BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI
IN
Original Application No. 623/2024

IN THE MATTER OF:

AJAY KUMAR SINGH …APPLICANT

VERSUS

STATE LEVEL ENVIRONMENT
IMPACT ASSESSMENT AUTHORITY,
UTTAR PRADESH
ORS.....RESPONDENTS

INDEX

	Industrial Sectors under Red/Orange/Green White Categories dated 07.03.2016	
5.	**ANNEXURE-V, A** Copy of the letter regarding Methodology to conduct gap analysis with respect to generation and treatment of Bio medical waste dated 10.10.2023	
5.	**ANNEXURE-VI, A** Copy of Hon'ble NGT order dated 06.08.2024 in Original Application No. 623/2024	

(Filed by Adv. Atif Suhrawardy)
On behalf of Central Pollution Control Board

Place: Delhi
Dated: 16.11.2024

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI
IN
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STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY, UTTAR PRADESH ORS. ...RESPONDENTS

REPLY ON BEHALF OF RESPONDENT NO. 7, CENTRAL POLLUTION CONTROL BOARD (CPCB).

1. That the present reply is being filed by CPCB in compliance of order dated 06.08.2024 passed by this Hon'ble Tribunal in the present O.A.623 of 2024.

2. That at the very outset, the answering Respondent deny all claims, contentions, allegations and averments against answering respondent CPCB in the above Original Application (OA) contrary to anything stated or submitted in this reply. Nothing in the OA may be deemed to have been accepted or admitted by the answering Respondent for want of a specific denial, save any averment which has been expressly admitted hereinafter.

3. That, CPCB is a statutory Board constituted under Section 3 of The Water (Prevention and Control of Pollution) Act, 1974. It performs the functions under The Water (Prevention and Control of Pollution) Act, 1974, The Air (Prevention and Control of Pollution) Act, 1981, and The Environment (Protection) Act, 1986.

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4. That averments made in the Original Application No. 623 of 2024, the Applicant has alleged that the Environmental Clearance granted by State Environmental Impact Assessment Authority, Uttar Pradesh, to Respondent No. 2 i.e. M/s R.S. BMW Services, Plot No. C-20, Sathariya Industrial Development Authority, Sathariya, District- Jaunpur, Uttar Pradesh; Respondent No. 3 i.e. M/s V R B A Bio Waste Solutions Pvt. Ltd., E-46, Phase-1, Khasra No.- 148/5, Sindhitali, Phase-2, Ramnagar Industrial Area, Chandauli, Uttar Pradesh; and Respondent No. 4 i.e. M/s AV Bio Medical Waste Services, Plot No. A-2/36, Sector – 15, Gorakhpur Industrial Development Authority, Gorakhpur, Uttar Pradesh and Consent to Establish granted by Uttar Pradesh Pollution Control Board to Respondent No. 2 i.e. M/s R.S. BMW Services, Jaunpur, U.P. and Respondent No. 3 i.e. M/s V R B A Bio Waste Solutions Pvt. Ltd., Chandauli, Uttar Pradesh, are illegal and violating the Rules of Uttar Pradesh Industrial Development Corporation (hereafter will be referred as UPSIDC) and allegedly is not as per Biomedical Waste Management Rules, 2016 (hereafter will be referred as BMWM Rules, 2016 and CPCB guidelines.

PARA WISE REPLY

5. That the averments made in Paras 1 to 4 are regarding introduction of the Applicant and reasons for filing of present application. It is alleged that the Environmental Clearance for establishment of Common Biomedical Waste Treatment Facility (hereafter will be referred as "**CBWTF**") granted to Respondent No. 2 i.e. M/s R.S. BMW Services, Jaunpur, U.P., Respondent No. 3 i.e. M/s V R B A Bio Waste Solutions Pvt. Ltd., Chandauli, U.P. and Respondent No. 4 i.e. M/s AV Bio Medical Waste Services, Gorakhpur, U.P. and Consent to Establish granted Respondent No. 2 and 3, are illegal violating the Rules of UPSIDC and allegedly is also not as per BMWM Rules, 2016 as well as CPCB guidelines.

In this regard, it is humbly submitted that the authority for grant of Environmental Clearance is State Environment Impact Assessment Authority (hereafter will be referred as "**SEIAA**") or Ministry of

Environment, Forest & Climate Change (hereafter will be referred as "**MoEF & CC**"), as the case may be.

Further, the authority for grant of Consent to Establish under Water (Prevention and control of pollution) Act, 1974 and Air (Prevention and control of Pollution) Act, 1981 is State Pollution Control Board/ Pollution Control Committee (hereafter will be referred as "**SPCB/PCC**") in respective State/UT.

It is also humbly submitted that Operator of CBWTF is required to obtain Environmental Clearance before any construction work, or preparation of land by the project management, as per Environmental Impact Assessment Notification, 2006 from respective SEIAA or MoEF& CC, as the case may be.

The project proponent of the CBWTF is also required to obtain 'Consent to Establishment' under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention and Control of Pollution) Act, 1981, from the respective prescribed authority i.e. SPCB/PCC.

In this context, CPCB issued letter dated 08.03.2018 and 01.10.2024 to State Environment Impact Assessment Authority of all States/UTs with a request to follow CPCB guidelines for CBWTFs prior to grant Environmental Clearance to any new CBWTF. Copy of the letters dated 08.03.2018 and 01.10.2024 are annexed herewith at **Annexure I** and **Annexure-II**, respectively.

Further, with respect to site for CBWTF, as per BMWM Rules, 2016, the department in the business allocation of land assignment shall be responsible for providing suitable site for setting up of CBWTF in the jurisdictional area of State Government or Union territory Administration, as the case may be.

6. That in the averments made in Paras (A) (1) to (A)(6), the applicant has stated about the requirement of Environmental Clearance for construction or expansion of new project/activities as per Environmental Impact Assessment notification. It is also mentioned that the application for Environmental Clearance was submitted by Respondent No. 2 i.e. M/s R.S. BMW Services, Jaunpur, and accordingly Terms of Reference has been granted to Respondent No. 2 by SEIAA, Uttar Pradesh.

   In this regard, this answering Respondent has already submitted at Para 5 that as per Environmental Impact Assessment Notification, 2006, the operator of Common Bio-medical Waste Treatment Facility (as categorized under the Item 7 (da) in the schedule of EIA notification vide S.O. 1142 (E) on April 17, 2015) is required to obtain Environmental Clearance from the SEIAA or MoEF& CC, as the case may be, before any construction work, or preparation of land by the projects management.

7. That under the averment made in Paras (A) (7), the applicant mentioned about the constitution of Central Pollution Control Board (Answering Respondent) and its powers. In this regard, the submission made at para 3 of this reply are re-iterated and may kindly be considered by the Hon'ble Tribunal.
8. That the averment made at Para (A)(8) is regarding guidelines for Common Biomedical Waste Treatment and Disposal Facilities prepared by CPCB. In this regard, it is humbly submitted that CPCB has prepared revised guidelines for Common Biomedical Waste Treatment and Disposal Facility with an aim to have uniformity in ensuring site selection, allowing and establishment of a CBWTF, operation as well as verification of compliance to the BMWM Rules, 2016 in the country.

   The guidelines were forwarded to State Pollution Control Boards / Pollution Control Committee vide CPCB letter dated 20.02.2017 with a request to ensure effective implementation of BMWM Rules, 2016 as well as CPCB guidelines. Copy of said CPCB letter dated 20.02.2017 is given at **Annexure III**.

9. That the averments made in Paras (A)(9) to (A)(11) are regarding grant of Environmental Clearance by SEIAA, Uttar Pradesh to Respondent No. 2

i.e. M/s R.S. BMW Services, Jaunpur, U.P.; Respondent No. 3 i.e. M/s V R B A Bio Waste Solutions Pvt. Ltd., Chandauli, U.P.; and Respondent No. 4 i.e. M/s AV Bio Medical Waste Services, Gorakhpur, U.P. in violation to CPCB guidelines. In this regard, the submission made at Para (5) of this reply are re-iterated and may kindly be considered by the Hon'ble Tribunal.

10. That under the averment made in Para (A)(12), the applicant has alleged that site selected for CBWTF for proposed project no. 1 and 2 violated the guidelines outlined in the operating manual of UPSIDC. In this regard, it is humbly submitted that as per BMWM Rules, 2016, the department in the business allocation of land assignment shall be responsible for providing suitable site for setting up of CBWTF in the jurisdictional area of State Government or Union territory Administration, as the case may be.

11. That, no comments are offered over the averments made in Para (A)(13) of the OA, being matter of records and for want of specific input over the alleged fact, as the applicant has casted doubt over the transparency of Gorakhpur Industrial Development Authority (hereafter will be referred as GIDA) due to the alleged fact that GIDA allowed Respondent No.4 i.e. M/s AV Bio Medical Waste Services, Gorakhpur, to establish the CBWTF in the industrial area whereas rejected the proposal for development of CBWTF of M/s Royal Pollution Control Services.

12. That under the averment made in Para (A)(14), the applicant has alleged that site allocated to Respondent No. 2 i.e. M/s R.S. BMW Services, Jaunpur, U.P., is illegal and contrary to UPSIDC rules. In this regard, the submissions made at Para (10) of this reply are re-iterated and may kindly be considered by the Hon'ble Tribunal.

13. That the averments made in Para (A)(15) to (A)(17) are regarding CPCB letter dated 07.03.2016 regarding modified classification of industries circulated to all SPCBs/PCCs and its further acknowledgement by UPPCB on 18.04.2016. It is also mentioned by the applicant that CBWTF is categorised as red category industry as per the classification, however, UPPCB allegedly considered CBWTF as special red category and permitted project proponent 1 and 2 in proximity of established food industries. In this regard, it is humbly submitted that CPCB vide letter dated 07.03.2016 issued direction to all SPCBs/PCCs under section (18(1)(b) of the Water (Prevention and Control of Pollution) Act 1974 and the Air (Prevention and Control of Pollution) Act 1981 regarding

harmonisation of classification of industrial sectors under red/orange/green/white categories. According to which CBWTFs are classified as Red special category projects as these are parts of pollution control facilities. Copy of CPCB direction dated 07.03.2016 is attached herewith as **Annexure-IV**.

14. That no comments are offered by this answering respondent over the averments made in Paras (A)(18) and (A)(19) of the OA being matter of record, wherein the applicant has stated that Chief Medical Officer had informed to Member Secretary that CBWTF is not needed in Jaunpur, Uttar Pradesh, as it can affect public health and environment.

15. That under the averment made in Paras (A)(20) and (A)(21), it is alleged that the existing CBWTFs have sufficient capacity to handle biomedical waste of their district and grant of Environmental Clearance and Consent to Establish to Respondent No. 2, 3 and 4 is based on inaccurate information. It is also mentioned that Chief Medical Officer, Jaunpur, has communicated the same for Jaunpur district to Chairman SEIAA, Uttar Pradesh. In this regard, it is humbly submitted that CPCB guidelines for CBWTFs suggests that prior to allow any new CBWTF, SPCB/PCC is required to conduct gap analysis with respect to coverage area of biomedical waste generation, its projection over a period of next ten years and adequacy of existing treatment capacity of the CBWTF in each coverage area of radius 75 km. Further, to adopt uniform procedure while conducting gap analysis, CPCB has prepared methodology to conduct gap analysis with respect to generation and treatment of biomedical waste and circulated the same to all SPCBs/PCCs vide letter dated 10.10.2023. Copy of the letter dated 10.10.2023 is annexed herewith as **Annexure-V**.

16. That under the averment made in Para (A)(22) of the OA, the applicant has alleged of presenting various applications under Right to information Act, 2005 filed by the applicant to different officials. In this regard it is humblys submitted that this answering Respondent has not received any RTI application from the Applicant over the instant matter.

17. That no comments are offered over the averments made in Paras (A)(23) to (A)(25) of the OA, wherein it is mentioned that proposed facilities contradicts the rules and regulation and also infringes fundamental right to life of workers.

18. That under the averments made at Paras (A)(26) and (A) 27), the applicant has alleged that while granting Environmental Clearance and authorisation

to proposed CBWTF, UPPCB and SEIAA, Uttar Pradesh, overlooked the rules, 2016 and the same is alleged to be in contravention of law. In this regarding, the submission made at Para 5 of this reply are re-iterated and may kindly be considered by the Hon'ble Tribunal.

19. That in response to grounds Paras (A) to (S), the submissions made in preceding paragraphs of this reply are re-iterated and are not repeated herein for the sake of brevity.
20. That no comments are offered over the averments made under subsequent Paras related to limitation, interim relief and prayer by the Applicant.
21. That, in view of the submissions made above, it is humbly submitted that CPCB shall abide by all the directions/orders passed by Hon'ble Tribunal in the instant matter.

NOTARY PUBLIC R.L. Choudhary Regd. No. 1513 GOVT. OF INDIA

Vijay Prakash Yadav
Scientist 'F'
Central Pollution Control Board

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
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VERSUS

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY, UTTAR PRADESH
ORS. ...RESPONDENTS

NOTARY PUBLIC R.L. Chaudhary N.C.T of Delhi Regd. No. 1513 GOVT. OF INDIA

AFFIDAVIT

I, Vijay Prakash Yadav working as Scientist 'F' in Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032, the Respondent No. 7, in the above matter (hereinafter referred to as "CPCB" or "Answering Respondent") do hereby solemnly affirm and declare on oath and state as under:-

1. That I, the deponent herein is the authorized representative to represent the Respondent CPCB in the present case, and as such, I am well conversant with the facts and circumstances of the present case on the basis of the information derived from the official records, and hence, I am competent to verify, sign and swear this affidavit on behalf of the Respondent CPCB, Respondent No. 7.
2. That the accompanying reply may be read part and parcel of the present affidavit.
3. That the accompanying reply has been drafted and filed under my instructions and authority the contents thereof are true and correct on the basis of the records maintained during ordinary course of business of CPCB and available records and documents and the contents of the same

are read over and explained to me and are not repeated herein for the sake of brevity.

NOTARY PUBLIC R.L. Choudhary N.C.T. Delhi Regn. No. 1013 GOVT. OF INDIA

विजय प्रकाश यादव / Vijay Prakash Yadav
निदेशक/ Director
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
(M/o Environment, Forest & Climate Change, Govt. of India)
परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली–110032
Parivesh Bhawan, East Arjun Nagar, Delhi-110032

DEPONENT

VERIFICATION

Verified at Delhi on this day of 16 of November, 2024 that the contents of the above paragraphs are true and correct on the basis of the records of the case as mentioned in the day- to- day affairs of the CPCB. Nothing has been concealed therefrom or misstated.

ATTESTED
NOTARY PUBLIC
GOVT. OF INDIA
16 NOV 2024

विजय प्रकाश यादव / Vijay Prakash Yadav
निदेशक/ Director
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
(M/o Environment, Forest & Climate Change, Govt. of India)
परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली–110032
Parivesh Bhawan, East Arjun Nagar, Delhi-110032

DEPONENT

Annexure-I

By Speed Post

F.No.B-31011/BMW(50)/2018/WM-I/ 18165-18223 March 08, 2018

To

All State
SEIAA/SEAC

Sub: Implementation of CPCB revised Guidelines for Common Bio-medical Waste Treatment Facilities (CBWTF) - reg.

