



ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ
Karnataka State Pollution Control Board

“ಪರಿಸರ ಭವನ”, 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ. 49, ಚರ್ಚ್ ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ
“Parisara Bhavana”, 1st to 5th Floor, # 49, Church Street, Bengaluru - 560 001, Karnataka, INDIA
No. PCB/134(Vol-4)/COC/2016-17/ 491 Date: 01 FEB 2017

Proceedings of the Second State Level Monitoring Committee meeting to review the issues related to Critically Polluted and Severely Polluted areas held under the Chairmanship of Development Commissioner and Additional Chief Secretary, Government of Karnataka on 24-01-2017 at 3.00PM.

Members Present: List attached

Sri S. Shanthappa, IFS, Member Convener welcomed all the members for the meeting and briefed about the objectives and terms of reference of the State Level Monitoring Committee constituted by the Government of Karnataka. Further a detailed presentation on the revised CEPI-2016 was made. Highlights of the revised CEPI-2016 are as follows;

- Comprehensive Environmental Pollution Index. Reflects Environmental Quality of Industrial Clusters.
- In 2009-10, CPCB & IIT-D evaluated 88 Industrial Clusters on CEPI concept.
- Out of 88 clusters, 43 with CEPI > 70 notified as Critically Polluted Areas (CPA); 32 clusters with 60 < CEPI < 70 notified as Severely Polluted Areas (SPA).
- In Karnataka, CPA: Bhadravathi (72.33) & Mangalore (73.68).
- Similarly, SPA: Peenya (65.11), Bidar (67.64) & Raichur (68.07).
- Action Plan formulated & LAC constituted to monitor implementation.
- MoEF in 2010 issued moratorium based on the CEPI score in CPA.
- Based on the action plan and its implementation, moratorium was lifted in 2011 after reassessment of CEPI score by CPCB in 2011.
- In 2011, CEPI score for Bhadravathi is reduced to 62.64 from 72.33 and Mangalore was 73.86 from 73.68.
- In 2013, CEPI score for Bhadravathi was 45.27 from 62.64 and Mangalore was 67.62 from 73.86.
- In 2015, Draft guidelines on CEPI calculation were published and on 26/04/2016, CPCB issued Directions under Sec.18 (1) (B) of the Water Act and Air Act to calculate CEPI as per Revised CEPI 2016.

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- The Algorithm is Source – Pathway – Receptor.
- The Environment to be assessed: Air, Surface Water & Ground Water.
- Factor A – Pollutant Score, Factor B – Pathway Score, Factor C – Receptor Score & Factor D – Additional High Risk element.

SL. NO.	AS PER PREVIOUS CEPI CALCULATION	AS PER REVISED CEPI CALCULATION
FACTOR – A: POLLUTANT		
1	Factor A1: Presence of Toxin & its classification as acute/systemic & carcinogenicity. Max. Score – 6.	Select 3 relevant pollutants/ most critical pollutants based on toxicity & carcinogenicity. Max. Score – 5.
2	Factor A2: Scale of Industrial Activity in 10km ² area of cluster. Max. Score – 5.	Factor A2: Scale of Industrial Activity in 10km ² area of cluster. Max. Score – 4.
	Max. Possible score: 6 x 5 = 30.	Max. Possible score: 5 x 4 = 20.

SL. NO.	AS PER PREVIOUS CEPI CALCULATION	AS PER REVISED CEPI CALCULATION
FACTOR – B: PATHWAY		
1	Factor B1: Ambient Pollutant Concentration based on Exceedence Factor. Max. Score– 8.	Factor B – Level of exposure (No. of samples exceeded/ total no. of samples) x EF.
2	Factor B2: Evidence of adverse impact on people. Max. Score – 6.	Max. contribution of Primary Pollutant – 30. Max. Contribution of 2 Secondary Pollutants – 20.
3	Factor B3: Evidence of adverse impact on eco-geological features. Max. score – 6.	
	Max. possible score: 8 + 6 + 6= 20.	Max. Score – 30 + 20 = 50.
FACTOR – C: RECEPTOR		
1	Factor C1: No. of potentially affected people in 2km ² area of pollutant source. Max. Score – 5.	Factor C – Health statistics.

