



**Status of Implementation of M.B. Lal Committee recommendations as on April 2016**  
**Refinery Division**

**MUMBAI REFINERY**

| Sr. No. | Item description  | Total requirement (Nos.)                                  | PO placed (Nos.) | Item installed (Nos.) | Target date for completion | Remarks (if any)  |
|---------|---|---|------------------|-----------------------|----------------------------|---|
| 1       | High volume long range monitors (HVLRS) - Remote operated.  | 16  | 16               | 13                    | Completed                  | 13 nos. have been installed. 3 Nos. are spare to be used at later date.   |
|         | High volume long range monitors (HVLRS)- Manual   | 90  | 90               | 87                    | Completed                  | Completed. Balance 3 kept as spare for exigencies.  |
| 2       | Automatic actuated Rim Seal Fire detection & suppression system for class "A" floating roof tanks (FRT) | 27  | 27               | 24                    | 31.07.2016                 | <b>Phase 1:</b> 2 tanks competed (Tk 114 & 411)<br><b>Phase 2:</b> Total 16 tanks, (15 completed). Status of balance 1 tank: Tk 119 – Tank de-commissioned for M&I.<br><b>Phase 3:</b> Total 9 tanks. (7 completed) Status of balance 2 tanks, tank (Tk 124); decommissioned for M&I expected completion by July 2016, tank 115 have CF3I system which is being replaced by foam based rim seal fire protection system. Total tank requirement is revised from 37 to 27 as 12 tanks are being provided with dome roof to ensure the problem due to failure of roof drain line is eliminated, tendering action is in progress for provision of dome roof for identified tanks. |
| 3       | Hydrocarbon Detection (HC) & Alarms system  | 153   | 153              | 153                   | 31.03.2015                 | <b>All HC installed. 150 HC commissioned.</b> 3 to be commissioned as part of CDU 4 project. 421 Nos. on line HC detectors are already installed in refinery.   |
| 4       | Remote operated shut off valve (ROSOV)  | 255   | 255              | 158                   | 31.05.2016                 | 220 installed.35 installation is in progress and shall be completed by May 2016.  |
| 5       | Replacement of Hammer Blinds with double block and bleed valve (DBBV)                                   | ---   | ---              | ---                   | ---                        | There are no hammer blinds.   |
| 6       | Medium Expansion Foam Generators (MEFG)   | 4   | 4                | 4                     | Completed                  | ---   |
| 7       | Mass Flow Meters (MFM)  | ---   | ---              | ---                   | ---                        | Already available   |
| 8       | Emergency Kits  | ---   | ---              | ---                   | ---                        | Already Available.  |
| 9       | Closed circuit television (CCTV)  | 6   | 6                | 6                     | 31.03.2015                 | 52 CCTV has been installed along the periphery and movements are continuously monitored by CTSF in control room situated at main gate.  |
| 10      | Up-gradation of fire water system - double fire contingencies   | 1000 mtrs of lines comprising of 5 systems to be modified | 1000 mtrs        | 1000 mtrs             |                            | Completed   |
| 11      | Emergency Response Centre (ERC)   | ---   | ---              | ---                   | ---                        | Already available   |
| 12      | Training  | ---   | ---              | ---                   | ---                        | Training being imparted regularly.  |



**Status of Implementation of M.B. Lal Committee recommendations as on April 2016**  
**Refinery Division**  
**KOCHI REFINERY**

| Sr. No. | Item description  | Total requirement (Nos.)  | PO placed (Nos.)  | Item installed (Nos.)                            | Target date for completion | Remarks (If any)   |
|---------|---|---|---|--|----------------------------|--|
| 1       | High volume long range monitors (HVLRS)   | 130, including refinery and shore tank farm   | PO Placed for 139. Received 130. 9 nos spare  | 130 nos HVLRS installed.                         | 31.3.2015                  | Completed.   |
| 2       | Automatic actuated Rim Seal Fire detection & suppression system for class "A" floating roof tanks (FRT) | 21 at refinery  | 21  | Rim seal system on 21 tanks completed.           | 31.08.2015                 | Completed.   |
| 3       | Hydrocarbon Detection (HC) & Alarms system  | ---   | ---   | HC detectors and alarm system already available  | NA                         | HC detectors and alarm system already available  |
| 4       | Remote operated shut off valve (ROSOV)  | ---   | ---   | STF tanks are provided with remote operated MOVs | NA                         | STF tanks are provided with remote operated MOVs. In the refinery PR is given for procurement and installation of MOVs |
| 5       | Replacement of Hammer Blinds with double block and bleed valve (DBBV)                                   | ---   | ---   | ---  | NA                         | There are no hammer blinds.  |
| 6       | Medium Expansion Foam Generators (MEFG)   | 8   | 8   | 8  | Completed                  | Installation completed.  |
| 7       | Mass Flow Meters (MFM)  | ---   | ---   | ---  | ---                        | ---  |
| 8       | Emergency Kits  | 1   | 1   | 1  | Completed                  | Completed.   |
| 9       | Closed circuit television (CCTV)  | ---   | ---   | CCTV already provided                            | NA                         | CCTV already provided  |
| 10      | Up-gradation of fire water system - double fire contingencies   | Piping approx 6500M and 2800M has to be resized in Refinery / STF respectively. New pumps 4 Nos required at STF | PO has awarded for piping fabrication, pumps and construction at STF. PO awarded for the Piping jobs (part-1) in the refinery | Completed  | 30.6.2015                  | Completed  |
| 11      | Emergency Response Centre (ERC)   | ---   | ---   | ---  | ---                        | Already available  |
| 12      | Training  | ---   | ---   | ---  | ---                        | Complied.  |