

BEFORE THE NATIONAL GREEN TRIBUNAL, PRINCIPAL BENCH

ORIGINAL APPLICATION NUMBER 693 of 2023 (PB)

IN THE MATTER OF

**News Item titled “Pollution Control Boards are the weak link” appearing in
Deccan Herald dated 24/10/2023**

AFFIDAVIT ON BEHALF OF KARNATAKA STATE

POLLUTION CONTROL BOARD

PAPERBOOK

[PLEASE SEE INSIDE FOR INDEX]



DEVRAJ ASHOK

COUNSEL FOR KARNATAKA STATE POLLUTION CONTROL BOARD

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PLACE: BENGALURU

DATE: 04/04/2026



THROUGH COUNSEL

DEVRAJ ASHOK

BEFORE THE NATIONAL GREEN TRIBUNAL, PRINCIPAL BENCH

ORIGINAL APPLICATION NUMBER 693 of 2023 (PB)

IN THE MATTER OF

News Item titled "Pollution Control Boards are the weak link" appearing in
Deccan Herald dated 24/10/2023

AFFIDAVIT ON BEHALF OF THE KARNATAKA

STATE POLLUTION CONTROL BOARD

I, Shri. S. Dinesh, aged about 55 years, son of Shri. Siddegowda, presently working as the Administrative Officer, Karnataka State Pollution Control Board (the "KSPCB"), do hereby solemnly affirm and state that I am duly authorized and competent to depose the present affidavit, on behalf of the KSPCB. I am familiar with the facts and circumstances about the present matter, based on the official documents/records of the Karnataka State Pollution Control Board and also in my official capacity and depose as set forth below:

1. It is respectfully submitted that the present affidavit is being filed in pursuance of the directions of this Hon'ble Tribunal in order dated 14/10/2025 and 08/01/2026, passed in the present matter.




Administrative Officer
Karnataka State Pollution
Control Board, Bangalore

2. It is submitted that there are a total of 723 sanctioned posts in the KSPCB, consisting of the following:

- (a) Scientific: 142
- (b) Engineering: 278
- (c) Administration 303

3. Out of the total number of sanctioned posts, currently, 468 are vacant, as detailed below:

- (a) Scientific: 107
- (b) Engineering: 160
- (c) Administration: 201

4. Appointments to the vacant posts were held up due to pending adjudication in WP Nos. 200448/2025, 17968/2025 and 3145/2023 before the Hon'ble High Court of Karnataka, wherein the validity of the Karnataka Scheduled Castes and Scheduled Tribes (Reservation of Seats in Educational Institutions and of Appointments or Posts in the services under the State) Act, 2022 has been challenged. As such, the Government of Karnataka had issued an official circular dated 25/11/2024, stopping all direct recruitment to posts in the State Civil Services until further orders, i.e., effective from the date of the circular. A copy of



S. D. M. Ch
Administrative Officer
Karnataka State Pollution
Control Board, Bangalore

the Circular of the Government of Karnataka dated 25/11/2024 is annexed herewith as **ANNEXURE R1**.

5. Nonetheless, the KSPCB wrote to the State Government, i.e., the Principal Secretary, Department of Forests, Ecology and Environment, Government of Karnataka, on 05/04/2025, to expedite appointments to fill vacancies, citing specific judicial directions in this regard. A copy of the KSPCB letter dated 05/04/2025, to the Principal Secretary, Department of Forests, Ecology and Environment, Government of Karnataka, is annexed herewith as **ANNEXURE R2**.

6. Thereafter, on 27.02.2026, taking into consideration the need for early appointments for administrative effectiveness and employment of qualified candidates, the Government of Karnataka issued a Government Order to recommence recruitment processes across all government departments, with the resulting appointments being subject to the final decision passed in Writ Petitions mentioned herein above. A copy of the Government of Karnataka Order dated 27/02/2026, is annexed herewith as **ANNEXURE R3**. It is therefore, respectfully submitted that the process of completing appointments to vacant posts in KSPCB, will now be expedited.

7. In connection with information about the upgrading of laboratories of the KSPCB, relevant information has been provided by KSPCB to the CPCB on 28/02/2025. The KSPCB has also submitted information sought by the CPCB in



S. Divya
Administrative Officer
Karnataka State Pollution
Control Board, Bangalore

'Google Spreadsheet' format. A copy of the KSPCB letter dated 28/02/2025 is annexed herewith as **ANNEXURE R4**, and the contents of the same may be read herein as part and parcel of this affidavit. Additionally, comprehensive information required by the CPCB in the format specified in their meeting of 04/11/2025 has also been provided by the KSPCB on 27.03.2026. A copy of the KSPCB letter dated 27.03.2026 is annexed herewith as **ANNEXURE R5**, and the contents of the same may be read herein as part and parcel of this affidavit.

8. KSPCB would be obliged to provide any additional information that may be required by this Hon'ble Tribunal.

S. Omesh
DEPONENT

Administrative Officer
 Karnataka State Pollution
 Control Board, Bangalore

VERIFICATION

Verified on this 2nd day of April, 2026, at Bengaluru, that the contents of the above affidavit are true and correct to the best of my knowledge, information and belief and nothing material is concealed therefrom.

S. Omesh
DEPONENT

Administrative Officer
 Karnataka State Pollution
 Control Board, Bangalore



SWORN TO BY *S. Omesh* **RE ME**
S. Omesh
 28/04/2026
CHANDRASHEKHARAIAH. S
 Advocate & Notary
 No. 217, Kannanpura Nilaya
 3rd Cross, 4th Main, 4th Extension
 Sunkeshwara, Bangalore-560091



ಕರ್ನಾಟಕ ಸರ್ಕಾರ

Annexure - R2

ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಸಂಖ್ಯೆ:ಸಿಆಸುಇ 388 ಸೆನೆನಿ 2024

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸಚಿವಾಲಯ
ವಿಧಾನ ಸೌಧ
ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 25.11.2024

ಸುತ್ತೋಲೆ

ವಿಷಯ: ರಾಜ್ಯ ಸಿವಿಲ್ ಸೇವೆಗಳಲ್ಲಿನ ಹುದ್ದೆಗಳ
ನೇಮಕಾತಿಗಾಗಿ ಹೊಸದಾಗಿ ಅಧಿಸೂಚನೆ
ಹೊರಡಿಸುವುದನ್ನು ತಡೆಹಿಡಿಯುವ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖ: ಸಮಾಜ ಕಲ್ಯಾಣ ಇಲಾಖೆಯ ಅನಧಿಕೃತ ಟಿಪ್ಪಣಿ
ಸಂಖ್ಯೆ: SWD/08/SLP/2024 (P-5), ದಿನಾಂಕ:
13.11.2024

ದಿನಾಂಕ: 28.10.2024 ರಂದು ನಡೆದ ಸಚಿವ ಸಂಪುಟ ಸಭೆಯಲ್ಲಿ ತೆಗೆದುಕೊಂಡ
ನಿರ್ಣಯದಂತೆ ರಾಜ್ಯ ಸಿವಿಲ್ ಸೇವೆಗಳಲ್ಲಿನ ಮೀಸಲಾತಿ ಅನ್ವಯವಾಗುವ ವೃಂದಗಳಲ್ಲಿನ ಹುದ್ದೆಗಳಿಗೆ
ನೇರ ನೇಮಕಾತಿ ಮಾಡಲು ಹೊಸದಾಗಿ ಯಾವುದೇ ಅಧಿಸೂಚನೆಯನ್ನು ತಕ್ಷಣದಿಂದ ಜಾರಿಗೆ
ಬರುವಂತೆ ಮುಂದಿನ ಆದೇಶದವರೆಗೂ ಹೊರಡಿಸಬಾರದೆಂದು ಸೂಚಿಸಲಾಗಿದೆ.

ಈ ದಿನಾಂಕದ ಪೂರ್ವದಲ್ಲಿ ನೇರ ನೇಮಕಾತಿಗಾಗಿ ಅಧಿಸೂಚನೆ ಹೊರಡಿಸಿದ್ದಲ್ಲಿ ಅಥವಾ
ಆಯ್ಕೆ ಪ್ರಕ್ರಿಯೆ ಪ್ರಾರಂಭಗೊಂಡಿದ್ದಲ್ಲಿ ಅಂತಹ ನೇಮಕಾತಿಗಳಿಗೆ ಹೊರಡಿಸಲಾಗಿದ್ದ
ಅಧಿಸೂಚನೆಯನ್ನಯವೇ ಪೂರ್ಣಗೊಳಿಸಬಹುದಾಗಿದೆ.

ಮೇಲ್ಕಂಡ ಸೂಚನೆಗಳನ್ನು ಎಲ್ಲಾ ಆಯ್ಕೆ ಪ್ರಾಧಿಕಾರಗಳು/ನೇಮಕಾತಿ ಪ್ರಾಧಿಕಾರಗಳು
ಕಟ್ಟುನಿಟ್ಟಾಗಿ ಪಾಲಿಸತಕ್ಕದ್ದು.

(ವಿರಭದ್ರ) 25-11-2024

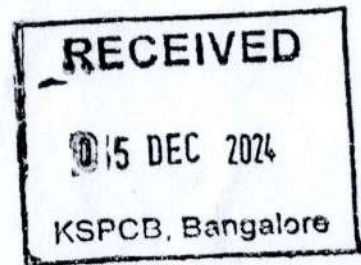
ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ
ಸಿಆಸು ಇಲಾಖೆ (ಸೇವಾ ನಿಯಮಗಳು-1)

ಇವರಿಗೆ:

ಸಂಕಲನಕಾರರು, ಇ-ರಾಜ್ಯಪತ್ರ

ಪ್ರತಿ:

1. ಸರ್ಕಾರದ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಯವರು.
2. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಯವರು.



3. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಯವರು ಹಾಗೂ ಅಭಿವೃದ್ಧಿ ಆಯುಕ್ತರು.
4. ಸರ್ಕಾರದ ಎಲ್ಲಾ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಗಳು/ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳು/ಕಾರ್ಯದರ್ಶಿಗಳು
5. ಮಾನ್ಯ ಮುಖ್ಯಮಂತ್ರಿಯವರ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಯವರು
6. ಮಾನ್ಯ ರಾಜ್ಯಪಾಲರ ವಿಶೇಷ ಕಾರ್ಯದರ್ಶಿಯವರು.
7. ಎಲ್ಲಾ ಇಲಾಖಾ ಮುಖ್ಯಸ್ಥರು/ ಎಲ್ಲಾ ಪ್ರಾದೇಶಿಕ ಆಯುಕ್ತರು/ ಎಲ್ಲಾ ಜಿಲ್ಲಾಧಿಕಾರಿಗಳು/ ಎಲ್ಲಾ ಜಿಲ್ಲಾ ಪಂಚಾಯತ್‌ಗಳ ಮುಖ್ಯ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಕಾರಿಗಳು/ ಎಲ್ಲಾ ಜಿಲ್ಲಾ ಪೊಲೀಸ್ ಅಧೀಕ್ಷಕರು.
8. *ಮಹಾ ನಿಬಂಧಕರು, ಕರ್ನಾಟಕ ಉಚ್ಚ ನ್ಯಾಯಾಲಯ, ಬೆಂಗಳೂರು.
9. *ನಿಬಂಧಕರು, ಕರ್ನಾಟಕ ಲೋಕಾಯುಕ್ತ, ಬೆಂಗಳೂರು.
10. *ನಿಬಂಧಕರು, ಕರ್ನಾಟಕ ರಾಜ್ಯ ಆಡಳಿತ ನ್ಯಾಯಮಂಡಳಿ, ಕಂದಾಯ ಭವನ, ಕೆ.ಜಿ.ರಸ್ತೆ, ಬೆಂಗಳೂರು.
11. *ಕಾರ್ಯದರ್ಶಿ, ಕರ್ನಾಟಕ ಲೋಕಸೇವಾ ಆಯೋಗ, ಬೆಂಗಳೂರು.
12. ಕಾರ್ಯನಿರ್ವಾಹಕ ನಿರ್ದೇಶಕರು, ಕರ್ನಾಟಕ ಪರೀಕ್ಷಾ ಪ್ರಾಧಿಕಾರ, ಬೆಂಗಳೂರು.
13. *ಕಾರ್ಯದರ್ಶಿ, ಕರ್ನಾಟಕ ವಿಧಾನ ಸಭೆ/ಪರಿಷತ್ತು, ಬೆಂಗಳೂರು.
14. ಶಾಖಾ ರಕ್ಷಾ ಕಡತ/ಬಿಡಿ ಪ್ರತಿಗಳು

TRANSLATED COPY OF ANNEXURE-R2



GOVERNMENT OF KARNATAKA

No. SiASUE 388 Seneni 2024

Karnataka Government Secretariat,
Vidhana Soudha,
Bangalore, Dated: 25.11.2024**CIRCULAR****Subject:** Regarding with holding of issuance of fresh notification for recruitment to posts in the State Civil Services.**Reference:** Social Welfare Department, Unofficial Note No. SWD/08/SLP/2024(P-5), Dated: 13.11.2024

As per the cabinet meeting held on 28.10.2024, it is decided not to issue fresh notification for direct recruitment to the posts in the state civil services from immediate effect until further orders.

If a notification for direct recruitment is already issued or the selection process is initiated before this date, such notification can be completed.

The above instructions should be strictly followed by all the selecting authorities/appointing authorities.

(Sd/-)

(VEERABHADRA)

Under Secretary to Government
SiASUE (Service Rules-1)**To,**

Compiler, E- Gazette.

Copies:

1. Chief Secretary to Government
2. Additional Chief Secretary to Government

3. Additional Chief Secretaries to Government & Development Commissioner
4. Additional Chief Secretaries to Government/Principal Secretaries/ Secretaries.
5. Hon'ble Chief Minister's Principal Secretary.
6. Hon'ble Governor's Special Secretary.
7. All Department heads/All Regional Commissioners/All Deputy Commissioners/ All Chief Executive officer, Zilla Panchayath/ All District Police Superintendents
8. *Registrar General, High Court of Karnataka, Bangalore.
9. *Registrar, Karnataka Lokayukta, Bangalore
10. *Registrar, Karnataka State Administrative Tribunal, Kandaya Bhavan, K.G. Road, Bangalore.
11. *Secretary, Karnataka Public Service Commission, Bangalore.
12. Executive Director, Karnataka Examination Board, Bangalore,
13. *Secretary, Karnataka Legislative Assembly/Council, Bangalore.
14. Section Additional Copy/Additional Copies.

ಹೆಲ್ಪ್ ಲೈನ್ / Helpline : 080-25582559
 ಈಮೇಲ್ / Email : contact@kspcb.gov.in
 ವೆಬ್‌ಸೈಟ್ / Website : kspcb.karnataka.gov.in



080-25581383, 25589112
 080-25589113, 25589114

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ - Karnataka State Pollution Control Board

"ಪರಿಸರ ಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ಸಂ. 49, ಚರ್ಚ್ ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ ರಾಜ್ಯ, ಭಾರತ
 "Parisara Bhavan", 1st to 5th Floor, # 49, Church Street, Bangalore - 560 001, Karnataka State, India

ಸಂಖ್ಯೆ: ಮಾನಿಮ 45 ಆಡವ 2023/ 08

ದಿನಾಂಕ: 05 APR 2025

ಇವರಿಗೆ:

ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳು,
 ಅರಣ್ಯ, ಜೀವಿಪರಿಸ್ಥಿತಿ ಮತ್ತು ಪರಿಸರ ಇಲಾಖೆ,
 (ಜೀವಿಪರಿಸ್ಥಿತಿ ಮತ್ತು ಪರಿಸರ),
 ಬಹಮದಡಿಗಳ ಕಟ್ಟಡ,
 ಬೆಂಗಳೂರು-560001.

ಮಾನ್ಯರೇ,

ವಿಷಯ: ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿಯ ರಾಜ್ಯ ವ್ಯಾಪಿ ಉಳಿಕೆ ವೃಂದ ಹಾಗೂ ಸ್ಥಳೀಯ ವೃಂದದಲ್ಲಿ ಖಾಲಿ ಇರುವ ಹುದ್ದೆಗಳನ್ನು ನೇರ ನೇಮಕಾತಿ ಮೂಲಕ ಭರ್ತಿ ಮಾಡಲು ಅನುಮತಿಸುವ ಬಗ್ಗೆ.

- ಉಲ್ಲೇಖ:** 1. ಸರ್ಕಾರದ ಪತ್ರ ಸಂಖ್ಯೆ: ಅಪಜೀ 271 ಇಪಿಸಿ 2021, ದಿನಾಂಕ: 22-02-2024.
 2. ಸರ್ಕಾರದ ಪತ್ರ ಸಂಖ್ಯೆ: ಅಪಜೀ 83 ಇಪಿಸಿ 2024, ದಿನಾಂಕ: 13-03-2024.

<<<<>>>

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿಯನ್ನು ಜಲ (ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮತ್ತು ನಿವಾರಣೆ) ಕಾಯ್ದೆ 1974 ರ ಸೆಕ್ಷನ್ (4) ರ ಅಡಿಯಲ್ಲಿ ಸ್ಥಾಪಿಸಲಾಗಿದ್ದು, ಜಲ (ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮತ್ತು ನಿವಾರಣೆ) ಕಾಯ್ದೆ 1974, ವಾಯು (ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮತ್ತು ನಿವಾರಣೆ) ಕಾಯ್ದೆ 1981, ಪರಿಸರ (ಸಂರಕ್ಷಣೆ) ಕಾಯ್ದೆ 1986, ಮತ್ತು ಇದರ ಅಡಿಯಲ್ಲಿ ಹೊರಡಿಸಲಾದ ಅಧಿಸೂಚನೆಗಳನ್ನು ಕಾರ್ಯಗೊಳಿಸಲಾಗುತ್ತಿದೆ. ಮಂಡಳಿಯು, ರಾಜ್ಯದಲ್ಲಿ ಮಾಲಿನ್ಯವನ್ನು ತಡೆಗಟ್ಟುವ ಕುರಿತು ಮಹತ್ತರ ಕೆಲಸವನ್ನು ನಿರ್ವಹಿಸುತ್ತಿದ್ದು, ಮಂಡಳಿಯ ಕಾರ್ಯಚಟುವಟಿಕೆಗಳು ದಿನೇ ದಿನೇ ಹೆಚ್ಚುತ್ತಿರುವುದರಿಂದ, ಮಂಡಳಿಯ ತಾಂತ್ರಿಕ, ಪ್ರಯೋಗಶಾಲೆ ಮತ್ತು ಆಡಳಿತ ವಿಭಾಗಗಳನ್ನು ಬಲಪಡಿಸುವ ನಿಟ್ಟಿನಲ್ಲಿ, ಪ್ರಸ್ತುತ ಮಂಡಳಿಯಲ್ಲಿ ಮಂಜೂರಾಗಿರುವ ಹುದ್ದೆಗಳ ಪೈಕಿ ನೇರ ನೇಮಕಾತಿಗಾಗಿ ಖಾಲಿಯಿರುವ ಹುದ್ದೆಗಳ ಭರ್ತಿಗಾಗಿ ಸರ್ಕಾರದಿಂದ ಸೂಕ್ತ ಅನುಮೋದನೆ ಪಡೆಯುವಂತೆ ದಿನಾಂಕ: 22-03-2025 ರಂದು ಮಾನ್ಯ ಮುಖ್ಯಮಂತ್ರಿಗಳ ಅಧ್ಯಕ್ಷತೆಯಲ್ಲಿ ನಡೆದ ಸಭೆಯಲ್ಲಿ ನಿರ್ದೇಶಿಸಲಾಗಿರುತ್ತದೆ. ಇದಲ್ಲದೇ, ಅಗತ್ಯ ಸಿಬ್ಬಂದಿಯನ್ನು ನೇಮಕ ಮಾಡಿಕೊಂಡು ಮಂಡಳಿಯ ಜವಾಬ್ದಾರಿಗಳನ್ನು ಪರಿಣಾಮಕಾರಿಯಾಗಿ ನಿರ್ವಹಿಸಲು ಮಾನ್ಯ ರಾಷ್ಟ್ರೀಯ ನ್ಯಾಯಾಧಿಕರಣವು ಸಹ ನಿರ್ದೇಶಿಸಿರುತ್ತದೆ.

