

Enclosure 1

**ONGC/CSHE/Misc/2000-01 dated 05.01.2001 from Head
Environment Management**



OIL & NATURAL GAS CORPORATION LTD.
Corporate Safety Health & Environment Management
Bengal Chemical Bhavan-II
502, Veer Savarkar Marg, Prabhadevi,
Mumbai - 400025
Phone: 24386619 Fax: 24366501

NOTE

ONGC/CSHE/Misc./2000-01

Date: 05.01.2001

From: A.B.Chakraborty, Head, Environment management

To: Asset Managers/Basin Managers/Chief of services/Head work centres

Subject: Future HSE Plan

This information on the subject Plan is given below for your kind perusal & necessary action.

Organization is looking ahead and designing future strategies to identify any damage to Mother Nature and accidental sufferings and losses. In addition to the present activities, the additional activities to be undertaken during 2001-02 & later, are the following:

- Development and implementation of SMS based on International safety Rating System (ISRS) in 20 Nos. of facilities.
- Compliance audit of all the installations of ONGC through external agencies of international repute.
- Review of the existing safety health and environment policies and formulation of integrated SHE policy
- Third party audit of all the effluent treatment plants as per the decision of the executive committee of the organization.
- National roadmap to combat oil spill in marine environment in coordination with pertinent national oil majors and Government agencies.
- Updating of National oil spill disaster contingency plan.
- Development of EMS ISO 14001 in Work over rigs and vessels other than fixed installation/facilities.
- Developing EMS ISO14001 in all the facilities of the organization within two years.
- Formulation of guidelines on various environmental issues like restoration of drill sites etc. for oil industries under the aegis of Oil Industry Safety Directorate.
- Reporting of Environmental performance of the organization (environmental reporting) duly audited by third party.
- Development of CDM Projects as per the Kyoto protocol.
- Vision 2025- Developing EMS ISO 14001 in all the facilities of the organization and developing and grooming a host of environmental auditors.
- Development and implementation of EMS in 20 Nos. of facilities as per the MOU with MOPNG during the year 2003-04
- Setting up of Occupational health Centers

A B Chakraborty
Head, Environment management

Enclosure 2

Meeting notice dated 19/01/2001



OIL AND NATURAL GAS CORPORATION LIMITED
MUMBAI REGION
URAN PLANT, URAN

Planning & Monitoring Group
 Dronagiri Bhavan, Uran Plant

URAN/PMG/24/85/2000-01

Date: 12.01.2001

Meeting Notice

From: **RAVINDER KHER, CE (P)-PMG**

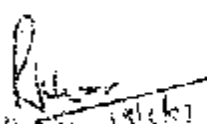
To: **As per distribution list**

Ref: Note No. **ONGC/ESSE/Misc/2000-01** dated **05.01.2001** from Head Environment Management

With reference to internal note dated 05.01.2001 from Head Environment Mgt., corporate ESSE, ONGC, Mumbai, a number of areas have been identified to be looked into. One of the areas pertains to CDM (Clean Development Mechanism) as per Kyoto protocol. The Clean Development Mechanism projects encourage reduction of emissions which is affecting normal environment. Necessary actions are required to be taken on priority to reduce/stop emission to the environment through suitable measures / Project. The "Clean Development Mechanism" is one such mechanism that facilitates viability of the project execution.

In view of above a meeting will be held at 15.30 hrs on (22.01.2001) at Dronagiri conference hall. All are requested to attend the meeting on priority.

- Distribution:
1. CE(P), GPC
 2. CE(P), OPC
 3. CE(P), Utilities
 4. CE(M), Mechanical Maintenance
 5. CE(E), Electrical Maintenance
 6. CE(I), Instrument Maintenance


 R. Kher
 CE(P)
 Incharge PMG

Enclosure 3

Minutes of the meeting dated 22/01/2001



OIL AND NATURAL GAS CORPORATION LIMITED
MUMBAI REGION
URAN PLANT, URAN

Planning & Monitoring Group
 Dronagiri Bheven, Uran Plant.

