden having jurisdiction over the nearest coastal area so as to enable him to monitor its impact, if any, on the wild life.

- (ii) Approval from DG Shipping under the Merchant Shipping Act prior to commencement of the drilling operations should be obtained. At least 30 days prior to the commencement of drilling, the exact location should be intimated to the Director General of Shipping, Mumbai and the Company should abide by any direction he may issue regarding ensuring the safety of navigation in the area.
- (iii) Only water based drilling fluids/mud should be used for the drilling operation. Ministry hereby grants **provisional permission for one-year** for disposal of the residual water based drilling fluids and drill cuttings after proper washing subject to following conditions:
- The water based muds must have low toxicity (i.e. 96 Hr LC-50 value > 30,000 ppm). The project authority should ensure that only low toxicity chemical additives shall be used for preparation of drilling fluids.
  - The disposal point should be located at least 5 KM away from the shoreline and ecologically sensitive areas.
  - At the disposal point, the sea bed currents should have a minimum velocity of 60cm/sec and sea depth of 50 meter minimum must be available for proper dilution and dispersion.
  - The drill cuttings should be discharged intermittently to avoid turbidity and reduction in transmittance.
  - Company should submit well-wise data on the quantity of water based muds / cuttings used/generated along with slurry volume and properties (particle size distribution etc.).
  - Company should monitor the sea surface water quality in terms of oil content around the well and submit reports to the Ministry on a monthly basis during the period of drilling operations.
- (iv) The company should monitor the petroleum hydrocarbons and heavy metals concentration in the marine fish species regularly and submit report to the Ministry.
- (v) In case commercial viability of the project is established, the company will prepare a detailed plan for development of oil and gas fields in PKGM-1 in the Bay of Bengal and obtain fresh clearance from the Ministry.
- (vi) Adequate infrastructural facilities should be provided near the offshore installations so that booms skimmers chemical dispersants could be deployed immediately in case of oil leakage from the installations. Efforts should be made to curtail the oil slick within 500 meters of the installation and accordingly, action plan and facilities to check the oil slick beyond 500 meters should be provided.

- (vii) The project proponent shall also comply with the environmental protection measures and safeguards recommended in the EIA/ EMP/risk analysis report as well as the recommendations of the Public hearing panel.

**B. GENERAL CONDITIONS:**

- i. The project authority must strictly adhere to the stipulations made by the Central Government as part of any International Convention(s) or Merchant Shipping Act.
- ii. The project authorities must strictly adhere to the stipulations made by the Andhra Pradesh State Pollution Control Board and the State Government.
- iii. No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- iv. The project authorities must strictly comply with the rules and regulations under ~~Manufacture, Storage and Import of Hazardous Chemicals~~ "Hazardous Chemicals" Rules, 1989 as amended on 3<sup>rd</sup> October, 1994 and 6<sup>th</sup> January, 2000. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained wherever applicable.
- v. The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management & Handling) Rules, 1989 as amended in January, 2000, wherever applicable. Authorization from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.
- vi. The overall noise levels in and around the rig area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- vii. A separate environmental management cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- viii. The project authorities will provide adequate funds both recurring and non recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation

schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.

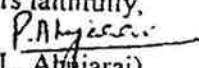
- ix. The implementation of the project vis-à-vis environmental action plans will be monitored by Ministry's Regional Office at Bangalore. State Pollution Control Board/Central Pollution Control Board. A six monthly compliance status report should be submitted to the monitoring agencies.
- x. The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.moi.in>. This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office.

3.0 The Ministry or any competent authority may stipulate any further condition(s) on receiving reports from the project authorities. The above conditions will be monitored by the Regional Office of this Ministry located at Bangalore.

4.0 The Ministry may revoke or suspend the clearance if implementation of any of the above conditions is not satisfactory

5.0 Any other conditions or alteration in the above conditions will have to be implemented by the project authorities in a time bound manner.

6.0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act, 1981 the Environment (Protection) Act, 1986, the Hazardous Wastes (Management & Handling) Rules, 1989 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

Yours faithfully,  
  
(Dr. P. L. Ahujara)  
Additional Director

Copy to :-

1. Secretary, State Deptt. of Environment, Government of Andhra Pradesh, Mantralaya, Hyderabad.
2. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.

3. The Chairman, Andhra Pradesh State Pollution Control Board, 2<sup>nd</sup> Floor, HUDA Complex, Maitrivaram , S.R.Nagar, Hyderabad- 500 038.
4. Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, IVth Floor, E&F Wing, 17<sup>th</sup> Main Road, Koramangala, Bangalore-560034.
5. The Senior Adviser, (EI Division), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi- 110003.
6. Director (Monitoring Cell), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi- 110003.
7. Guard file.
8. Record file.
9. Monitoring file.

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(Dr. P. L. Ahujari)  
Addl. Director