...2

ಸದ್ಯಲ್ಲದ ಚಿತ್ರ, ನೈಸರ್ಗಿಕ ಸಂಪನ್ಮೂಲಗಳ ಮಿತ ಬಳಕೆಯತ್ತ;
 ತ್ಯಾಜ್ಯ ಉತ್ಪಾದನೆಯನ್ನು ತಗ್ಗಿಸಿ

Our motto is to minimize waste generation
 through judicious use of natural resources


-2-

ಪ್ರಸ್ತುತ, ಮಂಡಳಿಯ ತಾಂತ್ರಿಕ, ವೈಜ್ಞಾನಿಕ ಹಾಗೂ ತಾಂತ್ರಿಕೇತರ ವೃಂದಗಳಲ್ಲಿ ನೇರ ನೇಮಕಾತಿ ಅಡಿಯಲ್ಲಿ ರಾಜ್ಯ ವ್ಯಾಪಿ ಉಳಿಕೆ ವೃಂದ ಮತ್ತು ರಾಜ್ಯ ವ್ಯಾಪಿ ಸ್ಥಳೀಯ ವೃಂದಗಳಲ್ಲಿ ಒಟ್ಟು 313 ಹುದ್ದೆಗಳು ಖಾಲಿಯಿದ್ದು, ಈ ಹುದ್ದೆಗಳ ಪೈಕಿ ಶೇಕಡಾ 80 ರಷ್ಟು ಅಂದರೆ 250 ಹುದ್ದೆಗಳಲ್ಲಿ, ಈಗಾಗಲೇ ಸರ್ಕಾರವು ಉಲ್ಲೇಖಿತ (1) ರಲ್ಲಿ 60 ಹುದ್ದೆಗಳನ್ನು (ರಾಜ್ಯ ವ್ಯಾಪಿ ಉಳಿಕೆ ವೃಂದ-54 ಮತ್ತು ರಾಜ್ಯ ವ್ಯಾಪಿ ಸ್ಥಳೀಯ ವೃಂದ-6) ಹಾಗೂ ಉಲ್ಲೇಖಿತ (2) ರಲ್ಲಿ ರಾಜ್ಯ ವ್ಯಾಪಿ ಉಳಿಕೆ ವೃಂದದ 92 ಹುದ್ದೆಗಳನ್ನು ಕರ್ನಾಟಕ ಪರೀಕ್ಷಾ ಪ್ರಾಧಿಕಾರದ ಮೂಲಕ ಭರ್ತಿ ಮಾಡಲು ಅನುಮೋದನೆ ನೀಡಿರುತ್ತದೆ. ಪ್ರಸ್ತುತ 250 ಹುದ್ದೆಗಳಲ್ಲಿ ಸರ್ಕಾರದಿಂದ ಅನುಮೋದಿಸಲಾದ ಒಟ್ಟು 152 ಹುದ್ದೆಗಳನ್ನು ಹೊರತುಪಡಿಸಿ, ಉಳಿದ 98 ಹುದ್ದೆಗಳು ನೇರ ನೇಮಕಾತಿಗೆ ಖಾಲಿಯಿದ್ದು, ಹುದ್ದೆಗಳ ವಿವರಗಳನ್ನು ಅನುಬಂಧ-1 ರಲ್ಲಿ ಲಗತ್ತಿಸಿದೆ.

ಆದ್ದರಿಂದ, ರಾಜ್ಯ ವ್ಯಾಪಿ ಉಳಿಕೆ ವೃಂದದಲ್ಲಿ 71 ಹುದ್ದೆಗಳು ಹಾಗೂ ರಾಜ್ಯ ವ್ಯಾಪಿ ಸ್ಥಳೀಯ ವೃಂದದಲ್ಲಿ 27 ಹುದ್ದೆಗಳು, ಒಟ್ಟು 98 ಹುದ್ದೆಗಳ ನೇಮಕಾತಿಯನ್ನು ಕರ್ನಾಟಕ ಪರೀಕ್ಷಾ ಪ್ರಾಧಿಕಾರದ ಮೂಲಕ ಕೈಗೊಳ್ಳಲು ಸರ್ಕಾರದ ಪೂರ್ವಾನುಮೋದನೆ ಕೋರಿದೆ.

ವಂದನೆಗಳೊಂದಿಗೆ,

ತಮ್ಮ ವಿಶ್ವಾಸಿ,


ಸದಸ್ಯ ಕಾರ್ಯದರ್ಶಿ

ಅಡಕ: ಮೇಲಿನಂತೆ.

ಅನುಬಂಧ-1

ಕ್ರ.ಸಂ.	ನೇರ ನೇಮಕಾತಿಗೆ ಖಾಲಿಯಿರುವ ಹುದ್ದೆಗಳ ಹೆಸರು	ನೇರ ನೇಮಕಾತಿಗೆ ಖಾಲಿಯಿರುವ ಒಟ್ಟು ಹುದ್ದೆಗಳು			ಸರ್ಕಾರದಿಂದ ಅನುಮತಿಸಲಾದ ಹುದ್ದೆಗಳು			ಪ್ರಸ್ತುತ ನೇರ ನೇಮಕಾತಿಗೆ ಅನುಮೋದನೆ ಕೋರಲಾಗುತ್ತಿರುವ ಹುದ್ದೆಗಳು*		
		ಉಳಕೆ ವೃಂದ	ಸ್ಥಳೀಯ ವೃಂದ	ಒಟ್ಟು	ಉಳಕೆ ವೃಂದ	ಸ್ಥಳೀಯ ವೃಂದ	ಒಟ್ಟು	ಉಳಕೆ ವೃಂದ	ಸ್ಥಳೀಯ ವೃಂದ	ಒಟ್ಟು
1	2	3	4	5	6	7	8	9	10	11
1	ಸಹಾಯಕ ಪರಿಸರ ಅಧಿಕಾರಿ	121	7	128	80	2	82	17	4	21
2	ಸಹಾಯಕ ವೈಜ್ಞಾನಿಕ ಅಧಿಕಾರಿ	14	0	14	10	0	10	1	0	1
3	ವೈಜ್ಞಾನಿಕ ಸಹಾಯಕ	33	5	38	22	1	23	4	3	7
4	ಕ್ಷೇತ್ರ ಸಹಾಯಕ	6	6	12	-	-	-	5	5	10
5	ಕಾನೂನು ಸಹಾಯಕ	4	0	4	3	0	3	0	0	0
6	ಪ್ರಥಮ ದರ್ಜೆ ಸಹಾಯಕ	6	1	7	4	0	4	1	1	2
7	ಶಿಕ್ಷಣಲಿಪಿಗಾರ	3	2	5	-	-	-	2	1	3
8	ಕಿರಿಯ ಡಾಟಾ ಎಂಟ್ರಿ ಆಪರೇಟರ್	16	4	20	-	-	-	13	3	16
9	ದ್ವಿತೀಯ ದರ್ಜೆ ಸಹಾಯಕ	45	8	53	27	3	30	9	3	12
10	ಬಾಲಕ	11	4	15	-	-	-	9	3	12
11	ಸೇವಕ/ಕಾವಲುಗಾರ	12	5	17	-	-	-	10	4	14
	ಒಟ್ಟು	271	42	313	146	6	152	71	27	98

*ನೇರ ನೇಮಕಾತಿಗೆ ಖಾಲಿಯಿರುವ ಒಟ್ಟು ಹುದ್ದೆಗಳ ಶೇಕಡ 80 ರಲ್ಲಿ ಈಗಾಗಲೇ ಸರ್ಕಾರದಿಂದ ನೇರ ನೇಮಕಾತಿಗೆ ಅನುಮತಿಸಿರುವ ಹುದ್ದೆಗಳನ್ನು ಕೊರತುಪಡಿಸಿ, ಮಿಕ್ಕುಳಿದ ಹುದ್ದೆಗಳ ಸಂಖ್ಯೆ.

ಸದಸ್ಯ ಕಾರ್ಯದರ್ಶಿ

English True Translation of ANNEXURE-21

Helpline: 080-25582559

Ph:080-25581383,25589112

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080-25581383,25589112

Website: kspcb.karnataka.gov.in**KARNATAKA STATE POLLUTION CONTROL BBOARD*****"Parisara Bhvana", 1st to 5th Floor, No.49, Church Street,
Bengaluru - 560 001, Karnataka State, India***

No.PCB 45 ADA 2023/08

Dated: 05.04.2025

To:

The Pri. Secretary to Government,
Forests, Ecology and Environment Department,
(Ecology and Environment),
Multistoried Buildings,
Bengaluru - 560 001.

Sir,

Sub: Permission to fill up statewide vacant posts of
Residual Cadre and Local Cadre in Karnataka
State Pollution Control Board through direct
recruitment - regarding.

- Ref:** 1. Government Letter No.APaJi 271 EPC 2021
dated: 22.02.2024.
2. Government Letter No.APaJi 83 EPC 2024
dated: 13.03.2024.

The Karnataka State Pollution Control Board is established under Section (4) of the Water (Prevention and Control of Pollution) Act, 1974 and has been implementing the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the notifications

13

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issued there under. The Board has been doing great work in prevention of pollution in the State and as the activities of the Board are increasing day by day, in order to strengthen the technical, laboratory and administrative departments of the Board, directions have been issued in the meeting dated 22.03.2025 presided by the Hon'ble Chief Minister to obtain suitable approval from the Government to fill up the vacant posts for direct recruitment among the posts presently sanctioned to the Board. Apart from this, the Hon'ble National Tribunal has also directed to appoint necessary staff and effectively discharge the responsibilities of the Board.

At present, a total of 313 posts are vacant in state-wide Residual Cadre and state-wide Local Cadre under direct recruitment in technical, scientific and non-technical posts in the Board, out of these posts, in 80 percent i.e. 250 posts, the Government has already accorded approval to fill up 60 posts (State-Wide Residual Cadre - 54 and State-wide Local Cadre - 6), as per Reference (1), and 92 posts of State-wise Residual Cadre, as per Reference (2), through Karnataka Examination Authority. Apart from the total 152 posts approved by the Government out of the existing 250 posts, the remaining 98 posts are vacant for direct recruitment and the details of posts are enclosed as per Annexure-1.

Therefore, prior approval of the Government has been sought for the recruitment of 71 posts in State-wide Residual Cadre and 27 posts in State-wide Local Cadre i.e., a total of 98 posts through the Karnataka Examination Authority.

Thanking you,

Yours faithfully,

Sd/-
Member Secretary.

Encl: as above.

ANNEXURE - 1

Sl. No.	Name of the post vacant for direct recruitment	Total posts vacant for direct recruitment			Posts approved by the Government			Posts for which approval is being presently sought for Direct Recruitment*		
		Residual Cadre	Local Cadre	Total	Residual Cadre	Local Cadre	Total	Residual Cadre	Local Cadre	Total
1	2	3	4	5	6	7	8	9	10	11
1	Assistant Environmental Officer	121	7	128	80	2	82	17	4	21
2	Assistant Scientific Officer	14	0	14	10	0	10	1	0	1
3	Scientific Assistant	33	5	38	22	1	23	4	3	7
4	Field Assistant	6	6	12	-	-	-	5	5	10
5	Legal Assistant	4	0	4	3	0	3	0	0	0
6	First Division Assistant	6	1	7	4	0	4	1	1	2
7	Stenographer	3	2	5	-	-	-	2	1	3
8	Junior Data Entry Operator	16	4	20	-	-	-	13	3	16

9	Second Division Assistant	45	8	53	27	3	30	9	3	12
10	Driver	11	4	15	-	-	-	9	3	12
11	Peon / Watchman	12	5	17	-	-	-	10	4	14
TOTAL		271	42	313	146	6	152	71	27	98

* Out of 80 per cent of the total vacancies for direct recruitment, the number of remaining posts excluding those already approved for direct recruitment by the Government.

Sd/-
Member Secretary



ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ನಡವಳಿಗಳು

ವಿಷಯ: 2022ರ ಅಧಿನಿಯಮದನ್ವಯ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪರಿಶಿಷ್ಟ ಪಂಗಡಗಳಿಗೆ ಹೆಚ್ಚಿಸಲಾದ ಮೀಸಲಾತಿ ಪ್ರಮಾಣವನ್ನು ಪ್ರಶ್ನಿಸಿ ಮಾನ್ಯ ಉಚ್ಚ ನ್ಯಾಯಾಲಯದಲ್ಲಿ ದಾಖಲಾಗಿದ್ದ ಪ್ರಕರಣಗಳಲ್ಲಿ ಮಾನ್ಯ ನ್ಯಾಯಾಲಯವು ನೀಡಿರುವ ಮಧ್ಯಂತರ ಆದೇಶದ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ನೇಮಕಾತಿ ಪ್ರಕ್ರಿಯೆಯನ್ನು ಮುಂದುವರಿಸಲು ಕೈಗೊಳ್ಳಬೇಕಾದ ಕ್ರಮಗಳ ಕುರಿತು.

- ಓದಲಾಗಿದೆ:**
1. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಸಿಆಸುಇ 8 ಸೇಹಿಮೆ 1995, ದಿನಾಂಕ 20.06.1995
 2. ಕರ್ನಾಟಕ ಅನುಸೂಚಿತ ಜಾತಿಗಳು ಮತ್ತು ಅನುಸೂಚಿತ ಪಂಗಡಗಳು (ಶೈಕ್ಷಣಿಕ ಸಂಸ್ಥೆಗಳಲ್ಲಿನ ಸ್ಥಾನಗಳಲ್ಲಿ ಮತ್ತು ರಾಜ್ಯಾಧೀನ ಸೇವೆಗಳಲ್ಲಿನ ನೇಮಕಾತಿ ಅಥವಾ ಹುದ್ದೆಗಳಲ್ಲಿ ಮೀಸಲಾತಿ) ಅಧಿನಿಯಮ, 2022
 3. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಸಿಆಸುಇ 01 ಸೇಹಿಮೆ 2022, ದಿನಾಂಕ: 28.12.2022
 4. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಸಿಆಸುಇ 02 ಸೇಹಿಮೆ 2023, ದಿನಾಂಕ: 8.3.2023
 5. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಸಕಇ 8 ಎಸ್‌ಎಲ್‌ಪಿ 2024 (ಭಾ-1), ದಿನಾಂಕ: 25-08-2025
 6. ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಸಿಆಸುಇ 2 ಸೇಹಿಮೆ 2025, ದಿನಾಂಕ: 03-09-2025
 7. ಮಾನ್ಯ ನ್ಯಾಯಾಲಯದಲ್ಲಿ ದಾಖಲಾಗಿರುವ ರಿಟ್ ಅರ್ಜಿ ಸಂಖ್ಯೆ: 200448 /2025, 17968/2025 ಮತ್ತು 3145/2023ರಲ್ಲಿ ದಿನಾಂಕ 27.11.2025ರಂದು ನೀಡಿರುವ ಮಧ್ಯಂತರ ಆದೇಶ.

ಪ್ರಸ್ತಾವನೆ:

ಮೇಲೆ (1)ರಲ್ಲಿ ಓದಲಾದ ದಿನಾಂಕ 20.06.1995ರ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ ರಾಜ್ಯ ಸಿವಿಲ್ ಸೇವೆಗಳಲ್ಲಿನ ಹುದ್ದೆಗಳಿಗೆ ಮಾಡುವ ನೇರ ನೇಮಕಾತಿಯಲ್ಲಿ ಪರಿಶಿಷ್ಟ ಜಾತಿ ಮತ್ತು ಪರಿಶಿಷ್ಟ ಪಂಗಡಗಳಿಗೆ ಕ್ರಮವಾಗಿ ನಿಗದಿಪಡಿಸಲಾಗಿದ್ದ ಶೇ15 ಮತ್ತು ಶೇ 3 ಮೀಸಲಾತಿ ಪ್ರಮಾಣಕ್ಕೆ ಅನುಗುಣವಾಗಿ ಭರ್ತಿ ಮಾಡಬೇಕಾದ ರಿಕ್ತ ಸ್ಥಾನಗಳಿಗೆ 100 ಬಿಂದುಗಳ ರೋಸ್ಟರನ್ನು ನಿಗದಿಪಡಿಸಲಾಗಿರುತ್ತದೆ.

(Signature)
24/11/2026

18 2. ಮೇಲೆ (2) ರಲ್ಲಿ ಓದಲಾದ ಕರ್ನಾಟಕ ಅನುಸೂಚಿತ ಜಾತಿಗಳು ಮತ್ತು ಅನುಸೂಚಿತ ಪಂಗಡಗಳು (ಶೈಕ್ಷಣಿಕ ಸಂಸ್ಥೆಗಳಲ್ಲಿನ ಸ್ಥಾನಗಳಲ್ಲಿ ಮತ್ತು ರಾಜ್ಯಾಧೀನ ಸೇವೆಗಳಲ್ಲಿನ ನೇಮಕಾತಿ ಅಥವಾ ಹುದ್ದೆಗಳಲ್ಲಿ ಮೀಸಲಾತಿ) ಅಧಿನಿಯಮ, 2022ರಲ್ಲಿ ಶೈಕ್ಷಣಿಕ ಸಂಸ್ಥೆಗಳಲ್ಲಿನ ಸ್ಥಾನಗಳಲ್ಲಿ ಮತ್ತು ರಾಜ್ಯಾಧೀನ ಸೇವೆಗಳಲ್ಲಿನ ನೇಮಕಾತಿ ಅಥವಾ ಹುದ್ದೆಗಳಲ್ಲಿ ರಾಜ್ಯದ ಅನುಸೂಚಿತ ಜಾತಿ ಮತ್ತು ಅನುಸೂಚಿತ ಪಂಗಡಗಳಿಗೆ ಸೇರಿದ ವ್ಯಕ್ತಿಗಳಿಗೆ ಶೇ. 17 ಮತ್ತು ಶೇ.7 ರಂತೆ ಮೀಸಲಾತಿ ಪ್ರಮಾಣವನ್ನು ಅನುಕ್ರಮವಾಗಿ ಹೆಚ್ಚಿಸಲಾಗಿರುತ್ತದೆ.

3. ಮೇಲೆ (3)ರಲ್ಲಿ ಓದಲಾದ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ 2022ರ ಅಧಿನಿಯಮದನ್ವಯ ಹೆಚ್ಚಿನ ಮೀಸಲಾತಿ ಪ್ರಮಾಣಕ್ಕೆ ಅನುಗುಣವಾಗಿ ನೇರ ನೇಮಕಾತಿ ಮುಖಾಂತರ ಭರ್ತಿ ಮಾಡುವ ರಿಕ್ತ ಸ್ಥಾನಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ 100 ಬಿಂದುಗಳ ಪರಿಷ್ಕೃತ ರೋಸ್ಟರನ್ನು ನಿಗದಿಪಡಿಸಿ ಆದೇಶಿಸಲಾಗಿರುತ್ತದೆ.