URAN/PMG/24(85)/2000-01

Date: 25.01.2001

Minutes of the meeting dated 22.01.2001

From: RAVINDER KHER, CE (P)-PMG

To: As per participant list

Subject: "Reduction of emission / suitable Project and the CDM"

Participants:

1. Shri T Krishnamoorthy, CE(P)
2. Shri D G Dumbre, CE(P)
3. Shri D K Bhattacharya, SE(P)
4. Shri H S Tripathi, SE(P)
5. Shri Shyamlat, DGM(M)
6. Shri O P Nathani, DGM(E)
7. Shri A K Rao, CE(T)

Mr R. Kher, CE(P), apprised the house regarding the internal note received from Head Environment Mgt., corporate HSE, ONGC, Mumbai. He also explained the "Clean Development Mechanism" and Kyoto Protocol, in brief.

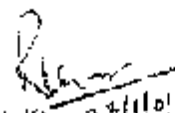
The following points were discussed.

1. Uran plant is flaring approximately 60000 to 120000 Nm³ of hydrocarbon gas per day. The source of this gas is from seals of various rotating equipments, flare purge points, pressure safety valves etc. This is technical, operational and safety requirement and can not be stopped, as of now.
2. Uran is already planning flare gas recovery unit (FGRU) to recover valuable hydrocarbon, which is at present being flared which will in turn stop emission to the environment. However there are many difficulties as under for executing such a project.
 - a. The quantity of the gas is very less and not constant.
 - b. Pressure of the gas is very low (300-400 mm H₂O).
 - c. Temperature of the gas not constant.
 - d. No suitable technology/Process available.

- There is no past experience regarding operation and maintenance in ONDC or other industries under similar circumstances. This involves a great risk for the project to be undertaken.

In view of this, the FGRU is getting delayed and there is probability that the Project may be dropped.

3. However, in view of communication received from Head- Environment management, all members agreed to have renewed look & undertake implementation of flare gas recovery project both as a challenge & necessity due to sustainability.
4. To overcome all envisaged difficulties it was decided to form a dedicated core team comprising members from operation and maintenance and give the FGRU top priority.
5. Members also opined that Urea may also look into other projects such as NOx control from stack emission, CO₂ emission from gas sweetening units etc.


R. Kher 22/1/04
CE(P)
Incharge-PMG

Enclosure 4

Letter of Intent (LoI) of the contract



OIL AND NATURAL GAS CORPORATION LTD.
MUMBAI REGIONAL BUSINESS CENTRE
 MATERIALS MANAGEMENT DEPARTMENT
 OPERATIONS BUSINESS GROUP
 6A, VASUDHARA BHAVAN, BANDRA (E),
 MUMBAI - 400 051, India

Ph: 642 9901/642 9983 Fax: 91-22-6515498 Telex: 011-71010 ONGC IN

FAX MESSAGE

NO.1 MRSC/OSG/MM/CAR/FGRP/92/2000/01-9023/PC-9055
 Dated November 20, 2001

M/S NICO CORPORATION LIMITED, BPT M/S NICO CORPORATION LIMITED,
 KOLKATA MUMBAI

KIND ATTN: MR. A.K. BHATTACHARYA,
 EXECUTIVE DIRECTOR

FAX NO.: (91) 33-248 3098 / 220 2362 FAX NO.: 91-22-677 6846

SUB: NOTIFICATION OF AWARD OF CONTRACT NO. MRSC/OSG/MM/
 CAR/FGRP/92/2000/01-9023/PC-9055 FOR "SUPPLY, INSTALLATION,
 COMMISSIONING AND TESTING OF FLARE GAS RECOVERY PROJECT AT
 URAN" ON TURNKEY BASIS AGAINST TENDER NO.
 MRSC/OSG/MM/CAR/FGRP/92/2000/01-9023

