



ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ
Karnataka State Pollution Control Board

“ಪರಿಸರಭವನ”, 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ.49, ಚರ್ಚ್‌ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ
"Parisara Bhavana", 1st to 5th Floor, # 49, Church Street, Bengaluru - 560-001, Karnataka, INDIA

No. PCB 744 COC 2015-16/ 3668

Date : 24 SEP 2015

Circular

Sub : Protocol for sampling, analysis of coal and reporting of compliance in respect of implementation of the Gazette Notification on use & supply of raw or blended or beneficiated coal with ash content not exceeding 34% ash content in coal based thermal power plants-reg.

Ref : MoEF & CC, GoI-No.Q-15017/40/2007-CPW - Office Memorandum dated : 26.8.2015

---*---

The Ministry of Environment, Forest and Climate Change vide Office Memorandum cited under reference has communicated the protocol for sampling, analysis and reporting of compliance on quarterly basis with respect to ash content in coal to be supplied and used by the thermal power plants covered under the provisions of the Gazette Notification GSR 02 (E) dated January 02, 2014 on supply and use of raw or blended or beneficiated coal in thermal power plants. Copy of the Office Memorandum under reference is enclosed. As per the Protocol, the SPCB's are required to amend the consent under the Air (Prevention & Control of Pollution) Act by stipulating the ash content in Coal and to verify the sampling and analysis process and calibration of real time monitoring devices. All the concerned Officers are hereby instructed to follow the procedure/instructions laid down in the MoEF & CC's Office Memorandum and also to communicate the Protocol to the Thermal Power Plants for compliance.


Chief Environmental Officer

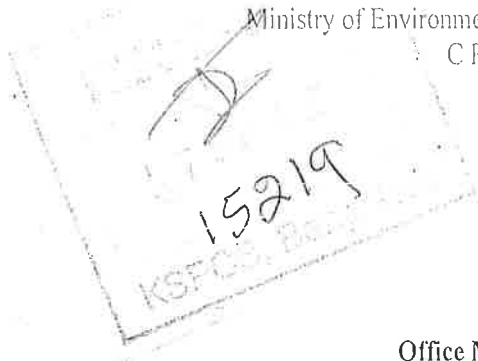
To,

1. Chief Environmental Officer- 2 & 3
2. SEO (17 Category Cell)-To communicate to all the Thermal Power Plants in the State.
3. SEO (Enforcement & Complaint Cell), SEO (Waste Management Cell), SEO (Mines, Steel & Stone Crusher Cell), SEO (Infrastructure Cell), SEO (Technical Officer to Chairman) and SEO (Inspection & Monitoring Cell).
4. SEO (Bangalore City), SEO (Bangalore East), SEO (Bangalore South), SEO (Bangalore North), SEO (Mysore), SEO (Mangalore), SEO (Dharwad), SEO (Bellary) and SEO (Chitradurga).
5. Chief Scientific Officers-1 & 2

cont/----

6. All Regional Officers, Regional Office: (1) Bangalore City-East, (2) Bangalore City-Peenya, (3) Bangalore City-South, (4) Bangalore City-West, (5) Dasarahalli, (6) Doddaballapura, (7) Nelamangala, (8) Yelahanka, (9) Anekal, (10) Bommanahalli, (11) Rajarajeshwari-nagara, (12) Ramnagar, (13) Sarjapura, (14) Chikkaballapur, (15) Hosakote, (16) Mahadevpura, (17) Mysore-1, (18) Mysore-2, (19) Mandya, (20) Chamarajnagar, (21) Tumkur, (22) Chitradurga, (23) Davangere, (24) Kolar, (25) Shimoga, (26) Dharwad, (27) Gadag (28) Belgaum-1, (29) Belgaum-2 (Chikkodi Centre), (30) Bagalkot, (31) Bijapur, (32) Bellary, (33) Raichur, (34) Koppal, (35) Bidar, (36) Gulbarga, (37) Udupi, (38) Mangalore, (39) Hassan, (40) Chikmagalur, (41) Karwar, (42) Kodagu (43) Haveri, (44) Yadgiri.
7. EO (e-gov), EO (17 Cat & Fly ash), EO 17 Cat & KUM), EO (Corporate cell), EO (MSW & Local bodies), EO (Non-EIA Bangalore based), EO (HWM), EO (Battery, BMW & Plastic, Noise), EO (Awareness, Enforcement Cell), EO (Non-EIA, other than Bangalore), EO (Infrastructure), SO (AAQM Cell).
8. Website

Copy to : The PA to Chairman & Member Secretary for information.



Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi-110003
Dated 26th August, 2015

Office Memorandum

Subject: Protocol for sampling, analysis of coal and reporting of compliance in respect of implementation of the Gazette notification on use & supply of raw or blended or beneficiated coal with ash content not exceeding 34% ash content in coal based thermal power plants

1.0 Purpose:

This protocol presents the protocol for sampling, analysis of coal and reporting of compliance on quarterly basis with respect to ash content in coal to be supplied and used by the thermal power plants covered under the provisions of the Gazette notification GSR 02 (E) dated January 02, 2014 on supply and use of raw or blended or beneficiated coal in thermal power plants. The objective is to ensure compliance of the quality of coal with respect to ash content, supplied and used by thermal power plants in keeping with applicable extant Notification of the Ministry in this regard. The data generated shall help in evaluation of compliance level of the notification.

2.0 The Notification:

In exercise of the powers conferred by Section 3, Section 6 and Section 25 of the Environment (Protection) Act, 1986 (29 of 1986) read with rule 5 of the Environment (Protection) Rules, 1986, the Ministry of Environment, Forest & Climate Change, Government of India made the following rules vide notification No GSR 2 (E) dated January 02, 2014 under the Environment (Protection) Rules, 1986, namely:—

With effect from the date specified hereunder, the following coal based thermal power plants shall be supplied with, and shall use, raw or blended or beneficiated coal with ash content not exceeding thirty-four per cent, on quarterly average basis, namely:—

- (a) a stand-alone thermal power plant (of any capacity), or a captive thermal power plant of installed capacity of 100 MW or above, located beyond 1000 kilometres from the pit-head or, in an urban area or an ecologically sensitive area or a critically polluted industrial area, irrespective of its distance from the pit-head, except a pit-head power plant, with immediate effect;
- (b) a stand-alone thermal power plant (of any capacity), or a captive thermal power plant of installed capacity of 100 MW or above, located between 750 – 1000 kilometres from the pit-head, with effect from the 1st day of January, 2015;

Save MS.

COO-1

MS/120
10/09

EO cc

pl. publish in website
- For circulation to all ASEO's, RO's & H.O. Section Heads
- To all TPP's
- To CSO-2 & EEO3
10
124/11

[Handwritten signature]

- (c) a stand-alone thermal power plant (of any capacity), or a captive thermal power plant of installed capacity of 100 MW or above, located between 500-749 kilometres from the pit-head, with effect from the 5th day of June, 2016:

Provided that in respect of a thermal power plant using Circulating Fluidised Bed Combustion or Atmosphere Fluidised Bed Combustion or Pressurized Fluidised Bed Combustion or Integrated Gasification Combined Cycle technologies or any other clean technologies as may be notified by the Central Government in the Official Gazette, the provisions of clauses (a), (b) and (c) shall not be applicable.

3.0 Statutory Compliance Requirement and Reporting:

As per the notification, power plants located 750 kilometres from pit head (500 kilometres from June 05, 2016) shall be supplied with, and shall use, raw or blended or beneficiated coal with ash content not exceeding thirty-four per cent, on quarterly average basis. Hence, coal mine or company, as applicable, supplying coal to thermal power plants as well as thermal power plants covered under provisions of the notification shall require to submit compliance report for each quarter with respect to average ash content in coal used by them to respective State Pollution Control Boards (SPCBs), Regional office of the Ministry of Environment, Forest & Climate Change (MoEF&CC) and Central Pollution Control Board (CPCB).

4.0 Amendment in Consent under Air (Prevention and Control of Pollution) Act, 1981 & conditions in Environmental Clearance issued under Environment (Protection) Act, 1986:

In order to implement the provisions made in the notification, the State Pollution Control Board concerned and Ministry of Environment, Forest & Climate Change shall include a condition with respect to specifying ash content in raw or blended or beneficiated coal to be supplied by the coal mine or company, as applicable, and used by thermal power plants, in the existing consent orders issued under Air (Prevention and control of pollution) Act, 1981 and in Environmental Clearance issued under Environment (Protection) Act, 1986 to thermal power plant and coal mine or company, as applicable, under the purview of the notification on supply and use of raw or blended or beneficiated coal and shall invariably prescribe to all new thermal power plant and coal mine or company, as applicable, which may otherwise fall under the purview of the said notification.

5.0 Ash content monitoring (sampling and analysis) technique of coal:

Coal is highly heterogeneous in nature consisting of particles of various shapes and sizes each having different physical characteristics, chemical properties and residual ash content. Sampling is further complicated by the sampling equipment available, the quantity to be represented by the sample mass, and the degree of precision required. In addition, the coal to be sampled may be a blend of different coal types and how the coal is blended has a profound effect on the way a representative sample is obtained. National and international standards have been developed to provide guidelines for coal sampling procedures under different conditions, sample preparation and bias test procedures for the purpose of obtaining unbiased samples.