4. ಮೇಲೆ (4) ರಲ್ಲಿ ಓದಲಾದ ದಿನಾಂಕ 08.03.2023ರ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ ಪ್ರತಿಯೊಂದು ನೇರ ಮೀಸಲಾತಿ ಪ್ರವರ್ಗದಡಿ (under each category of vertical reservation) ಮಾಜಿ ಸೈನಿಕ, ಅಂಗವಿಕಲ, ಮಹಿಳೆ, ಯೋಜನೆಗಳಿಂದ ನಿರ್ವಸಿತರಾದವರು, ಗ್ರಾಮೀಣ ಅಭ್ಯರ್ಥಿ, ಕನ್ನಡ ಮಾಧ್ಯಮದಲ್ಲಿ ವ್ಯಾಸಂಗ ಮಾಡಿದ ಅಭ್ಯರ್ಥಿ ಮತ್ತು ತೃತೀಯ ಲಿಂಗಿಗಳಿಗೆ ಕಲ್ಪಿಸಲಾದ ಸಮತಳ ಮೀಸಲಾತಿಯನ್ನು ಜಾರಿಗೊಳಿಸಲು 100 ಬಿಂದುಗಳ ರೋಸ್ಟರನ್ನು ನಿಗದಿಪಡಿಸಿ ಆದೇಶಿಸಲಾಗಿರುತ್ತದೆ.

5. ಮೇಲೆ (5) ರಲ್ಲಿ ಓದಲಾದ ದಿನಾಂಕ 25.08.2025ರ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ ಪರಿಶಿಷ್ಟ ಜಾತಿಗಳಲ್ಲಿರುವ 101 ಜಾತಿಗಳನ್ನು ಪ್ರವರ್ಗ-ಎ, ಪ್ರವರ್ಗ-ಬಿ ಮತ್ತು ಪ್ರವರ್ಗ-ಸಿ ಗಳೆಂದು 3 ಪ್ರವರ್ಗಗಳಾಗಿ ವರ್ಗೀಕರಿಸಿ, ಶಿಕ್ಷಣ ಮತ್ತು ಉದ್ಯೋಗದಲ್ಲಿ ಪರಿಶಿಷ್ಟ ಜಾತಿಗಳಿಗೆ ಪ್ರಸ್ತುತ ಜಾರಿಯಲ್ಲಿರುವ ಶೇಕಡ 17 ಮೀಸಲಾತಿಯನ್ನು, ಪ್ರವರ್ಗ-ಎ ರಲ್ಲಿನ ಸಮುದಾಯಗಳಿಗೆ ಶೇಕಡ 6, ಪ್ರವರ್ಗ-ಬಿ ರಲ್ಲಿನ ಸಮುದಾಯಗಳಿಗೆ ಶೇಕಡ 6 ಮತ್ತು ಪ್ರವರ್ಗ-ಸಿ ರಲ್ಲಿನ ಸಮುದಾಯಗಳಿಗೆ ಶೇಕಡ 5 ರಷ್ಟು ಮೀಸಲಾತಿಯನ್ನು ನಿಗದಿಪಡಿಸಿ ಆದೇಶಿಸಲಾಗಿರುತ್ತದೆ.

Shankar
27/02/2026

6. ಮೇಲೆ (6) ರಲ್ಲಿ ಓದಲಾದ ದಿನಾಂಕ 03.09.2025ರ ಸರ್ಕಾರದ ಆದೇಶದಲ್ಲಿ ದಿನಾಂಕ 28.12.2022ರ ಆದೇಶದಲ್ಲಿ ನಿಗದಿಪಡಿಸಲಾಗಿದ್ದ 100 ಬಿಂದುಗಳ ಮೀಸಲಾತಿ ರೋಸ್ಟರಿನಲ್ಲಿ ಪರಿಶಿಷ್ಟ ಜಾತಿಗಳಿಗೆ ಗುರುತಿಸಲಾಗಿರುವ 17 ಬಿಂದುಗಳನ್ನು ಮಾತ್ರ ಸದರಿ ಆದೇಶದಲ್ಲಿರುವ ಅನುಬಂಧದಂತೆ ಪುನರ್ ವರ್ಗೀಕರಿಸಿ ಆದೇಶಿಸಲಾಗಿರುತ್ತದೆ.

7. ಮೇಲೆ (7)ರಲ್ಲಿ ಓದಲಾದ ಪ್ರಕರಣಗಳಲ್ಲಿ ಕರ್ನಾಟಕ ಅನುಸೂಚಿತ ಜಾತಿಗಳು ಮತ್ತು ಅನುಸೂಚಿತ ಪಂಗಡಗಳು (ಶೈಕ್ಷಣಿಕ ಸಂಸ್ಥೆಗಳಲ್ಲಿನ ಸ್ಥಾನಗಳಲ್ಲಿ ಮತ್ತು ರಾಜ್ಯಾಧೀನ ಸೇವೆಗಳಲ್ಲಿನ ನೇಮಕಾತಿ ಅಥವಾ ಹುದ್ದೆಗಳಲ್ಲಿ ಮೀಸಲಾತಿ) ಅಧಿನಿಯಮ, 2022ರನ್ವಯ ಪರಿಶಿಷ್ಟಜಾತಿ ಮತ್ತು ಪರಿಶಿಷ್ಟ ಪಂಗಡಗಳಿಗೆ ಮೀಸಲಾತಿ ಪ್ರಮಾಣವನ್ನು ಕ್ರಮವಾಗಿ ಶೇ.15 ರಿಂದ ಶೇ.17ಕ್ಕೆ ಹಾಗೂ ಶೇ.3 ರಿಂದ ಶೇ.7ಕ್ಕೆ ಹೆಚ್ಚಿಸಲಾಗಿರುವುದನ್ನು ಪ್ರಶ್ನಿಸಲಾಗಿದ್ದು, ಸದರಿ ಪ್ರಕರಣಗಳಲ್ಲಿ ಮಾನ್ಯ ಉಚ್ಚ ನ್ಯಾಯಾಲಯವು ದಿನಾಂಕ: 27.11.2025ರಂದು ಕೆಳಗಿನಂತೆ ಮಧ್ಯಂತರ ಆದೇಶ ನೀಡಿರುತ್ತದೆ.

6. Considering that recruitment process has already begun pursuant to certain notifications specifying the enhanced reservation under the Karnataka Scheduled Castes and Scheduled Tribes (Reservation of Seats in Education Institutions and Appointments of Posts and Services under the State) Act, 2022 (hereafter Act), we consider it apposite to modify our order dated 19.11.2025 to direct that no further notifications for recruitment or appointment on the basis of increased reservation would be issued till the disposal of the present petitions. The recruitment pursuant to the process that is already begun, may be continued. However, any appointment made shall be subject to the final outcome of the present petitions.

8. ಮಾನ್ಯ ಉಚ್ಚ ನ್ಯಾಯಾಲಯವು ಮೇಲಿನಂತೆ ನೀಡಿರುವ ಮಧ್ಯಂತರ ಆದೇಶದಿಂದಾಗಿ ಹಲವಾರು ಇಲಾಖೆಗಳಲ್ಲಿನ ಖಾಲಿ ಹುದ್ದೆಗಳ ನೇಮಕಾತಿ ಪ್ರಕ್ರಿಯೆ

A. S. H. K. S.
23/12/2026

ಸ್ಥಗಿತಗೊಂಡಿದ್ದು, ನಿರುದ್ಯೋಗಿ ಅಭ್ಯರ್ಥಿಗಳ ಹಿತದೃಷ್ಟಿಯಿಂದ ಹಾಗೂ ಆಡಳಿತಾತ್ಮಕ ವ್ಯವಸ್ಥೆಯ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರುತ್ತಿರುವುದರಿಂದ ನೇಮಕಾತಿ ಪ್ರಕ್ರಿಯೆಯನ್ನು ತುರ್ತಾಗಿ ಮುಂದುವರಿಸಬೇಕಾಗಿರುವುದರಿಂದ ನೇಮಕಾತಿ ಅಧಿಸೂಚನೆಗಳನ್ನು ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಸಿಅಸುಇ 1 ಸೇಹಿಮ 2022, ದಿನಾಂಕ: 28-12-2022ರ ಆದೇಶದ ಪೂರ್ವದಲ್ಲಿ ಜಾರಿಯಲ್ಲಿದ್ದ ಮೀಸಲಾತಿ ಆದೇಶ ಮತ್ತು ರೋಸ್ಟರ್ ಬಿಂದುಗಳಂತೆ (ಮೀಸಲಾತಿ ಪ್ರಮಾಣ ಶೇ.50ಕ್ಕೆ) ಹೊರಡಿಸುವುದು ಸೂಕ್ತವೆಂದು ನಿರ್ಧರಿಸಿ ಈ ಕೆಳಕಂಡಂತೆ ಆದೇಶಿಸಿದೆ.

ಸರ್ಕಾರಿ ಆದೇಶ ಸಂಖ್ಯೆ: ಸಿಅಸುಇ 01 ಸೇಹಿಮ 2026,

ಬೆಂಗಳೂರು, ದಿನಾಂಕ: 27.02.2026

ಪ್ರಸ್ತಾವನೆಯಲ್ಲಿ ವಿವರಿಸಿರುವ ಸನ್ನಿವೇಶದಲ್ಲಿ, ಸರ್ಕಾರ ಈ ಕೆಳಕಂಡಂತೆ ಆದೇಶಿಸಿದೆ.

1. ಕರ್ನಾಟಕ ಅನುಸೂಚಿತ ಜಾತಿಗಳು ಮತ್ತು ಅನುಸೂಚಿತ ಪಂಗಡಗಳು (ಶೈಕ್ಷಣಿಕ ಸಂಸ್ಥೆಗಳಲ್ಲಿನ ಸ್ಥಾನಗಳಲ್ಲಿ ಮತ್ತು ರಾಜ್ಯಾಧೀನ ಸೇವೆಗಳಲ್ಲಿನ ನೇಮಕಾತಿ ಅಥವಾ ಹುದ್ದೆಗಳಲ್ಲಿ ಮೀಸಲಾತಿ) ಅಧಿನಿಯಮ, 2022ನ್ನು ಪ್ರಶ್ನಿಸಿ ಮಾನ್ಯ ಉಚ್ಚ ನ್ಯಾಯಾಲಯದಲ್ಲಿ ದಾಖಲಾಗಿರುವ ಪ್ರಕರಣಗಳಲ್ಲಿ ಮಾನ್ಯ ಉಚ್ಚ ನ್ಯಾಯಾಲಯವು ನೀಡುವ ಅಂತಿಮ ತೀರ್ಪಿಗೆ ಒಳಪಟ್ಟು ಹಾಗೂ ಸರ್ಕಾರದ ಮುಂದಿನ ಆದೇಶದವರೆಗೆ, ದಿನಾಂಕ 27.11.2025ರ ನಂತರದಲ್ಲಿ ರಾಜ್ಯ ಸಿವಿಲ್ ಸೇವಾ ಹುದ್ದೆಗಳಿಗೆ ಮಾಡುವ ನೇರ ನೇಮಕಾತಿಗಳಲ್ಲಿ ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಸಿಅಸುಇ 1 ಸೇಹಿಮ 2022, ದಿನಾಂಕ: 28-12-2022ರ ಆದೇಶದ ಪೂರ್ವದಲ್ಲಿ ಜಾರಿಯಲ್ಲಿದ್ದ ಮೀಸಲಾತಿ ಆದೇಶ ಮತ್ತು ರೋಸ್ಟರ್ ಬಿಂದುಗಳಂತೆ (ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಸಿಅಸುಇ 8 ಸೇಹಿಮ 1995, ದಿನಾಂಕ 20.06.1995ರನ್ವಯ ಮೀಸಲಾತಿ ಪ್ರಮಾಣವನ್ನು ಶೇ.50ಕ್ಕೆ) ನೇಮಕಾತಿ ಅಧಿಸೂಚನೆಗಳನ್ನು ಹೊರಡಿಸುವಂತೆ ಎಲ್ಲಾ ನೇಮಕಾತಿ/ಆಯ್ಕೆ ಪ್ರಾಧಿಕಾರಗಳಿಗೆ ಸೂಚಿಸಲಾಗಿದೆ.

2. ಈ ರೀತಿಯ ಆಯ್ಕೆಯನ್ನು ಹಿಂದಿನ ನೇಮಕಾತಿಯಲ್ಲಿ ಅಂದರೆ ದಿನಾಂಕ 28.12.2022ರ ಆದೇಶದಲ್ಲಿ ಗೊತ್ತುಪಡಿಸಿರುವ ರೋಸ್ಟರಿನ ಯಾವ ಬಿಂದುವಿನಲ್ಲಿ

(Signature)

27/02/2026

ನಿಲ್ಲಿಸಲಾಗಿತ್ತೋ ಆ ಬಿಂದುವಿನ ಮುಂದಿನ ರೋಸ್ಟರ್ ಬಿಂದುವಿಗೆ ಸರಿಸಮವಾದ ಬಿಂದುವನ್ನು ದಿನಾಂಕ 20.06.1995ರ ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಸಿಆಸುಇ 8 ಸೇಹಿಮ 1995ರಲ್ಲಿ ಗುರುತಿಸಿ ಅಲ್ಲಿಂದ ಪ್ರಾರಂಭಿಸಿ ಆಯ್ಕೆ ಮಾಡತಕ್ಕದ್ದು (ಉದಾಹರಣೆಗೆ ಹಿಂದಿನ ನೇಮಕಾತಿಯಲ್ಲಿ ದಿನಾಂಕ 28.12.2022ರ ಆದೇಶದಲ್ಲಿ ಗೊತ್ತುಪಡಿಸಿರುವ ರೋಸ್ಟರಿನ ಅನುಸಾರ 10 ನೇ ಬಿಂದುವಿನವರೆಗೆ ಪೂರ್ಣಗೊಳಿಸಲಾಗಿದ್ದಲ್ಲಿ, ಈಗ ಮಾಡಬೇಕಾಗಿರುವ ಆಯ್ಕೆಯನ್ನು ದಿನಾಂಕ 20.06.1995ರ ಆದೇಶದಲ್ಲಿನ ಅನುಬಂಧ-1ರ ರೋಸ್ಟರಿನ 11 ನೇ ಬಿಂದುವಿನಿಂದ ಪ್ರಾರಂಭಿಸಿ ಪೂರ್ಣಗೊಳಿಸತಕ್ಕದ್ದು).


3. ಮಾನ್ಯ ಉಚ್ಚ ನ್ಯಾಯಾಲಯದ ದಿನಾಂಕ 27.11.2025ರ ಮದ್ಯಂತರ ಆದೇಶಕ್ಕಿಂತ ಹಿಂದೆ ನೇಮಕಾತಿಗಾಗಿ ಅಧಿಸೂಚನೆಯನ್ನು ಹೊರಡಿಸಿರುವ ಪ್ರಕರಣಗಳನ್ನು ಯಥಾವಿಧಿಯಾಗಿ ಮುಂದುವರಿಸಿ, ಅಂತಿಮಗೊಳಿಸುವುದು ಹಾಗೂ ನೇಮಕಾತಿ ಆದೇಶದಲ್ಲಿ ಸ್ಪಷ್ಟವಾಗಿ ಈ ನೇಮಕಾತಿಯು ಮಾನ್ಯ ಉಚ್ಚ ನ್ಯಾಯಾಲಯದ ಅಂತಿಮ ಆದೇಶಕ್ಕೊಳಪಟ್ಟಿರುತ್ತದೆಂದು ಪರಾ ದಾಖಲಿಸತಕ್ಕದ್ದು.
4. ಸಮತಳ ಮೀಸಲಾತಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಸರ್ಕಾರದ ಆದೇಶ ಸಂಖ್ಯೆ: ಸಿಆಸುಇ 02 ಸೇಹಿಮ 2023, ದಿನಾಂಕ: 8.3.2023ರಲ್ಲಿ ನಿಗದಿಪಡಿಸಲಾಗಿರುವ ರೋಸ್ಟರ್ ಬಿಂದುಗಳನ್ನೇ ಮುಂದುವರಿಸುವುದು. ಹಿಂದಿನ ನೇಮಕಾತಿಯಲ್ಲಿ ದಿನಾಂಕ 08.03.2023 ಆದೇಶದಲ್ಲಿ ಗೊತ್ತುಪಡಿಸಿರುವ ರೋಸ್ಟರಿನ ಯಾವ ಬಿಂದುವಿನಲ್ಲಿ ನಿಲ್ಲಿಸಲಾಗಿತ್ತೋ ಆ ಬಿಂದುವಿನ ಮುಂದಿನ ರೋಸ್ಟರ್ ಬಿಂದುವಿನಿಂದ ಪ್ರಾರಂಭಿಸಿ ಆಯ್ಕೆ ಮಾಡತಕ್ಕದ್ದು.
5. ಮಾನ್ಯ ಉಚ್ಚ ನ್ಯಾಯಾಲಯದ ಅಂತಿಮ ಆದೇಶಕ್ಕೆ ಒಳಪಟ್ಟು ಆಯಾ ಇಲಾಖೆಗಳು / ನೇಮಕಾತಿ ಪ್ರಾಧಿಕಾರಗಳು ಮುಂದಿನ ನೇಮಕಾತಿ ಮಾಡಿಕೊಳ್ಳುವ ಹುದ್ದೆಗಳಲ್ಲಿ ಶೇ 6 ರಷ್ಟು (ಪರಿಶಿಷ್ಟ ಜಾತಿಗೆ ಶೇ.2 ಮತ್ತು ಪರಿಶಿಷ್ಟ ಪಂಗಡಕ್ಕೆ ಶೇ.4) ಹುದ್ದೆಗಳನ್ನು ಕಾಯ್ದಿರಿಸತಕ್ಕದ್ದು.

A. S. Kumar
28/01/2026

6. ಮುಂದುವರೆದು, ಖಾಲಿಯಿರುವ ನೇರ ನೇಮಕಾತಿ ಹುದ್ದೆಗಳಲ್ಲಿ ಸುಮಾರು 56432 ಹುದ್ದೆಗಳನ್ನು ತುಂಬುವ ಪ್ರಕ್ರಿಯೆಯನ್ನು ಮುಂದಿನ 30 ದಿನಗಳಲ್ಲಿ ಪ್ರಾರಂಭಿಸುವಂತೆ ಎಲ್ಲಾ ಇಲಾಖೆಗಳಿಗೆ / ನೇಮಕಾತಿ ಪ್ರಾಧಿಕಾರಗಳಿಗೆ ತಿಳಿಸಿದೆ.

ಮೇಲಿನ ಸೂಚನೆಗಳು ಸರ್ಕಾರದ ಮುಂದಿನ ಆದೇಶದವರೆಗೆ ಜಾರಿಯಲ್ಲಿರುತ್ತವೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯಪಾಲರ ಆದೇಶಾನುಸಾರ ಮತ್ತು
ಅವರ ಹೆಸರಿನಲ್ಲಿ,


(ಆಶಾ ಕುಮಾರಿ ಎ. ಜಿ.) 27/02/2026

ಸರ್ಕಾರದ ಅಧೀನ ಕಾರ್ಯದರ್ಶಿ,
ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣೆ ಇಲಾಖೆ,
ಇಲಾಖೆ (ಸೇವಾ ನಿಯಮಗಳು).

ಇವರಿಗೆ:

ಸಂಕಲನಕಾರರು, ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ, ಬೆಂಗಳೂರು, ವಿಶೇಷ ರಾಜ್ಯಪತ್ರದಲ್ಲಿ ಪ್ರಕಟಿಸಿ ಇದರ 50 ಪ್ರತಿಗಳನ್ನು ಸಿಬ್ಬಂದಿ ಮತ್ತು ಆಡಳಿತ ಸುಧಾರಣೆ ಇಲಾಖೆ (ಸೇವಾ ನಿಯಮಗಳು-ಎ), ಕೊರಡಿ ಸಂಖ್ಯೆ-31, ವಿಧಾನಸೌಧ, ನೆಲಮಹಡಿ ಇಲ್ಲಿಗೆ ಕಳುಹಿಸುವಂತೆ ಕೋರಲಾಗಿದೆ.

