

**Minutes of the Meeting of First State Expert Appraisal Committee (SEAC),
Arunachal Pradesh held on 16th and 25th November 2021 through Virtual
Conference**

The first meeting of State Expert Appraisal Committee (SEAC), Arunachal Pradesh was held on 16th November 2021 at the Conference Room of Arunachal University of Studies (AUS), Namsai. The agenda of the meeting which was circulated to all the members was to discuss the project proposal submitted by M/s Vedanta Limited (Division Cairn Oil & Gas) on "Proposal for Environmental Clearance (EC) for Onshore Oil and Gas Exploration, Appraisal and Early Production in AA-ONHP-2017/2 Hydrocarbon Block in Tirap District of Arunachal Pradesh"

This meeting was attended by Prof. Mohan Kumar, Vice Chancellor, AUS & Expert member SEAC, Arunachal Pradesh and Dr. Rani Jha, Director Science & Technology, AUS, Namsai, Expert Member, SEAC, Arunachal Pradesh along with some other special invitees as desired by Chairman, SEAC Arunachal Pradesh. The Chairman SEAC, Arunachal Pradesh and three other Expert members including Member Secretary, SEAC Arunachal Pradesh joined through Video Conferencing (VC) at Google-meet (meet.google.com/mxk-bjcu-pyn).

Subsequently, another meeting through VC (meet.google.com/xqx-djjj-pmm) was held on 25th November 2021 to discuss the outcome of the first meeting and finalise the ADS (Additional Details Sought) list to be sent to the project proponent (Vedanta Ltd.) Following attended the meeting/video conferencing:

VC on 16th November 2021 (02:45 PM)

S.No.	Name	Designation
Offline at Conference Room of Arunachal University of Studies (AUS), Namsai		
1.	Prof. B. Mohan Kumar	Member, SEAC, Arunachal Pradesh
2.	Dr. Rani Jha	Member, SEAC, Arunachal Pradesh
3.	Dr. Chowlani Manpoong	Special Invitee
4.	Dr. Baloy Bhattacharjee	Special Invitee
5.	Dr. Biswajyoti Deori	Special Invitee
6.	Shri. Dilip Kumar Bera	Project Proponent, Cairn Oil and Gas, Vedanta Ltd.
7.	Shri. Priyabrata Chatterjee	Project Proponent, Cairn Oil and Gas, Vedanta Ltd.
Through Video Conferencing at Google-meet		
8.	Shri S. Raghavan	Chairman, SEAC, Arunachal Pradesh
9.	Dr. G. Srinivasan	Member, SEAC, Arunachal Pradesh
10.	Dr. O.P. Tripathi	Member, SEAC, Arunachal Pradesh
11.	Shri D. Dohu Robin	Member Secretary, SEAC, Arunachal Pradesh

VC on 25th November 2021 (10:30 AM)

S.No.	Name	Designation
1.	Shri S. Raghavan	Chairman, SEAC, Arunachal Pradesh
2.	Prof. B. Mohan Kumar	Member, SEAC, Arunachal Pradesh
3.	Dr. G. Srinivasan	Member, SEAC, Arunachal Pradesh
4.	Dr. A.K. Tripathy	Member, SEAC, Arunachal Pradesh
5.	Dr. Rani Jha	Member, SEAC, Arunachal Pradesh
6.	Shri D. Dohu Robin	Member Secretary, SEAC, Arunachal Pradesh





The meeting on 16th November, 2021 started with Shri S. Raghavan, Chairman, SEAC, Arunachal Pradesh welcoming all the members, the Special invitees and the Vedanta team to the SEAC, Arunachal Pradesh meeting. He congratulated the Vedanta team for winning the right for exploration of Oil and Gas under OLAP of Govt. of India in Arunachal Pradesh and initiated the discussion with self-introduction of Chairman, Members, Special invitees and Project Proponent.