2	Factor C2: Level of exposure. Max. score – 5	Impact on Human health based on % increase in total no. of cases recorded in two consecutive years.
3	Factor C3: Additional Risk to sensitive receptors. Max. Score – 5.	
	Max. possible score: (5 x 5) + 5 = 30.	Max. Score – 10.

SL. NO.	AS PER PREVIOUS CEPI CALCULATION	AS PER REVISED CEPI CALCULATION
FACTOR – D: ADDITIONAL HIGH RISK ELEMENT		
1	Adequacy of pollution control measures for large, medium and small-scale industries and also due to the unorganized sector.	Remains unchanged.
	Max. Score – 20.	Max. Score – 20.
Sub-index score in either case is computed as follows:		
Sub-index score (Air/ Surface/ Ground water), $i = \{A + B + C + D\}$		
Maximum sub-index score is designated as i_{max} while other two sub-indices are designated as i_2 & i_3 , respectively.		
$CEPI = i_{max} + \{(100 - i_{max}) \times (i_2/100) \times (i_3/100)\}$		

Highlights of CPCB directions;

- SPCB/PCC to undertake environmental quality monitoring in the critically polluted area falling under their jurisdiction through an outside third party agency (Laboratory) recognised under Environment (Protection) Act, 1986 and accredited under NABL. The frequency of the monitoring shall be twice in a year i.e, Post monsoon season and Pre monsoon season.
- Existing sampling locations where monitoring was undertaken in 2013 are retained. If additional monitoring locations are required, it can be included in consultation with concerned Zonal offices of CPCB and (or) Head Office of CPCB.
- Shall collect 3 samples with a gap of one or two days at each location during each round of monitoring in all CPAs.
- At each of the CPA, 24 hourly ambient air quality monitoring shall be carried out for parameters as detailed.

A. CPCB Directions concerned to State Government

- All future CEPI Score evaluation shall be made on basis of revised formula
- The environmental quality data including CEPI score of the industrial area as per revised concept shall be placed in public domain through website and also to be published by the State Government periodically
- State Government shall notify the area on a properly scaled map and also issue public advisories that such an area will be exclusively meant for industrialisation as per the State land.
- Revised CEPI shall be used by the State Governments, SPCBs and others concerned to understand the severity of pollution and formulate appropriate action plan. Sufficient time shall be given for effective implementation of the action plan before imposition of moratorium.

B. CPCB Directions to SPCB

- Any moratorium on expansion, on setting up of new industries shall be imposed on a particular CPA only after a notice period of one year from the initial announcement of CEPI assessment.
- That for any industry in a critically polluted area, the changes which make it less polluting shall be permitted. These changes may include expansion of production capacity/ change of raw materials/ change of manufacturing process or a combination of these changes and shall be examined by respective SPCBs.
- SPCB shall continue the regular exercise of water and air quality monitoring work at different locations.
- SPCB shall take necessary measures to ensure regular maintenance and operation of the online systems and tamper proof mechanism including facilities for online calibration.
- SPCB shall install necessary software and hardware in their headquarter for centralised data collection, analysis and corrective action.
- SPCB shall take measures to connect and upload the online air quality and water quality monitoring data on the servers of SPCB and CPCB in a time bound manner.
- SPCB shall upload on its websites the consent conditions of all industrial units along with their compliance status updated half yearly) with respect to prescribed norms.
- Action plan categorised into short, medium and long term basis shall be brought into public domain and progress of implementation shall be reviewed by District and State level through Monitoring Committees.