(1A) PLEASE REFER YOUR BID AGAINST SUBJECT TENDER AND SUBSEQUENT
 EXCHANGE OF CORRESPONDENCE RESIDING WITH YOUR LETTER DATED
 08.11.2001 (.) ONGC HEREBY AWARDS THE SUBJECT CONTRACT FOR
 SUPPLY, INSTALLATION, COMMISSIONING AND TESTING OF FLARE GAS
 RECOVERY PROJECT AT URAN ON TURNKEY BASIS AS PER SPECIFICA-
 TIONS & SCOPE OF WORK AND AS PER TERMS AND CONDITIONS DETAILED
 IN THE SUBJECT TENDER, AS MODIFIED BY SUBSEQUENT LETTERS /
 TELEFAXES EXCHANGED BETWEEN ONGC & M/S NICO CORPORATION
 LIMITED, MUMBAI (NICO) WHICH HAVE BEEN AGREED TO BY ONGC IN
 WRITING, AT A TOTAL LUMP SUM PRICE OF US\$ 2,618,054 PLUS (B.
 14,13,300/- (US DOLLAR TWO MILLION EIGHT HUNDRED EIGHTEEN
 THOUSAND EIGHTY FOUR PLUS RUPEES FOURTEEN LAKHS THIRTEEN
 THOUSAND EIGHT HUNDRED ONLY)). THIS LUMP SUM PRICE IS INCLUSIVE
 OF ALL TAXES, DUTIES, FEES, LEVIES, CESSSES, INSURANCE, ETC.
 APPLICABLE ON MEN, MATERIAL AND SERVICES BUT NOT LIMITED TO
 SALES TAX, EXCISE DUTY, CUSTOMS DUTY, OCTROI, CESSSES, CORPO-
 RATE/PERSONNEL TAX FOR COMPLETION OF THE PROJECT ON TURNKEY
 BASIS (.)

(2A) THE PRICES, CHARGES AS STATED ABOVE SHALL REMAIN FIRM AND VALID
 DURING THE ENTIRE DURATION OF THE CONTRACT (.)

NECESSARY DEDUCTION ON ACCOUNT OF TAXES, DUTIES, FEES AND LEVIES
 AS APPROPRIATE SHALL BE MADE BY ONGC FROM THE INVOICES OR PAYMENTS
 TO BE MADE / ADJUSTED AS PER APPLICABLE PROVISION OF LAW (.)

- (CC) THE TIME PERIOD FOR EXECUTION OF TOTAL SCOPE OF WORK SHALL BE 18 MONTHS FROM THE DATE OF THIS NOTIFICATION OF AWARD OF CONTRACT I.E. FROM NOVEMBER 22, 2004 (.)
- (DD) NICCO SHALL FURNISH AN UNCONDITIONAL AND IRREVOCABLE BANK GUARANTEE FOR DUE PERFORMANCE OF THE CONTRACT AS PER PROFORMA OF TENDER DOCUMENT APPENDIX-10 FOR A SUM EQUIVALENT TO 10 % (TEN PERCENT) OF THE TOTAL CONTRACT VALUE I.E. FOR (US\$ 281,810 PLUS RS. 1,41,398 (ONE DOLLAR TWO EIGHTY ONE THOUSAND EIGHT HUNDRED TEN PLUS RUPEES ONE LAKH FORTY ONE THOUSAND THREE HUNDRED EIGHTY ONLY) (.) THIS IRREVOCABLE BANK GUARANTEE SHALL BE VALID UPTO 30.07.2004 (.) THE BANK GUARANTEE SHALL BE ISSUED FROM AN INDIAN PUBLIC SECTOR BANK OR FROM SCHEDULED COMMERCIAL BANK IN INDIA AND SHALL BE SUBMITTED WITHIN 15 DAYS FROM THE DATE OF THIS NOTIFICATION OF AWARD (.) NICCO SHALL KEEP ITS PERFORMANCE BANK GUARANTEE VALID TILL ENTIRE OBLIGATION OF NICCO UNDER THIS CONTRACT IS OVER (.)
- (EE) FOR THE PURPOSE OF COMMENCEMENT OF ACTIVITIES UNDER THE CONTRACT, THIS NOTIFICATION OF AWARD SHALL CONSTITUTE A BINDING CONTRACT BETWEEN NICCO AND ENCO AND SHALL BE SUBJECT TO ALL TERMS AND CONDITIONS OF THE TENDER DOCUMENTS AND OTHER DOCUMENTS MENTIONED IN PARA "AA" ABOVE (.)
- (FF) KINDLY ACKNOWLEDGE THE RECEIPT OF THIS NOTIFICATION OF AWARD PER RETURN, THE EFFECTIVE DATE OF CONTRACT REMAINING AS NOVEMBER 22, 2004 THAT IS THE DATE OF THIS NOTIFICATION OF AWARD (.)