ಪ್ರತಿ:

1. ಪ್ರಧಾನ ಮಹಾಲೇಖಪಾಲರು, (ಜಿ&ಎಸ್‌ಎಸ್‌ಎ), (ಇ&ಆರ್‌ಎಸ್‌ಎ), ಕರ್ನಾಟಕ, ಹೊಸ ಕಟ್ಟಡ, ಆಡಿಟ್ ಭವನ, ಬೆಂಗಳೂರು.
2. ಪ್ರಧಾನ ಮಹಾಲೇಖಪಾಲರು (ಎ&ಇ), ಕರ್ನಾಟಕ ಪಾರ್ಕ್ ಹೌಸ್ ರಸ್ತೆ, ಬೆಂಗಳೂರು.
3. ಸರ್ಕಾರದ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಯವರು.
4. ಮಾನ್ಯ ಮುಖ್ಯಮಂತ್ರಿಯವರ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಯವರು
5. ಸರ್ಕಾರದ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಯವರು
6. ಸರ್ಕಾರದ ಎಲ್ಲಾ ಅಪರ ಮುಖ್ಯ ಕಾರ್ಯದರ್ಶಿಯವರು/ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿಗಳು/ಕಾರ್ಯದರ್ಶಿಗಳು

ENGLISH TRUE TRANSLATION OF**PROCEEDINGS OF THE GOVERNMENT OF KARNATAKA**

SUB: Steps to be taken for resuming the recruitment process in the light of the interim order passed by the Hon'ble Court in the cases filed before the Hon'ble High Court challenging the increased reservation quota for Scheduled Castes and Scheduled Tribes under the 2022 Act - regarding.

- READ:**
1. Government Order No.: DPAR 8 SeHiMa 1995, dated: 20.06.1995.
 2. The Karnataka Scheduled Castes and Scheduled Tribes (Reservation of Seats in Educational Institutions and of Appointments or Posts in the services under the State) Act, 2022.
 3. Government Order No.: DPAR 01 SeHiMa 2022, dated: 28.12.2022.
 4. Government Order No.: DPAR 02 SeHiMa 2023, dated: 08.03.2023.
 5. Government Order No.: SaKaI 8 SLP 2024 (Bha-1), dated: 25.08.2025.
 6. Government Order No.: DPAR 02 SeHiMa 2025, dated: 03.09.2025.
 7. Interim order dated 27.11.2025 passed in Writ Petition Nos.: 200448/2025, 17968/2025 and 3145/202300 filed in the Hon'ble Court.

PREAMBLE:

In the Government Order dated 20.06.1995 read at (1) above, a roster of 100 points has been specified for filling up the vacancies of the posts in the State Civil Services

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by direct recruitment in accordance with the reservation ratio of 15% and 3% for Scheduled Castes and Scheduled Tribes respectively.

2. In the Karnataka Scheduled Castes and Scheduled Tribes (Reservation of Seats in Educational Institutions and of Appointments or Posts in the services under the State) Act, 2022 read at (2) above, the reservation ratio for persons belonging to the Scheduled Castes and Scheduled Tribes of the State in posts in educational institutions and in appointments or posts in State Services has been increased to 17% and 7% respectively.

3. In the Government Order read at (3) above, a revised roster of 100 points has been fixed and ordered in respect of vacant posts to be filled through direct recruitment in accordance with the higher reservation scale under the 2022 Act.

4. In the Government Order dated 08.03.2023 read at (4) above, a 100-point roster has been fixed and ordered for implementing the horizontal reservation provided for ex-servicemen, specially-abled, women, project displaced persons, rural candidates, candidates who studied in Kannada medium and third genders under each category of vertical reservation.

5. In the Government Order dated 25.08.2025 read at (5) above, 101 castes existing in the Scheduled Castes have been classified into 3 categories namely Category-A, Category-B and Category-C and the 17% reservation currently in force for the Scheduled Castes in education and employment has been fixed and ordered as 6% for the communities in Category-A, 6% for the communities in Category-B and 5% for the communities in Category-C.

6. In the Government Order dated 03.09.2025 read at (6) above, only 17 points identified for Scheduled Castes in the reservation roster of 100 points fixed in the order dated 28.12.2022 have been reclassified and ordered as per the annexure to the said order.

7. In the cases read at (7) above, the increase in the reservation rate for Scheduled Castes and Scheduled Tribes from 15% to 17% and from 3% to 7% respectively under the Karnataka Scheduled Castes and Scheduled Tribes (Reservation of Seats in Educational Institutions and of Appointments or Posts in the services under the State) Act, 2022 has been questioned and in the said cases, the Hon'ble High Court has issued the following interim order on 27.11.2025.

6. Considering that recruitment process has already begun pursuant to certain notifications specifying the enhanced reservation under the Karnataka Scheduled

Castes and Scheduled Tribes (Reservation of Seats in Education Institutions and Appointments of Posts and Services under the State) Act, 2022 (hereafter Act), we consider it apposite to modify our order dated 19.11.2025 to direct that no further notifications for recruitment or appointment on the basis of increased reservation would be issued till the disposal of the present petitions. The recruitment pursuant to the process that is already begun, may be continued. However, any appointment made shall be subject to the final outcome of the present petitions.

8. The recruitment process for vacant posts in several departments has been stopped due to the interim order issued by the Hon'ble High Court as above. In the interest of the unemployed candidates and as it is affecting the administrative system, the recruitment process needs to be continued urgently. Therefore, it has been decided that it is appropriate to issue the recruitment notifications as per the reservation order and roster points (reservation rate at 50%) that was in force prior to the order bearing Government Order No.: DPAR 1, SeHiMa 2022, dated: 28.12.2022 and it has been ordered as hereunder.

GOVERNMENT ORDER NO.: DPAR 01 SEHIMA 2026,
BANGALORE, DATED: 27.02.2026.

In the circumstances detailed in the preamble, the Government has passed the following order.

1. Subject to the final judgment of the Hon'ble High Court in the cases filed in the Hon'ble High Court challenging the Karnataka Scheduled Castes and Scheduled Tribes (Reservation of Seats in Educational Institutions and of Appointments or Posts in the services under the State) Act, 2022 and until further orders of the Government, all the appointing/selection authorities are directed to issue recruitment notifications in direct appointments to State Civil Service posts after 27.11.2025 as per the reservation order and roster points that were in force prior to the order bearing Government Order No.: DPAR 8 SeHiMa 2022, dated 28.12.2022 (as per Government Order No.: DPAR 8, SeHiMa 1995, dated 20.06.1995, reservation ratio at 50%).
2. In this type of selection, the point corresponding to the next roster point after the roster point at which the previous appointment was stopped as specified in the order dated 28.12.2022, should be identified in the Government Order No.: DPAR 8 SeHiMa, 1995 dated 20.06.1995 and selection should be made starting from there (for example, if in the previous appointment, the selection has been completed up to point 10 as per the roster specified in the order dated 28.12.2022, the selection to be made now should be completed by

starting from point 11 of the roster in Annexure-1 of the order dated 20.06.1995).

3. The cases in which notifications for appointments were issued prior to the interim order of the Hon'ble High Court dated 27.11.2025 shall be continued and finalized as per the procedure and the appointment order shall clearly state that this appointment is subject to the final order of the Hon'ble High Court.
4. Regarding horizontal reservation, the roster points fixed in the Government Order No.: DPAR 02 SehiMa 2023, dated: 08.03.2023 shall be continued. Selection should be made starting from the next roster point after the point at which it was stopped in the roster specified in the order dated 08.03.2023 in the previous recruitment.
5. Subject to the final order of the Hon'ble High Court, the respective departments / appointing authorities shall reserve 6% (2% for Scheduled Castes and 4% for Scheduled Tribes) in the posts to be filled in the future.
6. Further, all departments/appointing authorities have been informed to commence the process of filling up about 56432 vacant direct recruitment posts within the next 30 days.

The above instructions shall be in force until further orders from the Government.

By Order of and in the name
of the Governor of Karnataka,

Sd/-
(Asha Kumari A.J.)
Under Secretary to Government,
Department of Personnel and
Administrative Reforms,
(Service Rules).

To:

The Compiler, Karnataka Gazette, Bangalore, with a request to publish it in the Special Gazette and forward 50 copies to the Department of Personnel and Administrative Reforms (Service Rules-A), Room No.-31, Vidhana Soudha, Ground Floor.

Copy to:

1. The Accountant General, (G&SSA), (E&RSA), Karnataka, New Building, Audit Bhavan, Bangalore.
2. The Accountant General (A&E), Karnataka, Park House Road, Bangalore.
3. The Chief Secretary to the Government.
4. The Additional Chief Secretary to Hon'ble the Chief Minister.
5. The Additional Chief Secretary to the Government.
6. All the Additional Chief Secretaries / Principal Secretaries / Secretaries to the Government.

LABORATORY ANALYTICAL FACILITIES

Name of the Board / Committee:

PART I: Facility available for monitoring of environmental parameters:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
A. Sample Matrix / Group of Water and Wastewater				
(a) Physical Tests				
1	Temperature	Yes		
2	Colour	Yes		
3	pH	Yes		
4	Turbidity	Yes		
5	Conductivity	Yes		
6	Total Solids	Yes		
7	Total Dissolved Solids (TDS)	Yes		
8	Total Suspended Solids (TSS)	Yes		
(b) Inorganic Tests				
(i) General & Non-metallic				
1	Alkalinity	Yes		
2	Chloride	Yes		
3	Cyanide	Yes		
4	Dissolved oxygen	Yes		
5	Nitrite nitrogen	Yes		
6	Nitrate nitrogen	Yes		
7	Ammonical nitrogen	Yes		
8	Fluoride	Yes		
9	Hardness (Total)	Yes		
10	Calcium	Yes		
11	Magnesium	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
12	Phosphate	Yes		
13	Sulphate	Yes		
14	Sulphide	Yes		
15	Total Residual chlorine (TRC)	Yes		
(ii) Trace Metals Tests				
1	Aluminium (Al)	Yes		
2	Arsenic (As) Total	Yes		
3	Barium	Yes		
4	Boron	Yes		
5	Chromium (Cr) Hexavalent	Yes		
6	Chromium (Cr) Total	Yes		
7	Cadmium (Cd)	Yes		
8	Cobalt (Co)	Yes		
9	Copper (Cu)	Yes		
10	Iron (Fe)	Yes		
11	Lead (Pb)	Yes		
12	Manganese (Mn)	Yes		
13	Mercury (Hg)	Yes		
14	Nickel (Ni)	Yes		
15	Potassium (K)	Yes		
16	Sodium (Na)	Yes		
17	Vanadium (V)	Yes		
18	Zinc (Zn)	Yes		
19	Selenium (Se)	Yes		
(c) Organics (General) and Trace Organics Tests				
1	Biological Oxygen Demand (BOD)	Yes		
2	Chemical oxygen demand (COD)	Yes		
3	Oil & Grease	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
4	Phenolic Compounds as C6H5OH	Yes		
5	Benzopyrene	Yes		
6	Pesticides			
6.a Organochlorine Pesticides (OCPs) Tests				
i	Aldrin	Yes		
ii	Alpha Endosulphan	Yes		
iii	p,p'-DDT	Yes		
iv	Alpha-HCH	Yes		
v	Beta HCH	Yes		
vi	Beta Endosulphan	Yes		
vii	Gama-HCH	Yes		
viii	o,p'-DDT	Yes		
ix	p,p'-DDE	Yes		
6.b Organophosphorus Pesticides (OPPs) Tests				
i	Malathion	Yes		
ii	Methyl parathion	Yes		
iii	Chlorpyrifos	Yes		
iv	Dimethoate	Yes		
v	Dieldrin	Yes		
vi	Ethion	Yes		
(d) Microbiological Tests				
1	Total Coliform	Yes		
2	Faecal Coliform	Yes		
3	E. Coli	Yes		
4	Faecal Streptococci	Yes		
(e) Toxicological Tests				
1	Bioassay method for evaluation of toxicity using fish (90% survival of fish after 96 hrs in 100% effluent)	Yes		
B. Sample Matrix / Group of Solid / Solid Waste				
(a) Soil / Sediment / Compost Tests				

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
1	Cation Exchange Capacity (CEC)	Yes		
2	Electrical Conductivity (EC)	Yes		
3	Organic carbon (Chemical Method)	Yes		
4	pH	Yes		
5	Soil moisture	Yes		
6	Total nitrogen	Yes		
7	Metals by digestion (As, Cd, Cr, Pb, Ni etc.)	Yes		
(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests				
1	Corrosivity	Yes		
2	Ignitability (Flash Point)	Yes		
3	Loss on Drying at 1050C (% Moisture Content)	Yes		
4	Loss on Drying at 5500C (% Organic Content)	Yes		
5	pH	Yes		
6	Organic carbon/matter (Chemical Method)	Yes		
7	Calorific Value	Yes		
8	Toxicity Characteristics leaching procedure (TCLP) Leachate and Metals in Leachate (As,Cd,Cr, Pb, Ni)	Yes		
C. Sample Matrix / Group of Analytes: Air				
(a) Ambient Air				
1	Nitrogen dioxide as NO2	Yes		
2	Sulphur dioxide (SO2)	Yes		
3	Particulate matter (PM10)	Yes		
4	Particulate matter (PM2.5)	Yes		
5	Carbon Monoxide	Yes		
6	Ozone	Yes		
7	Benzene	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
8	Ammonia	Yes		
9	Metals in Particulate Matter, Pb	Yes		
10	Metals in Particulate Matter, As	Yes		
11	Metals in Particulate Matter, Ni	Yes		
12	Particulate Benzo-a-Pyrene (BaP)	Yes		
(b) Stack Gas / Stationary Source Emission				
1	Particulate Matter	Yes		
2	Sulphur Dioxide	Yes		
3	Carbon Dioxide	Yes		
4	Carbon Monoxide (NDIR based Method)	Yes		
5	Temperature	Yes		
6	Moisture	Yes		
7	Oxygen	Yes		
8	Oxides of Nitrogen	Yes		
9	Halides (HCL/HF)	Yes		
(c) Noise Level				
1	Ambient Noise level measurement (20 to 140 dB)	Yes		
2	Source Noise Level Measurement (Industrial process, DG set- 20 to 140dB)	Yes		
(d) Meteorological Monitoring				
1	Ambient Temperature	Yes		
2	Wind direction	Yes		
3	Wind speed	Yes		
4	Relative Humidity	Yes		
5	Mixing Height	Yes		

Specific remarks, if any:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
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PART II: Details of Laboratory Infrastructure (Instruments and Equipment)

S. No.	Name of Instrument / Equipments	Available Yes / No	If the Instrument / Equipment is not available, Specify Timeline for procurement of this instrument (in months)	Action Taken for procurement of this Instrument / Equipment (Specification finalized / procurement initiated / work awarded / outsourced)
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes				
a) Mandatory Requirements				
1	Portable / Pen type pH meter / pH strip	Yes		
2	Portable Dissolved Oxygen Meter / Field Fixing using chemicals	Yes		
3	Electrical Conductivity meter pen type	Yes		
4	Flow meter / Physical flow measuring	Yes		
5	GPS / Mobile with GPS app	Yes		
6	Ice Box (2 nos.) (150 litre & 100 litre capacities)	Yes		
7	Thermometer	Yes		
8	Stainless steel bucket with nylon rope and mug	Yes		
9	Ground water level measuring device	Yes		
10	Scoop / shovel	Yes		
11	Auger / core sampler	Yes		
b) Optional Requirements				
1	Bottom Sampler / Depth sampler	Yes		
2	Chloroscope for residual chlorine	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
3	Vandom or equivalent water sampler (Automatic sampler when composite sampling to be done)	No	24 Months	Specification is under finalization
4	Ekman Dredge	Yes		
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring				
a) Mandatory Requirements				
1	Fine dust samplers PM2.5 (*4 Nos)	Yes		
2	Respirable Dust Sampler PM 10 (*4 Nos)	Yes		
3	High Volume Sampler (SPM) (4 Nos)	Yes		
4	Handy Sampler with set of glass impingers (*2 Nos)	Yes		
5	Low Volume Sampler (LVS)	Yes		
6	Tedler bags different sizes	NO	24 Months	Specification is under finalization
7	Meteorological tower (All in one telescopic Mast) with sensors comprising wind speed, wind direction, ambient temp., Relative humidity, Solar radiation, rainfall etc.	Yes		
8	Nitrogen Cylinder portable	No	24 Months	Specification is under finalization
9	Activated Charcoal tubes/ Tenex	No	24 Months	Specification is under finalization
10	Barometer (Digital)	Yes		
11	Isokinetic Stack Monitoring Kit complete with Stack monitoring instrument panel with inclined cum vertical manometer, Cold Box, Vacuum pump, Glass assembly impingers	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
12	Modified S type Stainless steel Pitot tube (Standard length) with Assembly	Yes		
13	Monoblock type, rotary design vacuum pump	Yes		
14	Orsat Apparatus	Yes		
15	Source emission monitoring Impingers train set with spare impingers 100 ml & 225 ml capacity	Yes		
16	Stainless steel heated Sampling Probes with thimble holders short and long	Yes		
17	Flue Gas analyzer	Yes		
18	Thermometer/ Thermocouple	Yes		
19	Calibrator for Noise Meters	Yes		
20	Digital Sound level (Noise) Metres	Yes		
21	Portable TOC Analyzer for emission monitoring.	Yes		
22	Polyurethane Foam PUF Sampler	Yes		
b) Optional Requirements				
1	Anemometer	Yes		
2	Weather Monitoring system	Yes		
3	Wind speed/wind direction monitor	Yes		
4	Continuous Ambient Air Monitoring System, Fixed	Yes		
5	Continuous PM10 Analyzer	Yes		
6	Continuous Ambient Air Monitoring System, Mobile	Yes		
7	Continuous PM2.5 analyzer	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
8	Ambient Nitrogen Oxides (NO-NO2-NOx Analyzer	Yes		
9	Ambient Ozone Analyzer	Yes		
10	Ambient BTEX Analyzer	Yes		
11	Multipoint Gas Calibration system	Yes		
12	Ambient Sulphur Dioxide analyzer	Yes		
13	Ambient Carbon Monoxide & Carbon dioxide analyzer	Yes		
14	Total Hydrocarbon analyzer	No		
15	Ambient Ammonia analyzer	Yes		
16	Zero Gas Generator	No	24 Months	Specification is under finalization
17	Synthetic Air Cylinder	No	24 Months	Specification is under finalization
18	Calibration Gas Cylinders, SO2, NO, CO, NH3B ,enzene and Toluene One each with stainless steel Regulators	Yes		
19	Continuous emission monitoring equipment	Yes		
20	19 inch Rack mounting system for air analyzers	Yes		
21	Dry Gas Meter	Yes		
22	Diesel Exhaust analyzer	Yes		
23	Exhaust CO/HC analyzer with Sampling Probe	Yes		
24	Automated Noise Monitoring System	Yes		
25	Integrating Sound level meter	Yes		
26	Continuous PM10& PM2.5 Monitoring Analyzer TEOM system	Yes		
27	Top loading orifice kit for calibration of HVS	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (In months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
28	Permeation tubes (SO ₂ , NO-NO ₂ -NO _x , NH ₃ , BTX)	No	24 Months	Specification is under finalization
C. List of Equipment required for processing of Environmental Samples:				
a) Mandatory Requirements				
1	Accelerated Solvent Extraction (ASE) System	No	24 Months	Specification is under finalization
2	Ammonia distillation assembly/TKN Analyzer	Yes		
3	Analytical Balance 4/5 digit & 6 digit (Digital)	Yes		
4	Aquarium for Toxicity bioassay test with complete accessories (*4 Nos)	Yes		
5	Autoclave (*2 Nos)	Yes		
6	Bacteriological Incubators Stainless steel (*2 Nos)	Yes		
7	Bio safety cabinets	Yes		
8	BOD Incubators (2 nos.)	Yes		
9	Centrifuge	Yes		
10	COD Digestion heated Blocks (2) with capacity 16 nos. or more	Yes		
11	Cyanide Distillation Assembly (3)	Yes		
12	Deep Freezer- Capacity 500 litre	Yes		
13	Laboratory Ball Mill Grinder	Yes		
14	Laboratory Grinder	Yes		
15	Laminar Flow bench for Microbiological analysis	Yes		
16	Magnetic Stirrer with heating system (*2 Nos)	Yes		
17	Mechanical Shaker	Yes		
18	Membrane Filtration assembly with vacuum pump (2 nos.)	Yes		
19	Microbial culture refrigerator	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
20	Microwave Digester with 16 vessels/ Hot Plate	Yes		
21	Muffle Furnace (* 1 Nos), Range 1200 C	Yes		
22	Phenol distillation assembly (3)	Yes		
23	Plate counter, Manual/Automatic	Yes		
24	Digestion Chambers/ Fume hood	Yes		
25	Digital Thermometer & Humidity meter- All lab area	Yes		
26	Dispensers (Various capacities) up to 5, 10, 25 & 50 ml	Yes		
27	Filtration Assembly with vacuum pump	Yes		
28	Fluoride Distillation Assembly (3)	Yes		
29	Arsenic / Fluoride Glass Distillation assemblies	Yes		
30	Glass Double Distillation Assembly /Water Purification System	Yes		
31	Heating mantles (2 nos.)	Yes		
32	Hot plates (small, Medium and Large) (*2 nos.)	Yes		
33	Thermo Hygrometer	Yes		
34	Imhoff Cone	Yes		
35	Top loading Precision Digital Balance (minimum detection 0.001mg/0.01 mg) with anti-vibration facility- 3 nos. i.e 4/5 Digit (2 nos), - 6 Digit (1 no)	Yes		
36	Refrigerators Big Size 300 litres or more, double door- 2 nos.	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
37	Rotary Evaporator (Buchi type) with water recirculating chiller	Yes		
38	Separating funnel shaker	Yes		
39	Soxhlet Apparatus	Yes		
40	Solid Phase Extraction (SPE) /SPME Extraction system	No	24 Months	Specification is under finalization
41	Thermometer (Alcohol)	Yes		
42	Dry & wet bulb Thermometer	Yes		
43	Toxicity characteristic leaching procedure (TCLP) Extractors (Zero head and Bottle)	Yes		
44	Ultra sonic water bath- Capacity 3 litre	Yes		
45	Water Bath with temperature control (*2 Nos)	Yes		
46	Water Bath with temp. for mercury sample digestion- 20 BOD Bottles	Yes		
D. Analytical Instruments at Environmental Laboratories				
a) Mandatory Requirements				
1	Atomic Absorption spectrometer (AAS)- Flame, Hydride & Graphite Tube Atomizer (GTA)	Yes		
2	Binocular Stereo Zoom Microscope	Yes		
3	Bomb Calorimeter	Yes		
4	BTX Analyzer with BTX calibrator	No	24 Months	Specification is under finalization
5	Colony counter	Yes		
6	Conductivity meter- 2 nos.	Yes		
7	Environment conditioning chamber	No	24 Months	Specification is under finalization

