J-11011/245/2014-IA II (I)
Government of India
Ministry of Environment, Forests & Climate Change
(IA Division)

Indira Paryavaran Bhavan
Aliganj, Jor Bagh Road
New Delhi-110003

E-mail: lk.bokolia@nic.in
Dated: 9th December, 2014

To,
Shri G. Janakiraman
HSE Manager
M/s Hindustan Oil Exploratory Company Ltd.
Lakshmi Chjambers', 192, St. Mary's Road
Alwarpet, Chennai-600 018
Tamil Nadu

Email: gjanaki9raman@hoec.com Fax: 044-66229012

Subject: Development Drilling (3 wells), Construction of GGS and laying of transportation pipeline at onshore block AAP-ON-94/1, Village Dirok Tea Estate, Tehsil Marghrita, District Tinsukia, Assam by M/S Hindustan Oil Exploration Company Ltd.- reg TOR.

Ref. No.: HOEC/MoEF/AAP/2014/09/07 dated 17th September, 2014

Sir,

Kindly refer your letter no. HOEC/MoEF/AAP/2014/09/07 dated 17th September, 2014 alongwith project documents including Form-I, Pre-feasibility Report and draft 'Terms of Reference' as per the EIA Notification, 2006. It is noted that proposal is for Development Drilling (3 wells), Construction of GGS and laying of transportation pipeline at onshore block AAP-ON-94/1, Village Dirok Tea Estate, Tehsil Marghrita, District Tinsukia, Assam by M/S Hindustan Oil Exploration Company Ltd. The following projects and facilities are planned:

- Three existing wells viz. Dirok 1, dirok 2 and Dirok 4 will be put on production.
- Drilling of three new development wells viz Dirok 5, 6, 7 in the Block;
- Setting up of Gas Gathering Station (GGS) with in the block areas
- Construction of pipeline for transportation of gas from the GGS to GPP and from the GPP to Kusijan
- Setting up of Gas Processing plant (GFP) outside 11km radius of the wildlife Sanctuary
- Gas Processing and Handling Capacity: 20mmscf/d
- Condensate Storage and Handling Facility: 80 BPD (Barrels per day)
Coordinates of the proposed wells, GGS and GPP are as under:

<table>
<thead>
<tr>
<th>Coordinates</th>
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<tr>
<td>95°37'03.74&quot;/E; 27°16' 12.14&quot;/N</td>
</tr>
<tr>
<td>95°37'27.57&quot;/E; 27°16' 13.85&quot;/N</td>
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<td>95°37'48.18&quot;/E; 27°16' 13.85&quot;/N</td>
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<tr>
<td>95°37'41.06&quot;/E; 27°15' 45.42&quot;/N</td>
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<tr>
<td>95°37'42.99&quot;/E; 27°21' 49.97&quot;/N</td>
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2.0 Draft Terms of Reference (TOR) have been discussed and finalized during the 24th Reconstituted Expert Appraisal Committee (Industry) held during 29th - 30th September, 2014 for preparation of EIA/EMP report. Accordingly, following 'TOR' are prescribed:

**A. Standard TOR:**

1. Executive summary of a project
2. Project description, project objectives and project benefits.
3. Site details within 1 km of the each proposed well, any habitation, any other installation/activity, flora and fauna, approachability to site, other activities including agriculture/land, satellite imagery for 10 km area.
4. Distance from nearby critically/severely polluted area as per Notification dated 13th January, 2010, if applicable.
5. Copy of CRZ map prepared by one of the agencies authorized by the MoEF for carrying out the CRZ demarcation, w.r.t. the project boundary and facilities.
7. A certified copy of the report of the status of compliance of the conditions stipulated in the Consent to Operate for the ongoing/existing operation of the project by the Regional Office of the Ministry of Environment and Forests and SPCB.
8. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, compliance to the notice(s).
9. Comprehensive proposal covering surface facilities, pipeline/gas collection system, utilities etc.
10. Design details of all the facilities including CGS, GGS, pipe network, utilities and technology to be used for development project.
11. Details of project cost.
12. Environmental considerations in the selection of the drilling locations for which environmental clearance is being sought. Present any analysis suggested for minimizing the footprint giving details of drilling and development options considered.
13. Baseline data collection for air, water and soil for one season leaving the monsoon season in an area of 10 km radius with centre of Oil Field as its centre covering the area of all proposed drilling wells.

   i. Topography of the project site.
   ii. Ambient Air Quality monitoring at 8 locations for PM10, SO2, NOX, VOCs, Methane and non-methane HC.
iii. Soil sample analysis (physical and chemical properties) at the areas located at 5 locations.
iv. Ground and surface water quality in the vicinity of the proposed wells site.
v. Climatology and Meteorology including wind speed, wind direction, temperature, rainfall, relative humidity etc.
vi. Measurement of Noise levels within 1 km radius of the proposed wells.
vii. Vegetation and land use; Animal resources

