# PROCEEDINGS OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE, ODISHA HELD ON 09<sup>th</sup> DECEMBER, 2020

The SEAC met on 09<sup>th</sup> December, 2020 at 11:00 AM through video conferencing in Google Meet under the Chairmanship of Sri. B. P Singh. The following members were present in the meeting.

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- 1. Sri. B. P. Singh
- 2. Dr. D. Swain
- 3. Prof. (Dr.) P.K. Mohanty
- 4. Sri. J. K. Mahapatra
- 5. Sri. K. R. Acharya
- 6. Prof.(Dr.) B.K. Satpathy
- 7. Dr. Sailabala Padhi
- 8. Dr. K.C.S Panigrahi

- Chairman
- Member
- Member
- Member
  - Member
- Member
  - Member
- Member

The agenda-wise proceedings and recommendations of the committee are detailed below.

### ITEM NO. 01

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR ADDITIONAL INSTALLATION OF CHROME ORE BENEFICIATION UNIT OF THROUGHPUT CAPACITY 18,500 TPA WITHIN THE EXISTING CAMPUS OF M/S SHREE MONOLITHIC PVT. LTD. OVER AN AREA OF 7.76 ACRE OR 3.14 HA. IN PLOT NO. 30/301, AT VILLAGE: JAMINIBANDHA, P.O: BHANDARIPOKHARI, DISTRICT - BHADRAK, ODISHA-756120 OF M/S SHREE MONOLITHIC PVT. LTD (TOR)

- 1. The proposal was considered by the committee to determine the "Terms of Reference (ToR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendment thereafter.
- 2. The project falls under Category "B2", as the throughput capacity of the beneficiation plant is 18,500 TPA (<20,000 TPA) as per schedule of EIA Notification dated 14th Sep, 2006 as amended from time to time.
- 3. M/s Shree Monolithics Pvt. Ltd. proposes for establishment of Chrome Ore Beneficiation plant over an area of 7.76 Acres or 3.14 Ha with throughput capacity of 18,500 TPA within the existing Chrome Monolithic Unit.
- 4. The chrome monolithic unit does not attract Environment Clearance as it is only mixing of raw materials without any use of heat and chemical treatment. The present application for environment clearance is being made as the proponent is now proposing for installation of additional Chrome ore beneficiation plant within the existing premises.
- 5. The existing chrome monolithic unit has obtained Consent to Operate vide Consent Order No. 270/2017-18 (WPC and APC) issued vide letter no. 594/con-908 / 2000 on dated 24.02.2018.
- Connectivity: The proposed unit is located at Village Jaminibindha, P.O. Bhandaripokari, Dist: Bhadrak, Odisha. The lease area is bounded by Latitude: 20<sup>0</sup>57'26.88"N Longitude: 86<sup>0</sup>21'21.67"E. with Toposheet No.:73L/5 & 73K/8 having Plot No:25/285, 19, 27, 17, 18, 30, 20, 21, 96/321, 29, 30/301 and Khata No.: 9/9,92/67,9/5,92/61,9/6,92/65,92/62 and 92/64. The land area required for the project will be 7.76Ac. or 3.14 Ha. which comes

under agricultural waste land category and belongs to the project proponent Nearest Railway Station is Bhadrak Railway station – 7 Km and nearest airport is Bhubaneswar Airport 180 Kms from project site. There is no wild life sanctuary, corridor, National park, biosphere reserve located within 10Km buffer zone of the project site. The project is accessible through a 50ft wide road which connect to NH – 5 is located at a distance of 0.3 Km from the project site. Nearest railway station is at Manjuri road PH located at a distance of 7Km from the project site.