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
8	Digital Burettes- 50 ml*2, 100 ml*2	Yes		
9	Dissolved Oxygen Meter (Bench model)	Yes		
10	Flame Photometer	Yes		
11	Flash Point Apparatus	Yes		
12	Gas Chromatograph Mass Spectrometer	Yes		
13	High Performance Liquid Chromatograph (HPLC)	No	24 Months	Specification is under finalization
14	Inductively Coupled Plasma (ICP) Spectrometer-OES	Yes		
15	Ion Chromatograph Anion & Cations	No		
16	Methane and Non Methane (NMHC) Analyzer	No		
17	Microscope – 100x	Yes		
18	Microscope Binocular Research	Yes		
19	CO (NDIR based) Analyzer	Yes		
20	Nephelometer (Turbidity Meter)	Yes		
21	pH-Meter with combined electrode (3 point)- 2 nos.	Yes		
22	Specific ion Analyzer with ion selective electrodes	Yes		
23	Spectrophotometer Visible (Portable)	Yes		
24	TKN Analyzer semi-automatic with aluminum block digester	Yes		
25	UV-Vis Spectrophotometer	Yes		
26	Moisture Content Analyzer	No	24 Months	Specification is under finalization
b) Optional Requirements				
1	Automatic Titration Assembly	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
2	Carbon, Hydrogen, Nitrogen and Sulphur (CHNS) Elemental Analyzer	No	24 Months	Specification is under finalization
3	EDXRF Analyzer/WDXRF Analyzer	No	24 Months	Specification is under finalization
4	Fourier-transform infrared Spectrometer (FTIR)	No	24 Months	Specification is under finalization
5	Flocculator (Jar testing apparatus)	No	24 Months	Specification is under finalization
6	Toxic Gas Analyzer	No	24 Months	Specification is under finalization
7	Organic Halogen (AOX/TOX) Analyzer	No	24 Months	Specification is under finalization
8	TOC Analyzer	No	24 Months	Specification is under finalization
9	High Resolution Mass Spectrometer (HRGC-HRMS)	No	24 Months	Specification is under finalization
10	Inductively Coupled Plasma Mass (ICP-MS) Spectrometer	No	24 Months	Specification is under finalization
11	X Ray Fluorescence (XRF) Spectrometer (Portable)	No	24 Months	Specification is under finalization

Specific remarks, if any:

Note: 1. Wherever facility not available samples are submitted to the nearest Board Laboratory and also out sourced to E(P)A recognized Laboratories

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PART I: Facility available for monitoring of environmental parameters:			
Parameters	Total Number of Parameters	Facility available for	Facility not available for
A. Sample Matrix / Group of Water and Wastewater	67	67	0
(a) Physical Tests	8	8	0
(b) Inorganic Tests	34	34	0
(i) General & Non-metallic	15	15	0
(ii) Trace Metals Tests	19	19	0
(c) Organics (General) and Trace Organics Tests	20	20	0
Pesticides	15	15	0
Organochlorine Pesticides (OCPs) Tests	9	9	0
Organophosphorus Pesticides (OPPs) Tests	6	6	0
(d) Microbiological Tests	4	4	0
(e) Toxicological Tests	1	1	0
B. Sample Matrix / Group of Solid / Solid Waste	15	15	0
(a) Soil / Sediment / Compost Tests	7	7	0
(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests	8	8	0
C. Sample Matrix / Group of Analytes: Air	28	28	0
(a) Ambient Air	12	12	0
(b) Stack Gas / Stationary Source Emission	9	9	0
(c) Noise Level	2	2	0
(d) Meteorological Monitoring	5	5	0
PART II: Details of Laboratory Infrastructure (Instruments and Equipment)			
Name of Instrument / Equipments	Total Numbers	Number of Available	Number of Not Available
Total	148	122	26
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes	15	14	1
a) Mandatory Requirements	11	11	0
b) Optional Requirements	4	3	1
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring	50	43	7
a) Mandatory Requirements	22	19	3
b) Optional Requirements	28	24	4
C. List of Equipment required for processing of Environmental Samples:	46	44	2
a) Mandatory Requirements	46	44	2
D. Analytical Instruments at Environmental Laboratories	37	21	16
a) Mandatory Requirements	26	20	6
b) Optional Requirements	11	1	10

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Note: It is requested to please ensure that each sheet is created separately for each laboratory and rename the sheet accordingly . For e.g. Central Laboratory, Regional Laboratory etc

LABORATORY ANALYTICAL FACILITIES

Name of the Board / Committee: Central Environmental Laboratory-1, Bengaluru, Karnataka State Pollution Control Board

PART I: Facility available for monitoring of environmental parameters:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
A. Sample Matrix / Group of Water and Wastewater				
(a) Physical Tests				
1	Temperature	Yes		
2	Colour	Yes		
3	pH	Yes		
4	Turbidity	Yes		
5	Conductivity	Yes		
6	Total Solids	Yes		
7	Total Dissolved Solids (TDS)	Yes		
8	Total Suspended Solids (TSS)	Yes		
(b) Inorganic Tests				
(i) General & Non-metallic				
1	Alkalinity	Yes		
2	Chloride	Yes		
3	Cyanide	Yes		
4	Dissolved oxygen	Yes		
5	Nitrite nitrogen	Yes		
6	Nitrate nitrogen	Yes		
7	Ammonical nitrogen	Yes		
8	Fluoride	Yes		
9	Hardness (Total)	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
10	Calcium	Yes		
11	Magnesium	Yes		
12	Phosphate	Yes		
13	Sulphate	Yes		
14	Sulphide	Yes		
15	Total Residual chlorine (TRC)	Yes		
(ii) Trace Metals Tests				
1	Aluminium (Al)	Yes		
2	Arsenic (As) Total	Yes		
3	Barium	Yes		
4	Boron	Yes		
5	Chromium (Cr) Hexavalent	Yes		
6	Chromium (Cr) Total	Yes		
7	Cadmium (Cd)	Yes		
8	Cobalt (Co)	Yes		
9	Copper (Cu)	Yes		
10	Iron (Fe)	Yes		
11	Lead (Pb)	Yes		
12	Manganese (Mn)	Yes		
13	Mercury (Hg)	Yes		
14	Nickel (Ni)	Yes		
15	Potassium (K)	Yes		
16	Sodium (Na)	Yes		
17	Vanadium (V)	Yes		
18	Zinc (Zn)	Yes		
19	Selenium (Se)	Yes		
(c) Organics (General) and Trace Organics Tests				

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
1	Biological Oxygen Demand (BOD)	Yes		
2	Chemical oxygen demand (COD)	Yes		
3	Oil & Grease	Yes		
4	Phenolic Compounds as C6H5OH	Yes		
5	Benzopyrene	Yes		
6	Pesticides			
6.a Organochlorine Pesticides (OCPs) Tests				
i	Aldrin	Yes		
ii	Alpha Endosulphan	Yes		
iii	p,p'-DDT	Yes		
iv	Alpha-HCH	Yes		
v	Beta HCH	Yes		
vi	Beta Endosulphan	Yes		
vii	Gama-HCH	Yes		
viii	o,p'-DDT	Yes		
ix	p,p'-DDE	Yes		
6.b Organophosphorus Pesticides (OPPs) Tests				
i	Malathion	Yes		
ii	Methyl parathion	Yes		
iii	Chlorpyrifos	Yes		
iv	Dimethoate	Yes		
v	Dieldrin	Yes		
vi	Ethion	Yes		
(d) Microbiological Tests				
1	Total Coliform	Yes		
2	Faecal Coliform	Yes		
3	E. Coli	Yes		
4	Faecal Streptococci	Yes		
(e) Toxicological Tests				

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
1	Bioassay method for evaluation of toxicity using fish (90% survival of fish after 96 hrs in 100% effluent)	Yes		
B. Sample Matrix / Group of Solid / Solid Waste				
(a) Soil / Sediment / Compost Tests				
1	Cation Exchange Capacity (CEC)	Yes		
2	Electrical Conductivity (EC)	Yes		
3	Organic carbon (Chemical Method)	Yes		
4	pH	Yes		
5	Soil moisture	Yes		
6	Total nitrogen	Yes		
7	Metals by digestion (As, Cd, Cr, Pb, Ni etc.)	Yes		
(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests				
1	Corrosivity	Yes		
2	Ignitability (Flash Point)	Yes		
3	Loss on Drying at 1050C (% Moisture Content)	Yes		
4	Loss on Drying at 5500C (% Organic Content)	Yes		
5	pH	Yes		
6	Organic carbon/matter (Chemical Method)	Yes		
7	Calorific Value	Yes		
8	Toxicity Characteristics leaching procedure (TCLP) Leachate and Metals in Leachate (As,Cd,Cr, Pb, Ni)	Yes		
C. Sample Matrix / Group of Analytes: Air				
(a) Ambient Air				
1	Nitrogen dioxide as NO2	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
2	Sulphur dioxide (SO2)	Yes		
3	Particulate matter (PM10)	Yes		
4	Particulate matter (PM2.5)	Yes		
5	Carbon Monoxide	Yes		
6	Ozone	Yes		
7	Benzene	Yes		
8	Ammonia	Yes		
9	Metals in Particulate Matter, Pb	Yes		
10	Metals in Particulate Matter, As	Yes		
11	Metals in Particulate Matter, Ni	Yes		
12	Particulate Benzo-a-Pyrene (BaP)	Yes		
(b) Stack Gas / Stationary Source Emission				
1	Particulate Matter	Yes		
2	Sulphur Dioxide	Yes		
3	Carbon Dioxide	Yes		
4	Carbon Monoxide (NDIR based Method)	Yes		
5	Temperature	Yes		
6	Moisture	Yes		
7	Oxygen	Yes		
8	Oxides of Nitrogen	Yes		
9	Halides (HCL/HF)	Yes		
(c) Noise Level				
1	Ambient Noise level measurement (20 to 140 dB)	Yes		
2	Source Noise Level Measurement (Industrial process, DG set- 20 to 140dB)	Yes		
(d) Meteorological Monitoring				
1	Ambient Temperature	Yes		
2	Wind direction	Yes		
3	Wind speed	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
4	Relative Humidity	Yes		
5	Mixing Height	Yes		

Specific remarks, if any:

PART II: Details of Laboratory Infrastructure (Instruments and Equipment)

S. No.	Name of Instrument / Equipments	Available Yes / No	If the Instrument / Equipment is not available, Specify Timeline for procurement of this instrument (in months)	Action Taken for procurement of this Instrument / Equipment (Specification finalized / procurement initiated / work awarded / outsourced)
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes				
a) Mandatory Requirements				
1	Portable / Pen type pH meter / pH strip	Yes		
2	Portable Dissolved Oxygen Meter / Field Fixing using chemicals	Yes		
3	Electrical Conductivity meter pen type	Yes		
4	Flow meter / Physical flow measuring	Yes		
5	GPS / Mobile with GPS app	Yes		
6	Ice Box (2 nos.) (150 litre & 100 litre capacities)	Yes		
7	Thermometer	Yes		
8	Stainless steel bucket with nylon rope and mug	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
9	Ground water level measuring device	Yes		
10	Scoop / shovel	Yes		
11	Auger / core sampler	Yes		
b) Optional Requirements				
1	Bottom Sampler / Depth sampler	Yes		
2	Chloroscope for residual chlorine	Yes		
3	Vandorn or equivalent water sampler (Automatic sampler when composite sampling to be done)	No	24 Months	Specification is under finalization
4	Ekman Dredge	Yes		
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring				
a) Mandatory Requirements				
1	Fine dust samplers PM2.5 (*4 Nos)	Yes		
2	Respirable Dust Sampler PM 10 (*4 Nos)	Yes		
3	High Volume Sampler (SPM) (4 Nos)	Yes		
4	Handy Sampler with set of glass impingers (*2 Nos)	Yes		
5	Low Volume Sampler (LVS)	Yes		
6	Tedler bags different sizes	No	24 Months	Finalization of specification
7	Meteorological tower (All in one telescopic Mast) with sensors comprising wind speed, wind direction, ambient temp., Relative humidity, Solar radiation, rainfall etc.	Yes		
8	Nitrogen Cylinder portable	No	24 Months	Specification is under finalization
9	Activated Charcoal tubes/ Tenex	No	24 Months	Specification is under finalization
10	Barometer (Digital)	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
11	Isokinetic Stack Monitoring Kit complete with Stack monitoring instrument panel with inclined cum vertical manometer, Cold Box, Vacuum pump, Glass assembly impingers	Yes		
12	Modified S type Stainless steel Pitot tube (Standard length) with Assembly	Yes		
13	Monoblock type, rotary design vacuum pump	Yes		
14	Orsat Apparatus	Yes		
15	Source emission monitoring Impingers train set with spare impingers 100 ml & 225 ml capacity	Yes		
16	Stainless steel heated Sampling Probes with thimble holders short and long	Yes		
17	Flue Gas analyzer	Yes		
18	Thermometer/ Thermocouple	Yes		
19	Calibrator for Noise Meters	Yes		
20	Digital Sound level (Noise) Metres	Yes		
21	Portable TOC Analyzer for emission monitoring.	Yes		
22	Polyurethane Foam PUF Sampler	Yes		
b) Optional Requirements				
1	Anemometer	Yes		
2	Weather Monitoring system	Yes		
3	Wind speed/wind direction monitor	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
4	Continuous Ambient Air Monitoring System, Fixed	Yes		
5	Continuous PM10 Analyzer	Yes		
6	Continuous Ambient Air Monitoring System, Mobile	Yes		
7	Continuous PM2.5 analyzer	Yes		
8	Ambient Nitrogen Oxides (NO-NO2-NOx Analyzer	Yes		
9	Ambient Ozone Analyzer	Yes		
10	Ambient BTEX Analyzer	Yes		
11	Multipoint Gas Calibration system	Yes		
12	Ambient Sulphur Dioxide analyzer	Yes		
13	Ambient Carbon Monoxide & Carbon dioxide analyzer	Yes		
14	Total Hydrocarbon analyzer	No	24 Months	Specification is under finalization
15	Ambient Ammonia analyzer	Yes		
16	Zero Gas Generator	No	24 Months	Specification is under finalization
17	Synthetic Air Cylinder	No	24 Months	Specification is under finalization
18	Calibration Gas Cylinders, SO2, NO, CO, NH3B, benzene and Toluene One each with stainless steel Regulators	Yes		
19	Continuous emission monitoring equipment	Yes		
20	19 inch Rack mounting system for air analyzers	Yes		
21	Dry Gas Meter	Yes		
22	Diesel Exhaust analyzer	Yes		
23	Exhaust CO/HC analyzer with Sampling Probe	Yes		
24	Automated Noise Monitoring System	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
25	Integrating Sound level meter	Yes		
26	Continuous PM10& PM2.5 Monitoring Analyzer TEOM system	Yes		
27	Top loading orifice kit for calibration of HVS	Yes		
28	Permeation tubes (SO2, NO-NO2-NOx, NH3, BTX)	No	24 Months	Specification is under finalization
C. List of Equipment required for processing of Environmental Samples:				
a) Mandatory Requirements				
1	Accelerated Solvent Extraction (ASE) System	No	24 Months	Specification is under finalization
2	Ammonia distillation assembly/TKN Analyzer	Yes		
3	Analytical Balance 4/5 digit & 6 digit (Digital)	Yes		
4	Aquarium for Toxicity bioassay test with complete accessories (*4 Nos)	Yes		
5	Autoclave (*2 Nos)	Yes		
6	Bacteriological Incubators Stainless steel (*2 Nos)	Yes		
7	Bio safety cabinets	No	24 Months	Specification is under finalization
8	BOD Incubators (2 nos.)	Yes		
9	Centrifuge	Yes		
10	COD Digestion heated Blocks (2) with capacity 16 nos. or more	Yes		
11	Cyanide Distillation Assembly (3)	Yes		
12	Deep Freezer- Capacity 500 litre	Yes		
13	Laboratory Ball Mill Grinder	No	24 Months	Specification is under finalization
14	Laboratory Grinder	Yes		
15	Laminar Flow bench for Microbiological analysis	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
16	Magnetic Stirrer with heating system (*2 Nos)	Yes		
17	Mechanical Shaker	Yes		
18	Membrane Filtration assembly with vacuum pump (2 nos.)	Yes		
19	Microbial culture refrigerator	Yes		
20	Microwave Digester with 16 vessels/ Hot Plate	Yes		
21	Muffle Furnace (*1 Nos), Range 1200 C	Yes		
22	Phenol distillation assembly (3)	Yes		
23	Plate counter, Manual/Automatic	Yes		
24	Digestion Chambers/ Fume hood	Yes		
25	Digital Thermometer & Humidity meter- All lab area	Yes		
26	Dispensers (Various capacities) up to 5, 10, 25 & 50 ml	Yes		
27	Filtration Assembly with vacuum pump	Yes		
28	Fluoride Distillation Assembly (3)	Yes		
29	Arsenic / Fluoride Glass Distillation assemblies	Yes		
30	Glass Double Distillation Assembly /Water Purification System	Yes		
31	Heating mantles (2 nos.)	Yes		
32	Hot plates (small, Medium and Large) (*2 nos.)	Yes		
33	Thermo Hygrometer	Yes		
34	Imhoff Cone	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
35	Top loading Precision Digital Balance (minimum detection 0.001mg/0.01 mg) with anti-vibration facility- 3 nos. i.e 4/5 Digit (2 nos), - 6 Digit (1 no)	Yes		
36	Refrigerators Big Size 300 litres or more, double door- 2 nos.	Yes		
37	Rotary Evaporator (Buchi type) with water recirculating chiller	Yes		
38	Separating funnel shaker	Yes		
39	Soxhlet Apparatus	Yes		
40	Solid Phase Extraction (SPE) /SPME Extraction system	No	24 Months	Specification is under finalization
41	Thermometer (Alcohol)	Yes		
42	Dry & wet bulb Thermometer	Yes		
43	Toxicity characteristic leaching procedure (TCLP) Extractors (Zero head and Bottle)	Yes		
44	Ultra sonic water bath- Capacity 3 litre	Yes		
45	Water Bath with temperature control (*2 Nos)	Yes		
46	Water Bath with temp. for mercury sample digestion- 20 BOD Bottles	Yes		
D. Analytical Instruments at Environmental Laboratories				
a) Mandatory Requirements				
1	Atomic Absorption spectrometer (AAS)- Flame, Hydride & Graphite Tube Atomizer (GTA)	Yes		
2	Binocular Stereo Zoom Microscope	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
3	Bomb Calorimeter	Yes		
4	BTX Analyzer with BTX calibrator	No	24 Months	Specification is under finalization
5	Colony counter	Yes		
6	Conductivity meter- 2 nos.	Yes		
7	Environment conditioning chamber	No	24 Months	Specification is under finalization
8	Digital Burettes- 50 ml*2, 100 ml*2	Yes		
9	Dissolved Oxygen Meter (Bench model)	Yes		
10	Flame Photometer	Yes		
11	Flash Point Apparatus	Yes		
12	Gas Chromatograph Mass Spectrometer	Yes		
13	High Performance Liquid Chromatograph (HPLC)	No	24 Months	Specification is under finalization
14	Inductively Coupled Plasma (ICP) Spectrometer-OES	Yes		
15	Ion Chromatograph Anion & Cations	No	24 Months	Specification is under finalization
16	Methane and Non Methane (NMHC) Analyzer	No	24 Months	Specification is under finalization
17	Microscope – 100x	Yes		
18	Microscope Binocular Research	Yes		
19	CO (NIR based) Analyzer	Yes		
20	Nephelometer (Turbidity Meter)	Yes		
21	pH-Meter with combined electrode (3 point)- 2 nos.	Yes		
22	Specific ion Analyzer with ion selective electrodes	Yes		
23	Spectrophotometer Visible (Portable)	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
24	TKN Analyzer semi-automatic with aluminum block digester	Yes		
25	UV-Vis Spectrophotometer	Yes		
26	Moisture Content Analyzer	No	24 Months	Specification is under finalization
b) Optional Requirements				
1	Automatic Titration Assembly	Yes		
2	Carbon, Hydrogen, Nitrogen and Sulphur (CHNS) Elemental Analyzer	No	24 Months	Specification is under finalization
3	EDXRF Analyzer/WDXRF Analyzer	No	24 Months	Specification is under finalization
4	Fourier-transform infrared Spectrometer (FTIR)	No	24 Months	Specification is under finalization
5	Flocculator (Jar testing apparatus)	No	24 Months	Specification is under finalization
6	Toxic Gas Analyzer	No	24 Months	Specification is under finalization
7	Organic Halogen (AOX/TOX) Analyzer	No	24 Months	Specification is under finalization
8	TOC Analyzer	No	24 Months	Specification is under finalization
9	High Resolution Mass Spectrometer (HRGC-HRMS)	No	24 Months	Specification is under finalization
10	Inductively Coupled Plasma Mass (ICP-MS) Spectrometer	Yes		
11	X Ray Fluorescence (XRF) Spectrometer (Portable)	No	24 Months	Specification is under finalization