Sir,

Central Pollution Control Board (CPCB) has been receiving representations from Common Bio-medical Waste Treatment Facilities (CBWTF) operators/ CBWTF Association of India regarding grant of Environmental Clearance by State Environmental Impact Assessment Authority (SEIAA)/ State Expert Appraisal Committee (SEAC) for setting up new CBWTF without following the provisions of CPCB's revised guidelines for Common Bio-medical Waste Treatment Facilities (CBWTFs) especially w.r.to criteria for setting up of new CBWTF, land requirement and coverage area of CBWTF. In this connection, it is to inform that the said CPCB's revised guidelines stipulates following clauses which are required to be complied for setting up of new CBWTF:

1. Gap analysis conducted by the State Pollution Control Boards/Pollution Control Committees w.r.to bio-medical waste generation with its projection over 10 years and the adequacy of the existing CBWTFs with coverage area of 75 Km.
2. Land requirement of not less than one acre to setup any CBWTF. In case of new CBWTF the land requirement may be relaxed (not less than 0.5 acre) by the SPCB/PCC.
3. Coverage area vis-à-vis CBWTF located within the respective State/UT shall be allowed to cater healthcare units situated at a radial distance of 75 KM with 10, 000 beds. If 10,000 beds are not available within radial distance of 75 Km, existing CBWTF may be allowed to cater the healthcare units situated upto 150 KM radius.

Copy of the relevant portion of the CPCB's revised guidelines for CBWTFs are enclose for your ready reference.

In view of the above, it is requested to follow the criteria for setting up of new CBWTF, as well as the provision for location & coverage of CBWTF as laid down under CPCB's revised guidelines for CBWTF before allowing new CBWTF for ensuring proper treatment & disposal of Bio-medical waste.

Yours faithfully,

(A.Sudhakar)
Member Secretary

Encl.: As Above
Copy to:

(i) Joint Secretary, : For kind information, please
Ministry of Environment, Forest & Climate Change
3rd Floor, Prithvi Wing
Indira Parvayaran Bhawan
Jor Bagh Road, New Delhi- 110003

(ii) PS to 'CCB' : For kind information of 'CCB', please

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
निर्गत.....
दिनांक.....

(A.Sudhakar)

1015

1	Member Secretary Department of Science and Technology, Anadman and Nicobar Administration, Post: City, Dollygunj, Andaman Nicobar
2	Member Secretary Andhra Pradesh PollutionControl Board, A-3, Industrial Estate,Sanatnagar, Hyderabad- 500 018.
3	Member Secretary State Environment Impact Assessment Authority O/o PCCF & Principal Secretary (environment & Forest) Arunachal Pradesh
4	Member Secretary State Environment Impact Assessment Authority SEIAA Assam bamunimaidan, Guwahati -21
5	Member Secretary Center for Environment & Nature Conservation, Deptt. Of Zoology, Patna University, Patna Bihar.
6	Member Secretary Chairman Sh. Khazan Singh, No. 5, Surya Enclave Sector 115, Kharar Ladran S.A.S Nagar, Mohali (Punjab)
7	Member Secretary State Environment Impact Assessment Authority Government of Chhattisgarh, Mantralay, Mahanadi Bhavan, Naya Raipur, Chhattisgarh
8	Member Secretary ISBT Building, 4th Floor, Keshmere Gate, Delhi-110006.
9	Member Secretary, State Environment Impact Assessment Authority - SEIAA (Goa) Goa State Secretariat, C/o Goa State Pollution Control Board (GSPCB), Dempo Towers, Patto- Panaji
10	Member Secretary State Environment Impact Assessment Authority Forests and Environment Department, Sachivalaya, Gandhinagar - 382010.
11	Member Secretary State Environment Impact Assessment Authority Bay's No. 55-58, Ist Floor, Prayatan Bhawan, Sector-2, Panchkula, Haryana
12	Member Secretary State Environment Impact Assessment Authority Government of Himachal Pradesh, Paryavaran Bhawan, Near US Club, Shimla, HP-171001
13	Member Secretary State Environment Impact Assessment Authority C-170, Road No.- 4, Ashok Nagar, Ranchi – 834002, Jharkhand.
14	Member Secretary State Environment Impact Assessment Authority JAMMU OFFICE: PARYAWARAN BHAWAN, GLADNI, NARWAL, JAMMU - 180010
15	Member Secretary State Environment Impact Assessment Authority Room no 709, 7th floor 4th gate MS building, Bangalore 56001.
16	Member Secretary State Environment Impact Assessment Authority ASSESSMENT AUTHORITY KERALA Devi Kripa, Pallimukku, Pettah PO, Trivandrum-
17	Member Secretary State Environment Impact Assessment Authority Environmental Planning & Coordination Organization (Paryavaran Parisar, E-5, Arera Colony, Bhopal-462 016 (MP)
18	Member Secretary State Environment Impact Assessment Authority Department ofEnvironment, 15th Floor, New Administrative Building, Madam Cama Road,Mantralaya, Mumbai-400032 Maharashtra
19	Member Secretary State Environment Impact Assessment Authority Environment Department GOVT. OF MANIPUR POROMPAT, IMPHAL EAST PIN-CODE: 795005
20	Member Secretary State Environment Impact Assessment Authority Meghalaya State Pollution Control Board, "ARDEN", Lumpyngngad, Shillong – 793 014, Meghalaya
21	Member Secretary State Environment Impact Assessment Authority Department of Environment, Forest & Climate Change, PCCF Mizoram Office, Tuikhuahtlang Rd, Aizawl, Mizoram
22	Member Secretary State Environment Impact Assessment Authority Forests, Environment & Wildlife Management Department, Government of Sikkim Sikkim
23	Member Secretary State Environment Impact Assessment Authority Impact Assesment Authority 5RF-2/1, Acharya Vihar,Unit – IX, Bhubaneswar, Odisha 751022
24	Member Secretary State Environment Impact Assessment Authority Department of Science, Technology and Environment Puducherry- 605 005
25	Member Secretary State Environment Impact Assessment Authority Punjab Pollution Control Board , Vatavaran Bhawan, Nabha Road, Patiala, Punjab-- 147001
26	Member Secretary State Environment Impact Assessment Authority Aravali Bhawan, Jhalana Institutional Area, Jaipur (Rajasthan)
27	Member Secretary State Environment Impact Assessment Authority Forests, Environment & Wildlife Management Department, Deorali, Gangtok 737102
28	Member Secretary State Environment Impact Assessment Authority Ground Floor, Panagal Maligai, No.1 Jeenis Road, Saidapet, Chennai-600 015, Tamil Nadu
29	Member Secretary State Environment Impact Assessment Authority Special Secretary, Environment Forest Science & Technology (EFS&T) Dept., 330 A, D Block, Telangana, Secretariat,Hyderabad.
30	Member Secretary State Environment Impact Assessment Authority Parivesh Bhawan, Pandit Nehru Complex, PO- Kunjaban Agartala-799006, West Tripura

31	Member Secretary State Environment Impact Assessment Authority Ajabpurkala, Mothrowala Road, Near P.N.B. Dehradun, Uttarakhand
32	Member Secretary State Environment Impact Assessment Authority Directorate of Environment, U.P., Vineet Khand 1, Gomti Nagar, Lucknow-226010
33	Member Secretary State Environment Impact Assessment Authority West Bengal Pollution Control Board Paribesh Bhavan, 10A, Block-L.A Sector III, Salt Lake City, Calcutta - 700 098

Annexure_II

By Speed Post

F. No. B-31011-BMW (6022)-2024-WM-I 5411-5472 **October 01, 2024**

To,

All State
SEIAA/SEAC

Sub: Implementation of CPCB guidelines for Common Biomedical Waste Treatment Facilities (CBWTF) –reg.

Ref. : CPCB letter No. : F. No. B-31011/BMW(50)/2028/WM-I/18165-18223 dated 08.03.2018

Sir/Madam,

This has reference to above referred letter dated 08.03.2018 wherein it was requested to follow the provisions of CPCB's guidelines for Common Biomedical Waste Treatment Facilities while granting Environmental Clearance. In this regard, Central Pollution Control Board (CPCB) is still receiving representations regarding grant of Environmental Clearance for setting up new CBWTF by State Environmental Impact Assessment Authority (SEIAA)/ State Expert Appraisal Committee (SEAC) without following the provisions of CPCB's guidelines for Common Biomedical Waste Treatment Facilities.

In view of above, it is requested to kindly follow CPCB guidelines for CBWTF while granting Environmental Clearance to any new CBWTF for ensuring proper treatment and disposal of biomedical waste.

Yours faithfully,

(V. P. Yadav)
Director & Head
Waste Management -I Division

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
निर्गत.....
दिनांक 3/10/2024

9C

Annexure-III

Speed Post

F.No.B-31011/BMW (6.7 -III)/2016/HWMD/ 23379-28421 February 20, 2017

To

(DGAFMS, SPCBs/PCCs and CBWTF Association)

Sub: Revised Guidelines for Common Bio-medical Waste Treatment Facilities- reg.

Sir,

This is to inform that the existing guidelines for Common Bio-medical Waste Treatment Facilities (CBWTFs) issued in the year 2003 has been reviewed in consultation with the concerned stakeholders by the Central Pollution Control Board and same has been revised in line with the Bio-medical Waste Management Rules, 2016 notified by the Ministry of Environment, Forest and Climate Change (MoEF & CC) under the Environment (Protection) Act, 1986.

Presently, these revised guidelines entitled "Revised Guidelines for Common Bio-medical Waste Treatment Facilities" are updated in CPCB Website at http://cpcb.nic.in/wast/bioimedicalwast/Common_Bio_Medical_Waste_treatment_facilities.pdf.

It is therefore requested that your organization may kindly initiate actions for ensuring compliance to the afore-said finalised guidelines and action taken report may please be submitted to CPCB periodically to apprise the MoEF & CC accordingly.

Yours faithfully,

(B.Vinod Babu)
Nodal Officer,
Waste Management Division

Copy to:

(i) PS to 'CCB', CPCB : For kind information of 'CCB'please

(ii) PS to 'MS', CPCB : For kind information of 'MS'please

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
निर्गत.....
दिनांक.....

(B.Vinod Babu)

Annexure-IV

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
(पर्यावरण एवं वन मंत्रालय, भारत सरकार)
(MINISTRY OF ENVIRONMENT & FORESTS, GOVT. OF INDIA)

No.B-29012/ESS(CPA)/2015-16/ March 07, 2016

To

The Chairman
All the State Pollution Control Boards / Pollution Control Committees
(List Attached)

SUB: MODIFIED DIRECTIONS UNDER SECTION 18(1)(b) OF THE WATER (PREVENTION & CONTROL OF POLLUTION) ACT, 1974 and THE AIR (PREVENTION & CONTROL OF POLLUTION) ACT, 1981 REGARDING HARMONIZATION OF CLASSIFICATION OF INDUSTRIAL SECTORS UNDER RED / ORANGE / GREEN / WHITE CATEGORIES.

WHEREAS, under section 16 (2)(b) of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 16 (2)(c) of the Air (Prevention & Control of Pollution) Act, 1981, one of the functions of the Central Pollution Control Board (CPCB), constituted under the Water (Prevention and Control of Pollution) Act, 1974, is to coordinate activities of the State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs); and

WHEREAS, under section 16 (2)(c) of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 16 (2)(d) of the Air (Prevention & Control of Pollution) Act, 1981, one of the functions of the CPCB is to provide technical assistance and guidance to SPCBs and PCCs; and

WHEREAS, it was brought to the notice of CPCB, that different SPCBs /PCCs were following different criteria for classification of industrial sectors under Red/Orange/ Green category and that classification was being used by the SPCBs/PCCs for grant of consents to industries and for Inventorization / surveillance of industries.

WHEREAS, the issue regarding classification of industries was deliberated upon in the 56th Conference of Chairmen & Member Secretaries of CPCB & SPCBs/PCCs held on August 31, 2010 and a working group comprising of representatives from SPCBs & CPCB was constituted to prepare a consolidated list of industrial sectors falling under Red/Orange/Green category to bring uniformity in classification of industrial sectors across the country;

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली-110032
'Parivesh Bhawan', East Arjun Nagar, Delhi - 110032
दूरभाष/Tel. : 43102030, फैक्स/Fax : 22305793, 22307078, 22307079, 22301932, 22304948
ई-मेल/e-mail : cpcb@nic.in वेबसाईट/Website : www.cpcb.nic.in

WHEREAS, the report prepared by the Working Group was discussed in the 57th Conference of Chairmen & Member Secretaries of CPCB& SPCBs/PCCs held in Delhi on September 15, 2011, wherein some modifications were proposed;

WHEREAS, the final report of the working group was prepared, incorporating the suggestions/observations made in the 57th Conference of Chairmen and Member Secretaries of CPCB & SPCBs/PCCs and in exercise of the powers delegated to the Chairman, CPCB under Section 18(1)(b) of the Water Act, 1974, following directions were issued for compliance to all SPCBs/PCCs to maintain uniformity in categorization of industries as red, orange and green as per list finalized by CPCB, which identified 85 types of industrial sectors as 'Red', 73 industrial sectors as 'Orange' and 86 sectors as 'Green':

a). To maintain uniformity in categorization of industries under Red/ Orange/Green category, the SPCBs /PCCs shall adopt the list as finalized by CPCB based on the recommendations of that Working Group for grant of Consent, inventorization of industries under Red, Orange and Green categories and other related activities.

(b). The SPCBs/PCCs shall revise the list of Red, Orange and Green categories of industries operating in their jurisdiction based on the criteria specified in the final report of that Working Group and submit the same to CPCB within 90 days in hard copy as well as soft copy;

WHEREAS, later-on, it was observed that the process of categorization thus far was primarily based on the size of the industries and consumption of resources and pollution due to discharge of emissions and effluents and its likely impact on health was not considered as primary criteria;

WHEREAS, there have been proposals from the SPCBs / PCCs and industrial associations for categorization of the industrial sectors in a more pragmatic manner. The issue was discussed during the national level conference of the Environment Ministers of the States, held in New Delhi during April 06-07, 2015 and also during the Conference of the Chairmen and Member Secretaries of CPCB and SPCBs/PCCs held in New Delhi on April 08, 2015. Accordingly, a 'Working Group' comprising of the Members from Central Pollution Control Board and State Pollution Control Boards representing the States of Andhra Pradesh, Punjab, Tamilnadu, West Bengal, Madhya Pradesh and Maharashtra, was constituted to revisit the criteria of categorization of industries and suggest rationale based on pollution potential for categorization of industrial sectors and adopting it for implementation of pollution control plan;

WHEREAS, the Working Group has developed the criteria of categorization of industrial sectors based on the concept of Pollution Index which is a function of the emissions (air pollutants), effluents (water pollutants), hazardous wastes generated and consumption of resources. For this purpose the references are taken from the the Water (Prevention and Control

of Pollution) Cess (Amendment) Act, 2003, Standards so far prescribed for various pollutants under Environment (Protection) Act , 1986 and Doon Valley Notification, 1989 issued by MoEFCC. The Pollution Index (PI) of any industrial sector is a number from 0 to 100 and the increasing value of PI denotes the increasing degree of pollution load from the industrial sector;

WHEREAS , based on the series of consultations with SPCBs, different Government / Non-government Institutions including industries and MoEFCC , the following criteria on 'Range of Pollution Index 'for the purpose of categorization of industrial sectors has been finalized:

- Industrial Sectors having Pollution Index score of 60 and above - Red category
- Industrial Sectors having Pollution Index score of 41 to 59 -Orange category
- Industrial Sectors having Pollution Index score of 21 to 40 -Green category
- Industrial Sectors having Pollution Index score incl. & upto 20 -White category

WHEREAS, based on the revised criteria, the 'Final Report on Revised Categorization of Industrial Sectors under Red/Orange/Green/White' has been evolved. The 'Categorization' is based on the relative pollution potential of the industrial sectors and grouping of the industrial sectors based on the use of raw materials, manufacturing process adopted and pollutants likely to be generated;

WHEREAS, based on relative Pollution Index, the number of industries in various categories are as under :

i. The Red category of industrial sectors: 60
ii. The Orange category of industrial sectors: 83
iii. The Green category of industrial sectors: 63 and
iv. The Newly introduced White category: 36

WHEREAS, there shall be no necessity of obtaining the Consent to Operate" for White category of industries and an intimation to concerned SPCB / PCC shall suffice;

WHEREAS, the purpose of categorization is to ensure that the industry is established in a manner consistent with the environmental objectives and to prompt industrial sectors to adopt cleaner technologies, ultimately resulting in generation of no or minimum pollutants.