FOR FUTURE CORRESPONDENCE, PLEASE QUOTE CONTRACT NO. HR&C/089/MM/CAR/FCRP/92/2002/GT-9023/PC-9035

KINDLY ACKNOWLEDGE RECEIPT IMMEDIATELY (.)

REGARDS (.)

(S. RAMACHANDRAN)
GENERAL SUPPORT MANAGER (PM)

CONFIRMATION COPY BY REGD POST TO :

M/S NICCO CORPORATION LTD.,
PROJECT DIVISION,
NICCO HOUSE, 2 HARE STREET,
KOLKATA 700 031

Copy to :

1. Shri C.Muzib, General Manager (P&A), 222, Vaidyanatha Bhawan,
2. Shri R.K. Mishra, DGM(P), LPG/DSU Plant, Jharkhand.

Enclosure 5

Progress report dated 05/09/2002



OIL AND NATURAL GAS CORPORATION LIMITED
MUMBAI REGION
URAN PLANT, URAN

Planning & Monitoring Group
Dronagiri Bhavan, Uran Plant

URAN/PMG/24483/2000-01

Date: 05.09.2002

Subject: Global Compact Principles

Kindly refer to your telephonic discussion regarding environment related information on the principles 7, 8 and 9 of Global compact.

Under principle 8: Undertake initiatives to promote greater environmental responsibility – Global warming concern and principle 9: Encourage the development and diffusion of environmental friendly technologies – Clean Development Mechanism (CDM). Uran has taken the project of zero gas flaring under "Flare Gas Recovery Unit (FGRU)". The progress of the project is as under.

The job of above project is awarded to M/s NIGCO CORPORATION LIMITED on 20.11.2001. Contractor confirmed that purchase orders of long lead items are placed. Preparation of drawings is in progress and almost at final stage.

Since this is a CDM project all efforts are being made to expedite timely completion of the project.


R. Kher 5/9/02
CE(P)

3M Head H.S. Mumbai

Enclosure 6

**Certificate of Recognition for being the first of its kind
project in the sector**



NATIONAL PETROLEUM MANAGEMENT PROGRAMME

AWARDS FOR EXCELLENCE

Certificate of Recognition

Creativity & Innovation

For the Year 2003-2004

Team Category - (Non R&D)

A Certificate of Recognition for Creativity & Innovation in the Non-R&D Team Category goes to **Shri B.R.K. Verma**, DGM (C&M) and his team comprising **Shri T. Krishnamoorthy**, DGM (P), **Shri R. Kher**, CE (P), **Shri L.K. Jindal**, CE (E), **Shri A.G. Dahake**, SE (P), **Shri S.K. Biswas**, SE (INST), **Shri T. Mohan Prasad**, SE (P), **Shri Prabhat Kumar**, SE (P), **Shri A. Hosatti**, EE (P) and **Shri C.M. Virkud**, AEE (E) from **Oil and Natural Gas Corporation Limited for Zero Hydro carbon Emission at Uran**.

Hydro carbon emissions cause tremendous environmental problems at national and international level, in addition to the economic loss of the gas which is flared. The team has successfully implemented innovations to achieve zero hydro carbon emission level besides additional production of value added LPG, naphtha and C2C3. The pay back period for the investment is about three to three and a half years. ONGC has found the use of Flare Gas Recovery Unit (zero flaring) and Tank Vapour Recovery Unit to be extremely economical and efficient and are trying to replicate this in other projects as well. This is the first time such an achievement has been made in any of the plants and the overall impact of these innovations would be enormous not only in economic but also in environmental terms.

In commendation of this work Certificate of Recognition is given to **Shri B.R.K. Verma** and his team from **ONGC**.


(S.C. TRIPATHI)

Secretary

Ministry of Petroleum & Natural Gas
&
Chairman General Council