- 7. **Power Requirement:** The electricity load of 100 kVA will be procured from NESCO, Odisha. Also proposed to install125kVA DG set.
- 8. Water Requirement: Total water Consumption for the proposed project will be 153 KL/ day out of which 13 KLD will be the makeup water. About 95% of the water will be re-circulated in the process and only 5% of the will be makeup water. There will be no waste water generation from the project. Domestic waste water will be treated through soak pit via septic tank and industrial waste water generated will be treated by settling and reused in the process.
- 9. The raw material i.e. low grade chrome ore will be sourced from mines of Odisha Mining Corporation, Sukinda which is located at a distance of 46 Km from the project site. The transportation of ore from the mines to the project site will be done through covered trucks.
- 10. Green Belt: Out of the total land 33% has been demarcated for development of green belt.
- 11. **Employment Potential** The project generates employment opportunities for 12 personnel which includes operator -2, supervisor 2, 4 no of semi-skilled labour and 4no of unskilled labour.
- 12. Solid Waste Generation The major solid waste will be the tailings generated from the beneficiation process. The quantity of tailings to be 6500TPA having <10% Cr2O3. The tailings will be collected & treated with Ferro-Sulphate solution and dried through a filter press. Further, the tailing will be stored in the tailing dump. After drying the tailing will be blended in the chrome refractory mortar as per the demand of the customer. An area has been demarcated for storage of tailing within the plant premises. The land allocated for tailing storage will be 0.25 Acres. However, the tailing generated from the plant will be completely utilized in the chrome refractory mortar unit and thus there will be no tailing dumping in the long term. Further, an area of 0.25 acres has been demarcated for storage of tailing could not be sold out by the proponent
- 13. The project cost is `283 lakhs.
- 14. The Environment consultant **M/s Kalyani Laboratories (Pvt) Ltd. Pahala, Bhubaneswar** along with the proponent made a presentation on the proposal before the Committee.
- 15. The Committee observed the following:
  - a) The proponent has applied to consider their project as Category-B2 as per MoEF&CC, Govt. of India O.M. No. J/13012/12/2013-IA-II(I), dated 24.12.2013 as throughput of Mineral Beneficiation activity is less than 20,000 TPA involving only physical beneficiation.
  - b) The MoEF&CC, Govt. of India O.M. No. J/13012/12/2013-IA-II(I), dated 24.12.2013 stipulates the Mineral Beneficiation activity listed in the schedule as Category-B will be treated as Category-B2 with throughput ≤ 20,000 TPA, involving only physical beneficiation.

Considering the information / documents furnished by the proponent and presentation made by the consultant, the SEAC decided to take decision on the proposal after receipt of the following information / documents from the proponent followed by site visit of sub-committee of SEAC.

- (i) Date and year of establishment of existing unit.
- (ii) Copy of Consent to Establish and Consent to Operate from State Pollution Control Board, Odisha, Bhubaneswar to be submitted.
- (iii) Copy of conversion of land for industrial use as this is an existing unit.
- (iv) Details of Technology to be used for process of treatment of Hexavalent Chromium in waste water.
- (v) Details of existing green belt and proposed with plant layout.
- (vi) Details of solar energy to be used.
- (vii) Details calculation and plant Layout showing location of rain harvesting recharging pits and quantity to be harvested.
- (viii) Documents supporting previous water consumption in the plant.
- (ix) Undertaking by project proponent for maintenance of haulage road.
- (x) Status of NOC/permission letter from CGWA/WR Deptt, Govt. of Odisha respectively for drawl of ground water.
- (xi) Details of Tailing and leaching management.
- (xii) Material Balance of the process.
- (xiii) Detailed linkage of raw materials such as source and agreement copy with the party for supply of raw material i.e., low grade Chromite Ore.
- (xiv) Revise Plant layout with all detailed features to scale super imposing the existing set ups/infrastructures/utilities/features.

## I<u>TEM NO. 02</u>

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR OFFSHORE AND ONSHORE OIL AND GAS EXPLORATION, DEVELOPMENT AND PRODUCTION OIL & GAS EXPLORATORY BLOCK MN-ONHP-2018/1 AT- BALIANTA, TAHASIL – BHUBANESWAR IN THE DISTRICT OF KHORDHA OF OIL INDIA LTD (BAY EXPLORATION PROJECT) – EC.