Note: 1. Wherever facility not available samples are submitted to the nearest Board Laboratory and also out sourced to E(P)A recognized Laboratories

PART I: Facility available for monitoring of environmental parameters:				
Parameters	Total Number of Parameters	Facility available for	Facility not available for	
A. Sample Matrix / Group of Water and Wastewater	67	67	0	0
(a) Physical Tests	8	8	0	0
(b) Inorganic Tests	34	34	0	
(i) General & Non-metallic	15	15	0	0
(ii) Trace Metals Tests	19	19	0	0
(c) Organics (General) and Trace Organics Tests	20	20	0	
Pesticides	15	15	0	0
Organochlorine Pesticides (OCPs) Tests	9	9	0	0
Organophosphorus Pesticides (OPPs) Tests	6	6	0	0
(d) Microbiological Tests	4	4	0	0
(e) Toxicological Tests	1	1	0	0
B. Sample Matrix / Group of Solid / Solid Waste	15	15	0	
(a) Soil / Sediment / Compost Tests	7	7	0	0
(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests	8	8	0	0
C. Sample Matrix / Group of Analytes: Air	28	28	0	
(a) Ambient Air	12	12	0	0
(b) Stack Gas / Stationary Source Emission	9	9	0	0
(c) Noise Level	2	2	0	0
(d) Meteorological Monitoring	5	5	0	0
PART II: Details of Laboratory Infrastructure (Instruments and Equipment)				
Name of Instrument / Equipments	Total Numbers	Number of Available	Number of Not Available	
Total	148	121	27	0
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes	15	14	1	
a) Mandatory Requirements	11	11	0	0
b) Optional Requirements	4	3	1	0
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring	50	43	7	
a) Mandatory Requirements	22	19	3	0
b) Optional Requirements	28	24	4	0
C. List of Equipment required for processing of Environmental Samples:	46	42	4	
a) Mandatory Requirements	46	42	4	0
D. Analytical Instruments at Environmental Laboratories	37	22	15	
a) Mandatory Requirements	26	20	6	0
b) Optional Requirements	11	2	9	0

Note: It is requested to please ensure that each sheet is created separately for each laboratory and rename the sheet accordingly . For e.g. Central Laboratory, Regional Laboratory etc

LABORATORY ANALYTICAL FACILITIES

Name of the Board / Committee: Central Environmental Laboratory-2, Davanagere, Karnataka State Pollution Control Board

PART I: Facility available for monitoring of environmental parameters:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
A. Sample Matrix / Group of Water and Wastewater				
(a) Physical Tests				
1	Temperature	Yes		
2	Colour	Yes		
3	pH	Yes		
4	Turbidity	Yes		
5	Conductivity	Yes		
6	Total Solids	Yes		
7	Total Dissolved Solids (TDS)	Yes		
8	Total Suspended Solids (TSS)	Yes		
(b) Inorganic Tests				
(i) General & Non-metallic				
1	Alkalinity	Yes		
2	Chloride	Yes		
3	Cyanide	Yes		
4	Dissolved oxygen	Yes		
5	Nitrite nitrogen	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
6	Nitrate nitrogen	Yes		
7	Ammonical nitrogen	Yes		
8	Fluoride	Yes		
9	Hardness (Total)	Yes		
10	Calcium	Yes		
11	Magnesium	Yes		
12	Phosphate	Yes		
13	Sulphate	Yes		
14	Sulphide	Yes		
15	Total Residual chlorine (TRC)	Yes		
(ii) Trace Metals Tests				
1	Aluminium (Al)	Yes		
2	Arsenic (As) Total	Yes		
3	Barium	Yes		
4	Boron	Yes		
5	Chromium (Cr) Hexavalent	Yes		
6	Chromium (Cr) Total	Yes		
7	Cadmium (Cd)	Yes		
8	Cobalt (Co)	Yes		
9	Copper (Cu)	Yes		
10	Iron (Fe)	Yes		
11	Lead (Pb)	Yes		
12	Manganese (Mn)	Yes		
13	Mercury (Hg)	Yes		
14	Nickel (Ni)	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
15	Potassium (K)	Yes		
16	Sodium (Na)	Yes		
17	Vanadium (V)	Yes		
18	Zinc (Zn)	Yes		
19	Selenium (Se)	Yes		
(c) Organics (General) and Trace Organics Tests				
1	Biological Oxygen Demand (BOD)	Yes		
2	Chemical oxygen demand (COD)	Yes		
3	Oil & Grease	Yes		
4	Phenolic Compounds as C6H5OH	Yes		
5	Benzopyrene	Yes		
6	Pesticides			
6.a Organochlorine Pesticides (OCPs) Tests				
i	Aldrin	Yes		
ii	Alpha Endosulphan	Yes		
iii	p,p'-DDT	Yes		
iv	Alpha-HCH	Yes		
v	Beta HCH	Yes		
vi	Beta Endosulphan	Yes		
vii	Gama-HCH	Yes		
viii	o,p'-DDT	Yes		
ix	p,p'-DDE	Yes		
6.b Organophosphorus Pesticides (OPPs) Tests				
i	Malathion	No	24 Months	Specification is under finalization
ii	Methyl parathion	No	24 Months	Specification is under finalization
iii	Chlorpyrifos	No	24 Months	Specification is under finalization
iv	Dimethoate	No	24 Months	Specification is under finalization
v	Dieldrin	No	24 Months	Specification is under finalization
vi	Ethion	No	24 Months	Specification is under finalization

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
(d) Microbiological Tests				
1	Total Coliform	Yes		
2	Faecal Coliform	Yes		
3	E. Coli	Yes		
4	Faecal Streptococci	Yes		
(e) Toxicological Tests				
1	Bioassay method for evaluation of toxicity using fish (90% survival of fish after 96 hrs in 100% effluent)	Yes		
B. Sample Matrix / Group of Solid / Solid Waste				
(a) Soil / Sediment / Compost Tests				
1	Cation Exchange Capacity (CEC)	Yes		
2	Electrical Conductivity (EC)	Yes		
3	Organic carbon (Chemical Method)	Yes		
4	pH	Yes		
5	Soil moisture	Yes		
6	Total nitrogen	Yes		
7	Metals by digestion (As, Cd, Cr, Pb, Ni etc.)	Yes		
(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests				
1	Corrosivity	No	24 Months	Specification is under finalization
2	Ignitability (Flash Point)	Yes		
3	Loss on Drying at 1050C (% Moisture Content)	Yes		
4	Loss on Drying at 5500C (% Organic Content)	Yes		
5	pH	Yes		
6	Organic carbon/matter (Chemical Method)	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
7	Calorific Value	Yes		
8	Toxicity Characteristics leaching procedure (TCLP) Leachate and Metals in Leachate (As,Cd,Cr, Pb, Ni)	Yes		
C. Sample Matrix / Group of Analytes: Air				
(a) Ambient Air				
1	Nitrogen dioxide as NO2	Yes		
2	Sulphur dioxide (SO2)	Yes		
3	Particulate matter (PM10)	Yes		
4	Particulate matter (PM2.5)	Yes		
5	Carbon Monoxide	No	24 Months	Specification is under finalization
6	Ozone	No	24 Months	Specification is under finalization
7	Benzene	No	24 Months	Specification is under finalization
8	Ammonia	Yes		
9	Metals in Particulate Matter, Pb	Yes		
10	Metals in Particulate Matter, As	Yes		
11	Metals in Particulate Matter, Ni	Yes		
12	Particulate Benzo-a-Pyrene (BaP)	Yes		
(b) Stack Gas / Stationary Source Emission				
1	Particulate Matter	Yes		
2	Sulphur Dioxide	Yes		
3	Carbon Dioxide	Yes		
4	Carbon Monoxide (NDIR based Method)	Yes		
5	Temperature	Yes		
6	Moisture	Yes		
7	Oxygen	Yes		
8	Oxides of Nitrogen	Yes		
9	Halides (HCL/HF)	No	24 Months	Specification is under finalization

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
(c) Noise Level				
1	Ambient Noise level measurement (20 to 140 dB)	Yes		
2	Source Noise Level Measurement (Industrial process, DG set- 20 to 140dB)	Yes		
(d) Meteorological Monitoring				
1	Ambient Temperature	No	24 Months	Specification is under finalization
2	Wind direction	No	24 Months	Specification is under finalization
3	Wind speed	No	24 Months	Specification is under finalization
4	Relative Humidity	No	24 Months	Specification is under finalization
5	Mixing Height	No	24 Months	Specification is under finalization

Specific remarks, if any:

PART II: Details of Laboratory Infrastructure (Instruments and Equipment)

S. No.	Name of Instrument / Equipments	Available Yes / No	If the Instrument / Equipment is not available, Specify Timeline for procurement of this instrument (in months)	Action Taken for procurement of this Instrument / Equipment (Specification finalized / procurement initiated / work awarded / outsourced)
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes				
a) Mandatory Requirements				

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
1	Portable / Pen type pH meter / pH strip	Yes		
2	Portable Dissolved Oxygen Meter / Field Fixing using chemicals	Yes		
3	Electrical Conductivity meter pen type	Yes		
4	Flow meter / Physical flow measuring	No	24 Months	Specification is under finalization
5	GPS / Mobile with GPS app	Yes		
6	Ice Box (2 nos.) (150 litre & 100 litre capacities)	Yes		
7	Thermometer	Yes		
8	Stainless steel bucket with nylon rope and mug	Yes		
9	Ground water level measuring device	No	24 Months	Specification is under finalization
10	Scoop / shovel	Yes		
11	Auger / core sampler	No	24 Months	Specification is under finalization
b) Optional Requirements				
1	Bottom Sampler / Depth sampler	No	24 Months	Specification is under finalization
2	Chloroscope for residual chlorine	No	24 Months	Specification is under finalization
3	Vandorn or equivalent water sampler (Automatic sampler when composite sampling to be done)	No	24 Months	Specification is under finalization
4	Ekman Dredge	No	24 Months	Specification is under finalization
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring				
a) Mandatory Requirements				
1	Fine dust samplers PM2.5 (*4 Nos)	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
2	Respirable Dust Sampler PM 10 (* 4 Nos)	Yes		
3	High Volume Sampler (SPM) (4 Nos)	Yes		
4	Handy Sampler with set of glass impingers (*2 Nos)	No	24 Months	Specification is under finalization
5	Low Volume Sampler (LVS)	No	24 Months	Specification is under finalization
6	Tedler bags different sizes	No	24 Months	Specification is under finalization
7	Meteorological tower (All in one telescopic Mast) with sensors comprising wind speed, wind direction, ambient temp., Relative humidity, Solar radiation, rainfall etc.	No	24 Months	Specification is under finalization
8	Nitrogen Cylinder portable	No	24 Months	Specification is under finalization
9	Activated Charcoal tubes/ Tenex	No	24 Months	Specification is under finalization
10	Barometer (Digital)	No	24 Months	Specification is under finalization
11	Isokinetic Stack Monitoring Kit complete with Stack monitoring instrument panel with inclined cum vertical manometer, Cold Box, Vacuum pump, Glass assembly impingers	Yes		
12	Modified S type Stainless steel Pitot tube (Standard length) with Assembly	Yes		
13	Monoblock type, rotary design vacuum pump	No	24 Months	Specification is under finalization
14	Orsat Apparatus	No	24 Months	Specification is under finalization

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
15	Source emission monitoring Impingers train set with spare impingers 100 ml & 225 ml capacity	No	24 Months	Specification is under finalization
16	Stainless steel heated Sampling Probes with thimble holders short and long	Yes		
17	Flue Gas analyzer	Yes		
18	Thermometer/ Thermocouple	Yes		
19	Calibrator for Noise Meters	No	24 Months	Specification is under finalization
20	Digital Sound level (Noise) Metres	Yes		
21	Portable TOC Analyzer for emission monitoring.	No	24 Months	Specification is under finalization
22	Polyurethane Foam PUF Sampler	No	24 Months	Specification is under finalization
b) Optional Requirements				
1	Anemometer	No	24 Months	Specification is under finalization
2	Weather Monitoring system	No	24 Months	Specification is under finalization
3	Wind speed/wind direction monitor	No	24 Months	Specification is under finalization
4	Continuous Ambient Air Monitoring System, Fixed	Yes		
5	Continuous PM10 Analyzer	Yes		
6	Continuous Ambient Air Monitoring System, Mobile	Yes		
7	Continuous PM2.5 analyzer	Yes		
8	Ambient Nitrogen Oxides (NO-NO2-NOx Analyzer	Yes		
9	Ambient Ozone Analyzer	Yes		
10	Ambient BTEX Analyzer	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
11	Multipoint Gas Calibration system	Yes		
12	Ambient Sulphur Dioxide analyzer	Yes		
13	Ambient Carbon Monoxide & Carbon dioxide analyzer	Yes		
14	Total Hydrocarbon analyzer	Yes		
15	Ambient Ammonia analyzer	Yes		
16	Zero Gas Generator	Yes		
17	Synthetic Air Cylinder	Yes		
18	Calibration Gas Cylinders, SO ₂ , NO, CO, NH ₃ , benzene and Toluene One each with stainless steel Regulators	Yes		
19	Continuous emission monitoring equipment	Yes		
20	19 inch Rack mounting system for air analyzers	Yes		
21	Dry Gas Meter	Yes		
22	Diesel Exhaust analyzer	Yes		
23	Exhaust CO/HC analyzer with Sampling Probe	Yes		
24	Automated Noise Monitoring System	Yes		
25	Integrating Sound level meter	Yes		
26	Continuous PM ₁₀ & PM _{2.5} Monitoring Analyzer TEOM system	Yes		
27	Top loading orifice kit for calibration of HVS	No	24 Months	Specification is under finalization
28	Permeation tubes (SO ₂ , NO-NO ₂ - NO _x , NH ₃ , BTX)	No	24 Months	Specification is under finalization

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
C. List of Equipment required for processing of Environmental Samples:				
a) Mandatory Requirements				
1	Accelerated Solvent Extraction (ASE) System	No	24 Months	Specification is under finalization
2	Ammonia distillation assembly/TKN Analyzer	Yes		
3	Analytical Balance 4/5 digit & 6 digit (Digital)	Yes		
4	Aquarium for Toxicity bioassay test with complete accessories (*4 Nos)	Yes		
5	Autoclave (*2 Nos)	Yes		
6	Bacteriological Incubators Stainless steel (*2 Nos)	Yes		
7	Bio safety cabinets	Yes		
8	BOD Incubators (2 nos.)	Yes		
9	Centrifuge	No	24 Months	Specification is under finalization
10	COD Digestion heated Blocks (2) with capacity 16 nos. or more	Yes		
11	Cyanide Distillation Assembly (3)	No	24 Months	Specification is under finalization
12	Deep Freezer- Capacity 500 litre	Yes		
13	Laboratory Ball Mill Grinder	No	24 Months	Specification is under finalization
14	Laboratory Grinder	No	24 Months	Specification is under finalization
15	Laminar Flow bench for Microbiological analysis	Yes		
16	Magnetic Stirrer with heating system (*2 Nos)	Yes		
17	Mechanical Shaker	Yes		
18	Membrane Filtration assembly with vacuum pump (2 nos.)	Yes		
19	Microbial culture refrigerator	No	24 Months	Specification is under finalization