WHEREAS the new categorization system shall also facilitate in self-assessment by industries;

Now, therefore, in exercise of the powers delegated to the Chairman, CPCB under Section 18(1)(b) of the Water (Prevention & Control of Pollution) Act, 1974 and Section 18(1)(b) of the Air (Prevention & Control of Pollution), Act , 1981 the earlier Directions issued in June 2012 in the context of categorisation of industries as Red, Orange & Green are withdrawn with immediate effect and following **'Directions'** are hereby issued for compliance by all SPCBs and PCCs :

1. That the SPCBs and PCCs shall adopt the Revised Criteria of categorization of industrial sectors as detailed in table nos. F1, F2, F3 and F4 and Revised Lists of Red, Orange, Green and White categories of industrial sectors, presented at table no. G2, G3, G4 and G5 respectively, in the 'Final Report' as attached herewith immediately.
2. That all pending applications for consideration of 'Consent to Establish' and 'Consent to Operate' and future such applications shall be processed as per revised criteria.
3. That the SPCBs and PCCs will provide the list of industries identified in each category existing in the State which have been considered for grant of consents. SPCBs/PCCs will forward the list of such industries before 31.05.2016 and the same will be uploaded on the websites of respective SPCB/PCC.

4. That the 'Revised Lists of Red, Orange, Green and White category of industrial sectors' shall be used by the SPCBs and PCCs for Consent Management and inventorization of industries under Red, Orange ,Green and White categories. Siting of industries shall be only in conforming areas. SPCBs / PCCs shall evolve sector specific plans for control of pollution and industrial surveillance for verifying compliance.

5. That the SPCBs and PCCs shall revise /prepare the inventory of Red, Orange, Green and White categories of industries operating in their jurisdiction based on the revised criteria specified in the Final Report and submit the same to CPCB within 90 days i.e., before 30.05.2016 in hard copy as well as soft copy.

6. That the listed category of industries or those identified later-on under different categories shall not be linked to sanction of loan /finance or bank proceedings.

7. That any further addition of any new or left-over industrial sector and their categorization which is not listed in the revised list of Red, Orange, Green and White industrial sectors, shall be done at the level of concerned SPCB /PCC following revised criteria & guidelines as detailed in the attached document and no concurrence of CPCB shall normally be required. It is further clarified that while categorizing the industries, fractional numbers shall be rounded off to nearest integer.

The SPCBs/PCCs shall acknowledge the receipt of directions and submit the 'Action Taken Report' in compliance with these directions to CPCB before 15.04.2016.

(Arun Kumar Mehta)
Chairman
7/3/16

Copy to:

1. The Chief Secretary of all the States and UTs
2. The Secretary ,
   Ministry of Micro, Small and Medium Entrepreneurs
   Udyog Bhawan, Rafi Marg, New Delhi - 110 011
3. The Secretary ,
   Ministry of Heavy Industries
   Udyog Bhawan, Rafi Marg, New Delhi - 110 011
4. The Secretary,
   Ministry of New and Renewable Energy
   Block-14, CGO Complex,
   Lodhi Road,New Delhi-110 003,
5. The Advisor(CP Division)
   Ministry of Environment ,Forests and Climate Change
   Indira Paryavaran Bhawan
   Jor Bagh Road, New Delhi – 110 003
6. All Zonal Offices of CPCB

(A. B. Akolkar) 5.3.16
Member Secretary

Final Document on Revised Classification of Industrial Sectors Under

Red, Orange, Green and White Categories

(February 29, 2016)

Central Pollution Control Board

Delhi

1025

Executive Summary

Categorization of Industrial Sectors under Red, Orange, Green and White Category

The Ministry of Environment, Forest and Climate Change (MoEFCC) had brought out notifications in 1989, with the purpose of prohibition/ restriction of operations of certain industries to protect ecologically sensitive Doon Valley. The notification introduced the concept of categorization of industries as " Red", "Orange "and "Green" with the purpose of facilitating decisions related to location of these industries. Subsequently, the application of this concept was extended in other parts of the country not only for the purpose of location of industries, but also for the purpose of Consent management and formulation of norms related to surveillance / inspection of industries.

The concept of categorization of industries continued to evolve and as different State Pollution Control Boards interpreted it differently, a need arose to bring about necessary uniformity in its application across the country. In order to harmonize the 'Criteria of categorization', Directions were issued by CPCB under Section 18(1)(b) of the Water (Prevention & Control of Pollution) , Act, 1974 to all SPCBs/PCCs to maintain uniformity in categorization of industries as red, green and orange as per list finalized by CPCB, which identified 85 types of industrial sectors as 'Red', 73 industrial sectors as 'Orange' and 86 sectors as 'Green'.

The process of categorization thus far was primarily based on the size of the industries and consumption of resources. The pollution due to discharge of emissions & effluents and its likely impact on health was not considered as primary criteria. There was demand from the SPCBs / PCCs and industrial associations for categorization of the industrial sectors in a more transparent manner. Accordingly, the issue was discussed thoroughly during the national level conference of the Environment Ministers of the States, held in New Delhi during April 06-07, 2015 and a 'Working Group' comprising of the members from CPCB, APPCB, TNPCB, WBPCB, PPCB, MPPCB and Maharashtra PCB is constituted to revisit the criteria of categorization of industries and recommend measures for making the system transparent and rational.

The Working Group has developed the criteria of categorization of industrial sectors based on the Pollution Index which is a function of the emissions (air pollutants), effluents (water pollutants), hazardous wastes generated and consumption of resources. For this purpose the references are taken from the the Water (Prevention and Control of Pollution) Cess (Amendment) Act, 2003, Standards so far prescribed for various pollutants under Environment (Protection) Act , 1986 and Doon Valley Notification, 1989 issued by MoEFCC. The Pollution Index PI of any industrial sector is a number from 0 to 100 and the increasing value of PI denotes the increasing degree of pollution load from the industrial sector. Based on the series of brain storming sessions among CPCB, SPCBs and MoEFCC , the following criteria on 'Range of Pollution Index 'for the purpose of categorization of industrial sectors is finalized.

- Industrial Sectors having Pollution Index score of 60 and above – Red category
- Industrial Sectors having Pollution Index score of 41 to 59 –Orange category
- Industrial Sectors having Pollution Index score of 21 to 40 –Green category
- Industrial Sectors having Pollution Index score incl.&upto 20 -White category

The newly introduced White category of industries pertains to those industrial sectors which are practically non-polluting such as Biscuit trays etc. from rolled PVC sheet (using automatic vacuum forming machines), Cotton and woolen hosiers making (Dry process only without any dying/washing operation), Electric lamp (bulb) and CFL manufacturing by assembling only, Scientific and mathematical instrument manufacturing, Solar power generation through photovoltaic cell, wind power and mini hydel power (less than 25 MW).

The salient features of the 'Re-categorization' Exercise are as follows :

- Due importance has been given to relative pollution potential of the industrial sectors based on scientific criteria . Further, wherever possible, splitting of the industrial sectors is also considered based on the use of raw materials, manufacturing process adopted and in-turn pollutants expected to be generated.
- The Red category of industrial sectors would be 60.
- The Orange category of industrial sectors would be 83.
- The Green category of industrial sectors would be 63.
- Newly introduced White category contains 36 industrial sectors which are practically non-polluting.
- There shall be no necessity of obtaining the Consent to Operate'' for White category of industries. An intimation to concerned SPCB / PCC shall suffice.
- No Red category of industries shall normally be permitted in the ecologically fragile area / protected area.

The purpose of categorization is to ensure that the industry is established in a manner which is consistent with the environmental objectives. The new criteria will prompt industrial sectors willing to adopt cleaner technologies, ultimately resulting in generation of fewer pollutants. Another feature of the new categorization system lies in facilitating self-assessment by industries as the subjectivity of earlier assessment has been eliminated. This 'Re-categorization' is a part of the efforts, policies and objective of present government to create a clean & transparent working environment in the country and promote the Ease of Doing Business.

Other similar efforts include installation of Continuous Online Emissions/ Effluent Monitoring Systems in the polluting industries, Revisiting of the CEPI (Comprehensive Environment Pollution Index) concept for assessment of polluted industrial clusters, Revision of existing industrial Emission/Effluent discharge standards, initiation of special drive on pollution control activities in Ganga River basin and many more in coming future.

Revised Criteria of Categorization of Industries

"Securing industrial pollution control in accordance with the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 by linking with categorization of industries, consent management and vigilance – 'In context of Red, Orange, Green and White categories of industries"

A: Genesis of Categorization:

- The Ministry of Environment, Forest and Climate Change (MoEFCC) had brought out notifications, which inter-alia refers to Prohibition/ Restriction on operation of industries to protect ecologically sensitive areas or areas of specific importance. This has for the first time brought the concept of categorization of industries to" Red", "Orange "and "Green" and restrict their operation in certain areas of importance. Therefore, it is at-once interpreted that Red, Orange and Green categorization is linked with location specific needs.
- The notification of MoEF was first brought on 2nd February,1989 in case of "Restriction on location of industries, mining operations and other developmental activities in Doon Valley in "Uttarakhand" and thereafter another notification on 24th February 1999 regarding restriction on the setting up of industries in Dahanu Taluka in Maharashtra. The categorization had been made mainly on the basis of size of the industries, man power and consumption of resources.
- However, in other parts of the country, there have been variations in context to the classification of industries under Red, Orange and Green categories. SPCBs / PCCs were following their own criteria in different States thereby creating confusion.
- In order to harmonize the 'Criteria of categorization', a 'Working Group' was formed as per resolution passed during the 57th Conference of the Chairmen & Member Secretaries of CPCB and SPCBs. Based on the recommendations of the Working Group, Directions dated 4/6/2012 under Section 18(1)(b) of the Water

(Prevention & Control of Pollution) , Act, 1974 were issued to all SPCBs/PCCs with the effects to maintain uniformity in categorization of industries as red, green and orange as per list finalized by the Working Group. This indicative list included 85 types of industrial sectors as 'Red', 73 industrial sectors as 'Orange' and 86 sectors as 'Green'. However, these identified categories have not been assigned with scores as per existing criteria/ or any new criteria

B: Categorization criteria used by SPCBs/PCCs:

SPCBs and PCCs use the criteria of Red, Orange and Green categories for consent management and vigilance purposes for carrying out inspections to verify compliance to the stipulated standards. However the above categorization do not emphasize on sector-specific plan for control of pollution in accordance with priority based on pollution index.

C: Gap in the process:

1. The categorization has been made mainly on the basis of size of the industries and consumption of resources. The pollution due to discharge of emissions & effluents and its impact on health was not considered as primary criteria.
2. Categorization was on random basis, no scoring system was adopted.

D: Resolutions made during National Level Conferences

The issue was discussed thoroughly during the following national level conferences held in New Delhi:

- Conference of the Environment Ministers of Central Government and State Governments during April 06-07, 2015
- 59th Conference of Chairmen & Member Secretaries of Pollution Control Boards / Pollution Control Committees held on April 08, 2015

Accordingly following resolutions were made during the Conferences:

1. *A 'Working Group' comprising of the members from CPCB, APPCB, TNPCB, WBPCB, PPCB, MPPCB and Maharashtra PCB is constituted.*
2. *This WG shall revisit the categorization of industries that is based on pollution index criteria & environmental issues such as generation of emission, effluent and hazardous wastes.*
3. *The categorization will be done on the basis of composite score (0-100 marks) of Pollution Index given in accordance with the following weightage.*

Air Pollution Score based on parameters namely PM, CO, NOx, SOx, HMs , Benzene, Ammonia and other toxic parameters relevant to the industry.	*40 Marks*
Water Pollution Score based on parameters namely pH, TSS, NH_3-N, BOD, Phenol and other toxic pollutants relevant to the industry.	*40 Marks*
Hazardous wastes (land fillable, incinerable, recyclable) as generated by the industry.	*20 Marks*
Note : • *Parameters to be decided on the basis of the nature of the wastes generating from the industrial sector.* • *Industries having only either water pollution or air pollution, the score will be normalized wrt 100.*	

4. *Based on the score of the Pollution Index, following categorization be made :*
   - *Type of industries, if scores 60 and above be categorized as Red*
   - *Type of industries, if scores from 30 to 59 be categorized as Orange*
   - *Type of industries, if scores from 15 to 29 be categorized as Green*
   - *Type of industries, if less than 15 be categorized as White or non-polluting industry.*
5. *SPCBs/PCCs may issue consent to the industries*
   - *Red category of industries for 5 years.*
   - *Orange category of industries for 10 years.*
   - *Green category of industries for 15 years.*
   - *No necessity of consent for non-polluting industries.*
6. *No red categories of industries will be permitted to establish in eco-sensitive areas and protected areas.*

E: Follow-up Actions made on the Resolutions :-

- Accordingly, a Committee comprising the Chairmen of CPCB, APPCB, TNPCB, MPPCB, MPCB, PPCB, WBPCB and MS, CPCB was constituted vide CPCB OM dated

23.04.2015 to review & classify industrial sectors into different categories based on criteria of respective pollution potential.

- The categorization is made on the basis of following:
    - Quality of emissions (air pollutants) generated
    - Quality of effluents (water pollutants) generated
    - Types of hazardous wastes generated
    - Consumption of resources

- Reference is taken from the following :
    - The Water (Prevention and Control of Pollution) Cess Act, 1977
    - Standards so far prescribed for various pollutants under the Environment (Protection) Act , 1986
    - Doon Valley Notification, 1989 issued by MoEF.

F : Scoring Methodology :

The details on the scoring methodology in respect of the aforesaid 3 components is presented in the following tables F-1 to F-4 .

