F. No. J-11011/682/2008- IA II (I)

Government of India Ministry of Environment and Forests (I.A. Division)

Paryavaran Bhawan CGO Complex, Lodhi Road New Delhi – 110 003

E-mail: vp.upadhyay@nic.in Telefax: 011: 2436 2875

Dated 17th June, 2013

To.

The Chairman-cum- Managing Director, Oil India Limited Plot No. 19, Near Film City, Sector 16A, Noida – 201301

E-mail: prodgas@oilindia.in Fax No.- 0374-2801680;2800533

Subject: Expansion of Gas field Development in Tengakhat-Naharkatia-Jorajan area, Tinsukia-Dhola area and Dumduma-Pengeri area, Assam by M/s Oil India Ltd. - Environmental Clearance reg.

Ref. : Your letter no. PDNG: 27/14/EC/1485/11 dated 24th December, 2011.

Sir.

This has reference to your letter dated 24th December, 2011 on the above mentioned subject alongwith project documents including Form-1, Prefeasibility Report, Draft Terms of References, EIA/EMP, Public Hearing Report and subsequent communication vide your letters dated 7th January, 2013, 8th January, 2013 and 18th April, 3, 8th January, 2013 and 18th April, 2013 on the above mentioned subject.

2.0 The Ministry of Environment & Forests has examined your application. It is noted that the proposal is for expansion of Gas field Development in Tengakhat-Naharkatia-Jorajan area, Tinsukia-Dhola area and Dumduma-Pengeri area, Assam by M/s Oil India Ltd. The project comprises following natural gas production,

collection and transportation facilities:

Name of the Area	Type of Installation	Name of Installation
Tengakhat- Naharkaratia-Jorajan Area	Central Gas Gathering Station and Offtake Point (CGGS & OTP)	1No.
	Gas Compressor Station (GCS)	1) Tengakhat 2) Bhogpara
	Field Gathering Station (FGS)	1) Jorajan 2) OCS-4 3) Kathaloni 4) Hapjan 5) Ushapur
	Feeder pipelines	26 Nos.
Tinsukia-Dhola Area	Gas Compressor Station (GCS)	1) Dikom 2) Chabua 3) Barekuri 4) Baghjan 5) Makum
	Field Gathering Station (FGS)	1) Dikom 2) Chabua 3) Baghjan 4) South Chandmari

	Feeder Pipelines	6 Nos.
Dumduma-Pengeri Area	Field Gathering Station (FGS)	Borhapjan
	Feeder Pipeline	1No.

Total land requirement for construction of various installations and pipelines is 304.15 ha. Total project cost is Rs. 1160 Crore. Eco-sensitive areas (Dehing Patkai WLS, Bherjan-Borajan-Podumoni WLS and Dibru-Saikhowa National Park) are located within 10 Km from the some of installations. No forest land is involved.

- 3.0 Stack of adequate height will be provided to DG sets/gas engine/oil/gas fired heater. The flare system will be designed as per good oil field practices and Oil Industry Safety Directorate (OISD) guidelines. Total fresh water requirement from ground water source will be 18 m³/day per GCS, 17 m³/day per FGS around and 15 m³/day per CGGS & OTP respectively. Produced water/wastewater separated during processing in GCSs/FGSs/CGGS will be treated in the Effluent Treatment Plants (ETPs) and then routed to the nearby oil collecting station for injection into underground structures at depth between 1000m to 1500 m. Bottom oil sludge will be treated through bioremediation process. Waste oil/used oil will be sent to authorized reprocessors.
- 4.0 Off-shore and on-shore oil and gas exploration, development & production projects are listed at S.N. 1 (b) under category 'A' and appraised at Central level.
- 5.0 The proposal was considered by the Expert Appraisal Committee (Industry) in its 86th, 34th and 5th Meeting held during 20th-22nd October, 2008, 13th-14th April, 2012 and 31st January, 2013 1st February, 2013 respectively.
- 6.0 Public hearing/public consultation meetings were held on 23rd August for Duliajan, 2011, 25th August, 2011 for Lahoal in District Dibrugarh and 26th August, 2011 for Tinsukia in District Dibrugarh respectively.
- 7.0 The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 subject to strict compliance of the following specific and general conditions:

A. SPECIFIC CONDITIONS:

- Prior clearance under the Wildlife (Protection) Act, 1972, should be obtained from the Standing Committee of the National Board for Wildlife as the project is locted within 10 Km distance of Ecosensitive areas (Dehing Patkai WLS, Bherjan-Borajan-Podumoni WLS and Dibru-Saikhowa National Park).
- ii. As proposed, no facilities shall be developed in forest land.
- Adequate buffer zone around the oil and gas facilities, as may be required as per OISD or other statutory requirements.
- iv. The flare system shall be designed as per good oil field practices and Oil Industry Safety Directorate (OISD) guidelines. The company shall take necessary measures to prevent fire hazards and soil remediation as needed. At the place of ground flaring, the flare pit shall be lined with refractory bricks and efficient burning system. In case of overhead flare stacks, the stack height shall be provided as per the regulatory requirements and emissions from stacks shall meet the MOEF/CPCB guidelines.
- v. Regular ambient air quality monitoring of PM₁₀, SO₂, NO_x, VOCs and HC (Methane and Non-methane) shall be monitored and displayed at a convenient location near the main gate of the company and at important public places. The location and results of existing monitoring stations should be reviewed in consultation with the concerned State Pollution Control Board based on the occurrence of maximum

ground level concentration and downwind direction of wind. If required, additional stations should be set up. It will be ensured that at least one monitoring station is set up in up-wind & in down-wind direction along with those in other directions.

