

## कार्यसूची संख्या -108.11

विषय:- प्रदेश में नये स्थापित होने वाले पेट्रोल पम्प/रिटेल आउटलेट/ईंधन भराव केन्द्र हेतु केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा बनायी गयी गाईडलाइन में यथावश्यक संशोधन करते हुये प्रदेश में प्रभावी/अंगीकृत किये जाने के संबंध में।

प्रदेश में नये स्थापित होने वाले पेट्रोल पम्प/रिटेल आउटलेट/ईंधन भराव केन्द्र से जनित पर्यावरणीय प्रदूषण की समस्या के रोकथाम हेतु वर्तमान में कोई भी गाईडलाइन प्रभावी नहीं है। केन्द्रीय प्रदूषण नियंत्रण बोर्ड के गाईडलाइन दिनांक-07.01.2020 के विवेचना के उपरान्त गाईडलाइन को यथा अंगीकृत किये जाने संबंधी प्रस्ताव बोर्ड की दिनांक-30 मार्च, 2021 को सम्पन्न हुई बोर्ड की 105वीं बैठक के कार्यसूची संख्या-105.18 पर प्रस्तुत किया गया था। बोर्ड द्वारा प्रस्ताव का अवलोकन कर, प्रकरण पर पुर्नविचार कर, सुविचारित प्रस्ताव बोर्ड की आगमी बैठक में प्रस्तुत किये जाने के निर्देश दिये गये थे।

इस संबंध में केन्द्रीय प्रदूषण नियंत्रण बोर्ड के पत्र दिनांक-07.01.2020 द्वारा निर्धारित गाईडलाइन्स व दिनांक-16.08.2021 के पत्र द्वारा निर्गत Addendum का अध्ययन कर वांछित संशोधन करते हुये, प्रदेश में नये स्थापित होने वाले पेट्रोल पम्प/रिटेल आउटलेट/ईंधन भराव केन्द्र के संबंध में गाईडलाइन तैयार कर संलग्नक-1 पर प्रस्तुत की गई है।

अतएव बोर्ड के समक्ष प्रस्ताव है कि:-

“प्रदेश में नये स्थापित होने वाले पेट्रोल पम्प/रिटेल आउटलेट/ईंधन भराव केन्द्र हेतु केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा बनायी गयी गाईडलाइन में यथावश्यक संशोधन करते हुये प्रदेश में प्रभावी/अंगीकृत किये जाने हेतु अनुमोदन प्रदान करना चाहें।”



**PROPOSED GUIDELINES FOR SETTING UP OF NEW PETROL PUMPS****A: Siting criteria of Retail Outlets:**

- 1- 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 Petroleum and Explosives Safety Organization (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.
- 2- All the surface water bodies irrespective of utility shall be protected from any possible contamination. These include lakes, ponds, streams, rivers, wetlands, canals and creeks, as per revenue records. Retail Outlets shall not be located within a distance of 50 meters from the nearest point of water bodies. In case of streams and rivers, the distance shall be considered from floodway. In case floodway is not defined, the distance shall be considered from firm banks / edge of river. The siting criterion is to be implemented for all new petrol pumps where construction by Oil Marketing Company (OMCs) starts post the issuance of these guidelines.

**B. Containment and treatment of spillages from fuel filling operations at petrol pumps:**

1. Petrol pumps located in areas with high groundwater level 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. Retail outlets coming within 50 meter to 100 meter from the nearest point of surface water body shall also have secondary containment by way of double walled tanks of concrete protection walls around Underground Storage Tank (UST).
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 fuelling station, concerned OMC shall report to State Pollution Control Board (SPCB), PESO and District Administration under intimation to Central Pollution Control Board (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 Dispensing Units (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 fuelling position.
  6. Single/double plane swivel with breakaway coupling shall be installed for all the dispensing units for better positioning of nozzle while refuelling 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.