Table F-1 : Water Pollution Scoring Methodology

Sl. No.	Activity / Types of Discharges	Score
Part A : Score W1 : Score based on types of expected criteria water-pollutants present in industrial processes waste waters. **Maximum of the following seven categories is to be taken.**		
W11	Waste-water which is polluted and the pollutants are - • not easily biodegradable (very high strength waste waters having BOD > 5000 mg/l); or • toxic; or • both toxic and not easily biodegradable. (Presence of criteria water pollutants having prescribed standard limits up-to 10 mg/l or having BOD > 5000 mg/l). For details appendix 1 may be referred)	30
W12	Non-toxic high strength polluted waste-water having BOD in the range of 1000-5000 mg/l and the pollutants are biodegradable. (Presence of criteria water pollutants having prescribed standard limits from 11 mg/l to 250 mg/l and having BOD strength in the range of 1000-5000 mg/l) . For details appendix 1 may be referred)	25
W13	Non toxic- polluted waste-water having BOD below 1000 mg/l and the pollutants are easily biodegradable. (Presence of criteria water pollutants having prescribed standard limits from 11mg/l to 250 mg/l and having BOD strength below 1000 mg/l) . For details appendix 1 may be referred)	20
W14	Waste-water generated from the chemical processes and which is polluted due to presence of high TDS (total dissolved solids) of inorganic nature. (Presence of criteria water pollutants having prescribed standard limits more than 250 mg/l. For details appendix 1 may be referred)	15
W15	Waste-water generated from the physical unit operations / processes and which is polluted due to presence of TDS (total dissolved solids) of inorganic nature and of natural origin like fresh-water RO rejects, boiler blow-downs, brine solution rejects etc. (Presence of criteria water pollutants having prescribed standard limits more than 250 mg/l. For details appendix 1 may be referred)	12
W16	Non-toxic polluted waste-water from those units which are: • Having the overall waste-water generation less than 10 KLD and • The pollutants are easily bio-degradable having BOD below 200 mg/l which can be easily treated in a single stage ASP (activated	12

	sludge process) based Effluent Treatment Plant. Note : This is a special category and is applicable to only those units having over-all liquid waste generation less than 10 KLD with low strength organic load.	
W17	Waste-water from cooling towers and cooling-re-circulation processes	10
Part B : Score W2 : Score based on huge discharges of any kind (Penalty Clause)		
W2	Industry having overall liquid waste generation of 100 KLD or more including industrial & domestic waste-water.	10
Overall Water Pollution Score W = W1+W2		

Appendix 1

- **Water Pollutants covered under Group W11:**

  - ✓ Free available Chlorine , Total residual chlorine, Fluoride (as F), Sulphide (as S), Free Ammonical Nitrogen, Dissolved phosphates (as P), Free ammonia (as NH3), Nitrate Nitrogen, Mercury (As Hg), Selenium (as Se), Hexa-valent chromium (as Cr + 6), Lead (as Pb), Tin , Vanadium (as V), Cadmium (as Cd), Manganese (as Mn), Total chromium (as Cr), Copper (as Cu), Iron (as Fe), Nickel (as Ni), Zinc (as Zn), Benzene, Arsenic (as As), Benzo-a-pyrene, Cyanide (as CN), Phenolic compounds (as C_6H_5OH) , Adsorbable Organic Halogens (AOX), Boron and /or
  - ✓ BOD strength of waste water > 5000 mg/l

- **Water Pollutants covered under Group W12:**

  - ✓ Sodium Absorption Ratio (SAR) , Biochemical oxygen demand (3 days at 27^{o}C), Total Kjeldahl nitrogen (TKN), Ammonical nitrogen (as N), Suspended solids, Total nitrogen (as N), Chemical oxygen demand, Oils & grease and
  - ✓ BOD strength of waste water is in the range of 1000-5000 mg/l

- **Water Pollutants covered under Group W13:**

  - ✓ Sodium Absorption Ratio (SAR), Biochemical oxygen demand (3 days at 27^{o}C), Total Kjeldahl nitrogen (TKN), Ammonical nitrogen (as N), Suspended solids, Total nitrogen (as N), Chemical oxygen demand and
  - ✓ BOD strength of waste water is below 1000 mg/l

- **Water Pollutants covered under Group W14 and W15:**

  Chlorides as Cl, Colour , Total dissolved solids (TDS - Inorganic)

- **Water Pollutants covered under Group W16**

  - ✓ BOD strength of waste water is below 200 mg/l and overall discharge is less than 10 KLD.

Table F-2 : Air Pollution Score

Sl. No.	Air Pollutants Group	'Range of Prescribed Standard ' of criteria pollutants	Marks
Part 1 : Score A1 = Score based on types of expected criteria Air Pollutants present in the emissions . Maximum of the following seven categories is to be taken. For details appendix 2 may be referred.			
1	Group A1A	Presence of criteria air pollutants having prescribed standard limits up-to 2 mg/Nm3	30
2	Group A1B	Presence of criteria air pollutants having prescribed standard from 3 to10 mg/Nm3	25
3	Group A1C	Presence of criteria air pollutants having prescribed standard from 11 to 50 mg/Nm3	20
4	Group A1D	Presence of criteria air pollutants having prescribed standard from 51 to 250 mg/Nm3	15
5	Group A1E	Presence of criteria air pollutants having prescribed standard from 251mg/Nm3 & above.	10
6	Group A1F	• Generation of fugitive emissions of Particulate Matters which are: o Not generated as a result of combustion of any kind of fossil-fuel. o Generated due to handling / processing of materials without involving the use of any kind of chemicals. o Which can be easily contained /controlled with simple conventional methods	10
7	Group A1G	• Generation of Odours which are : o Generated due to application of binding gums / cements /adhesives /enamels o Which can be easily contained /controlled with simple conventional methods	10
Part 2 : Score A2 = Score based on consumption of fuels and technologies required for air pollution control :			
6	Group A2F1	• All such industries in which the daily consumption of coal/fuel is more than 24 MT/day and the particular (Particulate/gaseous/process) emissions from which can be controlled only with high level equipments / technology like ESPs, Bag House Filters, High Efficiency chemical wet scrubbers etc.	10
7	Group A2F2	• All such industries in which the daily consumption of coal/fuel is from 12 MT/day to 24 MT/day and the particular (Particulate/gaseous/process) emissions from which can be controlled with suitable proven technology.	5
Overall Air Pollution Score –A = A1 + A2			

Appendix 2

- **<u>Air pollutants covered under Group A1A:</u>**

  Cd+Th, Dioxins & Furans, Mercury, Asbestos

- **<u>Air Pollutants covered under Group A1B:</u>**

  HF, Nickel+ Vanadium, HBr, Manganese, Lead, H2S, P2O5 as H3PO4

- **<u>Air Pollutants covered under Group A1C:</u>**

  Chlorine, Pesticide compounds, CH3Cl, TOC, Total Fluoride, Hydrocarbons, NH3, HCL vapour & Mist, H2SO4 Mist, SO2

- **<u>Air Pollutants covered under Group A1D:</u>**

  CO, PM, CO, NOx

- **<u>Air Pollutants covered under Group A1E:</u>**

  NOx with liquid-fuel, SO2 with liquid-fuel

Table F-3: Hazardous Waste Generation Score

Sl.No.	**Types of Hazardous Waste Generated as** per Schedule 1 / Schedule 2 of Hazardous Waste (Management, Handling & Trans-boundary Movement) Rules , 2008 . **Maximum of the following four categories is to be taken**	**Score**
HW1	• Land disposable HW which require special care & treatment for stabilization before disposal.	20
HW2	• Incinerable HW	15
HW3	• Land disposable HW which doesn't require treatment & stabilization before disposal. • High volume low effect wastes such as fly-ash, phspho-gypsum, red-mud, slags from pyro-metallurgical operations, mine tailings and ore beneficiation rejects)	10
HW4	• Recyclable HW, which are easily recyclable with proven technologies.	10

Table F-4 : Calculation Sheet

Industrial Sector - .....

1. Water Pollution Score (W)			
Scores	Waste Water Category	Value	
Score on W1			
Score on W2			
Water Pollution Score = W1+W2			
2. Air Pollution Score (A)			
Scores	Air Pollutant Category	Value	
Score on A1			
Score on A2	-	-	
Air Pollution Score = A1+A2			
3. Hazardous Waste Score (HW)			
Score	HW Category	Value	
HW			
Grand Total = W + A + HW			

Note :

1. Any of the industrial sector having only either air pollution (A) or water pollution (W) , the score will be normalized to 100 as per the following formula –

   Normalized Score = {100 x W (or A)} / 40

2. Any of the industrial sector having air pollution (A) and water pollution (W) both but no hazardous waste generation (H) , the joint score of air & water pollution will be normalized to 100 as per the following formula –

   Normalized Score = {100 x (W+A)} / 80

3. Any of the industrial sector having air pollution (A) & hazardous waste generation (H) but no water pollution (W), the joint score of air pollution & hazardous waste generation will be normalized to 100 as per the following formula –

   Normalized Score = {100 x (A+H)} / 60

4. Any of the industrial sector having water pollution (W) and hazardous waste generation (H) but no air pollution (A), the joint score of water pollution & hazardous waste generation will be normalized to 100 as per the following formula –

   Normalized Score = {100 x (W+H)} / 60

G : Developments :

i. The existing Red (85 sectors) , Orange (73 sectors) and Green (86 sectors) i.e a total of 244 industrial sectors have been assessed as per the proposed formula by the Working Group. For this purpose, concerned Engineers / Scientists from the Member SPCBs were also involved & consulted during May 28-29, 2015.

ii. After careful examination and consideration of the suggestions of concerned stake-holders the "Draft Document on Revised Concept of Categorization of Industrial Sectors " was prepared by the Committee and circulated to all the SPCBs, PCCs and concerned Ministries for their information & comments. The ' Draft Document ' was uploaded on the website of CPCB also for information & comments of one & all.

iii. The matter was discussed during the 170th Board Meeting also and issues raised by the Board Members pertaining to some of the industrial sectors were clarified.

iv. Responses were received from various concerned Ministries, SPCBs, Industrial Associations including individuals.

v. Based on the above, final meeting was convened by the Secretary , MoEFCC with CPCB and senior officers of MoEFCC on January 06, 2016 to resolve the issues appropriately and finalize the 'Re-categorization'. Accordingly , following modifications in the 'Range of Pollution Index 'for the purpose of categorization of industrial sectors were suggested :

- Industrial Sectors having Pollution Index score of 60 and above – Red category
- Industrial Sectors having Pollution Index score of 41 to 59 –Orange category
- Industrial Sectors having Pollution Index score of 21 to 40 –Green category
- Industrial Sectors having Pollution Index score incl.& upto 20 –White category

vi. Based on the final criteria as described in v above , the final categorization is as follows :

Category of Industrial Sector	Existing Categorization	Proposed (New) categorization
Red	85	60
Orange	73	83
Green	86	63
White	---	36
Total	244	242

vii. In the proposed categorization, some of the industrial sectors have been either deleted due to duplication or merged with similar type of sectors on account of same

characteristics of pollution generation. In a similar way, some of the industrial sectors are split into more sectors on account of variation in the raw materials / manufacturing process. As a result final totals of the existing and proposed categorization are different.

viii. The industrial sector which doesn't fall under any of the above four categories (Red, Orange, Green and White) , decision with regard to its categorization will be taken at the level of concerned SPCB/PCC by a committee headed by the Member Secretary , SPCB/PCC and comprising of two senior cadre Engineers / Scientists of the SPCB / PCC in accordance with the scoring-criteria specified in this document.

ix. The summary is presented in the following Table G-1 and final lists of Red, Orange, Green and White categories of industries are presented in Tables G-2, G-3, G-4 and G-5 respectively, which are self explanatory.

Table G-1: Final Summary Table Red , Orange, Green and White Categories of Industries (16-01-16)

Sl No.	Original Categorization	Initial Nos.	Addition by Splitting into further classes	Deletion/ Shifting to foot-note due to vague term / Merger / other reasons	Re-categorization to Red	Re-categorization to Orange	Re-categorization to Green	Re-categorization to White	Check
		1	2	3	4	5	6	7	(1+2) = (3 to 7)
1	Red	85	11	7	60	26	3	Nil	96=96
2	Orange	73	2	3	Nil	51	19	2	75=75
3	Green	86	Nil	3+2=5	Nil	6	41	34	86=86
Final Categorization		244	13	15	**60 (Red)**	**83 (Orange)**	**63 (Green)**	**36 (White)**	**257 =257** (Total categories including in foot-note)

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Table G-2 : Final List of Red Category of Industrial Sectors

Sl No.	Orgnl Sl.No	Industry Sector	W1	W2	W	A1	A2	A	H	W+A+H	Revised Category	REMARKS
1.	38	Isolated storage of hazardous chemicals (as per schedule of manufacturing, storage of hazardous chemicals rules ,1989 as amended)									R-R	As per provisions of Rules, to be kept under Red category especially for safety purposes.
2.	4	Automobile Manufacturing (integrated facilities)	30	-	30	20	-	20	10	60	**R-R**	i. Such types of plants are having either one or combinations of polluting activities viz. washing, metal surface finishing operations, pickling, plating, electro-plating , phosphating, painting , heat treatment etc. ii. Some of such plants may outsource some /all of the polluting activities. In such cases, after thorough inspection of such units by concerned SPCB, re-categorization of the industry shall be made accordingly.
3.	34	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H& TBM) rules, 2008 - Items namely - Spent cleared metal catalyst containing copper,, Spent cleared metal catalyst containing zinc,,	30	-	30	20	-	20	10	60	**R-R**	All the three types of pollutants are expected.
4.	44	Manufacturing of lubricating oils ,grease and petroleum based products	20	-	20	20	-	20	20	60	**R-R**	Generates all sorts of pollution.
5.	66 E	DG Set of capacity > 5 MVA	-	-	-	20	5	25	-	62.5	**R-R**	i. Mainly air polluting. ii. DG sets consume the diesel @ 0.21 litres/hr/KVA at full load. iii. Average running is taken @ 12 hrs / day although many of the DG sets run for more than this period.
6.	31	Industrial carbon including electrodes and graphite blocks, activated carbon, carbon black	10	-	-	20	5	25	10	62.5	**R-R**	Mainly air polluting. Air pollution score is normalized to 100.

7.	39	Lead acid battery manufacturing(excluding assembling and charging of lead-acid battery in micro scale)	10	-	10	25	-	25	10	62.5	**R-R**	i. Mainly air polluting. Air pollution scores are normalized to 100. ii. Lead Acid Battery manufacturing consists of various stages which broadly involve (after producing or receiving lead oxide): Paste Mixing , Grid Casting , Grid Pasting & Curing , Hydro-setting, parting & enveloping , Stacking, grouping & inter-cell welding ,Formation. iii. Exposure of workmen to lead during all or any of the processes outlined above exceeds the prescribed standards if appropriate equipment in this respect is not installed at any Battery Manufacturing Unit. iv. All of the above processes, some more than others, involve release of lead particles or fumes into the environment. Pollution from the above processes can be grouped into two possible types, viz: (a) Lead Oxide becomes airborne and there is Particulate Pollution (b) Fumes are generated and there is Gaseous Pollution
8.	62	Phosphate rock processing plant	30	-	30	20	-	20	-	62.5	**R-R**	i. The separation of phosphate rock from impurities and non-phosphate materials for use in fertilizer manufacture consists of beneficiation, drying or calcining at some operations, and grinding. Phosphate rock from the mines is first sent to beneficiation units to separate sand and clay and to remove impurities. Steps used in beneficiation depend on the type of rock. ii. The water & air pollution scores are normalized to 100.