- This is a proposal for Environmental Clearance for offshore and onshore oil and gas exploration, development and production Oil & Gas Exploratory Block MN-ONHP-2018/1 at, Balianta, Tahasil – Bhubaneswar in the district of Khordha of Oil India Ltd (Bay Exploration Project
- As per EIA Notification dated 14.09.06 and its subsequent amendments vide S.O. 236 (E), dated 16.01.2020, the project falls under, Category "B2".
- The Onshore Block: MN-ONHP-2018/1 covering an area of 2933.85 sq.km was awarded to OIL INDIA LTD. by the Ministry of Petroleum and Natural Gas, Government of India (GoI) under the Open Acreage Licensing Policy (OALP). The block area falls in Cuttack, Khordha, Jagatsinghapur & Puri Districts of Odisha state.
- 4. Accordingly, Govt of Odisha has given Petroleum Exploration License (PEL) to OIL INDIA LTD for the said block vide letter No. 3438/II (PEL) SM-04/2020 dtd 04.05.2020.

- 5. The block area is bounded by Latitude-20°.00′ to 20°.50′ and Longitude- 85°.667′ to 86°.500. The block fall under East coast railway zone of Indian Railways. The nearest airport is Biju Patnaik international airport Bhubaneswar at a distance of 58 Km.
- 6. The project activities comprise of the following steps:

# Pre-drilling activity

- Site selection;
- Land acquisition;
- Site access road and drill site construction;
- Pre-drilling activities, mobilization and Rigging up; and
- Initial well construction.

## **Drilling activity**

- Drilling of wells; and
- Well testing.

## Well decommissioning

- Well abandonment;
- Site closure and decommissioning; and
- Site Restoration.
- 7. Water Requirement About 25 m3/day, for a short period of 2-3 months. Source is borewell or local water tankers.
- 8. Power Requirement 3000 KVA (Drill site: 3X1000 KVA) will be used for drilling purposes.
- 9. Employment Potential: Total number of employee will be around 30nos.
- Land requirement at each well site including site facilities and camp site Total Approx.
  1.5-2.25 ha. Proposed number of wells-05 exploratory drilling wells and duration of exploratory drilling at each well site 02 months.
- 11. Solid waste generation and management Drill cuttings generation About 408-430 m3. Drilling Wastewater generation and domestic wastewater generation- About 15-20 m3/day. Management of drill cuttings, waste drilling mud, waste oil and domestic waste, wastewater in accordance with Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005. The waste water will be treated in an ETP and will be reused.
- 12. The project cost is ` 350 Crores.
- 13. The proponent made a presentation on the proposal before the Committee. The Committee observed the following:
  - i) The MoEF&CC, Govt. of India vide notification S.O. 236 (E), dated 16.01.2020 categorized "All project in respect of Off-Shore and On-Shore oil and gas exploration" as B2.

Considering the information furnished and presentation made by the proponent, the SEAC recommended for grant of EC valid up to a period of 7 years as category B2 project with conditions stipulated as per **Annexure-A**.

### ITEM NO. 03

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR OFFSHORE AND ONSHORE OIL AND GAS EXPLORATION, DEVELOPMENT AND PRODUCTION OIL & GAS EXPLORATORY BLOCK MN-ONHP-2018/2 AT- GOBINDAPUR, TAHASIL – PIPILI IN THE DISTRICT OF PURI OF OIL INDIA LTD (BAY EXPLORATION PROJECT) - EC.

