



CENTRAL POLLUTION CONTROL BOARD

DELHI 110 032

January 07, 2020

B-13011/1/2019-20/AQM 10802-10847  
OFFICE MEMORANDUM

Sub: Guidelines for Setting Up of New Petrol Pumps in Compliance of Hon'ble NGT order dated January 18, 2019 in OA No. 86/2019: Gyanprakash@ Pappu Singh vs Gol & Ors -regarding.

Hon'ble National Green Tribunal, vide order dated January 18, 2019 in OA No. 86/2019: Gyanprakash@ Pappu Singh vs Gol & Ors directed Central Pollution Control Board and MoPNG to look into the issue of setting up of large number of petrol pumps in the country and directed that appropriate guidelines be issued by the Central Pollution Control Board in exercise of statutory power.

An Expert Committee comprising of members from IIT Kanpur, NEERI, IIP, TERI, MoPNG and CPCB was constituted to frame Guidelines for setting up of new Petrol Pumps including siting criteria and pollution prevention and control measures

The guidelines were placed in public domain and comments/suggestions/objections were invited from public and concern stakeholder and these were reviewed and guideline have been finalised.

The final Guidelines prepared by Expert Committee are hereby circulated for implementation by concerned stakeholders. These guidelines are hereby issued with the approval of the Competent Authority.

(V.K. Shukla)

Additional Director, AQM Div.

Encl.: As Above

To.

1. As per List Enclosed

Copy to:

1. Joint Secretary  
CP Division  
Ministry of Environment, Forest and Climate Change  
Indira Paryavaran Bhavan,  
Jorbagh Road, New Delhi – 110 003

2. PS to CCB

3. PS to MS

## GUIDELINES FOR SETTING UP OF NEW PETROL PUMPS

### A. Containment and treatment of spillages from fuel filling operations at petrol pumps:

1. Petrol pumps located in areas with high groundwater table i.e. groundwater levels less than 04 meters shall have secondary containment by way of double walled tanks or concrete protection walls so as to minimize groundwater and soil contamination. It shall be the responsibility of OMC to properly get measured groundwater level at the site of proposed petrol pump and ensure implementation of these adequate protection measures for such sites. Details of measures taken by Oil Marketing Company shall be placed in public domain and in case of contradictory view, view of State/ Central Ground Water Board/ Authority will prevail.
2. All new retail outlets shall have underground tanks/ above ground tank and its ancillary components such as pipes, flexible connectors, pumps, fittings etc. protected from leaks due to corrosion by adopting materials (HDPE/ Mild Steel etc.) with required protective coating, as applicable, duly approved by PESO.
3. Any major leakage/ spillage of Petrol, Diesel, Lube Oil (more than 1 barrel-165 litres) occurs at fueling station, concerned OMC shall report to State Pollution Control Board, PESO and District Administration under intimation to CPCB within 24 hours of occurrence.

Operation of concerned underground storage tank (UST) and its ancillary components shall be stopped immediately and not be resumed till corrective measures to contain and stop leakage/ spillages are implemented to the satisfaction of PESO and concerned SPCB.

OMCs will be held liable for Environmental Compensation (imposed by SPCBs/PCCs) and assessment of environmental damage (depending on extent of contamination in soil and groundwater) and site remediation. Consultant/ Expert agency appointed by OMCs for damage assessment and site remediation shall have minimum national/ international experience of 5 years in this field. Various approved methods shall be considered for cleaning underground contaminants.

4. All DUs shall have Auto Cut off Nozzles which shuts dispensation of fuel if its level in customer fuel tank reaches full capacity.
5. Breakaways to be installed for all the hoses of dispensing units to reduce spillage in the event of customer vehicles moves away with nozzle still in the fueling position.

6. Single/ double plane swivel with breakaway coupling shall be installed for all the dispensing units for better positioning of nozzle while refueling so that it does not fall off accidentally.
7. In pressurized dispensation, all dispensing units shall be installed with shear valves to cut the fuel flow from pipe line immediately upon accidental knocking of dispensing units from its position.
8. In pressurized system all Submersible Turbine Pumps (STPs) are to installed with line leak detectors and in the event of pipeline leaks STPs shall stop pumping fuel from underground tanks.
9. Emergency stop button switch shall be provided on the Multi-Product Dispenser (MPD) to stop the dispensation in case of emergency.
10. Automation system shall be installed at all new retail outlets to alert in case of tank leak by way of auto gauging system approved by PESO.
11. All Retail Outlets shall provide overfill alarm through automation.
12. Measures for spill containment in fill point chambers and forecourt area shall be implemented as prescribed by PESO.

**B. Check on leakages (Leakage Detection System) from underground storage tanks so as to prevent groundwater and soil contamination:**

1. All new retail outlets will have automation system installed which will provide reports on volume balance after every day operation and records shall be maintained.
2. Manual gauging shall be done once in a month and compare the same with Automatic Tank Gauging for accuracy.
3. Daily MS and HSD loss shall not exceed MoPNG prescribed limits. In case of leakage beyond such limits, matter shall be got analyzed by OMCs and further action shall be taken for ascertaining the reasons of losses. In case of leakage resulting in soil / groundwater contamination:
  - a. Concerned OMC shall report to State Pollution Control Board, PESO and District Administration under intimation to CPCB within 24 hours of occurrence. Operation of such underground storage tank (UST) and its ancillary components shall be stopped immediately.
  - b. Fuel shall be removed immediately from underground storage tank to prevent further release to environment. Measures to prevent explosion due to vapors released due to leakage as recommended by PESO shall be implemented immediately.