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9.	66	Power generation plant [except Wind and Solar renewable power plants of all capacities and Mini Hydel power plant of capacity <25MW]	10	-	10	15	10	25		62.5	**R-R**	1. Mainly air polluting. It uses a mixture of biomass (agro based) and coal (< 10 %) as a fuel. Almost, round the year operation. 2 . In case of DG sets of 5 MVA & more and emissions of SO2 will take place due to use of liquid fuel. Air pollution score will be =20 + 10 = 30, Normalized score will be 75. 3. In case of 'Waste to Energy Plants' , water will be used for cooling and air score will be - 30+10 = 40.
10.	34	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H& TBM) rules, 2008 - Items namely - Spent catalyst containing nickel, cadmium, Zinc, copper, arsenic, vanadium and cobalt,	30	-	30	25	-	25	10	65	**R-R**	All the three types of pollutants are expected.
11.	67	Processes involving chlorinated hydrocarbons	30	-	30	20	-	20	15	65	**R-R**	Chlorinated hydrocarbons are used in the manufacture of insecticides, pesticides and organo chloro pesticides. Effluents & emissions are toxic in nature.
12.	74	Sugar (excluding Khandsari)	20	10	30	15	10	25	10	65	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. Sugar mills generate all sorts of pollution problems.
13.	22	Fibre glass production and processing (excluding moulding)	-	-	-	20	-	20	20	67	**R-R**	i. The use of styrene in most methods of fiberglass production causes hazardous air pollution that is harmful to breathe at excessive levels. ii. It is mainly air polluting & HW generating industry. The air pollution & HW scores are normalized to 100. iii. In case of lead containing glass, the score of A1 will be 25 and final normalized score will be 75 and shall be categorized as Red.
14.	23	Fire crackers manufacturing and bulk storage facilities	-	-	-	20	-	20	20	67	**R-R**	i. This is the normalized score based on air pollution & HW generation. ii. Various hazardous chemicals are used in the manufacturing process. iii. These chemicals are namely Potassium Nitrate , Potassium per-chlorate, Barium Nitrate, Aluminium compounds, Copper Chloride etc.

												iv. These chemicals are highly hazardous and cause serious diseases among the workers. especially ability of blood to carry oxygen leading to headaches, methemoglobinemia and kidney problems , skin problems, thyroid metal fume etc.
15.	34	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H& TBM) rules, 2008 - Items namely - Dismantlers Recycling Plants -- Components of waste electrical and electronic assembles comprising accumulators and other batteries included on list A, mercury-switches, activated glass cullets from cathode-ray tubes and other activated glass and PCB-capacitors, or any other component contaminated with Schedule 2 constituents (e.g. cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they exhibit hazard characteristics indicated in part C of this Schedule.	-	-	-	30	0	30	10	67	R-R	Mainly air polluting and hazardous waste generating. Air & HW pollution scores are jointly normalized to 100.
16.	47	Milk processes and dairy products(integrated project)	20	10	30	20	5	25	-	68.75	**R-R**	i. Water as well as air polluting due to use of boilers. ii. Water & air pollution scores are normalized to 100.
17.	63	Phosphorous and its compounds	30	-	30	25	-	25	-	68.75	**R-R**	Water pollution & air pollution containing compounds of phosphorous are expected
18.	61	Pulp & Paper (waste paper based without bleaching process to manufacture Kraft paper)	20	10	30	15	10	25	0	68.75	**R-R**	Mainly water & air polluting . Water & air pollution scores are normalized to 100.
19.	13	Coke making , liquefaction, coal tar distillation or fuel gas making	30	-	30	20	-	20	20	70	**R-R**	It is a kind of petrochemical industry.

20.	41	Manufacturing of explosives, detonators, fuses including management and handling activities	30	-	30	20	-	20	20	70	**R-R**	i. Explosives manufacture and use contribute some measure of hazardous waste to the environment. ii. Nitroglycerin produces several toxic byproducts such as acids, caustics, and oils contaminated with heavy metals. These must be disposed of properly by neutralization or stabilization and transported to a hazardous waste landfill. iii. The use of explosives creates large amounts of dust and particulate from the explosion, and, in some cases, releases asbestos, **lead,** and other hazardous materials into the atmosphere.
21.	45	Manufacturing of paints varnishes, pigments and intermediate (excluding blending/mixing)	30	-	30	25	-	25	15	70	**R-R**	i. The process may cause considerable emissions of volatile organic compounds (VOC). VOC contribute to the creation of ozone in the lower layers of the atmosphere (photochemical air pollution) and can present danger to health. ii. Dust and odour may also be a problem. iii. Washing of vessels will contribute waste-waters. iv. Large quantity of HWs are also produced.
22.	56	Organic Chemicals manufacturing	30	-	30	20	-	50	20	70	**R-R**	Such types of industrial sectors generate all sorts of pollution.
23.	1	Airports and Commercial Air Strips	20	10	30	-	-	-	10	75	**R-R**	i. The Airports are generating mainly the waste-waters. ii. This is the water pollution normalized score for airports having discharge more than 100 KLD. iii. The airports / strips having discharge less than 100 KLD will have score of 50 and hence orange category. iv. If the score is normalized wrt water + HW both, then all the airports will come under Orange category (score - 58.33).
24.	3	Asbestos and asbestos based industries	-	-	-	30	-	30	10	75	**R-R**	i. This is mainly air polluting industry. ii. Final score is based on air pollution score only. iii. Asbestos is carcinogenic and banned in many countries.
25.	5	Basic chemicals and electro chemicals and its derivatives including manufacturing of acid	30	-	30	-	-	-	10	75	**R-R**	i. Standards prescribed for Inorganic Chemicals are adopted. ii. It is mainly water polluting industry having effluents which are toxic and not easily biodegradable.

												iii. Water pollution score normalized to 100 is undertaken. iv. The earlier Red category industrial sector namely "Hydrocyanic acid and its derivatives " is also merged under this industrial sector.
26.	7	Cement	-	-	-	20	10	30	-	75	**R-R**	This is mainly air polluting industry & hence normalized air pollution score.
27.	9	Chlorates, per-chlorates & peroxides	30	-	30	-	-	-	-	75	**R-R**	i. It is mainly water polluting industry having effluents which are toxic and not easily biodegradable. ii. Water pollution score normalized to 100 is undertaken.
28.	10	Chlorine, fluorine, bromine, iodine and their compounds	30	-	30	-	-	-	-	75	**R-R**	i. It is mainly water polluting industry having effluents which are toxic and not easily biodegradable. ii. Water pollution score normalized to 100 is undertaken.
29.	16	Dyes and Dye- Intermediates	30	-	30	20	5	25	20	75	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. Such types of industrial sectors generate all sorts of pollution.
30.	26	Health-care Establishment (as defined in BMW Rules)	20	10	30	-	-	-	-	75	**R-R**	i. Mainly water polluting. ii. The water pollution score is normalized to 100 & valid for Hospitals having total waste-water generation > 100 KLD. iii. The hospitals with incinerator will be categorized as Red irrespective of the quantity of the waste-water generation. iv. The hospitals having total waste-water generation less than 100 KLD and without incinerator, the normalized water pollution score will be 50 and will be categorized as Orange category.
31.	29	Hotels having overall waste-water generation @ 100 KLD and more.	20	10	30	15	-	15	-	75	**R-R**	i. Mainly water polluting. Small boiler may be installed. ii. The water pollution score is normalized to 100 & valid for Hotels having waste-water generation > 100 KLD. iii. The hotels having more than 20 rooms and waste-water generation less than 100 KLD and having a coal / oil fired boiler , the pollution score will be 35/40 & are categorized as Orange. iv. The hotels having more than 20 rooms and waste-water generation less than 10 KLD and

												having no-boiler & no hazardous waste generation, the pollution score will be 20 & are categorized as Green.
32.	34	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H& TBM) rules, 2008 - Items namely - Lead acid battery plates and other lead scrap/ashes/residues not covered under Batteries (Management and Handling) Rules, 2001. [* Battery scrap, namely: Lead battery plates covered by ISRI, Code word "Rails" Battery lugs covered by ISRI, Code word "Rakes". Scrap drained/dry while intact, lead batteries covered by ISRI, Code word "rains".	30	-	30	25	--	25	20	75	**R-R**	All the three types of pollutants are generated.
33.	34	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H& TBM) rules, 2008 - Items namely - Integrated Recycling Plants -- Components of waste electrical and electronic assembles comprising accumulators and other batteries included on list A, mercury-switches, activated glass cullets from cathode-ray tubes and other activated glass and PCB-capacitors, or any other component contaminated with Schedule 2 constituents (e.g. cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they exhibit hazard characteristics indicated in part C of this Schedule.	30	-	30	25	-	25	20	75	**R-R**	All the three types of pollutants are expected.
34.	43	Manufacturing of glue and gelatin	30	10	40	20	-	20	-	75	**R-R**	Highly water polluting & obnoxious air polluting.
35.	49	Mining and ore beneficiation	30	10	40	15	5	20	-	75	**R-R**	Both air and water polluting. Score is normalized with air & water pollution.

36.	52	Nuclear power plant	10	-	10	30	-	30	15	75	**R-R**	i. Mainly air polluting due to incinerator. Others - cooling water. ii. Air pollution score is normalized to 100.
37.	58	Pesticides (technical) (excluding formulation)	30	-	30	25	-	25	20	75	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. Such types of industrial sectors generate all sorts of pollution.
38.	64	Photographic film and its chemicals	30	-	30	-	-	-	-	75	**R-R**	i. Silver salts and other chemicals are used in preparation. Slight quantity of effluents is generated. ii. Water pollution scores are normalized to 100.
39.	68	Railway locomotive work shop/Integrated road transport workshop/Authorized service centers	20	10	30	-	-	-	10	75	**R-R**	i. Mainly water polluting industry . Water is used in the washing of locomotives, road transport vehicles during servicing. ii. This score is valid for those Centers having discharge more than 100 KLD. iii. Service Centers having waste-water generation < 100 KLD, the normalized score will be =(100*20)/40= 50.
40.	84	Yarn / Textile processing involving any effluent/emission generating processes including bleaching, dyeing, printing and colouring	30	10	40	15	-	15	20	75	**R-R**	In this sector all sorts of pollution are generated.
41.	8	Chlor Alkali	30	10	40	20	10	30	10	80	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. Chlor-alkali units are having different section like NaOH, Cl2, SBP etc which are having toxic effluents. Additionally , fuel consumption is also on higher-side.
42.	70	Ship Breaking Industries	30	-	30	30	-	30	20	80	**R-R**	i. The ship-breaking industry creates numerous hazards for the coastal and marine environment. ii. Ship-breaking releases a large number of dangerous pollutants, including toxic waste, oil, poly-chlorinated biphenyls, and heavy metals, into the waters and sea bed. iii. While most of the oil is removed before a ship is scrapped, sand used to mop up the remaining oil is thrown into the sea. High concentrations of oil and grease are then found in the coastal waters, choking marine life.

												iv. Solid waste strewn on the shore, 45 tonnes on any given day according to a study by the Central Pollution Control Board, also finds its way into the sea. v. Adding to the stress on coastal waters, the organic load from the thousands of workers living in cramped conditions with little or no sanitary facilities results in unacceptably high levels of BOD.
43.	53	Oil and gas extraction including CBM (offshore & on-shore extraction through drilling wells)	30	-	30	-	-	-	20	83	**R-R**	i. Mainly water polluting & hazardous waste generating. ii. The water pollution & HW generation scores are normalized to 100.
44.	36	Industry or process involving metal surface treatment or process such as pickling/ electroplating/paint stripping/ heat treatment using cyanide bath/ phosphating or finishing and anodizing / enamellings/ galvanizing	30	-	30	-	-	-	20	83	**R-R**	Mainly water polluting & toxic hazardous waste generating industry. Scores are normalized to 100.
45.	80	Tanneries	30	-	30	-	-	-	20	83	**R-R**	Mainly water polluting & hazardous waste generating industry. Scores are normalized to 100.
46.	65	Ports and harbour, jetties and dredging operations	30	10	40	15	10	25	20	85	**R-R**	This category contain all sorts of pollution.
47.	77	Synthetic fibers induding rayon ,tyre cord, polyester filament yarn	30	10	40	25	10	35	10	85	**R-R**	This sector generates all sorts of pollution problems.
48.	81	Thermal Power Plants	30	10	40	20	10	30	15	85	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. TPP generate all sorts of pollution problems.
49.	71	Slaughter house (as per notification S.O.270(E)dated 26.03.2001)and meat processing industries, bone mill, processing of animal horn, hoofs and other body parts	25	10	35	-	-	-	-	87.5	**R-R**	Mainly water polluting and obnoxious odour generating industry. The water pollution score is normalized to 100
50.	2	Aluminium Smelter	30	10	40	20	10	30	20	90	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. This sector is generating all sorts of pollution i.e. air, water and HW.
51.	12	Copper Smelter	30	10	40	20	10	30	20	90	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. Integrated Copper Smelters contain all sorts of

													pollution.
52.	20	Fertilizer (basic) (excluding formulation)	30	10	40	20	10	30	20	90	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. Generates all sorts of pollution.
53.	37	Iron & Steel (involving processing from ore/ integrated steel plants) and or Sponge Iron units	30	10	40	20	10	30	20	90	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. Such types of industrial sectors generate all sorts of pollution.
54.	61	Pulp & Paper (waste paper based units with bleaching process to manufacture writing & printing paper)	25	10	35	25	10	35	20	90	**R-R**	Waste paper based Pulp & Paper mills with bleaching process generate all sorts of pollution.
55.	85	Zinc Smelter	30	10	40	20	10	30	20	90	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. Integrated Zinc smelter generates all sorts of pollution problems.
56.	55	Oil Refinery (mineral Oil or Petro Refineries)	30	10	40	25	10	35	20	95	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. Such types of industrial sectors generate all sorts of pollution.
57.	59	Petrochemicals Manufacturing (including processing of Emulsions of oil and water)	30	10	40	25	10	35	20	95	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. Such types of industrial sectors generate all sorts of pollution. iii. The earlier red category industrial sector namely "Processing of Emulsions of Oil & Water " is merged with this industrial sector.
58.	60	Pharmaceuticals	30	10	40	30	5	35	20	95	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. Such types of industrial sectors generate all sorts of pollution.
59.	61	Pulp & Paper (Large-Agro + wood) , Small Pulp & Paper (agro based-wheat straw/rice husk)	30	10	40	25	10	35	20	95	**R-R**	i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'. ii. Large /Small Agro based Pulp & Paper mills contribute all sorts of pollution problems.
60.	15	Distillery (molasses / grain / yeast based)	30	10	40	-	-	-	-	100	**R-R**	Mainly water polluting industry. Final score is the normalized water pollution score.