- This is a proposal for Environmental Clearance for offshore and onshore oil and gas exploration, development and production Oil & Gas Exploratory Block MN-ONHP-2018/2 at- Gobindapur, Tahasil – Pipili in the district of Puri of Oil India Ltd (Bay Exploration Project.
- As per EIA Notification dated 14.09.06 and its subsequent amendments vide S.O. 236 (E), dated 16.01.2020, the project falls under, Category "B2".
- The Onshore Block: MN-ONHP-2018/1 covering an area of 2531.51 sq.km was awarded to OIL INDIA LTD. by the Ministry of Petroleum and Natural Gas, Government of India (GoI) under the Open Acreage Licensing Policy (OALP). The block area falls in the districts of Khordha & Puri of Odisha state.
- 4. Accordingly, Govt of Odisha has given Petroleum Exploration License (PEL) to OIL INDIA LTD for the said block vide letter No. 3690/II (PEL) SM-16/2020 dated 13.05.2020.
- The block area is bounded by Latitude 19°.700′ to 20°.1667′ and Longitude- 85°.500′ to 86°.500′. The block fall under East coast railway zone of Indian Railways. The nearest airport is Biju Patnaik international airport Bhubaneswar at a distance of 58 Km.
- 6. The project activities comprise of the following steps:

# Pre-drilling activity

- Site selection;
- Land acquisition;
- Site access road and drill site construction;
- Pre-drilling activities, mobilization and Rigging up; and
- Initial well construction.
  Drilling activity
- Drilling of wells; and
- Well testing.
  Well decommissioning
- Well abandonment;
- Site closure and decommissioning; and
- Site Restoration.
- 7. Water Requirement About 25m3/day, for a short period of 2-3 months. Source is borewell or local water tankers.
- 8. Power Requirement 3000 KVA (Drill site: 3X1000 KVA) will be used for drilling purposes.
- 9. Employment Potential- Total number of employees will be around 30nos.
- Land requirement at each well site including site facilities and camp site Total Approx.
  1.5-2.25 ha. Proposed number of wells-03 exploratory drilling wells and duration of exploratory drilling at each well site 02 months.
- Solid waste generation and management Drill cuttings generation About 408-430 m3. Drilling Wastewater generation and domestic wastewater generation- About 15-20 m3/day. Management of drill cuttings, waste drilling mud, waste oil and domestic waste,

wastewater in accordance with Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005. The waste water will be treated in an ETP and will be reused.

- 12. The project cost is `200 crores.
- 13. The proponent made a presentation on the proposal before the Committee. The Committee observed the following:
  - i) The MoEF&CC, Govt. of India vide notification S.O. 236 (E), dated 16.01.2020 categorized "All project in respect of Off-Shore and On-Shore oil and gas exploration" as B2.

Considering the information furnished and presentation made by the proponent, the SEAC recommended for grant of EC valid up to a period of 7 years as category B2 project with conditions stipulated as per **Annexure-A**.

### <u>ITEM NO. 04</u>

## PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR OFFSHORE AND ONSHORE OIL AND GAS EXPLORATION, DEVELOPMENT AND PRODUCTION OIL & GAS EXPLORATORY BLOCK MN-ONHP-2018/3 AT- BALASORE, IN THE DISTRICT OF BALASORE OF OIL INDIA LTD (BAY EXPLORATION PROJECT) - EC.

- 1. This is a proposal for Environmental Clearance for offshore and onshore oil and gas exploration, development and production Oil & Gas Exploratory Block MN-ONHP-2018/3 at- Balasore, in the district of Balasore of Oil India Ltd (Bay Exploration Project).
- As per EIA Notification dated 14.09.06 and its subsequent amendments vide S.O. 236 (E), dated 16.01.2020, the project falls under, Category "B2".
- The Onshore Block: MN-ONHP-2018/1 covering an area of 3138.59 sq.km was awarded to OIL INDIA LTD. by the Ministry of Petroleum and Natural Gas, Government of India (GoI) under the Open Acreage Licensing Policy (OALP). The block area falls in in Balasore, Bhadrak, Jajpur and Kendraparha districts of Odisha state.
- 4. Accordingly, Govt of Odisha has given Petroleum Exploration License (PEL) to OIL INDIA LTD for the said block vide letter No. 1959. Dated 14.08.2019.
- The block area is bounded by Latitude 20°.58333' to 21°.5333' and Longitude-85°.6333' to 86°.96667'. The block fall under East coast railway zone of Indian Railways. The nearest airport is Biju Patnaik international airport Bhubaneswar at a distance of 58 Km.
- 6. The project activities comprise of the following steps:

