EXECUTIVE SUMMARY

Group Gathering Station (GGS-IV) at Gamij, Kheda,Gujarat

OIL AND NATURAL CORPORATION LIMITED

AHMEDABAD ASSET

I. PROJECT NAME AND LOCATION

Group Gathering Station (GGS-IV) at Gamij at Tehsil Mehmedabad, District Kheda by M/s ONGC.

Location details are as follows:

Khasra No. : 211/P, 212/P, 235, 238/P, 209/P

Village: Karoli

Tehsil: Mehmedabad

District: Kheda

Coordinates of Gamij GGS IV:

Longitude: 72° 53'21.85" (E) Latitude: 22° 52' 19.30 (N)

II. PERSONS TO BE EMPLOYED

During operation and maintenance of the project, about 15-17 persons shall be deployed in 8 hours shift pattern.

III. ADDRESS FOR CORRESPONDENCE

ED- Asset Manager, Ahmedabad Asset, ONGC, Avani Bhavan, Chandkheda, Ahmedabad- 380005

IV.PRODUCTS AND CAPACITIES. IF EXPANSION PROPOSAL THEN EXISTING PRODUCTS WITH CAPACITIES AND REFERENCE TO EARLY EC

Processing of 200 M^3 / day of well fluid and with storage capacity of 290 M^3/day.

This is a new project.

V.REQUIREMENT OF LAND, RAW MATERIAL, WATER, POWER, FUEL WITH SOURCE OF SUPPLY

Land: 74648 sq. meters

Raw Material requirement: Conditioning chemicals for water injection like anti-corrosion, anti- sealant and biocides.

Water: 5 m3/d for domestic use and bath heater

Power: Approx. 72,000 KwH/month and alternatively one DG set of 125 kVA, only in situation when GEB power supply is not available.

VI. PROCESS DESCRIPTION IN BRIEF, SPECIFICALLY INDICATION THE GASEOUS EMISSION, LIQUID EFFLUENT AND SOLID AND HAZARDOUS WASTES

The well fluid comprised of oil, gas and water and sediments received from the wells located around it are subjected to bath heater for maintaining the fluidity. Subsequently well fluid is guided to separators wherein gas and liquid phases are separated. Gas is subjected to internal use and to the customers. Technical gas is disposed of through flaring. The liquid phase having oil, water and sediments is passed through heater treaters and subsequently stored in storage tanks. No treatment will be done at GGS IV except for heating. From storage tanks the liquid is pumped to another plant namely Nawagam Desalter Plant for desalting by knocking out the water. The effluent generated at Nawagam Desalter Plant is treated in ETP and subjected to underground injection below sub surface (1000 mts. or below) in compliance to the conditions prescribed in EPA Rule 1986.

Hazardous waste like spent oil, oil soaked cotton waste, containers of POL & chemicals and oily sludge generated during hydro testing of separators shall be stored at a designated place in the facility. These wastes shall be disposed of in accordance to the conditions prescribed by Gujarat Pollution Control Board (GPCB) in common consent & authorization (CCA).

Oily sludge generated from bottom of storage tanks will be transported to authorized recyclers. Asset is member of TSDF site to dispose of hazardous waste generated through its facilities.

In case of any amount of waste oil, it will be subjected to bioremediation through consortium of bacteria in association with M/s. OTBL to restore the site back to the normal.

Gaseous emission: Gaseous emissions from bath heater and heater treaters are disposed of through elevated stacks of appropriate heights. Technical gas separated during process is disposed of through flare stack.

Liquid effluent: The scheme doesn't envisage generation of much amount of liquid effluents. Facility will only be used for collection of crude and dispatch to Nawagam CTF via Gamij GGS-III & Ramol GGS; no treatment except heating will be done at GGS-4. The scheme does not envisage generation of much amount of liquid effluent. Whatever insignificant amount of effluent is generated shall be utilized for line flushing/other jobs. The water coproduced with the crude oil shall be dispatched to Nawagam CTF along with the crude where the separated effluent shall be treated The waste water from transit accommodation will be disposed through Septic tank/soak pit.

Solid and hazardous wastes:

Used Oil: 250 ltr./year

Oily cotton waste: 100 Kg/month

Oily sludge: 100 kg /year

POL and Chemical containers: 200 empty barrels /year

Noise: Running of DG sets, Dispatch pumps etc.

VII. MEASURES FOR MITIGATING THE IMPACT ON THE ENVIRONMENT AND MODE OF DISCHARGE OR DISPOSAL.

Gaseous emission: Through stacks of appropriate heights and flaring.