Note :

i. *Under the column Revised Category, the full forms of the abbreviations are as follows :*
   a. *R-R means original category was Red and revised category is also Red*
   b. *R-O means original category was Red and revised category is Orange*
   c. *O-O means original category was Orange and revised category is also Orange*
   d. *O-G means original category was Orange and revised category is Green*
   e. *O-W means original category was Orange and revised category is White*
   f. *G-O means original category was Green and revised category is Orange*
   g. *G-G means original category was Green and revised category is also Green*
   h. *G-W means original category was Green and revised category is White*

ii. *There are specific remarks in respect of some of the industrial sectors. These sectors are either merged with other relevant sectors or deleted due to duplication. The overall details are as follows :*

Sl No.	Original Sl No.	Industry Sector	Original Category	Remarks
1	14	Common treatment and disposal facilities(CETP, TSDF, E-waste recycling, CBMWTF, effluent conveyance project, incinerator, solvent/acid recovery plant, MSW sanitary land fill site)	R	i. All such facilities are classified as Red but special category projects as these are parts of pollution control facilities. ii. In case of CETP , the categorization will depend upon the category of member industries being served.
2	18	Processing of Emulsions of Oil & Water		It is a part of Petrochemical industries. Transferred and merged with the industrial sector namely 'Petrochemicals' at Sl. No. 54.
3	27	Heavy engineering including ship building (with investment on Plant & Machineries more than Rs 10 crores)	R	Most of the pollution generating processes / operations under this category are similar to the industry category namely "Automobile Manufacturing (integrated facilities)" at Sl . No. 1 and may be referred accordingly.
4	30	Hydrocyanic acid and its derivatives	R	Have been merged with the red category industrial sector namely " Basic chemicals and electro chemicals and its derivatives including manufacturing of acid " at Sl. No. 24
5	32	Industrial estates/ parks / complexes/ areas/ export processing zones/ SEZs/ Biotech parks/ leather complex	R	The classification will depend upon the category(ies) of the industries operating / proposed to be permitted in the area. In this context, guidelines prescribed in EIA Notification, 2006 shall be followed.
6	33	Industrial inorganic gases namely- a) Chemical gas- Acetylene, hydrogen, chlorine, fluorine, ammonia, sulphur dioxide, ethylene, hydrogen-sulphide, phosphine b) Hydrocarbon gases- Methane , ethane, propane	R	These gases are generally secondary products and produced alongwith other main products. To be classified as per the main parent plant.
7	69	Reprocessing of used oils & waste oils	R	i. The industry generates mainly the air pollution and oil bearing hazardous wastes. The normalized (air pollution & HW generation score is 58.33. ii. To be deleted as already covered under HW Recyclers / Re-processors (Used oils / Waste Oils) under Orange Category

Table G-3 : Final List of Orange Category of Industrial Sectors

Final Sl. No.	Orgnl S.No	Industry Sector	W1	W2	W	A1	A2	A	H	W+A+H	Revised category	Remarks
1.	20	Dismantling of rolling stocks (wagons/ coaches)	--	--	--	15	--	15	10	41.67	O-O	Emissions of dust and generation of waste oils take place during dismantling. Air pollution & HW generation scores (15+10=25) are normalized to 100.
2.	5	Bakery and confectionery units with production capacity > 1 TPD. (With ovens / furnaces)	20	--	20	15	--	15	--	43.75	O-O	
3.	10	Chanachur and ladoo from puffed and beaten rice(muri and shira) using husk fired oven	20	--	20	15	--	15	--	43.75	O-O	Normal water and air polluting.
4.	23	Coated electrode manufacturing	15	0	15	20	0	20	0	43.75	**G-O**	Preparation of core wire / rod, preparation of dry mix, preparation of wet mix, application of coating by extrusion, baking of coated electrodes
5.	24	Compact disc computer floppy and cassette manufacturing / Reel manufacturing	15	0	15	20	0	20	0	43.75	**G-O**	Generates waste-water and process emissions.
6.	24	Flakes from rejected PET bottle	20	-	20	15	-	15	-	43.75	R-O	Normal water & air pollutions are generated.
7.	30	Food and food processing including fruits and vegetable processing	20	--	20	15	--	15	--	43.75	O-O	Normal water and air polluting.
8.	40	Jute processing without dyeing	20	--	20	15	--	15	--	43.75	O-O	CPCB has notified standards for this category. Both air and water pollutions are generated.
9.	56	Manufacturing of silica gel	15	0	15	20	0	20	0	43.75	**G-O**	Waste-waters containing TDS and emissions of H_2SO_4 are generated.

10.	45	Manufacturing of tooth powder, toothpaste, talcum powder and other cosmetic items	20	--	20	15	--	15	--	43.75	O-O	Both air and water pollution are generated.
11.	55	Printing or etching of glass sheet using hydrofluoric acid	15	--	15	20	--	20	--	43.75	O-O	Both air and water pollution are generated.
12.	65	Silk screen printing, sari printing by wooden blocks	20	--	20	15	--	15	--	43.75	O-O	Wash-water and PM emissions from boilers .
13.	76	Synthetic detergents and soaps(excluding formulation)	20	-	20	15	-	15	-	43.75	R-O	i. This is the score for units having generation of waste-waters less than 100 KLD. ii. The units having waste-water generation more than 100 KLD will become mainly water polluting and accordingly normalized water pollution score will be 75 and be categorized as Red.
14.	71	Thermometer manufacturing	15	--	15	20	--	20	--	43.75	O-O	Process - making glass bulb, forming reservoir in the glass tube for fluid, inserting fluid, scale marking. Use of fuel to heat the glass tubes and hydrofluoric acid to seal the scaling. Small quantities of spent acids are generated.
15.	14	Cotton spinning and weaving (medium and large scale)	--	--	--	15	--	37.5	10	47.5	O-O	Mainly air polluting industry. Sources of air pollution (PM) are the fine particles of cotton from spinning process. Air pollution score is normalized to 100.
16.	1	Almirah, Grill Manufacturing (Dry Mechanical Process)	--	--	--	20	--	20	--	50	O-O	Air pollution due to spray painting (emissions of VOCs). Units without painting operations shall be categorized as White.

17.	2	Aluminium & copper extraction from scrap using oil fired furnace (dry process only)	--	--	--	20	--	20	10	50	O-O	i. Normalized Air pollution score. ii. Significant air pollution due to melting (emissions of SO2, PM).
18.	3	Automobile servicing, repairing and painting (excluding only fuel dispensing)	20	--	20	20	--	20	10	50	O-O	Normal water & air polluting and recyclable waste oil generating. If the waste water generation is more than 100 KLD, it will become mainly water polluting and Red category unit.
19.	4	Ayurvedic and homeopathic medicine	20	--	20	15	--	15	15	50	O-O	
20.	7	Brickfields (excluding fly ash brick manufacturing using lime process)	--	--	--	20	--	20	--	50	O-O	Significantly air polluting.
21.	8	Building and construction project more than 20,000 sq. m built up area	20	--	20	20	--	20	--	50	O-O	1. In the pre-construction stage , it is mainly air polluting due to generation of dust (PM) emissions. 2. After construction, it is mainly water polluting. If the discharge is more than 100 KLD, it will be having the normalized score of 75 and be categorized as Red.
22.	6	Ceramics and Refractories	-	-	-	20	-	20	-	50	R-O	i. Mainly air polluting industry. ii. This score is for the units having coal consumption < than 12 MT/day. iii. For the units having coal consumption > 12 MT /day, the normalized air pollution score will be 62.5 and shall be categorized as Red.

23.	11	Coal washeries	15	10	25	15	-	15	-	50	R-O	i. Wet washeries are mainly water polluting industry generating effluents which are having inorganic SS & TDS. Additionally, air pollution due to PM emissions is also generated. ii. Water & air pollution scores are jointly normalized to 100.
24.	16	Dairy and dairy products (small scale)	20	--	20	20	--	20	--	50	O-O	Water and air polluting both.
25.	18	DG set of capacity >1MVA but < 5MVA	--	--	--	20	--	20	--	50	O-O	Mainly air polluting . air pollution score is normalized to 100.
26.	17	Dry coal processing, mineral processing, industries involving ore sintering, pelletisating, grinding & pulverization	-	-	-	20	-	20	-	50	R-O	Mainly air polluting industry. Final score is the normalized air pollution score.
27.	19	Fermentation industry including manufacture of yeast, beer, distillation of alcohol (Extra Neutral Alcohol)	20	-	20	-	-	-	-	50	R-O	i. Mainly water polluting industry. This is the normalized water pollution score for units having discharge < 100 KLD. ii. For the units having discharge > 100 KLD, the normalized water pollution score will be 75 and shall be accordingly categorized as Red.
28.	21	Ferrous and Non- ferrous metal extraction involving different furnaces through melting, refining, re-processing, casting and alloy-making	-	-	-	15	5	20	10	50	R-O	i. Mainly air polluting. ii. This score is applicable to secondary production of ferrous & non-ferrous metals (excluding lead) up-to 1 MT/hour production.

												iii. For lead, the normalized air pollution score will be = (100*25)/40= 62.5 and is categorized as Red. iv. For Induction Furnace clubbed with AOD furnace – separate calculation shall be made based on the capacity of the furnaces. In such industries, the molten metal from induction furnace is transferred to AOD furnace where other metals like manganese and nickel are added to get the metal of desired constituents. The lime and silicon are also added for reduction of the metal oxides to the base metal. the normalized air pollution score will be = (100*25)/40= 62.5 and is categorized as Red.
29.	26	Fertilizer (granulation / formulation / blending only)	--	--	--	20	--	20	--	50	O-O	Air polluting.
30.	27	Fish feed, poultry feed and cattle feed	--	--	--	20	--	20	--	50	O-O	Obnoxious odour , H2S etc. AP score is normalized to 100
31.	28	Fish processing and packing (excluding chilling of fishes)	20	--	20	--	--	--	--	50	O-O	Mainly water polluting. WP score is normalized to 100.

32.	31	Forging of ferrous and non- ferrous metals (using oil and gas fired furnaces)	--	--	--	20	--	20	--	50	O-O	Heating furnace. Mainly air polluting.
33.	32	Formulation/pelletization of camphor tablets, naphthalene balls from camphor/ naphthalene powders.	--	--	--	20	--	20	--	50	O-O	Mainly air polluting. Emissions of Benzene, HC are expected.
34.	33	Glass ceramics, earthen potteries and tile manufacturing using oil and gas fired kilns, coating on glasses using cerium fluorides and magnesium fluoride etc.	--	--	--	20	--	20	--	50	O-O	Mainly air polluting. Emissions of SO2 are expected.
35.	35	Gravure printing, digital printing on flex, vinyl	20	--	20	20	--	20	10	50	O-O	Waste waters , emissions of VOCs
36.	36	Heat treatment using oil fired furnace (without cyaniding)	--	--	--	20	--	20	--	50	O-O	Mainly air polluting and noise generating. AP Score is normalized to 100.
37.	28	Hot mix plants	-	-	-	20	-	20	-	50	R-O	Mainly air polluting. Air pollution scores are normalized to 100.
38.	37	Hotels (< 3 star) or hotels having > 20 rooms and less than 100 rooms.	20	--	20	20	--	20	--	50	O-O	Mainly water polluting. WP score is normalized to 100.
39.	38	Ice cream	20	--	20	20	--	20	--	50	O-O	Wash-water and boilers / oven for pasteurization.
40.	34	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H& TBM) rules, 2008 - Items namely - Paint and ink Sludge/residues	-	-	-	20	0	20	0	50	R-O	Mainly air polluting. Air pollution score is normalized to 100
41.	34	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H& TBM) rules, 2008 - Items namely - Brass Dross ,, Copper Dross,, Copper Oxide Mill Scale,, Copper Reverts, Cake & Residues,, Waste Copper and copper alloys in	10	-	10	20	-	20	10	50	R-O	Mainly air polluting.

		dispersible form,, Slags from copper processing for further processing or refining „ Insulated Copper Wire,, Scrap/copper with PVC sheathing including ISRI-code material namely "Druid" „ Jelly filled Copper cables „ Zinc Dross-Hot dip Galvanizers SLAB,, Zinc Dross-Bottom Dross,, Zinc ash/Skimming arising from galvanizing and die casting operations,, Zinc ash/Skimming/other zinc bearing wastes arising from smelting and refining,, Zinc ash and residues including zinc alloy residues in dispersible from ,,										
42.	35	Industry or processes involving foundry operations	-	-	-	20	-	20	-	50	R-O	i. This score is valid for the foundries having capacity < 5 MT/hr as such units require the coal/coke @ < 500 kg/hr. ii. The units having capacity of 5 MT/hr and more, the coal/coke consumption will be more than 500 kg/hr and the normalized score will be 62.5 and classified accordingly as Red.
43.	40	Lime manufacturing (using lime kiln)	-	-	-	20	-	20	-	50	R-O	Mainly air polluting
44.	41	Liquid floor cleaner, black phenyl, liquid soap, glycerol mono-stearate manufacturing	20	--	20	20	--	20	--	50	O-O	Both air and water pollution are generated.

45.	42	Manufacturing of glass	10	-	-	20	-	20	-	50	R-O	i. Mainly air polluting (melting at 1500ºC and refining . ii. In case of lead glass , the score of A1 will be 25 and accordingly the normalized scores will be 62.5 i.e. Red .
46.	43	Manufacturing of iodized salt from crude/ raw salt	12	--	12	20	--	20	--	50	O-O	Boiling in Evaporators (multiple effect evaporators), centrifuging, iodization with KIO3 mixing . Mainly air polluting. Air pollution score is normalized to 100.
47.	42	Manufacturing of mirror from sheet glass	--	--	--	20	--	20	--	50	O-O	Evaporator & furnace for heating the metal to be applied as reflector on mirror. Mainly air polluting.
48.	44	Manufacturing of mosquito repellent coil	--	--	--	20	--	20	--	50	O-O	Mainly air polluting. Toxic fumes are expected.
49.	46	Manufacturing of Starch/Sago	25	-	25	15	-	15	-	50	R-O	i. Water and air polluting industry. Boiler is used for steam generation. ii. Water & air pollution scores are normalized to 100
50.	46	Mechanized laundry using oil fired boiler	20	--	20	20	--	20	--	50	O-O	Both air and water pollution are generated.
51.	47	Modular wooden furniture from particle board, MDF< swan timber etc, Ceiling tiles/ partition board from saw dust, wood chips etc., and other agricultural waste using synthetic adhesive resin, wooden box making (With boiler)	--	--	--	20	--	20	--	50	O-O	1. Mainly air polluting. Boiler as well as VOCs from use of adhesives. 2. Without boiler, it will be a Green category industry.
52.	50	New highway construction project	-	-	-	20	-	20	-	50	R-O	Mainly air polluting project.

53.	51	Non-alcoholic beverages(soft drink) & bottling of alcohol/non alcoholic products	20	-	20	15	5	20	-	50	R-O	i. Both air and water polluting. Score is normalized with air & water pollution. This score is valid for industries having waste-water generation < 100 KLD. ii. For the units having waste-water generation > 100 KLD the , normalized score would be 62.5 and categorized as Red.
54.	49	Paint blending and mixing (Ball mill)	20	--	20	20	--	20	10	50	O-O	Both air and water pollution are generated.
55.	62	Paints and varnishes (mixing and blending)	20	0	0	20	0	20	0	50	**G-O**	Waste-waters as well as fumes of VOCs due to solvents, pigments, varnishes.
56.	51	Ply-board manufacturing(including Veneer and laminate) with oil fired boiler/ thermic fluid heater(without resin plant)	0	--	0	20	--	20	--	50	O-O	Mainly air polluting because of use of boiler. AP score is normalized to 100
57.	52	Potable alcohol (IMFL) by blending, bottling of alcohol products	20	--	20	--	--	--	--	50	O-O	Mainly water polluting. WP score is normalized to 100.
58.	54	Printing ink manufacturing	20	--	20	20	--	20	--	50	O-O	1. Pigments, binders and solvents are used. 2. Boiler is also used. 3. Emissions of VOCs take place.
59.	70	Printing press	20	0	20	20	0	20	0	50	**G-O**	Colored waste-waters containing dyes and VOC emissions are generated.
60.	59	Reprocessing of waste plastic including PVC	20	--	20	20	--	20	--	50	O-O	Large quantities of wash-water and fugitive emissions are generated.
61.	61	Rolling mill (oil or coal fired) and cold rolling mill	10	--	10	20	--	20	--	50	O-O	Mainly air polluting. Air pollution score is normalized to 100. Others - cooling water and recyclable waste oils etc. are generated.
62.	67	Spray painting, paint baking, paint shipping	--	--	--	20	--	20	10	50	O-O	Mainly air polluting. Emissions of VOCs and HC are generated.