## Pre-drilling activity

- Site selection;
- Land acquisition;
- Site access road and drill site construction;
- Pre-drilling activities, mobilization and Rigging up; and
- Initial well construction.
  Drilling activity
- Drilling of wells; and
- Well testing.
  Well decommissioning
- Well abandonment;

- Site closure and decommissioning; and
- Site Restoration.
- 7. Water Requirement About 25 m3/day, for a short period of 2-3 months. Source is borewell or local water tankers.
- 8. Power Requirement 3000 KVA (Drill site: 3X1000 KVA) will be used for drilling purposes.
- 9. Employment Potential: Total number of employee will be around 30nos.
- Land requirement at each well site including site facilities and camp site Total Approx.
  1.5-2.25 ha. Proposed number of wells-03 exploratory drilling wells and duration of exploratory drilling at each well site 02 months.
- 11. Solid waste generation and management Drill cuttings generation About 408-430 m3. Drilling Wastewater generation and domestic wastewater generation- About 15-20 m3/day. Management of drill cuttings, waste drilling mud, waste oil and domestic waste, wastewater in accordance with Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005. The waste water will be treated in an ETP and will be reused.
- 12. The project cost is `300 crores.
- 13. The proponent made a presentation on the proposal before the Committee. The Committee observed the following:
  - i) The MoEF&CC, Govt. of India vide notification S.O. 236 (E), dated 16.01.2020 categorized "All project in respect of Off-Shore and On-Shore oil and gas exploration" as B2.

Considering the information furnished and presentation made by the proponent, the SEAC recommended for grant of EC valid up to a period of 7 years as category B2 project with conditions stipulated as per **Annexure-A**.

## <u>ITEM NO. 05</u>

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR OFFSHORE AND ONSHORE OIL AND GAS EXPLORATION, DEVELOPMENT AND PRODUCTION OIL & GAS EXPLORATORY BLOCK MN-ONHP-2018/5 AT- MARSHAGHAI, TAHASIL – KENDRAPARA IN THE DISTRICT OF KENDRAPARA OF OIL INDIA LTD (BAY EXPLORATION PROJECT) - EC.

- This is a proposal for Environmental Clearance for offshore and onshore oil and gas exploration, development and production Oil & Gas Exploratory Block MN-ONHP-2018/15 at - Marshaghai, Tahasil – Kendrapara in the district of Kendrapara of Oil India Ltd (Bay Exploration Project.
- As per EIA Notification dated 14.09.06 and its subsequent amendments vide S.O. 236 (E), dated 16.01.2020, the project falls under, Category "B2".
- The Onshore Block: MN-ONHP-2018/5 covering an area of 2299.74 sq.km was awarded to OIL INDIA LTD. by the Ministry of Petroleum and Natural Gas, Government of India (GoI) under the Open Acreage Licensing Policy (OALP). The block area falls in Cuttack, Dhenkanal, Jajpur, Kendraparah & Jagatsinghapur Districts of Odisha state.
- 4. Accordingly, Govt of Odisha has given Petroleum Exploration License (PEL) to OIL INDIA LTD for the said block vide letter No. 3556/II (PEL) SM-05/2020 dtd 07.05.2020.
- 5. The block area is bounded by Lattitude- 20°.33' to 20°.6667' and Longitude- 85.8333' to

86°.6500′. The block fall under East coast railway zone of Indian Railways. The nearest airport is Biju Patnaik international airport Bhubaneswar at a distance of 58 Km.