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
20	Microwave Digester with 16 vessels/ Hot Plate	Yes		
21	Muffle Furnace (*1 Nos), Range 1200 C	Yes		
22	Phenol distillation assembly (3)	Yes		
23	Plate counter, Manual/Automatic	Yes		
24	Digestion Chambers/ Fume hood	Yes		
25	Digital Thermometer & Humidity meter- All lab area	Yes		
26	Dispensers (Various capacities) up to 5, 10, 25 & 50 ml	Yes		
27	Filtration Assembly with vacuum pump	Yes		
28	Fluoride Distillation Assembly (3)	No	24 Months	Specification is under finalization
29	Arsenic / Fluoride Glass Distillation assemblies	Yes		
30	Glass Double Distillation Assembly /Water Purification System	Yes		
31	Heating mantles (2 nos.)	Yes		
32	Hot plates (small, Medium and Large) (*2 nos.)	Yes		
33	Thermo Hygrometer	Yes		
34	Imhoff Cone	No	24 Months	Specification is under finalization
35	Top loading Precision Digital Balance (minimum detection 0.001mg/0.01 mg) with anti-vibration facility- 3 nos. i.e 4/5 Digit (2 nos), - 6 Digit (1 no)	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
36	Refrigerators Big Size 300 litres or more, double door- 2 nos.	Yes		
37	Rotary Evaporator (Buchi type) with water recirculating chiller	Yes		
38	Separating funnel shaker	Yes		
39	Soxhlet Apparatus	No	24 Months	Specification is under finalization
40	Solid Phase Extraction (SPE) /SPME Extraction system	No	24 Months	Specification is under finalization
41	Thermometer (Alcohol)	Yes		
42	Dry & wet bulb Thermometer	Yes		
43	Toxicity characteristic leaching procedure (TCLP) Extractors (Zero head and Bottle)	Yes		
44	Ultra sonic water bath- Capacity 3 litre	Yes		
45	Water Bath with temperature control (*2 Nos)	Yes		
46	Water Bath with temp. for mercury sample digestion- 20 BOD Bottles	Yes	24 Months	Specification is under finalization
D. Analytical Instruments at Environmental Laboratories				
a) Mandatory Requirements				
1	Atomic Absorption spectrometer (AAS)- Flame, Hydride & Graphite Tube Atomizer (GTA)	Yes		
2	Binocular Stereo Zoom Microscope	No	24 Months	Specification is under finalization
3	Bomb Calorimeter	Yes		
4	BTX Analyzer with BTX calibrator	No	24 Months	Specification is under finalization
5	Colony counter	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
6	Conductivity meter- 2 nos.	Yes		
7	Environment conditioning chamber	No	24 Months	Specification is under finalization
8	Digital Burettes- 50 ml*2, 100 ml*2	No	24 Months	Specification is under finalization
9	Dissolved Oxygen Meter (Bench model)	Yes		
10	Flame Photometer	Yes		
11	Flash Point Apparatus	Yes		
12	Gas Chromatograph Mass Spectrometer	No	24 Months	Specification is under finalization
13	High Performance Liquid Chromatograph (HPLC)	No	24 Months	Specification is under finalization
14	Inductively Coupled Plasma (ICP) Spectrometer-OES	Yes		
15	Ion Chromatograph Anion & Cations	No	24 Months	Specification is under finalization
16	Methane and Non Methane (NMHC) Analyzer	No	24 Months	Specification is under finalization
17	Microscope – 100x	Yes		
18	Microscope Binocular Research	No	24 Months	Specification is under finalization
19	CO (NDIR based) Analyzer	No	24 Months	Specification is under finalization
20	Nephelometer (Turbidity Meter)	Yes		
21	pH-Meter with combined electrode (3 point)- 2 nos.	Yes		
22	Specific ion Analyzer with ion selective electrodes	Yes		
23	Spectrophotometer Visible (Portable)	Yes	24 Months	Specification is under finalization
24	TKN Analyzer semi-automatic with aluminum block digester	No	24 Months	Specification is under finalization

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
25	UV-Vis Spectrophotometer	Yes		
26	Moisture Content Analyzer	No	24 Months	Specification is under finalization
b) Optional Requirements				
1	Automatic Titration Assembly	No	24 Months	Specification is under finalization
2	Carbon, Hydrogen, Nitrogen and Sulphur (CHNS) Elemental Analyzer	No	24 Months	Specification is under finalization
3	EDXRF Analyzer/WDXRF Analyzer	No	24 Months	Specification is under finalization
4	Fourier-transform infrared Spectrometer (FTIR)	No	24 Months	Specification is under finalization
5	Flocculator (Jar testing apparatus)	No	24 Months	Specification is under finalization
6	Toxic Gas Analyzer	No	24 Months	Specification is under finalization
7	Organic Halogen (AOX/TOX) Analyzer	No	24 Months	Specification is under finalization
8	TOC Analyzer	No	24 Months	Specification is under finalization
9	High Resolution Mass Spectrometer (HRGC-HRMS)	No	24 Months	Specification is under finalization
10	Inductively Coupled Plasma Mass Spectrometer (ICP-MS)	No	24 Months	Specification is under finalization
11	X Ray Fluorescence (XRF) Spectrometer (Portable)	No	24 Months	Specification is under finalization

P

PART I: Facility available for monitoring of environmental parameters:				
Parameters	Total Number of Parameters	Facility available for	Facility not available for	
A. Sample Matrix / Group of Water and Wastewater	67	61	6	0
(a) Physical Tests	8	8	0	0
(b) Inorganic Tests	34	34	0	
(i) General & Non-metallic	15	15	0	0
(ii) Trace Metals Tests	19	19	0	0
(c) Organics (General) and Trace Organics Tests	20	14	6	
Pesticides	15	9	6	0
Organochlorine Pesticides (OCPs) Tests	9	9	0	0
Organophosphorus Pesticides (OPPs) Tests	6	0	6	0
(d) Microbiological Tests	4	4	0	0
(e) Toxicological Tests	1	1	0	0
B. Sample Matrix / Group of Solid / Solid Waste	15	14	1	
(a) Soil / Sediment / Compost Tests	7	7	0	0
(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests	8	7	1	0
C. Sample Matrix / Group of Analytes: Air	28	19	9	
(a) Ambient Air	12	9	3	0
(b) Stack Gas / Stationary Source Emission	9	8	1	0
(c) Noise Level	2	2	0	0
(d) Meteorological Monitoring	5	0	5	0
PART II: Details of Laboratory Infrastructure (Instruments and Equipment)				
Name of Instrument / Equipments	Total Numbers	Number of Available	Number of Not Available	
Total	148	89	59	0
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes	15	8	7	
a) Mandatory Requirements	11	8	3	0
b) Optional Requirements	4	0	4	0
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring	50	32	18	
a) Mandatory Requirements	22	9	13	0
b) Optional Requirements	28	23	5	0
C. List of Equipment required for processing of Environmental Samples:	46	35	11	
a) Mandatory Requirements	46	35	11	0
D. Analytical Instruments at Environmental Laboratories	37	14	23	
a) Mandatory Requirements	26	14	12	0
b) Optional Requirements	11	0	11	0

Note: It is requested to please ensure that each sheet is created separately for each laboratory and rename the sheet accordingly. For e.g. Central Laboratory, Regional Laboratory etc

LABORATORY ANALYTICAL FACILITIES

Name of the Board / Committee: Regional Laboratory-Hassan, Karnataka State Pollution Control Board

PART I: Facility available for monitoring of environmental parameters:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
A. Sample Matrix / Group of Water and Wastewater				
(a) Physical Tests				
1	Temperature	Yes		
2	Colour	Yes		
3	pH	Yes		
4	Turbidity	Yes		
5	Conductivity	Yes		
6	Total Solids	Yes		
7	Total Dissolved Solids (TDS)	Yes		
8	Total Suspended Solids (TSS)	Yes		
(b) Inorganic Tests				
(i) General & Non-metallic				
1	Alkalinity	Yes		
2	Chloride	Yes		
3	Cyanide	No	12 Months	outsourced
4	Dissolved oxygen	Yes		
5	Nitrite nitrogen	Yes		
6	Nitrate nitrogen	No	12 Months	outsourced
7	Ammonical nitrogen	Yes		
8	Fluoride	Yes		
9	Hardness (Total)	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
10	Calcium	Yes		
11	Magnesium	Yes		
12	Phosphate	Yes		
13	Sulphate	Yes		
14	Sulphide	Yes		
15	Total Residual chlorine (TRC)	Yes		
(ii) Trace Metals Tests				
1	Aluminium (Al)	No	24 Months	Specification is under finalization
2	Arsenic (As) Total	No	24 Months	Specification is under finalization
3	Barium	No	24 Months	Specification is under finalization
4	Boron	Yes		
5	Chromium (Cr) Hexavalent	Yes		
6	Chromium (Cr) Total	Yes		
7	Cadmium (Cd)	Yes		
8	Cobalt (Co)	Yes		
9	Copper (Cu)	Yes		
10	Iron (Fe)	Yes		
11	Lead (Pb)	Yes		
12	Manganese (Mn)	Yes		
13	Mercury (Hg)	No	24 Months	Specification is under finalization
14	Nickel (Ni)	Yes		
15	Potassium (K)	Yes		
16	Sodium (Na)	Yes		
17	Vanadium (V)	No	24 Months	Specification is under finalization
18	Zinc (Zn)	Yes		
19	Selenium (Se)	No	24 Months	Specification is under finalization
(c) Organics (General) and Trace Organics Tests				
1	Biological Oxygen Demand (BOD)	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
2	Chemical oxygen demand (COD)	Yes		
3	Oil & Grease	Yes		
4	Phenolic Compounds as C6H5OH	No	12 Months	outsourced
5	Benzopyrene	No	24 Months	Specification is under finalization
6	Pesticides			
6.a	Organochlorine Pesticides (OCPs) Tests			
i	Aldrin	No	24 Months	Specification is under finalization
ii	Alpha Endosulphan	No	24 Months	Specification is under finalization
iii	p,p'-DDT	No	24 Months	Specification is under finalization
iv	Alpha-HCH	No	24 Months	Specification is under finalization
v	Beta HCH	No	24 Months	Specification is under finalization
vi	Beta Endosulphan	No	24 Months	Specification is under finalization
vii	Gama-HCH	No	24 Months	Specification is under finalization
viii	o,p'-DDT	No	24 Months	Specification is under finalization
ix	p,p'-DDE	No	24 Months	Specification is under finalization
6.b	Organophosphorus Pesticides (OPPs) Tests			
i	Malathion	No	24 Months	Specification is under finalization
ii	Methyl parathion	No	24 Months	Specification is under finalization
iii	Chlorpyrifos	No	24 Months	Specification is under finalization
iv	Dimethoate	No	24 Months	Specification is under finalization
v	Dieldrin	No	24 Months	Specification is under finalization
vi	Ethion	No	24 Months	Specification is under finalization
(d)	Microbiological Tests			
1	Total Coliform	Yes		
2	Faecal Coliform	Yes		
3	E. Coli	No	24 Months	Specification is under finalization
4	Faecal Streptococci	No	24 Months	Specification is under finalization
(e)	Toxicological Tests			
1	Bioassay method for evaluation of toxicity using fish (90% survival of fish after 96 hrs in 100% effluent)			outsourced
B. Sample Matrix / Group of Solid / Solid Waste				
				No

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
(a) Soil / Sediment / Compost Tests				
1	Cation Exchange Capacity (CEC)	No	24 Months	Specification is under finalization
2	Electrical Conductivity (EC)	Yes		
3	Organic carbon (Chemical Method)	Yes		
4	pH	Yes		
5	Soil moisture	Yes		
6	Total nitrogen	No	12 Months	Outsourced
7	Metals by digestion (As, Cd, Cr, Pb, Ni etc.)	No	24 Months	Specification is under finalization
(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests				
1	Corrosivity	No	24 Months	Specification is under finalization
2	Ignitability (Flash Point)	No	24 Months	Specification is under finalization
3	Loss on Drying at 1050C (%) Moisture Content)	Yes		
4	Loss on Drying at 5500C (%) Organic Content)	No	24 Months	Specification is under finalization
5	pH	Yes		
6	Organic carbon/matter (Chemical Method)	No	24 Months	Specification is under finalization
7	Calorific Value	No	24 Months	Specification is under finalization
8	Toxicity Characteristics leaching procedure (TCLP) Leachate and Metals in Leachate (As, Cd, Cr, Pb, Ni)	No	24 Months	Specification is under finalization
C. Sample Matrix / Group of Analytes: Air				
(a) Ambient Air				
1	Nitrogen dioxide as NO2	Yes		
2	Sulphur dioxide (SO2)	Yes		
3	Particulate matter (PM10)	Yes		
4	Particulate matter (PM2.5)	Yes		
5	Carbon Monoxide	No	24 Months	Specification is under finalization
6	Ozone	No	24 Months	Specification is under finalization
7	Benzene	No	24 Months	Specification is under finalization

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
8	Ammonia	Yes		
9	Metals in Particulate Matter, Pb	Yes		
10	Metals in Particulate Matter, As	Yes		
11	Metals in Particulate Matter, Ni	Yes		
12	Particulate Benzo-a-Pyrene (BaP)	No	24 Months	Specification is under finalization
(b) Stack Gas / Stationary Source Emission				
1	Particulate Matter	Yes		
2	Sulphur Dioxide	No	24 Months	Specification is under finalization
3	Carbon Dioxide	No	24 Months	Specification is under finalization
4	Carbon Monoxide (NDIR based Method)	No	24 Months	Specification is under finalization
5	Temperature	No	24 Months	Specification is under finalization
6	Moisture	No	24 Months	Specification is under finalization
7	Oxygen	No	24 Months	Specification is under finalization
8	Oxides of Nitrogen	No	24 Months	Specification is under finalization
9	Halides (HCL/HF)	No	24 Months	Specification is under finalization
(c) Noise Level				
1	Ambient Noise level measurement (20 to 140 dB)	Yes		
2	Source Noise Level Measurement (Industrial process, DG set- 20 to 140dB)	Yes		
(d) Meteorological Monitoring				
1	Ambient Temperature	Yes		
2	Wind direction	No	24 Months	Specification is under finalization
3	Wind speed	No	24 Months	Specification is under finalization
4	Relative Humidity	No	24 Months	Specification is under finalization
5	Mixing Height	No	24 Months	Specification is under finalization

Specific remarks, if any:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
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PART II: Details of Laboratory Infrastructure (Instruments and Equipment)

S. No.	Name of Instrument / Equipments	Available Yes / No	If the Instrument / Equipment is not available, Specify Timeline for procurement of this instrument (in months)	Action Taken for procurement of this Instrument / Equipment (Specification finalized / procurement initiated / work awarded / outsourced)
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes				
a) Mandatory Requirements				
1	Portable / Pen type pH meter / pH strip	Yes		
2	Portable Dissolved Oxygen Meter / Field Fixing using chemicals	Yes		
3	Electrical Conductivity meter pen type	Yes		
4	Flow meter / Physical flow measuring	Yes		
5	GPS / Mobile with GPS app	Yes		
6	Ice Box (2 nos.) (150 litre & 100 litre capacities)	Yes		
7	Thermometer	Yes		
8	Stainless steel bucket with nylon rope and mug	Yes		
9	Ground water level measuring device	No	24 Months	Specification is under finalization
10	Scoop / shovel	Yes		
11	Auger / core sampler	No	24 Months	Specification is under finalization
b) Optional Requirements				
1	Bottom Sampler / Depth sampler	No	24 Months	Specification is under finalization

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
2	Chloroscope for residual chlorine	No	24 Months	Specification is under finalization
3	Vandorn or equivalent water sampler (Automatic sampler when composite sampling to be done)	No	24 Months	Specification is under finalization
4	Ekman Dredge	No	24 Months	Specification is under finalization
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring				
a) Mandatory Requirements				
1	Fine dust samplers PM2.5 (*4 Nos)	Yes		
2	Respirable Dust Sampler PM 10 (*4 Nos)	Yes		
3	High Volume Sampler (SPM) (4 Nos)	Yes		
4	Handy Sampler with set of glass impingers (*2 Nos)	No	24 Months	Specification is under finalization
5	Low Volume Sampler (LVS)	No	24 Months	Specification is under finalization
6	Tedler bags different sizes	No	24 Months	Specification is under finalization
7	Meteorological tower (All in one telescopic Mast) with sensors comprising wind speed, wind direction, ambient temp., Relative humidity, Solar radiation, rainfall etc.	No	24 Months	Specification is under finalization
8	Nitrogen Cylinder portable	No	24 Months	Specification is under finalization
9	Activated Charcoal tubes/ Tenex	No	24 Months	Specification is under finalization
10	Barometer (Digital)	No	24 Months	Specification is under finalization
11	Isokinetic Stack Monitoring Kit complete with Stack monitoring instrument panel with inclined cum vertical manometer, Cold Box, Vacuum pump, Glass assembly impingers	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
12	Modified S type Stainless steel Pitot tube (Standard length) with Assembly	Yes		
13	Monoblock type, rotary design vacuum pump	No	24 Months	Specification is under finalization
14	Orsat Apparatus	No	24 Months	Specification is under finalization
15	Source emission monitoring Impingers train set with spare impingers 100 ml & 225 ml capacity	No	24 Months	Specification is under finalization
16	Stainless steel heated Sampling Probes with thimble holders short and long	No	24 Months	Specification is under finalization
17	Flue Gas analyzer	No	24 Months	Specification is under finalization
18	Thermometer/ Thermocouple	Yes		
19	Calibrator for Noise Meters	No	24 Months	Specification is under finalization
20	Digital Sound level (Noise) Metres	Yes		
21	Portable TOC Analyzer for emission monitoring.	No	24 Months	Specification is under finalization
22	Polyurethane Foam PUF Sampler	No	24 Months	Specification is under finalization
b) Optional Requirements				
1	Anemometer	No	24 Months	Specification is under finalization
2	Weather Monitoring system	No	24 Months	Specification is under finalization
3	Wind speed/wind direction monitor	No	24 Months	Specification is under finalization
4	Continuous Ambient Air Monitoring System, Fixed	Yes		
5	Continuous PM10 Analyzer	Yes		
6	Continuous Ambient Air Monitoring System, Mobile	No	24 Months	Specification is under finalization
7	Continuous PM2.5 analyzer	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
8	Ambient Nitrogen Oxides (NO-NO2-NOx Analyzer	Yes		
9	Ambient Ozone Analyzer	Yes		
10	Ambient BTEX Analyzer	Yes		
11	Multipoint Gas Calibration system	Yes		
12	Ambient Sulphur Dioxide analyzer	Yes		
13	Ambient Carbon Monoxide & Carbon dioxide analyzer	Yes		
14	Total Hydrocarbon analyzer	No	24 Months	Specification is under finalization
15	Ambient Ammonia analyzer	Yes		
16	Zero Gas Generator	Yes		
17	Synthetic Air Cylinder	No	24 Months	Specification is under finalization
18	Calibration Gas Cylinders, SO2, NO, CO, NH3B, benzene and Toluene One each with stainless steel Regulators	Yes		
19	Continuous emission monitoring equipment	No	24 Months	Specification is under finalization
20	19 inch Rack mounting system for air analyzers	Yes		
21	Dry Gas Meter	No	24 Months	Specification is under finalization
22	Diesel Exhaust analyzer	No	24 Months	Specification is under finalization
23	Exhaust CO/HC analyzer with Sampling Probe	No	24 Months	Specification is under finalization
24	Automated Noise Monitoring System	No	24 Months	Specification is under finalization
25	Integrating Sound level meter	No	24 Months	Specification is under finalization
26	Continuous PM10& PM2.5 Monitoring Analyzer TEOM system	No	24 Months	Specification is under finalization