63.	72	Steel and steel products using various furnaces like blast furnace /open hearth furnace/induction furnace/arc furnace/submerged arc furnace /basic oxygen furnace /hot rolling reheated furnace	10	-	10	20	-	20	10	50	R-O	i. Mainly air polluting. In the emissions, oxides of manganese, nickel etc. are also present. ii. Air pollution score is normalized to 100.
64.	73	Stone crushers	-	-	-	20	-	20	-	50	R-O	Mainly air polluting. Air pollution score is normalized to 100.
65.	75	Surgical and medical products including prophylactics and latex	20	-	20	20	-	20	-	50	R-O	Both air as well as water polluting. Air and water pollution scores are normalized to 100.
66.	85	Tephlon based products	0	0	0	20	0	20	0	50	**G-O**	Due to spraying applications, emissions (HC) are generated
67.	70	Thermocol manufacturing (with boiler)	--	--	--	20	--	20	--	50	O-O	Polystyrene is heated. Mainly air polluting with boiler.
68.	82	Tobacco products including cigarettes and tobacco/opium processes	20	-	20	20	-	20	-	50	R-O	Such industries generate both air as well as water pollution. These scores are normalized to 100.
69.	72	Transformer repairing/ manufacturing (dry process only)	--	--	--	20	--	20	10	50	O-O	Mainly air polluting because of ovens, shot-blasting etc.
70.	73	Tyres and tubes vulcanization/ hot retreating	10	--	10	20	--	20	--	50	O-O	Mainly air polluting . Emissions of PM, VOCs and obnoxious odour are generated.
71.	83	Vegetable oil manufacturing including solvent extraction and refinery /hydrogenated oils	20	-	20	15	5	20	10	50	R-O	i. All sorts of pollution are generated. ii. This score is valid for plants having waste-water generation < 100 KLD. iii. If the waste-water generation is more than 100 KLD, the unit shall be classified as Red.
72.	74	Wire drawing and wire netting	20	--	20	--	--	--	--	50	O-O	Mainly water polluting. WP score is normalized to 100.

73.	21	Dry cell battery (excluding manufacturing of electrodes) and assembling & charging of acid lead battery on micro scale	30	--	30	15	--	15	10	55	O-O	Water and air polluting both.
74.	50	Pharmaceutical formulation and for R & D purpose (For sustained release/ extended release of drugs only and not for commercial purpose)	20	--	20	20	--	20	15	55	O-O	i. All sorts of pollution are generated. ii. R&D activities are to be shifted to Red category.
75.	78	Synthetic resins	20	-	20	20	-	20	15	55	R-O	All sorts of pollution are generated.
76.	79	Synthetic rubber excluding molding	20	-	20	20	-	20	15	55	R-O	i. Most synthetic rubber is created from two materials, styrene and butadiene. Both are currently obtained from petroleum. ii. Process is similar to a part of Petrochemical plants.
77.	9	Cashew nut processing	25	--	25	20	--	20	--	56	O-O	Normal water and air polluting.
78.	12	Coffee seed processing	25	--	25	20	--	20	--	56	O-O	Normal water & air polluting industry.
79.	57	Parboiled Rice Mills	25	-	25	20	-	20	-	56	R-O	i. Rice Mills are generating both air and water pollution. Waste-waters are having high strength in respect of BOD. ii. This is the normalized air & water pollution score for units having waste-water generation < 100 KLD and fuel consumption less than 12 MTD. iii. For units having waste-water generation > 100 KLD or fuel consumption > 12 MTD or both , the unit shall be classified as Red.

80.	29	Foam manufacturing	--	--	--	20	--	20	15	58	O-O	i. Raw material is polyurethane, latex etc. ii. Emissions of VOCs and HAPs. CH3Cl2 and similar compounds as blowing agents. iii. Outdated raw materials and spoiled slots are discarded as HW.
81.	34	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H& TBM) rules, 2008 - Items namely - Used Oil – As per specifications prescribed from time to time.	10	0	10	20	0	20	15	58.33	R-O	Mainly air polluting and hazardous waste generating industry. Air pollution & HW scores are normalized to 100
82.	34	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H& TBM) rules, 2008 - Items namely - Waste Oil ---As per specifications prescribed from time to time.	-	-	-	20	0	20	15	58.33	R-O	Mainly air polluting and hazardous waste generating industry. Air pollution & HW scores are normalized to 100.
83.	56	Producer gas plant using conventional up drift coal gasification (linked to rolling mills glass and ceramic industry refectories for dedicated fuel supply)	--	--	--	20	--	20	15	58.33	O-O	Mainly air polluting & tar (HW) generating. SO2, CO, NOx are generated. Tar is the by-product and utilized by other industries in co-processing.

Note :

i. Under the column Revised Category, the full forms of the abbreviations are as follows :

a. R-R means original category was Red and revised category is also Red
b. R-O means original category was Red and revised category is Orange
c. O-O means original category was Orange and revised category is also Orange
d. O-G means original category was Orange and revised category is Green
e. O-W means original category was Orange and revised category is White
f. G-O means original category was Green and revised category is Orange
g. G-G means original category was Green and revised category is also Green
h. G-W means original category was Green and revised category is White

ii. *There are specific remarks in respect of some of the industrial sectors. These sectors are either merged with other relevant sectors or deleted due to duplication / vague category. The overall details are as follows:*

Sl No.	Original Sl No.	Industry Sector	Original Category	Remarks
1	24	Excavation of sand from the river bed (excluding manual excavation)	O	Since such types of activities cause ecological disturbances, the instructions issued by the government from time to time be followed. To be categorized by MoEF&CC.
2	39	Infrastructure Development Project	O	Vast variety of such projects come under such category. This is to be decided by the concerned SPCB in line of EIA Notification, 2006.
3	53	Power press	O	Very vague term hence deleted. Such types of general engineering units have already been covered.

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Table G-4 : Final List of Green Category of Industrial Sectors

Sl. No.	Orgnl Sl. No.	**Industry Sector**	W1	W2	W	A1	A2	A	H	W+A+H	Revised Category	Remarks
1.	2	Aluminium utensils from aluminium circles by pressing only (dry mechanical operation)	--	--	--	10	--	10	--	25	**G-G**	Minor air pollution due to some fugitive PM emissions from buffing operations.
2.	6	Ayurvedic and homeopathic medicines (without boiler)	10	--	10	--	--	--	--	25	**G-G**	Small quantities of waste-waters are generated from washing operations.
3.	8	Bakery /confectionery /sweets products (with production capacity <1tpd (with gas or electrical oven)	10	--	10	--	--	--	--	25	**G-G**	Small quantities of waste-waters are generated from washing operations.
4.	6	Bi-axially oriented PP film along with metalizing operations	10	--	10	--	--	--	--	25	**O-G**	Mainly extrusion process involving Cooling water recirculation
5.	10	Biomass briquettes (sun drying) without using toxic hazardous wastes	--	--	--	10	--	10	--	25	**G-G**	Minor air pollution due to some fugitive PM emissions from pulverization / mixing operations.
6.	13	Blending of melamine resins & different powder, additives by physical mixing	--	--	--	10	--	10	--	25	**G-G**	Minor air pollution due to some fugitive PM emissions from pulverization / mixing operations.
7.	15	Brass and bell metal utensils manufacturing from circles(dry mechanical operation without re-rolling facility)	--	--	--	10	--	10	--	25	**G-G**	Minor air pollution due to some fugitive PM emissions from buffing operations.
8.	16	Candy	10	--	10	10	--	10	--	25	**G-G**	Small quantities of waste-water and minor

												PM emissions are generated.
9.	17	Cardboard or corrugated box and paper products (excluding paper or pulp manufacturing and without using boilers)	--	--	--	10	--	10	--	25	**G-G**	This score is valid with Small gas / electricity operated oven / furnace for making glue.
10.	18	Carpentry & wooden furniture manufacturing (excluding saw mill) with the help of electrical (motorized) machines such as electrical wood planner, steel saw cutting circular blade, etc.	--	--	--	10	--	10	--	25	**G-G**	Minor air pollution due to some fugitive PM emissions from cutting operations.
11.	19	Cement products (without using asbestos / boiler / steam curing) like pipe ,pillar, jafri, well ring, block/tiles etc.(should be done in closed covered shed to control fugitive emissions)	--	--	--	10	--	10	--	25	**G-G**	Minor air pollution due to some fugitive PM emissions from mixing operations.
12.	20	Ceramic colour manufacturing by mixing & blending only (not using boiler and wastewater recycling process)	--	--	--	10	--	10	--	25	**G-G**	Minor air pollution due to some fugitive PM emissions.
13.	11	Chilling plant, cold storage and ice making	10	--	10	--	--	--	--	25	**O-G**	Cooling water recirculation only.
14.	13	Coke briquetting (sun drying)	--	--	--	10	--	10	--	25	**O-G**	Mainly air polluting industry. Sources of air pollution (PM) are pulverizes and mixers. Air pollution score is normalized to 100.
15.	28	Cotton spinning and weaving (small scale)	--	--	--	10	--	10	--	25	**G-G**	Minor PM emissions from spinning process.
16.	17	Dal Mills	--	--	--	10	--	10	--	25	**O-G**	Some fugitive emissions of PM.

17.	29	Decoration of ceramic cups and plates by electric furnace	--	--	--	10	--	10	--	25	**G-G**	Fumes of enamels. Minor air pollution.
18.	19	Digital printing on PVC clothes	--	--	--	10	--	10	--	25	**O-G**	Minor emissions / odour generations are expected.
19.	25	Facility of handling, storage and transportation of food grains in bulk	--	--	--	10	--	10	--	25	**O-G**	Some fugitive emissions of PM during handling of grains.
20.	36	Flour mills (dry process)	--	--	--	10	--	10	--	25	**G-G**	Fugitive dust emissions.
21.	41	Glass , ceramic, earthen potteries, tile and tile manufacturing using electrical kiln or not involving fossil fuel kiln	--	--	--	10	--	10	--	25	**G-G**	Minor fugitive emissions only.
22.	34	Glue from starch (physical mixing) with gas / electrically operated oven /boiler.	--	--	--	10	--	10	--	25	**O-G**	Some fugitive emissions of PM during mixing of raw materials.
23.	42	Gold and silver smithy (purification with acid smelting operation and sulphuric acid polishing operation) (using less or equal to 1 litre of sulphuric acid/ nitric acid per month)	--	--	--	10	--	10	--	25	**G-G**	Minor fumes from cleaning process.
24.	36	Heat treatment with any of the new technology like ultrasound probe , induction hardening , ionization beam, gas carburizing etc.	10	--	10	10	--	10	--	25	**O-G**	• Cooling waters and minor heat fumes. • Finalization of categorization subject to field verification.
25.	46	Insulation and other coated papers (excluding paper or pipe manufacturing)	--	--	--	10	--	10	--	25	**G-G**	Minor fumes due to application of poly-urethane
26.	49	Leather foot wear and leather products (excluding tanning and hide processing except cottage scale)	--	--	--	10	--	10	--	25	**G-G**	Minor fumes due to use of adhesives / gums.

27.	50	Lubricating oil, greases or petroleum based products (only blending at normal temperature)	--	--	--	10	--	10	--	25	**G-G**	Minor fumes at the time of transfers from one container to other.
28.	54	Manufacturing of pasted veneers using gas fired boiler or thermic fluid heater and by sun drying	--	--	--	10	--	10	--	25	**G-G**	1. Minor fumes due to application of gums / adhesives / pastes etc. 2. This score is valid only for gas fired boiler.3. The units having coal fired boilers shall be categorized as Orange.
29.	59	Oil mill Ghani and extraction (no hydrogenation / refining)	10	--	10	--	--	--	--	25	**G-G**	Small quantities of floor washings & equipments washings are generated.
30.	48	Packing materials manufacturing from non asbestos fibre, vegetable fibre yarn	--	--	--	10	--	10	--	25	**O-G**	Some fugitive emissions of PM are expected.
31.	65	Phenyl/toilet cleaner formulation and bottling	--	--	--	10	--	10	--	25	**G-G**	Minor fumes of VOCs in the work zone
32.	67	Polythene and plastic processed products manufacturing (virgin plastic)	10	--	10	10	--	10	--	25	**G-G**	Cooling water & emissions due to mixing of raw materials.
33.	68	Poultry, Hatchery and Piggery	--	--	--	10	--	10	--	25	**G-G**	Obnoxious odour containing H_2S, CH_4 etc. and fugitive PM emissions
34.	69	Power looms (without dye and bleaching)	--	--	--	10	--	10	--	25	**G-G**	Minor emissions of PM.
35.	71	Puffed rice (muri) (using gas or electrical heating system)	--	--	--	10	--	10	--	25	**G-G**	Minor emissions of PM.
36.	57	Pulverization of bamboo and scrap wood	--	--	--	10	--	10	--	25	**O-G**	Some fugitive emissions of PM are expected.
37.	72	Ready mix cement concrete	--	--	--	10	--	10	--	25	**G-G**	PM emissions.
38.	73	Reprocessing of waste cotton	--	--	--	10	--	10	--	25	**G-G**	PM emissions.
39.	60	Rice mill (Rice hullers only)	--	--	--	10	--	10	--	25	**O-G**	PM emissions are generated. Mainly air

												polluting. AP score is normalized to 100
40.	62	Rolling mill (gas fired) and cold rolling mill	10	--	10	10	--	10	--	25	**O-G**	Mainly air polluting. AP score is normalized to 100
41.	75	Rubber goods industry (with gas operated baby boiler)	--	--	--	10	--	10	--	25	**G-G**	Some PM emissions and obnoxious odour.
42.	63	Saw mills	--	--	--	10	--	10	--	25	**O-G**	Mainly air polluting. PM and noise are generated.
43.	77	Soap manufacturing (hand made without steam boiling / boiler)	10	--	10	--	--	--	--	25	**G-G**	Small quantities of waste-water are generated.
44.	80	Spice grinding (upto-20 HP motor)	--	--	--	10	--	10	--	25	**G-G**	Small quantities of fugitive emissions of raw materials.
45.	66	Spice grinding (>20 hp motor)	--	--	--	10	--	10	--	25	**O-G**	Mainly air polluting. Fugitive emissions of PM.
46.	81	Steel furniture without spray painting	--	--	--	10	--	10	--	25	**G-G**	Obnoxious gases from welding as well as noise pollution.
47.	82	Steeping and processing of grains	10	--	10	--	--	--	--	25	**G-G**	Washing waters are generated.
48.	86	Tyres and tube retreating (without boilers)	--	--	--	10	--	10	--	25	**G-G**	Due to applications of binding gum / adhesives / cement, some obnoxious fumes may generate.
49.	22	Chilling plant and ice making without using ammonia	12	--	12	--	--	--	--	30	**G-G**	Cooling water and brine water circuits. Spillages / blow down may take place
50.	26	CO2 recovery	12	--	12	--	--	--	--	30	**G-G**	Normal water pollution from scrubbing action
51.	32	Distilled water (without boiler) with electricity as source of heat	12	--	12	--	--	--	--	30	**G-G**	TDS as distillation residues

52.	45	Hotels (up to 20 rooms and without boilers)	12	--	12	--	--	--	--	30	**G-G**	This score is valid for hotels having overall waste-water generation less than 10 KLD.
53.	53	Manufacturing of optical lenses (using electrical furnace)	12	--	12	--	--	--	--	30	**G-G**	Small quantities of waste-waters containing TDS, SS are generated.
54.	58	Mineralized water	12	--	12	--	--	--	--	30	**G-G**	RO Rejects.
55.	68	Tamarind powder manufacturing	12	--	12	15	--	15	--	33.75	O-G	• Dried tamarind fruits - cleaned and after soaking them in water they are boiled in steam jacketed kettle for about 40-45 minutes. Then pulp is extracted in pulper and dried in drum type drier and on cooling, the final product is packed. • Generates small quantities of waste waters and air emissions. Joint score is normalized to 100.
56.	15	Cutting, sizing and polishing of marble stone	15	--	15	--	--	--	--	37.5	O-G	Mainly water polluting . Water pollution score is normalized to 100.
57.	22	Emery powder (fine dust of sand) manufacturing	--	--	--	15	--	15	--	37.5	O-G	Air polluting. PM emissions take place during various stages of grindings of naturally occurring minerals.
58.	25	Flyash export, transport & disposal facilities	-	-	-	15	-	15	-	37.5	R-G	• This is mainly air polluting activity. • This is the normalized score based on air pollution.
59.	48	Mineral stack yard / Railway sidings	15	-	15	15	-	15	-	37.5	R-G	• Mainly air pollution due to loading, unloading, storage and transportation of the minerals.