- vi. Regular monitoring of VOC and HC in the work zone area in the plant premises shall be carried and data be submitted to Ministry's Regional Office at Shillong, CPCB and Assam Pollution Control Board.
- vii. Vapor recovery system shall be installed to prevent leakage of vapor from tank/ vessels/processing and filing areas to ensure no hydrocarbon vapors are released unchecked.
- viii. Total fresh water requirement from ground water source shall not exceed 18 m³/day per GCS, 17 m³/day per FGS around and 15 m³/day per CGGS & OTP and prior permission shall be obtained from the CGWA/SGWA.
- The company shall construct the garland drain all around the project site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system should be created for oil contaminated and non-oil contaminated streams. During rainy season, the storm water drains shall be connected to oil water separator and passed through guard pond. Water quality monitoring of guard pond shall be conducted.
- x. Produced water/wastewater separated during processing in GCSs/FGSs/CGGS shall be treated in efficient Effluent Treatment Plants and then routed to the nearby oil collecting station for injection into underground structures at depth between 1000m to 1500 m. Water quality of treated effluent shall conform to CPCB standards. No effluent shall be discharged outside the premises of facilities.
- xi. Oil Industry Safety Directorate guidelines regarding safety against fire, spillage, pollution control etc. should be followed. Company shall ensure no oil spillage occur during loading / unloading of petroleum products.
- xii. The project authorities should strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989, as amended in 2000 and the Public Liability Insurance Act for handling of hazardous chemicals etc. All the hazardous waste should be properly treated and disposed of in accordance with the Hazardous Waste (Management, Handling and Transboundary Movement) Rules 2008.
- xiii. Necessary approvals from Chief Controller of Explosives must be obtained before commission of project. Requisite On-site and Off-site Disaster Management Plans will be prepared and implemented.
- xiv. The company shall obtain all requisite clearances for fire safety and explosives and should comply with the stipulation made by the respective authorities.
- xv. All storage tanks should be provided with design features based on applicable OISD standards.
- xvi. No change in the storage capacity and other facilities should be made without getting proper approval from the Ministry.
- xvii. Fully automated tank farm management system (TFMS) will be provided for accounting of products & reconciliation.
- xviii. Emergency Response Plan shall be based on the guidelines prepared by OISD, DGMS and Govt. of India. Mock drill shall be conducted once in a month.

- xix. Bottom oil sludge should be handled, stored and disposed as per CPCB/ MoEF guidelines. An action plan in this regard including bioremediation should be submitted to the Ministry and its Regional Office at Shillong within 3 months of issue of the letter.
- xx. Occupational health surveillance of worker should be done on a regular basis and records maintained as per the Factory Act.
- xxi. Green belt should be developed in 33% of the plot area to mitigate the effect of fugitive emission all around the plant in consultation with DFO as per CPCB guidelines. Thick green belt around POL depot should be ensured.
- All the commitments made to the public during the Public Hearing/Public Consultation meeting held on 23rd August, 2011, 25th August, 2011 and 26th August, 2011 for Duliajan, Lahoal in District Dibrugarh and Tinsukia in District Dibrugarh shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office at Shillong.
- xxiii. At least 5 % of the total cost of the project shall be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Shillong. Implementation of such program shall be ensured accordingly in a time bound manner.
- xxiv. Company shall prepare operating manual in respect of all activities. It should cover all safety & environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness should be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office.
- xxv. Project proponent shall comply with the environment protection measures and safeguards recommended in the EIA/EMP/risk analysis report/disaster management plan.
- xxvi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

B. GENERAL CONDITIONS:

- The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and any other statutory authority.
- ii. No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- iii. The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from

- Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.
- iv. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- v. A separate Environmental Management Cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- vi. The company shall earmark sufficient funds for recurring cost per annum 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 earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- vii. The Regional Office of this Ministry/Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.
- viii. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
- ix. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the PCB, Assam. The criteria pollutant levels namely; PM₁₀, SO₂, NOx, CO, HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- x. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the PCB, Assam. The Regional Office of this Ministry / CPCB / MPPCB shall monitor the stipulated conditions.
- xi. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.
- xii. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the PCB, Assam and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall 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 shall be forwarded to the Regional office.

- xiii. Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.
- The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is 8.0 not satisfactory.
- The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 10.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules

(V. P. Upadhyay) Director

Copy to :-

1. Principal Secretary, Department of Environment & Forest, Govt. of Assam, Guwahati, Assam.

2. Chairman, Assam Pollution Control Board, Bahunimatram, Assam, Guwahati.

3. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110032.

4. The Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (Northeast Eastern Regional Office, Uplands Road, Laitumkhrah, Shillong - 793003, Meghalaya.

5. Joint Secretary (IA), Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, New

6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, New Delhi.

Guard File/Record File/Notice Board.

(V. P. Upadhyay) Director