Action taken by the Board

- Short term tender has been invited for the laboratories as specified. After finalisation, monitoring of environmental parameters will be monitored in all the critically and severally polluted areas as notified earlier.
- Local area committees are constituted with TOR as specified earlier to review the action plan and action taken.
- Online monitoring system for 17 category industries are installed and are connected to CPCB server. CPCB has shared the software to KSPCB. KSPCB has exclusive data care centre at Head office for monitoring of the same.

Committee after detailed deliberation directed as follows:

1. Considering the Industrial growth potential in Peenya and Mangalore, PCB need to install continuous online monitoring system as per the CPCB directions for ambient air quality monitoring. The data of the monitoring shall be shown in public domain on the Board website.
2. The manually monitored data of air and water quality analyses shall be published in the Board website preferably by color coding on the exceeding parameters.
3. As per the suggestions made by Zonal office CPCB on the ground water extraction by the textile units located in Doddaballapur, the KSPCB shall convene a meeting inviting officials of BWSSB and industrial association of Peenya, Bidadi and Doddaballapur to explore the possibility of the use of tertiary treated sewage water for their industrial use.

The meeting concluded with thanks from and to the Chair.

Sd/-
Chairman of the Committee,
Development Commissioner and
Additional Chief Secretary.

To:

1. Additional Chief Secretary to Government, Department of Forest, Ecology and Environment, 4th Floor, MS Building, Bangalore-560001.
2. Additional Chief Secretary to Government, Department of Industries and Commerce, Room No: 135, 1st Floor, Vikasa Soudha, Bangalore-560001.
3. Secretary to Government, Department of Urban Development, Room No: 436, 4th Floor, Vikasa Soudha, Bangalore-560001.

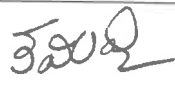
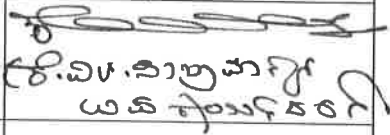




4. Principal Secretary to the Government, Department of Revenue, 3rd Gate, 5th Floor, MS Building, Bangalore-560001.
5. Managing Director, Karnataka Urban Water Supply and Drainage Board, Jala Bhavana, Bannerghatta Road, Bangalore.
6. Secretary to Government, (Ecology and Environment) Department of Forest, Ecology and Environment, 7th Floor, MS Building, Bangalore-560001.
7. Commissioner, BBMP, Narasimha Raja Chouka, Bangalore.
8. Deputy Commissioner, Mangalore.
9. Deputy Commissioner, Shimoga.
10. Chief Engineer, KIADB, 5th Floor, North Wing, Kanija Bhavana, Rase course Road, Bangalore-560001.
11. Commissioner, Transport Department, 1st Floor, "A" Block, BMTC Complex, Shanthinagar, Bangalore-560027.
12. Zonal Officer, CPCB, Shivanagar, Bangalore.

Copy to:

1. Personal Secretary to Additional Chief Secretary and Development Commissioner, Government of Karnataka, 3rd Floor, Vidhana Soudha, Bangalore-560001 - for kind information and bring it to the kind notice of Additional Chief Secretary.
2. Technical Officer to Chairman, Karnataka State Pollution Control Board, Bangalore – for kind information and bring it to the kind notice of Hon'ble Chairman.
3. Zonal Senior Environmental Officer, Mangalore, Chitradurga, Bellary and Bangalore North - for kind information.
4. Regional Officers, Mangalore, Shimoga, Bidar, Raichur, Dasarahalli and Peenya – for kind information.


Member Convener of the Committee,
Member Secretary, KSPCB.

