

PUNJAB POLLUTION CONTROL BOARD  
VATAVARAN BHAWAN, NABHA ROAD, PATIALA

No. HQ-1/Pet Coke/F-200/2010/

678

Dated: 25.7.10

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The Punjab Pollution Control Board in its 148<sup>th</sup> meeting held on 23.6.2010 vide item No. 148.15 permitted the use of pet coke as fuel in the boilers/furnaces subject to the following conditions :-

1. The boilers/ furnace emissions shall conform to  $SO_2$  standards of  $400 \text{ mg/Nm}^3$  as laid down by the Ministry of Environment & Forests for the small boilers.
2. The industry shall provide well designed two stages desulphurization i.e. at combustion stage and of flue gas emissions.
3. The industry shall install dry type air pollution control device, such as, cyclone/multi-cyclone followed by spray type alkali scrubber and packed bed alkali scrubber. The packed bed scrubber to be installed should conform to the guide parameters as mentioned below and the industry shall use only caustic soda as scrubbing media:-
  - i) Velocity of gas through the tower is recommended to be 1.5-2.5m/s.
  - ii) Liquid gas ratio is recommended to be 3.5-4.0 liter/ $\text{m}^3$  of gas flow or 80-325 lpm/ $\text{m}^3$  of tower cross sectional area.
  - iii) Pressure drop is recommended to be 15-150 mm W.G./m of packed bed height.
  - iv) Maximum inlet concentration- 5000 ppm by volume.
4. The industry shall install on line monitor for  $SO_2$  with the stack of the boiler.
5. The industry shall provide interlocking of on line  $SO_2$  monitor with the feeding system of the boiler, so as to ensure that the feeding system of fuel in the boiler furnace should become in shut down condition, in case, the conc. of  $SO_2$  increases beyond the prescribed standards of  $400 \text{ mg/Nm}^3$  at any time.
6. The industry shall provide on line pH meter on the recirculation tank of scrubbing liquor, from where the said liquor is fed to the air pollution control device and ensure that the pH of the feed scrubbing liquor should remain within the range of 10-12.
7. The industry shall provide flow meter and pressure gauge at the outlet of the pump used to supply the scrubbing liquor to the alkali scrubber, so as to ensure that the scrubbing liquor is fed to the air pollution control device at the desired rate and pressure.
8. The industry shall provide a stack of height calculated by using the formula  $H = 14 Q^{0.3}$  and the emission rate of  $SO_2$  (value of Q in kg./hr.) should be calculated by using the volume of flue gas emissions and the standards for  $SO_2$  ( $400 \text{ mg/Nm}^3$ ) or 30 m, whichever is higher.
9. The sludge produced in the recirculation tank of the scrubbing liquor shall be disposed off in an environmentally sound manner.

These orders shall come into force with immediate effect.

Chairman

Endst No HQ-1/Pet Coke/F-200/2010/ 32506-52

Dated. 20-7-10

A copy of the above is forwarded to the following for information and necessary action:

1. The Member Secretary-Cum-Chief Environmental Engineer, Punjab Pollution Control Board, Patiala.
2. The Chief Environmental Engineer, Punjab Pollution Control Board, Patiala.
3. The Senior Environmental Engineer, Punjab Pollution Control Board, HQ-1/II/EPs, Patiala.
4. The Senior Environmental Engineer, Punjab Pollution Control Board, Zonal Office, Patiala-1/II, Jalandhar, Ludhiana-1/II, Amritsar, Bathinda.
5. The Additional Secretary (Gen & Planning), Punjab Pollution Control Board, Nodal Office, Mohali.
6. The Senior Scientific Officer, Punjab Pollution Control Board, Patiala.
7. The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Patiala/ Ludhiana-1/II/III/IV, Fatehgarh Sahib, Sangrur/ Faridkot/ Hoshiarpur/ Jalandhar/Amritsar/ Bathinda & Nodal Office, Mohali.
8. The Deputy Controller (F&A)/Administrative Officer, Punjab Pollution Control Board, Patiala.
9. Law Officer, P. S. to Chairman/P. A. to Member Secretary, Punjab Pollution Control Board, Patiala.

Member Secretary