**C: 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 Ministry of Petroleum and Natural Gas (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 5 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.

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

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

**E: Installation, Operation and maintenance of Vapour Recovery System (VRS):**

1. All new retail outlets set up with sale potential of 300 KL 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 fuelling station. Proper records of operation of VRS shall be maintained.
6. Work zone monitoring for Total Volatile Organic Compounds (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 Occupational Safety and



Health Administration (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.

#### F: Ground Water and Soil Quality Monitoring Protocol:

- Groundwater and soil quality monitoring near the premises of fuel retail outlets shall be conducted by OMCs once a year through E(P) Act, 1986 approved labs or labs with national / international accreditation. The monitoring shall be done for those Fuel Retail Outlets which are located within 100 meter from the nearest point of surface water bodies. These shall be applicable to all petrol pumps, regardless of the date establishment. In case of any clarification and/or difficulty in obtaining samples for groundwater and soil quality monitoring, OMCs may seek assistance of local administration/SPCB/PCC/CGWB.
- Groundwater and soil quality monitoring shall also be conducted by OMCs before installation of the new fuel retail outlet, for those retail outlets coming up within 100 meter from the nearest point of surface water bodies.

#### Protocol for monitoring quality of soil and groundwater near the premises of fuel retail outlets

Samples of groundwater being used for drinking purposed shall be collected from at least three different directions with reference to the retail outlet. The sampling point should be preferable within 50m distance from the underground storage tank location at the retail outlet.

The samples shall be analyzed from the following parameters:

Table 1

Sr.No.	Parameter	Screening Values
1	Total petroleum hydrocarbons (C10-C40)	0.6mg/L
2	BTEX	I. Benzene- 0.01 mg/L II. Toluene-0.7mg/L III. Xylene-0.5mg/L
3	Methyl Tertiary Butyl Ether	13µg/L
4	Total PAH	0.0001mg/L

Further, soil sample shall be collected from a borehole within the premises of the fuel retail outlet adjacent to the Underground Storage Tank (UST) pit. The depth of bore hole should be up to 1m below the bottom of the storage tank level. Soil samples shall be analyzed for the following parameters:

Table 2

Sr.No.	Parameter	Screening Values (mg/kg)
1	Total petroleum hydrocarbons (TPH)	5000
2	Benzene	5
3	Toluene	30
4	Xylene	50
5	Methyl Tertiary Butyl Ether	100
6	Total PAH	40

Ground water and soil quality monitoring shall be conducted by OMCs once a year through E (P) Act, 1986 approved labs or labs with national/international



accreditation and the reports are to be submitted to SPCB. The soil monitoring shall be done in first six months while groundwater monitoring shall be done in the next six months. In case of exceedance of screening by any parameter, or in case of leakage resulting in soil/groundwater contamination, the measures/steps as prescribed in the CPCB guidelines for setting up to petrol pumps dated 07.01.2020 shall be taken up. Assessment and remediation shall be carried out as per the guidelines issued by MoEF&CC and CPCB.

**G: 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.

**H: 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.

**NOTE:** All the above Guidelines are supplementary to all existing relevant Rules, Guidelines, Orders, Notifications such as Wetlands (Conservation and Management) Rules, 2017 Coastal Regulation Zone (CRZ) Notification, 2011 etc. The other measures, prescribed in CPCB guidelines for setting up of new petrol pumps dated 07.01.2020, containment and treatment of spillages, check on leakages from USTs, treatment and disposal of sludge removed from underground tanks during cleaning, measures from protection of workers' health, audit of all protection measures and monitoring system implemented at petrol pumps, shall also apply to the fuel retail outlets falling in the criteria specified above.

Monitoring protocol specifying the prescribed parameters and screening values annexed with these guidelines (other than the monitoring frequency), shall also be adopted for those retail outlets where CPCB guidelines dated 07.01.2020 are applicable.

These guidelines shall be reviewed from time to time.