14. Incremental GLC as a result of DG set operation.
15. Potential environmental impact envisages during various stages of project activities such as site activation, development, operation/maintenance and decommissioning.
16. Actual source of water and 'Permission' for the draw of water from the Competent Authority. Detailed water balance, wastewater generation and discharge.
17. Noise abatement measures and measures to minimize disturbance due to light and visual intrusions in case coastaly located.
18. Treatment and disposal of waste water.
19. Treatment and disposal of solid waste generation.
20. Disposal of spent oil and lubes.
21. Storage of chemicals and diesel at site.
22. Commitment for the use of WBM only
23. Mud make up and mud and cutting disposal – all options considered should be listed with selective option.
24. Hazardous material usage, storage accounting and disposal.
25. Disposal of packaging waste from site.
26. Oil spill emergency plans in respect of recovery/reclamation.
27. H2S emissions control.
28. Produced oil handling and storage.
29. Details of scheme for oil collection system along with process flow diagram and its capacity.
30. Details of control of air, water and noise pollution in oil collection system.
31. Disposal of produced/formation water.
32. Whether any burn pits being utilized for well test operations.
33. Restoration and decommissioning plans which should include mud pits and wastage restoration also and documentation and monitoring of site recovery.
34. Measures to protect ground water and shallow aquifers from contamination.
35. Risk assessment and disaster management plan for independent reviews of well designed construction etc. for prevention of blow out.
36. Environmental management plan.
37. Documentary proof of membership of common disposal facilities, if any.
38. Details of environmental and safety related documentation within the company including documentation and proposed occupational health and safety Surveillance Safety Programme for all personnel at site. This should also include monitoring programme for the environmental.
39. Total capital and recurring cost for environmental control measures.
40. A copy of Corporate Environment Policy of the company as per the Ministry's O.M. No. J-11013/41/2006-IA.II(I) dated 26th April, 2011 available on the Ministry's website

41. Corporate Environment Policy

i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.

iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.

42. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan should be prepared and incorporated.

43. A note on identification and implementation of Carbon Credit project if any should be included.

44. A tabular chart with index for point-wise compliance of above TORs.

The following general points should be noted:

(i) All documents should be properly indexed, page numbered.

(ii) Period/date of data collection should be clearly indicated.

(iii) Authenticated English translation of all material provided in Regional languages.

(iv) The letter/application for EC should quote the MoEF file No. and also attach a copy of the letter.

(v) A copy of the letter received from the Ministry should be also attached as an annexure to the final EIA-EMP Report.

(vi) The final EIA-EMP report submitted to the Ministry must incorporate the issues in this letter. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report where the above issues have been incorporated.

B. Additional TOR:

1. A separate chapter on status of compliance of Environmental Conditions earlier granted by Centre to be provided. As per circular dated 30th May, 2012 issued by MoEF, a certified report by RO, MoEF on status of compliance of conditions on existing unit to be provided in EIA/EMP report.

2. Permission from the State Forest Department regarding the impact of the proposed project on the surrounding National Park/Wild life Sanctuary/Reserve Forest/Eco sensitive area. Approval obtained from the State/Central Government under Forest (Conservation Act, 1980) for the forestland should be submitted.
3. Since the project falls within 10km of Dehing Patkai Wildlife Sanctuary eco-sensitive area, a copy of application submitted to Standing Committee of the NBWL for Wildlife clearance shall be furnished.

4. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.

3.0 These ‘TORs’ should be considered for the preparation of EIA / EMP report for Development Drilling (3 wells), Construction of GGS and laying of transportation pipeline at onshore block AAP-ON-94/1, Village Dirok Tea Estate, Tehsil Marghrita, District Tinsukia, Assam by M/s Hindustan Oil Exploratory Company Ltd. in addition to all the relevant information as per the ‘General Structure of EIA’ given in Appendix III and IIIA in the EIA Notification, 2006. The EIA/EMP as per TORs should be submitted to the Chairman, Assam State Pollution Control Board, (APCB) for public consultation. The SPCB shall conduct the public hearing/public consultation as per the provisions of EIA notification, 2006.

4.0 You are requested to kindly submit the final EIA/EMP prepared as per TORs and incorporating all the issues raised during Public Hearing / Public Consultation to the Ministry for considering the proposal for environmental clearance within 3 years as per the MoEF O.M. No. J-11013/41/2006-I.A.II (I) dated 8th October, 2014

5.0 The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India / National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/Laboratories including their status of approvals etc.

(Lalit Bokolia)
Additional Director

Copy to:

1. Chairman, Assam Pollution Control Board, Bahunimatram, Guwahati, Assam. (E-mail: membeersecretary@pcbassam.org)

2. Chief Conservator of Forests (Western), Ministry of Environment & Forests, Regional Office, Upland Road, Laitumhsing Shillong-793003.

((Lalit Bokolia)
Additional Director