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
27	Top loading orifice kit for calibration of HVS	NO	24 Months	Specification is under finalization
28	Permeation tubes (SO ₂ , NO-NO ₂ -NO _x , NH ₃ , BTX)	No	24 Months	Specification is under finalization
C. List of Equipment required for processing of Environmental Samples:				
a) Mandatory Requirements				
1	Accelerated Solvent Extraction (ASE) System	No	24 Months	Specification is under finalization
2	Ammonia distillation assembly/TKN Analyzer	No	24 Months	Specification is under finalization
3	Analytical Balance 4/5 digit & 6 digit (Digital)	Yes		
4	Aquarium for Toxicity bioassay test with complete accessories (*4 Nos)	No	24 Months	Specification is under finalization
5	Autoclave (*2 Nos)	Yes		
6	Bacteriological Incubators Stainless steel (*2 Nos)	Yes		
7	Bio safety cabinets	No		
8	BOD Incubators (2 nos.)	Yes		
9	Centrifuge	No	24 Months	Specification is under finalization
10	COD Digestion heated Blocks (2) with capacity 16 nos. or more	Yes		
11	Cyanide Distillation Assembly (3)	No	24 Months	Specification is under finalization
12	Deep Freezer- Capacity 500 litre	No	24 Months	Specification is under finalization
13	Laboratory Ball Mill Grinder	No	24 Months	Specification is under finalization
14	Laboratory Grinder	No	24 Months	Specification is under finalization
15	Laminar Flow bench for Microbiological analysis	Yes		
16	Magnetic Stirrer with heating system (*2 Nos)	No	24 Months	Specification is under finalization
17	Mechanical Shaker	No	24 Months	Specification is under finalization

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
18	Membrane Filtration assembly with vacuum pump (2 nos.)	Yes		
19	Microbial culture refrigerator	No	24 Months	Specification is under finalization
20	Microwave Digester with 16 vessels/ Hot Plate	No	24 Months	Specification is under finalization
21	Muffle Furnace (*1 Nos), Range 1200 C	Yes		
22	Phenol distillation assembly (3)	No	24 Months	Specification is under finalization
23	Plate counter, Manual/Automatic	No	24 Months	Specification is under finalization
24	Digestion Chambers/ Fume hood	Yes		
25	Digital Thermometer & Humidity meter- All lab area	No	24 Months	Specification is under finalization
26	Dispensers (Various capacities) up to 5, 10, 25 & 50 ml	Yes		
27	Filtration Assembly with vacuum pump	Yes		
28	Fluoride Distillation Assembly (3)	No	24 Months	Specification is under finalization
29	Arsenic / Fluoride Glass Distillation assemblies	No	24 Months	Specification is under finalization
30	Glass Double Distillation Assembly /Water Purification System			
31	Heating mantles (2 nos.)	Yes		
32	Hot plates (small, Medium and Large) (*2 nos.)	Yes		
33	Thermo Hygrometer	No	24 Months	Specification is under finalization
34	Imhoff Cone	No	24 Months	Specification is under finalization
35	Top loading Precision Digital Balance (minimum detection 0.001mg/0.01 mg) with anti-vibration facility- 3 nos. i.e 4/5 Digit (2 nos), - 6 Digit (1 no)	No	24 Months	Specification is under finalization

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
36	Refrigerators Big Size 300 litres or more, double door- 2 nos.	Yes		
37	Rotary Evaporator (Buchi type) with water recirculating chiller	No	24 Months	Specification is under finalization
38	Separating funnel shaker	Yes		
39	Soxhlet Apparatus	No	24 Months	Specification is under finalization
40	Solid Phase Extraction (SPE) /SPME Extraction system	No	24 Months	Specification is under finalization
41	Thermometer (Alcohol)	No	24 Months	Specification is under finalization
42	Dry & wet bulb Thermometer	No	24 Months	Specification is under finalization
43	Toxicity characteristic leaching procedure (TCLP) Extractors (Zero head and Bottle)	No	24 Months	Specification is under finalization
44	Ultra sonic water bath- Capacity 3 litre	No	24 Months	Specification is under finalization
45	Water Bath with temperature control (*2 Nos)	Yes		
46	Water Bath with temp. for mercury sample digestion- 20 BOD Bottles	No	24 Months	Specification is under finalization
D. Analytical Instruments at Environmental Laboratories				
a) Mandatory Requirements				
1	Atomic Absorption spectrometer (AAS)- Flame, Hydride & Graphite Tube Atomizer (GTA)	Yes		
2	Binocular Stereo Zoom Microscope	No	24 Months	Specification is under finalization
3	Bomb Calorimeter	No	24 Months	Specification is under finalization
4	BTX Analyzer with BTX calibrator	No	24 Months	Specification is under finalization
5	Colony counter	No	24 Months	Specification is under finalization
6	Conductivity meter- 2 nos.	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
7	Environment conditioning chamber	No	24 Months	Specification is under finalization
8	Digital Burettes- 50 ml*2, 100 ml*2	No	24 Months	Specification is under finalization
9	Dissolved Oxygen Meter (Bench model)	Yes		
10	Flame Photometer	Yes		
11	Flash Point Apparatus	No	24 Months	Specification is under finalization
12	Gas Chromatograph Mass Spectrometer	No	24 Months	Specification is under finalization
13	High Performance Liquid Chromatograph (HPLC)	No	24 Months	Specification is under finalization
14	Inductively Coupled Plasma (ICP) Spectrometer-OES	No	24 Months	Specification is under finalization
15	Ion Chromatograph Anion & Cations	No	24 Months	Specification is under finalization
16	Methane and Non Methane (NMHC) Analyzer	No	24 Months	Specification is under finalization
17	Microscope – 100x	No	24 Months	Specification is under finalization
18	Microscope Binocular Research	No	24 Months	Specification is under finalization
19	CO (NDIR based) Analyzer	No	24 Months	Specification is under finalization
20	Nephelometer (Turbidity Meter)	No	24 Months	Specification is under finalization
21	pH-Meter with combined electrode (3 point)- 2 nos.	No	24 Months	Specification is under finalization
22	Specific ion Analyzer with ion selective electrodes	No	24 Months	Specification is under finalization
23	Spectrophotometer Visible (Portable)	Yes		
24	TKN Analyzer semi-automatic with aluminum block digester	No	24 Months	Specification is under finalization
25	UV-Vis Spectrophotometer	No	12 Months	Outsourced
26	Moisture Content Analyzer	No	24 Months	Specification is under finalization
b) Optional Requirements				

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
1	Automatic Titration Assembly	No	24 Months	Specification is under finalization
2	Carbon, Hydrogen, Nitrogen and Sulphur (CHNS) Elemental Analyzer	No	24 Months	Specification is under finalization
3	EDXRF Analyzer/WDXRF Analyzer	No	24 Months	Specification is under finalization
4	Fourier-transform infrared Spectrometer (FTIR)	No	24 Months	Specification is under finalization
5	Flocculator (Jar testing apparatus)	No	24 Months	Specification is under finalization
6	Toxic Gas Analyzer	No	24 Months	Specification is under finalization
7	Organic Halogen (AOX/TOX) Analyzer	No	24 Months	Specification is under finalization
8	TOC Analyzer	No	24 Months	Specification is under finalization
9	High Resolution Mass Spectrometer (HRGC-HRMS)	No	24 Months	Specification is under finalization
10	Inductively Coupled Plasma Mass (ICP-MS) Spectrometer	No	24 Months	Specification is under finalization
11	X Ray Fluorescence (XRF) Spectrometer (Portable)	No	24 Months	Specification is under finalization

PART I: Facility available for monitoring of environmental parameters:			
Parameters	Total Number of Parameters	Facility available for	Facility not available for
A. Sample Matrix / Group of Water and Wastewater	67	39	28
(a) Physical Tests	8	8	0
(b) Inorganic Tests	34	26	8
(i) General & Non-metallic	15	13	2
(ii) Trace Metals Tests	19	13	6
(c) Organics (General) and Trace Organics Tests	20	3	17
Pesticides	15	0	15
Organochlorine Pesticides (OCPs) Tests	9	0	9
Organophosphorus Pesticides (OPPs) Tests	6	0	6
(d) Microbiological Tests	4	2	2
(e) Toxicological Tests	1	0	1
B. Sample Matrix / Group of Solid / Solid Waste	15	6	9
(a) Soil / Sediment / Compost Tests	7	4	3
(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests	8	2	6
C. Sample Matrix / Group of Analytes: Air	28	12	16
(a) Ambient Air	12	8	4
(b) Stack Gas / Stationary Source Emission	9	1	8
(c) Noise Level	2	2	0
(d) Meteorological Monitoring	5	1	4
PART II: Details of Laboratory Infrastructure (Instruments and Equipment)			
Name of Instrument / Equipments	Total Numbers	Number of Available	Number of Not Available
Total	148	51	97
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes	15	9	6
a) Mandatory Requirements	11	9	2
b) Optional Requirements	4	0	4
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring	50	20	30
a) Mandatory Requirements	22	7	15
b) Optional Requirements	28	13	15
C. List of Equipment required for processing of Environmental Samples:	46	17	29
a) Mandatory Requirements	46	17	29
D. Analytical Instruments at Environmental Laboratories	37	5	32
a) Mandatory Requirements	26	5	21
b) Optional Requirements	11	0	11

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Note: It is requested to please ensure that each sheet is created separately for each laboratory and rename the sheet accordingly . For e.g. Central Laboratory, Regional Laboratory etc

LABORATORY ANALYTICAL FACILITIES

Name of the Board / Committee: Regional Laboratory-Mysuru, Karnataka State Pollution Control Board

PART I: Facility available for monitoring of environmental parameters:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
A. Sample Matrix / Group of Water and Wastewater				
(a) Physical Tests				
1	Temperature	Yes		
2	Colour	Yes		
3	pH	Yes		
4	Turbidity	Yes		
5	Conductivity	Yes		
6	Total Solids	Yes		
7	Total Dissolved Solids (TDS)	Yes		
8	Total Suspended Solids (TSS)	Yes		
(b) Inorganic Tests				
(i) General & Non-metallic				
1	Alkalinity	Yes		
2	Chloride	Yes		
3	Cyanide	Yes		
4	Dissolved oxygen	Yes		
5	Nitrite nitrogen	Yes		
6	Nitrate nitrogen	Yes		
7	Ammonical nitrogen	Yes		
8	Fluoride	Yes		
9	Hardness (Total)	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
10	Calcium	Yes		
11	Magnesium	Yes		
12	Phosphate	Yes		
13	Sulphate	Yes		
14	Sulphide	Yes		
15	Total Residual chlorine (TRC)	Yes		
(ii) Trace Metals Tests				
1	Aluminium (Al)	Yes		
2	Arsenic (As) Total	Yes		
3	Barium	Yes		
4	Boron	Yes		
5	Chromium (Cr) Hexavalent	Yes		
6	Chromium (Cr) Total	Yes		
7	Cadmium (Cd)	Yes		
8	Cobalt (Co)	Yes		
9	Copper (Cu)	Yes		
10	Iron (Fe)	Yes		
11	Lead (Pb)	Yes		
12	Manganese (Mn)	Yes		
13	Mercury (Hg)	Yes		
14	Nickel (Ni)	Yes		
15	Potassium (K)	Yes		
16	Sodium (Na)	Yes		
17	Vanadium (V)	Yes		
18	Zinc (Zn)	Yes		
19	Selenium (Se)	Yes		
(c) Organics (General) and Trace Organics Tests				
1	Biological Oxygen Demand (BOD)	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
2	Chemical oxygen demand (COD)	Yes		
3	Oil & Grease	Yes		
4	Phenolic Compounds as C6H5OH	Yes		
5	Benzopyrene	Yes		
6	Pesticides			
6.a	Organochlorine Pesticides (OCPs) Tests			
i	Aldrin	Yes		
ii	Alpha Endosulphan	Yes		
iii	p,p'-DDT	Yes		
iv	Alpha-HCH	Yes		
v	Beta HCH	Yes		
vi	Beta Endosulphan	Yes		
vii	Gama-HCH	Yes		
viii	o,p'-DDT	Yes		
ix	p,p'-DDE	Yes		
6.b	Organophosphorus Pesticides (OPPs) Tests			
i	Malathion	No	12 Months	Outsourced
ii	Methyl parathion	No	12 Months	Outsourced
iii	Chlorpyrifos	No	12 Months	Outsourced
iv	Dimethoate	No	12 Months	Outsourced
v	Dieldrin	No	12 Months	Outsourced
vi	Ethion	No	12 Months	Outsourced
(d)	Microbiological Tests			
1	Total Coliform	Yes		
2	Faecal Coliform	Yes		
3	E. Coli	Yes		
4	Faecal Streptococci	Yes		
(e)	Toxicological Tests			
1	Bioassay method for evaluation of toxicity using fish (90% survival of fish after 96 hrs in 100% effluent)	No	12 Months	Outsourced

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
B. Sample Matrix / Group of Solid / Solid Waste				
(a) Soil / Sediment / Compost Tests				
1	Cation Exchange Capacity (CEC)	No	24 Months	Specification is under finalization
2	Electrical Conductivity (EC)	Yes		
3	Organic carbon (Chemical Method)	Yes		
4	pH	Yes		
5	Soil moisture	Yes		
6	Total nitrogen	Yes		
7	Metals by digestion (As, Cd, Cr, Pb, Ni etc.)	Yes		
(b) Hazardous Waste (Liquid / Slurry / Sludge / Solid / Semi-Solid) Tests				
1	Corrosivity	Yes		
2	Ignitability (Flash Point)	Yes		
3	Loss on Drying at 1050C (%) Moisture Content	Yes		
4	Loss on Drying at 5500C (%) Organic Content	Yes		
5	pH	Yes		
6	Organic carbon/matter (Chemical Method)	Yes		
7	Calorific Value	Yes		
8	Toxicity Characteristics leaching procedure (TCLP) Leachate and Metals in Leachate (As,Cd,Cr, Pb, Ni)	Yes		
C. Sample Matrix / Group of Analytes: Air				
(a) Ambient Air				
1	Nitrogen dioxide as NO2	Yes		
2	Sulphur dioxide (SO2)	Yes		
3	Particulate matter (PM10)	Yes		
4	Particulate matter (PM2.5)	Yes		
5	Carbon Monoxide	No	24 Months	Specification is under finalization

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
6	Ozone	No	24 Months	Specification is under finalization
7	Benzene	No	24 Months	Specification is under finalization
8	Ammonia	Yes		
9	Metals in Particulate Matter, Pb	Yes		
10	Metals in Particulate Matter, As	Yes		
11	Metals in Particulate Matter, Ni	Yes		
12	Particulate Benzo-a-Pyrene (BaP)	Yes		
(b) Stack Gas / Stationary Source Emission				
1	Particulate Matter	Yes		
2	Sulphur Dioxide	Yes		
3	Carbon Dioxide	Yes		
4	Carbon Monoxide (NDIR based Method)	Yes		
5	Temperature	Yes		
6	Moisture	Yes		
7	Oxygen	Yes		
8	Oxides of Nitrogen	Yes		
9	Halides (HCL/HF)	No	24 Months	Specification is under finalization
(c) Noise Level				
1	Ambient Noise level measurement (20 to 140 dB)	Yes		
2	Source Noise Level Measurement (Industrial process, DG set- 20 to 140dB)	Yes		
(d) Meteorological Monitoring				
1	Ambient Temperature	No	24 Months	Specification is under finalization
2	Wind direction	No	24 Months	Specification is under finalization
3	Wind speed	No	24 Months	Specification is under finalization
4	Relative Humidity	No	24 Months	Specification is under finalization
5	Mixing Height	No	24 Months	Specification is under finalization

Specific remarks, if any:

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
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PART II: Details of Laboratory Infrastructure (Instruments and Equipment)

S. No.	Name of Instrument / Equipments	Available Yes / No	If the Instrument / Equipment is not available, Specify Timeline for procurement of this instrument (in months)	Action Taken for procurement of this Instrument / Equipment (Specification finalized / procurement initiated / work awarded / outsourced)
A. List of Instruments / Equipment for Sampling of Water, Wastewater and Soil / Hazardous Wastes				
a) Mandatory Requirements				
1	Portable / Pen type pH meter / pH strip	Yes		
2	Portable Dissolved Oxygen Meter / Field Fixing using chemicals	Yes		
3	Electrical Conductivity meter pen type	Yes		
4	Flow meter / Physical flow measuring	Yes		
5	GPS / Mobile with GPS app	Yes		
6	Ice Box (2 nos.) (150 litre & 100 litre capacities)	Yes		
7	Thermometer	Yes		
8	Stainless steel bucket with nylon rope and mug	Yes		
9	Ground water level measuring device	Yes		
10	Scoop / shovel	Yes		
11	Auger / core sampler	Yes		
b) Optional Requirements				
1	Bottom Sampler / Depth sampler	Yes		

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S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
2	Chloroscope for residual chlorine	No	24 Months	Specification is under finalization
3	Vandom or equivalent water sampler (Automatic sampler when composite sampling to be done)	No	24 Months	Specification is under finalization
4	Ekman Dredge	Yes		
B. List of Instruments / Equipment for Sampling of Ambient Air and Source Emission monitoring				
a) Mandatory Requirements				
1	Fine dust samplers PM2.5 (*4 Nos)	No	24 Months	Specification is under finalization
2	Respirable Dust Sampler PM 10 (*4 Nos)	Yes		
3	High Volume Sampler (SPM) (4 Nos)	Yes		
4	Handy Sampler with set of glass impingers (*2 Nos)	NO	24 Months	Specification is under finalization
5	Low Volume Sampler (LVS)	No	24 Months	Specification is under finalization
6	Tedler bags different sizes	No	24 Months	Specification is under finalization
7	Meteorological tower (All in one telescopic Mast) with sensors comprising wind speed, wind direction, ambient temp., Relative humidity, Solar radiation, rainfall etc.	No	24 Months	Specification is under finalization
8	Nitrogen Cylinder portable	No	24 Months	Specification is under finalization
9	Activated Charcoal tubes/ Tenex	No	24 Months	Specification is under finalization
10	Barometer (Digital)	No	24 Months	Specification is under finalization
11	Isokinetic Stack Monitoring Kit complete with Stack monitoring instrument panel with inclined cum vertical manometer, Cold Box, Vacuum pump, Glass assembly impingers	Yes		

S. No.	Parameters	Facilities Available (Yes / No)	If facility is not available, Specify Timeline for addition of this parameter. (in months)	Action Taken for addition of this parameter (Specification finalized / procurement initiated / work awarded / outsourced)
12	Modified S type Stainless steel Pitot tube (Standard length) with Assembly	No	24 Months	Specification is under finalization
13	Monoblock type, rotary design vacuum pump	No	24 Months	Specification is under finalization
14	Orsat Apparatus	No	24 Months	Specification is under finalization
15	Source emission monitoring Impingers train set with spare impingers 100 ml & 225 ml capacity	Yes		
16	Stainless steel heated Sampling Probes with thimble holders short and long	Yes		
17	Flue Gas analyzer	Yes		
18	Thermometer/ Thermocouple	Yes		
19	Calibrator for Noise Meters	Yes		
20	Digital Sound level (Noise) Metres	Yes		
21	Portable TOC Analyzer for emission monitoring.	No	24 Months	Specification is under finalization
22	Polyurethane Foam PUF Sampler	No	24 Months	Specification is under finalization
b) Optional Requirements				
1	Anemometer	No	24 Months	Specification is under finalization
2	Weather Monitoring system	No	24 Months	Specification is under finalization
3	Wind speed/wind direction monitor	No	24 Months	Specification is under finalization
4	Continuous Ambient Air Monitoring System, Fixed	Yes		
5	Continuous PM10 Analyzer	No	24 Months	Specification is under finalization
6	Continuous Ambient Air Monitoring System, Mobile	No	24 Months	Specification is under finalization
7	Continuous PM2.5 analyzer	No	24 Months	Specification is under finalization