Chairman, SEAC, Arunachal Pradesh requested Shri. Dilip Kumar Bera, Senior Manager (Environment), Project Proponent, Cairn Oil and Gas, Vedanta Ltd. to present the details of **“Proposal for Environmental Clearance (EC) for Onshore Oil and Gas Exploration, Appraisal and Early Production in AA-ONHP-2017/2 Hydrocarbon Block in Tirap District of Arunachal Pradesh”** before the Members, SEAC, Arunachal Pradesh and other Special invitees from AUS, Namsai.

Project Details presented by the Proponent:

1. Onshore Oil and Gas Exploration, Appraisal and Early Production in AA-ONHP-2017/2 Block which encompasses within a total area of 73 sq. km. located at Namsang Circle of Tirap District in Arunachal Pradesh. The total land requirement for three (3) exploratory wells is 9 ha. The estimated Investment Cost for the project is INR 180 Crores.
2. The proposed area covers Deomali, Mopaya and Kenon villages (Toposheet Nos.: G46F/7, G46F/8, G46F/11 and G46F/12).
3. Vedanta Ltd. (Div.: Cairn Oil & Gas) proposes to carry out:
 - Drilling of 3 exploratory (including appraisal) wells
 - Setting up of 3 nos. Early Production Units.
 - Early production of 6000 BOPD crude oil and 1.2 MMSCFD associated natural gas
4. **Coordinates of the proposed wells**

Village Name	Tehsil	District	Latitude	Longitude
Mopaya	Namsang	Tirap	27° 11' 59.522" N	95° 32' 31.866" E
Kenon	Namsang	Tirap	27° 13' 37.326" N	95° 33' 48.527" E
Deomali	Namsang	Tirap	27° 10' 37.200" N	95° 31' 10.079" E

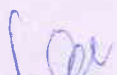
5. **Water requirement:** For drilling activities, total water requirement will be of 87 KLD/well which includes 15 KLD/well for domestic use, 22 KLD/well for mud preparation and 45 KLD/well for rig operation and 5 KLD for Gardening. Water requirement for the project activities will be sourced locally through Govt. approved/ authorized sources. No Bore wells shall be drilled for extraction of ground water for this project activity.
6. **Power requirement:** The power requirement of drill rig will be met by three (03) DG sets (2W+1S) 3X1000 KVA OR 2 x 1850 KVA (1W+1S).
7. **Pollution Control Measures:** The emissions to the atmosphere from the drilling operations shall be from the diesel engines, and power generator and temporary from flaring activity (during testing/ extended well testing). The source of noise generation would be the operation of rig and diesel generator sets. Besides, certain pumps are

expected to be in operation during this phase, for mud circulation. The noise generation work however is transient and limited to the drilling period only. Domestic wastewater generated during drilling (about 12 KLD) will be treated through mobile STP/ septic tank and soak pit system.

8. **Wastes Treatment and Disposal:** 2250 tons/well for drill cuttings associated with WBM and 500 tons/well WBM spent/residual drilling mud will be generated at site during drilling operations. This will be stored in well-designed HDPE lined pit and Drill cuttings will be used for filling of low-lying areas/ as sub-grade construction material/ co-processing in cement kiln as per feasibility. Used /waste Oil – During the drilling approx. 2 tons of used oil, sludge containing oil and other drilling wastes will be 500 tons/well will be generated per well. This usedoil will be sent to authorize recyclers and sludge containing oil will be collected in HDPE lined pit and disposed in co-processing in cement kiln (if feasible)/ common Hazardous waste TSDF/ HW processing facility. Domestic waste of 25-30 kg/day per well will be generated at site, which will be segregated at source (Organic/Inorganic) and disposed accordingly. All kind of waste will be disposed in accordance with the requirements of CPCB/SPCB.
9. **Employment Generation:** It is anticipated that, at any given time, there will be about 80-100 personnel working on site including technical staff, drilling crew, security staff etc.
10. **Green Belt Development:** As per CPCB guidelines, Vedanta Ltd. (Division: Cairn Oil and Gas) is going to develop green belt on 33% of project area (i.e. 2.97 ha) within the proposed well pad and Early production area. The maintenance programme has been designed for a period of 10 years. This work would be completed in ten years at an estimated cost of Rs.30 lakhs at the rate of Rs.10 lakh/ha which includes the cost of plantations and maintenance.