6. The project activities comprise of the following steps:

# Pre-drilling activity

- Site selection;
- Land acquisition;
- Site access road and drill site construction;
- Pre-drilling activities, mobilization and Rigging up; and
- Initial well construction.
- Drilling activity
- Drilling of wells ;and
- Well testing.
  Well decommissioning
- Well abandonment;
- Site closure and decommissioning; and
- Site Restoration.
- 7. Water Requirement About 25 m3/day, for a short period of 2-3 months. Source is borewell or local water tankers.
- 8. Power Requirement 3000 KVA (Drill site: 3X1000 KVA) will be used for for drilling purposes.
- 9. Employment Potential: Total number of employee will be around 30nos.
- Land requirement at each well site including site facilities and camp site Total Approx.
  1.5-2.25 ha. Proposed number of wells-03 exploratory drilling wells and duration of exploratory drilling at each well site 02 months.
- 11. Solid waste generation and management Drill cuttings generation About 408-430 m3. Drilling Wastewater generation and domestic wastewater generation- About 15-20 m3/day. Management of drill cuttings, waste drilling mud, waste oil and domestic waste, wastewater in accordance with Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005. The waste water will be treated in an ETP and will be reused.
- 12. The project cost is `370 crores.
- 13. The proponent made a presentation on the proposal before the Committee. The Committee observed the following:
  - i) The MoEF&CC, Govt. of India vide notification S.O. 236 (E), dated 16.01.2020 categorized "All project in respect of Off-Shore and On-Shore oil and gas exploration" as B2.

Considering the information furnished and presentation made by the proponent, the SEAC recommended for grant of EC valid up to a period of 7 years as category B2 project with conditions stipulated as per **Annexure-A**.

## ITEM NO. 06

PROPOSAL FOR ENVIRONMENTAL CLEARANCE FOR OFFSHORE AND ONSHORE OIL AND GAS EXPLORATION, DEVELOPMENT AND PRODUCTION OIL & GAS EXPLORATORY BLOCK MN-ONHP-2018/4 AT - BAILO, TAHASIL – ANANDAPUR IN THE DISTRICT OF KEONJHAR OF OIL INDIA LTD (BAY EXPLORATION PROJECT) – EC.

- This is a proposal for Environmental Clearance for offshore and onshore oil and gas exploration, development and production Oil & Gas Exploratory Block MN-ONHP-2018/4 at - Bailo, Tahasil – Anandapur in the district of Keonjhar of Oil India Ltd (Bay Exploration Project.
- As per EIA Notification dated 14.09.06 and its subsequent amendments vide S.O. 236 (E), dated 16.01.2020, the project falls under, Category "B2".
- The Onshore Block: MN-ONHP-2018/1 covering an area of 3196.86 sq.km was awarded to OIL INDIA LTD. by the Ministry of Petroleum and Natural Gas, Government of India (GoI) under the Open Acreage Licensing Policy (OALP). The block area falls in Mayurbhanj, Kendujhar, Baleshwar, Bhadrak, Jajpur & Kendraparha of Odisha state.
- 4. Accordingly, application for Petroleum Exploration License (PEL) given to Govt of Odisha by OIL INDIA LTD for the said block under rule 5(1) of the petroleum and natural gas rules.1959.
- The block area is bounded by Lattitude-20°.664000′ to 21°.333018 and Longitude-86.166000′ to 86°.498772′. The block fall under East coast railway zone of Indian Railways. The nearest airport is Biju Patnaik international airport Bhubaneswar at a distance of 58 Km.
- 6. The project activities comprise of the following steps:

## Pre-drilling activity

- Site selection;
- Land acquisition;
- Site access road and drill site construction;
- Pre-drilling activities, mobilization and Rigging up; and
- Initial well construction.

## **Drilling activity**

- Drilling of wells ;and
- Well testing.

# Well decommissioning

- Well abandonment;
- Site closure and decommissioning; and
- Site Restoration.
- 7. Water Requirement About 25 m3/day, for a short period of 2-3 months. Source is borewell or local water tankers.
- 8. Power Requirement 3000 KVA (Drill site: 3X1000 KVA) will be used for for drilling purposes.
- 9. Employment Potential: Total number of employee will be around 30nos.
- 10. Land requirement at each well site including site facilities and camp site Total Approx.

exploratory drilling at each well site - 02 months.