Real Time monitoring using auto mechanical sampling (online) from moving streams shall be used for sampling fuels. This shall be effective from a date not later

than 01 September, 2016 in order to enable the Coal Companies and thermal power plants to install and operationalise the real time monitoring system. Manual sampling and analysis may be done so as to verify the online monitoring results.

In case of manual monitoring, coal samples may be taken from a moving conveyor belt since sampling from stationary coal such as a coal storage pile or railcars may be problematic. The analysis of samples shall be carried out by third party appointed by the respective thermal power plant/coal mine or company, as applicable, as per the guidelines of Coal Controller.

6.0 Calibration of auto-mechanical sampler:

It should be ensured that the online ash monitoring instrument is properly calibrated. Measurements should be accepted as valid only if the calibration level shows variation in ash content is 1.0-2%. The online monitor and calibrator will hold a current calibration certificate traceable to national standards.

7.0 Location of Real-Time monitor:

The best location of real-time monitor for sampling from a moving stream is at the coal discharge point of a conveyor belt to bunker where the complete stream can be intersected at regular intervals.

8.0 Sampling frequency:

The continuous sampling of ash content in coal shall be carried out using real-time coal quality monitoring devices. In case of manual monitoring, minimum one sample from moving conveyor belt leading to bunker at each filling shall be collected. The data generated shall be computed and average for each quarter shall be calculated for reporting to concerned agencies as specified in the para 3.0 of this Office Memorandum.

9.0 Monitoring:

The following criteria will be observed when undertaking the sampling and analysis of coal samples with respect to ash content:

9.1 In case of manual monitoring:

- i. Collection of coal samples shall strictly be collected as per the guidelines of Coal Controller/ Bureau of Indian Standards (BIS).
- ii. Coal samples shall be collected by the third party appointed by the respective thermal power plant, coal mine or company, as applicable. However, in case of legal sampling a representative of concerned SPCB, thermal power plant, coal mine or company, as applicable shall also be present during sampling.
- iii. Preparation of samples and analysis shall be carried out by using standard methodology as given by Coal Controller/ Bureau of Indian Standards (BIS) at the NABL accredited laboratory of either coal company/power plant or third party engaged.

9.2 In case of Real Time monitoring:

Data generated through real time online monitors shall be computed on daily basis an average of 3 months shall be calculated for reporting of compliance.

10.0 Monitoring records:

All power plants and coal mine or company, as applicable shall maintain records of the data generated and reported to SPCBs concerned, CPCB & Regional Office of MoEF&CC in compliance to the provisions of the notification for every quarter.

11.0 Compliance Reporting:

All thermal power plants covered under provisions of the notification shall submit compliance Report for each quarter with respect to average ash content in coal used by them to respective SPCBs, Regional office of the MoEF& CC and CPCB on or before 10th day of next month of each quarter ending on 31st day of March, 30th day of June, 30th day of September and 31st day of December every year. Similarly, all coal mine or company, as applicable, supplying coal to power plants shall also submit the same to agencies as mentioned in para 3 of this Office Memorandum.

In order to improve compliance reporting, the thermal power plants and connected coal mine or company, as applicable, should explore possibility of reporting of compliance on continuous basis (online) by making suitable arrangements with respect to ash content in coal being supplied and used by thermal power plants.

12.0 Verification of data & Compliance:

The SPCB concerned shall verify the sampling and analysis process and calibration of real time monitoring devices at least once a year at each thermal power plant and coal mine. Besides, random sampling and analysis of coal used by the power plant and supplied by coal mine shall also be conducted once in a year to ensure compliance and quality of data reporting by the thermal power plants and coal mines.


(Dr. Manoranjan Hota)
Director

To

- 1 PS to MEF&CC
- 2 PPS to Secretary (EF&CC)
- 3 Secretary, Ministry of Coal, Shastri Bhawan, New Delhi
- 4 Secretary, Ministry of Power, Shram Shakti Bhawan New Delhi
- 5 Secretary, Ministry of Steel, Udyog Bhawan, New Delhi
- 6 PPS to Addl. Secretary (HKP)/AS (SK)/AS (MMK);
- 7 JS (MKS), JS (BS)
- 8 Chairman, CPCB/Member Secretary, CPCB
- 9 Member Secretary, All the SPCBs/PCCs
- 10 IT Division, MoEFCC to upload into the website