After presentation the SEAC member and the Special Invitees sought various clarifications from the Vedanta team regarding the project and pointed out discrepancies between the presentation made and project proposal submitted. The Environment Management plan (EMP) and the Environment Impact Assessment (EIA) reports submitted were also discussed at length with the project proposers. The SEAC, Arunachal Pradesh has unanimously decided to take decision on the proposal after the project proponent submits additional details and clarifications on the project proposal. ADS (Additional Details Sought) is to be sought on the on following points.


1. The proposed project of Vedanta is within 10 kms of the boundary of Dihing Patkai Wildlife Sanctuary of Assam. Either a National Board for Wildlife (NBWL) recommendation will be required or a final notification of the Dehing Patkai Wildlife Sanctuary Eco-Sensitive Zone (ESZ) showing that the project area is not within ESZ will be required. Ministry of Environment, Forests and Climate Change (MoEF&CC) –Wildlife Division Circular F.No. 6-60/2020 WL dated 16th July 2020)
2. Submission of 'No objection certificate' from the owner of the land on which the project is to be executed will be required or/and Forest Clearance from MoEF&CC.
3. The status of the land whether Reserve Forest/Community Land/Private land is to be clarified. The land requirement per well and the total land requirement for the 3 wells also needs to be clarified by Vedanta.




Vedanta may also provide following clarifications on the proposal submitted

- a. Process for setting up a viable well needs to be clarified or stated explicitly. The other concern is that there are no oil wells in nearby surroundings. Given that the location is close to a draft notified eco-sensitive zone, the project's future implications and development of a comprehensive wildlife management plan for the area taking into consideration the disturbance likely to be caused needs to be discussed.
- b. The total area of the block (52B) as mentioned in the proposal is 73 sq km (7300 ha). The green-belt plan was developed considering the requirement of 9 ha. The extent of land area that will be covered under the project activities including approach roads, if any, needs to be added and proportionately more land area should be brought under green-belt/compensatory afforestation.
- c. The Action Plan for Conservation of Elephants and the Green-Belt Development proposals are very rudimentary. The budgetary allocation for these items (Rs. 10 lakhs for three years for Conservation of elephants and Rs 10 lakhs per ha for 10 years for Green-Belt development) are also seemingly inadequate. It would be appropriate to provide more realistic budgetary estimates for these activities.
- d. The EIA report is not clear about the nature of the existing flora and fauna and the extent of land cover changes that may result from the project activities. Detailing of the agricultural fields in the vicinity of the wells and the likely impact on them to be provided.
- e. The detailed values of the various parameters being monitored at each of the 8 Monitoring Stations needs to be provided instead of average value. It is important to have monitoring stations at each of the three villages in the vicinity of the proposed wells. So that the impact of the project on the villagers could be determined.
- f. Aquifer network data of the surrounding area of the proposed sites need to be provided. Clarification about the management of drilling fluid to avoid ground water or surface water contaminations.
- g. Well abandonment/decommissioning and subsequent land restoration measures not clarified in the EMP. Disposal mechanisms of Chemical substances used for drilling process is not mentioned.
- h. Aspects like waste oil recycling and decommissioning and rehabilitation of the site of this upstream (exploration and production) oil and gas project also needs more clarity.
- i. Inclusion of an actual flow chart for mitigation plans for the project rather than the conceptual plan.

The meeting ended with a vote of thanks by Shri D. Dohu Robin, Member Secretary SEAC Arunachal Pradesh to all the SEAC members. He also informed that action to get Additional Details from Vedanta will be initiated through the Parivesh portal.


S. Raghavan
Chairman, SEAC
Arunachal Pradesh


D. Dohu Robin, Dy. Dir. (Env.)
Member Secretary SEAC,
Arunachal Pradesh