

# O&G Subcommittee meeting, M2M Partnership ONGC's (India) briefing

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## ONGC's update since Monterrey

### ➤ ONGC M2M Program team formation

- Core team with four members
- 10 Asset coordinators
- Hands on training of the core team on measurement techniques during June 26- June 30, 2009.
  - Through USEPA-ONGC collaboration
  - By HY-BON Engineering, Midland, Texas at ONGC Uran Plant

## ONGC's update since Monterrey

- 2 longer duration (repeat) measurements were carried out during June 17-25, 2009
  - At Uran Plant &
  - At Kallol CTF Complex
  
- The findings are;  
**Uran Plant:**  
  
Emission of tank vapours - 20800 SCMD normal and 28000 SCMD peak

# ONGC's update since Monterrey

## ➤ Kallol CTF Complex:

- 6,216 SCMD from the tanks at Kallol CTF complex and
- 10,200 SCMD approx. from Kallol heater treater flare.

## ➤ 5 table top analysis of new installations undertaken during April- July 2009

- CPF Gandhar
  - Hazira Plant
  - Ankleswar CTF Complex
  - GGS 1 of Gandhar
  - Mehsana CTF Complex
- *SH Complex- Mumbai High is being taken*

# on actionable items for the March 2010 Expo

## ➤ Response from ONGC India:

- Two projects have been kept for showcasing

### • Project-1

**Name:** Arresting tank hydrocarbon emissions.

**Location:** Uran Plant of ONGC

#### **A Brief about the project:**

The project aims at recovering 20,800 SCMD of rich & wet tank vents from its two intermediate storage tanks which was otherwise being emitted to the atmosphere.

A detailed study was carried out during June – July, 2009 through HY-BON Engineering, USA under a joint effort from USEPA & ONGC to accurately measure the tank vents and suggest the suitable technical interventions necessary towards this end. HY-BON has suggested the use of VRU.

Detailed reports received on Sep 12, 2009.

Actions being undertaken.

# on actionable items for the March 2010 Expo

## ➤ **Estimated emissions reduction**

- The gas is typically wet & rich.
- The percentage of methane is 36.75%.
- It would amount to a saving of approx. 7644 m<sup>3</sup> of methane per day.
- This is equivalent to 40,000 tons of CO<sub>2</sub>e per annum.

## ➤ **Projected capital**

- Approx: \$2 million

## ➤ **Timeline for completion**

- Oct 30, 2010

# On actionable items for the March 2010 Expo

- **Project 2**

**Name:** To recover low pressure & very low pressure gas by using screw compressor

**Location:** Heera and Neelam Offshore Platforms of ONGC

**A Brief of the project:**

- The project aims at recovering 18.25 MMSCM per year (50,000 SCMD) of gas in each platform which was otherwise being flared and vented.
- The vented component of the project is approx 2.54 MMSCM of natural gas per year.
- The project aims at capturing the entire gas by using Screw Compressor.

# On actionable items for the March 2010 Expo

## ➤ Estimated emissions reduction

- Heera gas contains 57.34% methane
- The total methane saving from Heera Platform from the vented gas of 2.54 MMSCM per year would be = Approx 1.5 Million cubic meter or approx 54 Mcf per annum.
- Saving of 15.7 MMSCM per year of NG which is otherwise being flared
- This is equivalent to 54,554 tons of CO<sub>2</sub>e per annum.

*(32,711 tons of Co<sub>2</sub> equiv from 15.71 MMSCM of NG which is being flared and 21,843 tons of Co<sub>2</sub> from 2.54 MMSCM per year which is being vented.)*

## ➤ Projected capital

- Approx: \$13 million

## ➤ Timeline for completion

- Oct 30, 2010



Target companies, organizations and individuals that could contribute to the topic of reducing methane emissions (via research, inventories, relevant technologies, active or future projects, etc.) whom each Subcommittee member will contact to encourage participation in Expo (minimum of two, including contact information).

Response from ONGC, India:

Besides ONGC, other companies could be:

1. Oil India
2. EIL
3. BGEPIL
4. Cairn Energy
5. TATA Petrodyne & Hardy Oil etc .

## Conclusion

- M2M : A positive step towards Sustainable Development

Thank you

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