- c. OMCs will be held liable for Environmental Compensation (imposed by SPCBs/PCCs) and assessment of environmental damage (depending on extent of contamination in soil and groundwater) and site remediation. Consultant/ Expert agency appointed by OMCs for damage assessment and site remediation shall have minimum national/ international experience of 05 years in this field. Various approved methods shall be considered for cleaning underground contaminants.
  - d. Operation of Underground tank and its ancillary components shall not be resumed till corrective measures to contain and stop leakages are implemented to the satisfaction of PESO and concerned SPCB.
4. All underground tanks and pipelines shall be subjected to test for leaks every 7 years.

**C. Policy towards Treatment and disposal of sludge removed from underground tanks during cleaning:**

Sludge shall be collected, stored and disposed as per Rule 8 of Hazardous Waste (Management and Transboundary) Rules, 2016 and amendments thereof and records shall be maintained.

**D. Installation, Operation and maintenance of Vapour Recovery System:**

1. All **new retail** outlets set up with sale potential of 300KL MS per month and setting up in cities with population more than 1 lakh will be provided with VRS. VRS should be functional by the time of sale of MS touch 300 KL. In case of failure of installation of VRS, Environment Compensation will be levied by SPCBs/ PCCs equivalent to the cost of VRS and this will further increase proportionate to the period of non-compliance.
2. Any **new retail** outlet set up in cities having population more than 10 lakh and having sale potential of 100 KL MS per month will be provided with VRS. VRS should be installed within a period 03 months from the day of sale of MS touch 100 KL. In case of failure of installation of VRS, Environment Compensation will be levied by SPCBs/ PCCs equivalent to the cost of VRS and this will further increase proportionate to the period of non-compliance.
3. In case of Stage II VRS, nozzle shall be provided with flexible cover flap or other alternative system for proper covering of filling tank and therefore proper recovery of vapors.
4. OMCs are responsible for maintaining installed VRS. They have to maintain periodic inspections for A/L regulator as prescribed by Legal Metrology. Proper record shall be maintained.

5. Working of dispenser shall be interlinked with VRS functioning. Online system shall be developed within 06 months to monitor status of operation of VRS. In case of non-operation of VRS, the same shall be automatically reported to concerned OMC. VRS shall be brought into operation immediately within 24 hrs and in any case within 72 hrs failing which sale of MS shall be stopped from the fueling station. Proper records of operation of VRS shall be maintained.
6. Work zone monitoring for Total VOC and Benzene shall be conducted by OMCs for petrol pumps selling more than 300 KL/ month and more than 10 lakh population (in first phase) by E(P)Act, 1986 approved labs once in a year to check compliance with OSHA norms (Time-Weighted Average) and report shall be submitted to SPCB. In addition, pilot study shall be conducted by OMCs through expert institutions for online monitoring of VOCs.
- E. Ground water and soil quality monitoring within petrol pump selling more than 300 KL/ month and more than 10 lakh population shall be conducted by OMCs once in two years through E(P)Act, 1986 approved labs for the following parameters from the nearest source and report submitted to SPCB:

Permissible Limit

Sr.No.	Parameter	Permissible Limit
1.	Total petroleum hydrocarbons	600µg/l
2.	BTEX	i. Benzene- 950µg/l ii. Toluene- 300µg/l iii. Xylenes- a. o-xylene- 350µg/l b. m & p- xylene- 200µg/l
3.	Ethanol	1400 µg/l
4.	Methyl Tertiary Butyl Ether	13µg/l
5.	PAH	0.0001µg/l

Enforcement agencies including SPCB can collect samples in and around petrol pump to check contamination.

#### **F. Measures for protection of Worker's Health**

1. All workers engaged at retail outlets may be covered under ESI. OMC dealers shall implement the personal protective equipment (PPE) as per labor laws.
2. IEC (Information Education Communication) activities should be organized by OMC dealers for workers at regular intervals in order to sensitize them about harmful impacts of VOC emissions.

#### **G. Audit of all protection measures and monitoring system implemented at petrol pumps:**

PESO shall conduct audit of tanks and fuel equipment including pipes, overfill protection equipment and alarm system on annual basis and maintain records.

#### **H. Siting criteria of Retail Outlets:**

In case of siting criteria for petrol pumps new Retail Outlets shall not be located within a radial distance of 50 meters (from fill point/ dispensing units/ vent pipe whichever is nearest) from schools, hospitals (10 beds and above) and residential areas designated as per local laws. In case of constraints in providing 50 meters distance, the retail outlet shall implement additional safety measures as prescribed by PESO. In no case the distance between new retail outlet from schools, hospitals (10 beds and above) and residential area designated as per local laws shall be less than 30 meters. No high tension line shall pass over the retail outlet.

*These guidelines are supplementary to all existing relevant Rules, Guidelines, Orders etc.*