Water: No process water is to be generated. Only domestic waste water likely to be of quantum 2-3 M^3/day shall be disposed of through septic tank.

Solid and hazardous wastes: Recycling and disposal at TSDF site.

Noise: Acoustic barrier have been provided for DG set. Regular maintenance of equipment.

VIII. IN CASE OF HAZARDOUS OPERATION, SAFETY SYSTEMS INCORPORATE.

The installation i.e. Gamij GGS-IV shall maintain third party certified Quality, Health, Safety and Environment Management system based on ISO 9001, OHSAS 18001 and ISO 14001. Besides that, best applicable safety systems applicable as per Petroleum standards and guideline (OMR 1984 and OISD) are installed during operation.

IX. CAPITAL COST OF THE PROJECT, ESTIMATED TIME OF COMPLETION

Total Cost: 27.91 Crores (incl. land cost)

X. DESCRIPTIONS OF ENVIRONMENTAL SENSITIVITY IN 10 KM RADIUS FORM THE SITE

Site selected for the project**:**

Land – Government / waste/ barren land / Agriculture

Water Body –Vatrak River is in the study area

Villages – About 160 villages are falling in study area.

Eco Sensitive Zone –No

XI.IDENTIFICATION OF HAZARDS IN HANDLING, PROCESSING AND STORAGE OF HAZARDOUS MATERIAL AND SAFETY SYSTEM PROVIDED TO MITIGATE THE RISK

Hazards associated with chemicals like lubricants, PPD, Demulsifier, etc. shall be addressed as per MSDS.

ERP and DMP in place to tackle any emergency and disaster associated with fire in storage tanks.

Risk register of the installation shall identify all the process and other activities related hazards and risk thereof as well as control measures to address these.

XII. LIKELY IMPACT OF THE PROJECT ON AIR, WATER, LAND, FLORA-FAUNA AND NEARBY POPULATION

Overall impact due to proposed activity on Air, Water, Land, etc is transient and temporary and shall not cause any major adverse impact on flora/fauna and humans. However ONGC shall strictly implement Environment Management Plan to nullify the effect due to project activities.

XIII. EMERGENCY PREPAREDNESS PLAN IN CASE OF NATURAL OR IN PLANT EMERGENCIES

Site specific Emergency Response Plan (ERP) and Disaster Management Plan (DMP) shall be in place. Regular mock drills shall be conducted to check the efficacy.

XIV. ISSUES RAISED DURING PUBLIC HEARING (IF APPLICABLE) AND RESPONSE GIVEN:

NA

XV. INTERLINKED PROJECT:

Environment Clearance already granted by MoEF&CC to the project “Development Drilling of (406 nos) wells in oil field Ahmedabad Asset at Kheda, Gandhinagar and Ahmedabad districts of Gujarat by M/s ONGC. (File no. J-11011/92/2012-IA II (I)” vide order dated 22.03.2016 (for development drilling of oil and gas wells in the area.)

XVI. CSR PLAN

ONGC spends CSR funds on education, Health care, community development, infrastructure development, promoting sports, women empowerment & girl child development, Environment protection, protection of heritage sites, aid for physically and mentally challenged. As per Government rules ONGC spends 2% of average net profit of last three years in various CSR activities mentioned above.

XVII. OCCUPATIONAL HEALTH MEASURES

The health and hygiene of the personnel working at the installations are monitored through periodic health checks of the persons by Health and Hygiene Coordinator. All employees undergo a periodic medical examination, with periodicity as per age profile. This medical examination focuses on individual medical surveillance of all types of health hazards covering both occupational issues and general health.

XVIII. POST PROJECT MONITORING PLAN

Post project monitoring of air, noise, vibration and water shall be carried out on regular basis (as per stipulated conditions).

XIX. SIGNIFANCE OF THE PROJECT

Presently, production from 33 nos. of existing wells in the proximity of proposed Gamij GGS-IV is being taken through tanker loading from the individual well sites to Gamij GGS-III. With creation of new GGS, all the 53 wells (including 33 existing wells and 20 new/planned wells) shall be connected to the proposed GGS thereby reducing the tanker loading points. Moreover, the crude oil from the 53 wells shall be transported through pipeline in a closed loop, which is the safest mode of operation. Also, the gas from these wells is planned to be utilized for Gas Sale from the proposed GGS, thus the same shall avoid Gas venting and safe operations.

Considering the significance of the project, it is requested to accord Environmental clearance to the proposed facility of Gamij GGS-IV.