ದಿನಾಂಕ: 24-01-2017 (ಮಂಗಳವಾರ) ರಂದು ಅಪರಾಹ್ನ 3.00 ಗಂಟೆಗೆ ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ ಮತ್ತು ಅಭಿವೃದ್ಧಿ ಆಯುಕ್ತರು, ಕರ್ನಾಟಕ ಸರ್ಕಾರ ಇವರ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ಕೊಠಡಿ ಸಂಖ್ಯೆ: 306, 3ನೇ ಮಹಡಿ, ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು-560001 ಇಲ್ಲಿ ಸಮಗ್ರ ಪರಿಸರ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಯೋಜನೆಗಳನ್ನು ಅನುಷ್ಠಾನಗೊಳಿಸುವ ಕುರಿತು ರಚಿಸಿರುವ ರಾಜ್ಯಮಟ್ಟದ ಸಮಿತಿಯ ಮೊದಲನೇ ಸಭೆ.

ಕ್ರ.ಸ.	ಸದಸ್ಯರ ಹೆಸರು ಮತ್ತು ಹುದ್ದೆ	ಸಹಿ
1	ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿ ಮತ್ತು ಅಭಿವೃದ್ಧಿ ಆಯುಕ್ತರು, ಕರ್ನಾಟಕ ಸರ್ಕಾರ, ಬೆಂಗಳೂರು	ಅಧ್ಯಕ್ಷರು 
2	ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಅರಣ್ಯ, ಜೀವಿಪರಿಸ್ಥಿತಿ ಮತ್ತು ಪರಿಸರ ಇಲಾಖೆ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
3	ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ವಾಣಿಜ್ಯ ಮತ್ತು ಕೈಗಾರಿಕಾ ಇಲಾಖೆ, ಕರ್ನಾಟಕ ಸರ್ಕಾರ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
4	ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, ನಗರಾಭಿವೃದ್ಧಿ ಇಲಾಖೆ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು ಪ್ರವೀಣ್ ಕೆ.ಎ. ಶಾಸ್ತ್ರಿ ಅಧ್ಯಕ್ಷರು
5	ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳು, ಕಂದಾಯ ಇಲಾಖೆ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು  ಕೆ.ಎಂ.ವಿ.ಪ್ರವೀಣ್ ಅಧ್ಯಕ್ಷರು
6	ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, ಕರ್ನಾಟಕ ನಗರ ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಮಂಡಳಿ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು  24/01/17
7	ಸರ್ಕಾರದ ಕಾರ್ಯದರ್ಶಿಗಳು, (ಜೀವಿಪರಿಸ್ಥಿತಿ ಮತ್ತು ಪರಿಸರ) ಅರಣ್ಯ, ಜೀವಿಪರಿಸ್ಥಿತಿ ಮತ್ತು ಪರಿಸರ ಇಲಾಖೆ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
8	ಆಯುಕ್ತರು, ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು
9	ಜಿಲ್ಲಾಧಿಕಾರಿಗಳು, ಜಿಲ್ಲಾಧಿಕಾರಿಗಳ ಕಛೇರಿ, ಮಂಗಳೂರು	ಸದಸ್ಯರು
10	ಜಿಲ್ಲಾಧಿಕಾರಿಗಳು, ಜಿಲ್ಲಾಧಿಕಾರಿಗಳ ಕಛೇರಿ, ಶಿವಮೊಗ್ಗ	ಸದಸ್ಯರು  Commissioner, Shimoga Shahayath, ಮಂಗಳೂರು
11	ಮುಖ್ಯ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು, KIADB, ಬೆಂಗಳೂರು.	ಸದಸ್ಯರು
12	ಆಯುಕ್ತರು, ಸಾರಿಗೆ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.	ಸದಸ್ಯರು 
13	ಸದಸ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು, ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ, ಬೆಂಗಳೂರು	ಸದಸ್ಯರು  ಶಿವಮೊಗ್ಗ

ಕ್ರ.ಸ.	ಸದಸ್ಯರ ಹೆಸರು ಮತ್ತು ಹುದ್ದೆ	ಸಹಿ
14	S. THIRUNIDATHY, SCS, CPCB, BANGALORE	h. 7/15
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