

Gujarat Pollution Control Board

“Paryavaran Bhavan”

Sector 10-A, Gandhinagar

Circular

Sub: Pilot Emissions Trading Scheme for selected industries in Surat, Gujarat

The ETS Notification [issued vide order No. GVN-2019-17-GPCB-SFS-1-2019-ETS-T] established an emissions trading scheme for particulate matter air pollution for selected industrial sources in Surat, Gujarat. Pursuant to the notification and based on the decisions taken in the 7th meeting of the Market Oversight Committee (held on 7th November, 2019), the GPCB hereby issues the rules for the **third live-trading period [16th November, 2019 to 31st December, 2019]** of the pilot ETS scheme in detail:

1. **Compliance Period-III:** The third live compliance period will start on the 16th of November 2019 and close on 31st of December 2019. A true-up period of seven days shall follow the third compliance period from 2nd January 2020 to 8th January 2020.
2. **Emissions cap:** Prorated for the 46 days long compliance period, the cap on the total mass of suspended particulate matter (SPM) emissions released from Industries for the third compliance period shall be set at **276 tons**.
3. **Permit allocation:**

- a. A fixed number of tradeable permits shall be created at the start of each compliance period. Every permit will correspond to a fixed quantum of particulate emissions.

- b. **80%** of the total month permit supply shall be distributed free of cost to all participant units at the start of the compliance period. The initial allocation shall be pro rata on basis of Boiler and Thermopack capacity as per the unit's Consent to Operate.

If the participant unit has SPM concentration standard different from 150 mg per Nm³, then the permit allocation will be adjusted by a factor of the concentration standard applying to that unit, divided by 150 mg per Nm³.

- c. The remaining **20%** of total permits shall be sold by GPCB through auction during the month. Hence, for the determined cap of 276 tons, a corresponding 220.8 tons will be freely distributed to industries and 55.2 tons will be sold through auction.

- d. There will be weekly uniform price discovery auctions in the compliance period, held on every Tuesdays for a duration of 2 hours.

- e. In the initial auction of a monthly compliance period, GPCB will offer 20% of the cap at the floor price of Rs 5 per kg. In case, the entire 20% permits are not sold in the initial auction, GPCB would offer the

remaining fraction of permits in the subsequent auctions until sold. This will ensure that the total amount of permits in the market is equal to 100% of the cap.

- f. Units may buy and sell permits during the continuous market from Wednesdays to Mondays, at the price discovered in the most recent Tuesday uniform price discovery auction. The following order limits would be applicable:
 - i. **Permit Holding Limit:** The greater of 150% of initial allocation or 5% of the total market-wide cap.
 - ii. **Permit Sell Limit:** Sale Limit at 90% of initial allocation.
- g. The platform for auctioning and trading will be hosted by National Commodities and Derivatives Exchange e-Markets Limited (NeML). The detailed market operations manual giving the rules of auction clearance, order matching and the like shall be issued by NeML.
- h. All buying and selling of permits in the 6 days following the weekly auction will occur at the clearing price set at the latest auction. A new permit price discovery will occur at the subsequent auction.
- i. Each industry shall appoint a nodal representative who will be actively involved in monitoring CEMS data and trading of permits under ETS. This representative will be the point of contact with the Surat Regional Office and NeML for auction participation and trading.

4. Permit price ceiling and floor:

- a. Permit price ceiling shall be imposed at **Rs. 100/kg**. Permit price floor shall be maintained at **Rs. 5/kg**. To enforce the aforementioned price band and provide industries with an outlet to buy additional permits from GPCB, the Surat Regional Office will be a standby seller of the entire quantity of permits in demand at the ceiling price of Rs. 100/kg at the end of each True-up.
- b. Price ceiling and floor may be adjusted by the Market Oversight Committee from time to time as the market performance is reviewed.

5. Compliance calculation and true-up period:

- a. For a "true-up period" from 2nd January 2020 to 8th January 2020, units may continue to buy and sell any remaining permits at the last auction price in order to meet their compliance obligations. Unit holding and sell limits stated in (3.f) would not be applicable during the True-up period.
- b. At the close of the first month compliance and true-up period, GPCB shall compare each unit's total emissions as reported by CEMS and validated as per the rule stated in (5), against the permit holdings of the unit. Units with permits sufficient to cover emissions are deemed compliant. Units with exceedance of emissions beyond permit holdings are deemed non-compliant.

6. Environmental Damage Compensation (EDC):

- a. The purpose of the emissions cap is to limit damage to the environment from SPM emissions. Environmental Damage Compensation (EDC) shall be imposed for every kg of emissions in excess of a unit's permit holdings at the end of the compliance period. The EDC shall be applied at a rate of **Rs. 200/kg** for each kg of exceedance.
- b. Participant industries shall post an **Environmental Damage Compensation Deposit (EDCD)** in the amount of Rs. 2 lakh for small-scale, Rs. 3 lakh for medium-scale and Rs. 10 lakh for large-scale industries.
- c. **Tenure and Refund Policy for ED CD:** The deposits would be valid until March 2020, beyond which industries would be required to post another deposit for the financial year 2020-21. For compliant industries the ED CD shall not be forfeited. For industries exceeding their permit holdings, the Environmental Damage Compensation (EDC) in part 6.a. above shall be deducted from the Deposit. Additional ED CD may then be required to be posted to meet any shortfall.
- d. Persistent or gross non-compliance is grounds for removal from the scheme and additional penalties available under Air (Prevention and Control of Pollution) Act 1981.

7. Imputation rule for missing CEMS data:

- a. Emissions during the compliance period are determined by CEMS data. In case of any missing or invalid CEMS data, emissions shall be imputed as per the following rule, detailed in the ETS Registry Manual.

Table 1: Validation Protocol for Missing CEMS Data

% Data Available from CEMS during Weekly Reporting Period	Load Imputation for Missing Data Values (kg/hr)
>95%	Impute industry's mean operating emissions load during the compliance period
80-95%	Impute industry's 75th percentile emissions load during the compliance period
50-80%	Impute industry's 90th percentile emissions load during the compliance period
<50%	Impute industry's 90th percentile emissions load during the compliance period and prior three months of valid CEMS data, up to start of the compliance period <i>and</i> Notice sent to GPCB of very poor data availability of the unit during the week

- b. The missing data rules shall be applied from the top of the table to the bottom for each percentile bracket of CEMS data missing.
- c. Knowingly reporting any inaccurate data would incur penalties and be treated as non-compliance with the scheme.

8. Compliance period:

- a. **Upcoming compliance periods:** Below is a schedule of the upcoming compliance periods through the end of the 2019-20 fiscal year.

Table 2: Compliance Period Roadmap

	Start	End	Cap (per month of period)
Compliance Period-III	16-Nov	31-Dec	180 tons
Compliance Period-IV	01-Jan	31-Mar	To be decided

- b. All transactions and compliance obligations during the live trading period will be enacted using industry escrow accounts to transfer margin money and settlement of funds using NEFT/RTGS/IMPS or Intra-Bank Transfer.
- c. Participation in the live trading period is mandatory for all participant units. Each unit would be required to submit a buy or sell bid in each permit auction during the live trading period. GPCB would monitor bid submission on a weekly basis.
- d. The timing and duration of compliance periods may be adjusted by GPCB Market Oversight Committee from time to time.

The above stated rules are determined on a provisional basis. Following the third compliance period, the ETS oversight committee will evaluate the market process and protocols. On basis of learnings from the third live compliance period and feedback from stakeholders, adjustments or changes to the market terms may be released for the next trading period.


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Member Secretary

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Copy to:

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