- 11. Solid waste generation and management Drill cuttings generation About 408-430 m3. Drilling Wastewater generation and domestic wastewater generation- About 15-20 m3/day. Management of drill cuttings, waste drilling mud, waste oil and domestic waste, wastewater in accordance with Standards for Emission or Discharge of Environmental Pollutants from Oil Drilling and Gas Extraction Industry of CPCB as modified in 2005. The waste water will be treated in an ETP and will be reused.
- 12. The project cost is ₹ 300 crores.
- 13. The proponent made a presentation on the proposal before the Committee. The Committee observed the following:
  - i) The MoEF&CC, Govt. of India vide notification S.O. 236 (E), dated 16.01.2020 categorized "All project in respect of Off-Shore and On-Shore oil and gas exploration" as B2.

Considering the information furnished and presentation made by the proponent, the SEAC recommended for grant of EC valid up to a period of 7 years as category B2 project with conditions stipulated as per **Annexure-A**.

Secretary, SEAC

24. 12. 2020

Chairman, SEAC

Environmental Scientist, SEAC

CONDITIONS TO BE STIPULATED IN ENVIRONMENTAL CLEARANCE FOR OFF-SHORE AND ONSHORE OIL AND GAS EXPLORATION, DEVELOPMENT & PRODUCTION SECTOR.

#### I. Statutory compliance:

- i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii) The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report, (in case of the presence of schedule-I species in the study area)
- iv) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- vi) The project proponent shall obtain and adhere to statutory clearance under the Coastal Regulation Zone Notification, 2011, as applicable

#### II. Air quality monitoring and preservation

- i) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with
- ii) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- iii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- iv) Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No.

826(E) dated 16th November, 2009 for  $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$ ,  $NO_X$ , CO,  $CH_4$ , HC, Nonmethane HC etc.

- v) During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- vi) The project proponent also to ensure trapping/storing of the CO<sub>2</sub> generated, if any, during the process and handling.
- vii) Approach road shall be made pucca to minimize generation of suspended dust

### III. Water quality monitoring and preservation

- As proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land. Domestic sewage shall be disposed off through septic tank/soak pit.
- ii) The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- iii) Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- iv) The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- v) Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.

#### IV. Noise monitoring and prevention

- i) The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- ii) 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.
- iii) The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

## V. Energy Conservation measures

i) The energy sources for lighting purposes shall preferably be LED based.

#### VI. Waste management

- Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- ii) Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the SEIAA, Odisha and Regional Office of MoEF&CC, Govt. of India.

#### VII. Safety and Human health issues

- i) Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii) Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
- iii) Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.
- iv) On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority
- v) The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations
- vi) The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- viii) The company shall develop a contingency plan for H<sub>2</sub>S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be provided with persona) H2S detectors in locations of high risk of exposure along with self-containing breathing apparatus

- ix) 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, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- x) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xi) The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the SEIAA, Odisha and Regional Office of MoEF&CC, Govt. of India.

## VIII. Corporate Environment Responsibility

- i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-1 A.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii) The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the SEIAA, Odisha and Regional Office of MoEF&CC, Govt. of India as a part of six-monthly report.
- iii) A separate Environmental Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization,
- iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the SEIAA, Odisha and Regional Office of MoEF&CC, Govt. of India along with the Six-Monthly Compliance Report.
- v) Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

#### IX. Miscellaneous

i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of

which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi) The project proponent shall inform to the SEIAA, Odisha and Regional Office of MoEF&CC, Govt. of India the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii) Restoration of the project site shall be carried out satisfactorily and report shall be sent to the SEIAA, Odisha and Regional Office of MoEF&CC, Govt. of India.
- viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during their presentation to the State Level Expert Appraisal Committee.
- x) No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA, Odisha.
- xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii) The SEIAA, Odisha may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii) The SEIAA, Odisha reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv) The Regional Office of the MoEF&CC, Govt. of India shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

- xv) 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 and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi) Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.