												• Waste-water generation mainly during rains only.
60.	54	Oil and gas transportation pipeline	-	-	-	10	5	15	-	37.5	R-G	• Contains small gas based power plants up-to 5 MWs. • Air pollution score is normalized to 100. • In case , if these power plants are bigger / liquid fuel / oil based, scores will be calculated accordingly.
61.	64	Seasoning of wood in steam heated chamber	--	--	--	15	--	15	--	37.5	O-G	Air pollution due to use boiler for supply of steam. Air pollution score is normalized to 100.
62.	84	Synthetic detergent formulation	--	--	--	15	--	15	--	37.5	**G-G**	• This score is valid for the industries which are not manufacturing LABSA. It is procured from outside. • Small quantities of emissions are generated from mini boiler. • Air pollution score is normalized to 100.
63.	69	Tea processing (with boiler)	--	--	--	15	--	15	--	37.5	O-G	With boiler, it is an orange category industry. Without boiler, it will be green category industry.

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Note :

i. *Under the column Revised Category, the full forms of the abbreviations are as follows :*
   a. *R-R means original category was Red and revised category is also Red*
   b. *R-O means original category was Red and revised category is Orange*
   c. *O-O means original category was Orange and revised category is also Orange*
   d. *O-G means original category was Orange and revised category is Green*
   e. *O-W means original category was Orange and revised category is White*
   f. *G-O means original category was Green and revised category is Orange*
   g. *G-G means original category was Green and revised category is also Green*
   h. *G-W means original category was Green and revised category is White*

ii. *There are specific remarks in respect of some of the industrial sectors. These sectors are either merged with other relevant sectors or deleted due to duplication. The overall details are as follows :*

Sl No.	Original Sl No.	Industry Sector	Original Category	Remarks
1	47	Jobbing and Machining	G	Vague category to be deleted, as such activities have already been covered in other categories.
2	66	Reel manufacturing	G	Already covered in other categories. Hence, deleted
3	1	Assembling of acid lead batteries (up to 10 batteries per day excluding lead plate casting)	G	Already covered in Orange category. Hence, deleted
4	5	Automobile fuel outlets (only dispensing)	G	Minor air pollution due to some fugitive emissions during fuel filling operations. May be exempted from the purview of Consent management.
5	30	Diesel generator sets (15 KVA to 1 MVA)	G	• Normal operation – 12 hrs a day. • Consumption of diesel = 1680 litres for 1 MVA DG set at full load @ 0.21 litres / KVA / hr. • Stand-alone DG Sets having total capacity 1 MVA or less and equipped with acoustic enclosures alongwith adequate stack height may be exempted from the purview of Consent management. Higher capacity DG sets have already been covered under Red / Orange categories .

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Table G-5: Final List of White Category of Industries

Sl. No.	Orgnl Sl. No.	**Industry Sector**	W1	W2	W	A1	A2	A	H	W+A+H	Revised Category
1.	3	Assembly of air coolers /conditioners ,repairing and servicing	--	--	--	--	--	--	--	--	**G-W**
2.	4	Assembly of bicycles ,baby carriages and other small non motorizing vehicles	--	--	--	--	--	--	--	--	**G-W**
3.	7	Bailing (hydraulic press)of waste papers	--	--	--	--	--	--	--	--	**G-W**
4.	9	Bio fertilizer and bio-pesticides without using inorganic chemicals	--	--	--	--	--	--	--	--	**G-W**
5.	11	Biscuits trays etc from rolled PVC sheet (using automatic vacuum forming machines)	--	--	--	--	--	--	--	--	**G-W**
6.	12	Blending and packing of tea	--	--	--	--	--	--	--	--	**G-W**
7.	14	Block making of printing without foundry (excluding wooden block making)	--	--	--	--	--	--	--	--	**G-W**
8.	21	Chalk making from plaster of Paris (only casting without boilers etc. (sun drying / electrical oven)	--	--	--	--	--	--	--	--	**G-W**
9.	25	Compressed oxygen gas from crude liquid oxygen (without use of any solvents and by maintaining pressure & temperature only for separation of other gases)	--	--	--	--	--	--	--	--	**G-W**
10.	27	Cotton and woolen hosiers making (Dry process only without any dying / washing operation)	--	--	--	--	--	--	--	--	**G-W**
11.	31	Diesel pump repairing and servicing (complete mechanical dry process)	--	--	--	--	--	--	--	--	**G-W**
12.	33	Electric lamp (bulb) and CFL manufacturing by assembling only	--	--	--	--	--	--	--	--	**G-W**

13.	34	Electrical and electronic item assembling (completely dry process)	--	--	--	--	--	--	--	--	G-W
14.	23	Engineering and fabrication units (dry process without any heat treatment / metal surface finishing operations / painting)	--	--	--	--	--	--	--	--	O-W
15.	35	Flavoured betel nuts production/ grinding (completely dry mechanical operations)	--	--	--	--	--	--	--	--	G-W
16.	37	Fly ash bricks/ block manufacturing	--	--	--	--	--	--	--	--	G-W
17.	38	Fountain pen manufacturing by assembling only	--	--	--	--	--	--	--	--	G-W
18.	39	Glass ampules and vials making from glass tubes	--	--	--	--	--	--	--	--	G-W
19.	40	Glass putty and sealant (by mixing with machine only)	--	--	--	--	--	--	--	--	G-W
20.	43	Ground nut decorticating	--	--	--	--	--	--	--	--	G-W
21.	44	Handloom/ carpet weaving (without dying and bleaching operation)	--	--	--	--	--	--	--	--	G-W
22.	48	Leather cutting and stitching (more than 10 machine and using motor)	--	--	--	--	--	--	--	--	G-W
23.	51	Manufacturing of coir items from coconut husks	--	--	--	--	--	--	--	--	G-W
24.	52	Manufacturing of metal caps containers etc	--	--	--	--	--	--	--	--	G-W
25.	55	Manufacturing of shoe brush and wire brush	--	--	--	--	--	--	--	--	G-W
26.	57	Medical oxygen	--	--	--	--	--	--	--	--	G-W
27.	60	Organic and inorganic nutrients (by physical mixing)	--	--	--	--	--	--	--	--	G-W
28.	61	Organic manure (manual mixing)	--	--	--	--	--	--	--	--	G-W
29.	63	Packing of powdered milk	--	--	--	--	--	--	--	--	G-W
30.	64	Paper pins and u clips	--	--	--	--	--	--	--	--	G-W
31.	58	Repairing of electric motors and generators (dry mechanical process)	--	--	--	--	--	--	--	--	O-W
32.	74	Rope (plastic and cotton)	--	--	--	--	--	--	--	--	G-W

33.	76	Scientific and mathematical instrument manufacturing	--	--	--	--	--	--	--	--	**G-W**
34.	78	Solar module non conventional energy apparatus manufacturing unit	--	--	--	--	--	--	--	--	**G-W**
35.	79	Solar power generation through solar photovoltaic cell, wind power and mini hydel power (less than 25 MW)	--	--	--	--	--	--	--	--	**G-W**
36.	83	Surgical and medical products assembling only (not involving effluent / emission generating processes)	--	--	--	--	--	--	--	--	**G-W**

Note : Under the column Revised Category, the full forms of the abbreviations are as follows :

a. *R-R means original category was Red and revised category is also Red*
b. *R-O means original category was Red and revised category is Orange*
c. *O-O means original category was Orange and revised category is also Orange*
d. *O-G means original category was Orange and revised category is Green*
e. *O-W means original category was Orange and revised category is White*
f. *G-O means original category was Green and revised category is Orange*
g. *G-G means original category was Green and revised category is also Green*
h. *G-W means original category was Green and revised category is White*

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Annexure

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
(पर्यावरण एवं वन मंत्रालय, भारत सरकार)
(MINISTRY OF ENVIRONMENT & FORESTS, GOVT. OF INDIA)

No. B-29012/ESS/CPA/2015-16

19.08.2015

Sub: "Harmonization of Classification of industries under Red / Orange / Green / White Categories".

During the Conference of the Environment Ministers of States held in New Delhi during April 06-07, 2015, it was resolved to adopt pollution potential criteria for categorization of Red, Orange & Green categories of industries and that a Committee be constituted with State representatives. Further, in the 59th Conference of Chairmen & Member Secretaries of Pollution Control Boards/PCCs held in New Delhi on April 08, 2015, it was agreed to constitute a Committee to look into categorization system of industries based on their respective pollution potential index.

2. Accordingly, a Committee comprising the Chairmen of CPCB, APPCB, TNPCB, MPPCB, MPCB, PPCB, WBPCB and MS, CPCB was constituted vide CPCB OM dated 23.04.2015 to review & classify industrial sectors into different categories based on criteria of respective pollution potential indices.

3. The existing Red (85 sectors) , Orange (73 sectors) and Green (86 sectors) industrial sectors have been assessed as per the proposed formula by a group of Scientists from CPCB . For this purpose , concerned Engineers / Scientists from the Member SPCBs of the Committee were also involved & consulted during May28-29, 2015.

4. After careful examination and consideration of the suggestions of concerned stake-holders the "Draft Document on Revised Concept of Categorization of Industrial Sectors " is prepared by the Committee .

In this context, the Undersigned is directed to forward a copy of the " Draft Document on Revised Concept of Categorization of Industrial Sectors to all the SPCBs, PCCs and concerned Ministries for their comments. Accordingly, the same is enclosed herewith and all the SPCBs, PCCs and concerned Ministries are, hereby requested to provide their comments by 04.09.2015. The comments may kindly be sent through hard copy as well as soft copy at e-mail: nkgupta.cpcb@nic.in , nkgcpcb@hotmail.com .

Encl : As above

[N.K. Gupta]
Incharge - ESS

To:

1. All the State Pollution Control Boards / Pollution Control Committees
2. The Secretary, Ministry of Micro Small and Medium Enterprises, New Delhi
3. The Secretary, Ministry of Heavy Industries & Public Enterprises, New Delhi
4. The Advisor & Incharge , CP Division, MoEFCC, New Delhi
5. CPCB Website

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली–110032
'Parivesh Bhawan', East Arjun Nagar, Delhi - 110032
दूरभाष / Tel. : 43102030, फैक्स / Fax : 22305793, 22307078, 22307079, 22301932, 22304948
ई–मेल / e-mail :cpcb@nic.in वेबसाईट / Website : www.cpcb.nic.in

134016/2023/WM-I-HO

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Annexure-V

By Speed Post

F. No. B-31011-BMW (3398)-2023-WM-I 4933-68

October 10, 2023

To,

The Member Secretary,
All SPCB and PCC

Sub: Regarding methodology to conduct gap analysis with respect to generation and treatment of biomedical waste -reg.

Sir/Madam,

It is to inform that State Pollution Control Boards/Pollution Control Committees are required to conduct gap analysis with respect to generation and treatment of biomedical waste in respective State/UT. A format for conducting gap analysis is given in CPCB guidelines for Common Bio-medical Waste Treatment Facilities. Few State Boards have prepared gap analysis report adopting their own methodology. The matter was also discussed in Central Monitoring Committee meeting on 18.07.2023 wherein need for adopting uniform methodology was emphasised. Hence, to avoid the ambiguity and to adopt uniform procedure, CPCB has prepared a methodology to conduct gap analysis (Copy attached herewith for ready reference).

In view of above, it is requested to-kindly conduct gap analysis with respect to generation and treatment of biomedical waste in your State/UT using the aforesaid methodology and report may be submitted to CPCB within one month.

Yours faithfully,

(V. P. Yadav)
Director & Head
Waste Management -I Division

Encl. As above

Copy to:

i. PS to 'MS' : For kind information of 'MS' please

(V. P. Yadav)

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
निर्गत N Singh O/C
दिनांक 18/10/2023

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Methodology to Conduct gap analysis with respect to generation and treatment of biomedical waste

Guidelines for Common Biomedical Waste Treatment Facilities was prepared by CPCB with an aim to have uniformity in ensuring site selection, allowing and establishment of a state-of-the-art Common Biomedical Waste Treatment Facilities (CBWTFs), operation as well as verification of compliance to the BMWM Rules, 2016 throughout the country. As per the said guideline, SPCB/PCC is required to prepare an inventory or review with regard to the bio-medical waste generation at least once in five years in the coverage areas of the existing CBWTF and conduct gap analysis as per format given in Annexure-I of the guideline.

To avoid the ambiguity and maintaining the uniformity for conducting gap analysis a methodology is suggested for estimating generation, treatment of biomedical waste and its extrapolation in the State and coverage area of CBMWTF. It is elaborated in following table.

S. No.	Parameters	Details
1.	Coverage area of CBWTF	Up to 75 km
2.	No. of HCFs (Bedded and non-bedded)	In Number
3.	No. of Beds covered	In Number
4.	Total biomedical waste generation (in Kg/day)	The generation may be calculated considering following factors: a) Generation from Bedded hospital (in absence of availability of required information biomedical waste generation may be taken as 274 grams per bed) b) Biomedical waste generated from non-bedded HCFs and other sources also be considered
5.	Extrapolate the biomedical waste generation for next years	Extrapolation may be based on factors such as population growth of the districts/cities covered by CBWTF, Rate of increase in number of HCFs/beds in past years etc. as decided by SPCB in consultation with Health department and CBMWTF associations.
6.	Total existing treatment capacity (in Kg/day) (Sum of Incineration Capacity and Autoclave/Microwave/Hydroclave Capacity)	For calculation of existing treatment capacity, maintenance time may be considered for calculating operational hours of equipment as below: a) Operational Hours for static incinerator 20 hrs/day b) Operational hours for Rotary incinerator 22 hrs/day

		c) 18 cycle per day for autoclave The actual capacity may be considered as 90% of available capacity keeping 10% margin for diverted/extra waste etc.
7.	Total Biomedical Waste treated and disposed (Kg/day)	Sum of all categories of biomedical waste treated and disposal.
8.	Gap between total extrapolated biomedical waste generation (for next 10 years) and existing biomedical waste treatment capacity	Extrapolate the biomedical waste generation minus total existing treatment capacity

Based on the above data, the gap between existing treatment capacity and need of additional treatment capacity should be examined after carrying out gap analysis at coverage area/city level and State level.

***

Annexure-VI

Item Nos. 04 to 06 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 623/2024
WITH
Original Application No. 749/2024
WITH
Original Application No. 750/2024

Ajay Kumar Singh Applicant

Versus

State Level Environment Impact Assessment Authority Uttar Pradesh & Ors. Respondent(s)

Date of hearing: 06.08.2024

CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER

Applicant: Mr. Devashish Bharuka, Senior Advocate with Mr. Yash Mishra, Mr. Anuj Rathee, Mr. Anam Siddiqui & Ms. Swati Mishra, Advs.

ORDER

1. These original applications involve common issue.

2. Learned Counsel for the Applicant has referred to the revised guidelines for Common Biomedical Waste Treatment Facilities (CBWTF), Annexure A-7 and has referred to Clause 2 thereof relating to criteria for development of new Common Biomedical Waste Treatment and Diposal Facility for locality or region and has laid emphasis that no gap analysis has been conducted with reference to the coverage area of biomedical waste generation in the State of UP. He has submitted that in fact the requirement of sub-clause – (a) to (e) of Clause 2 have not been complied with in UP and also in respect of Project Proponents which provide as:

> ***"2. Criteria for development of a new Common Bio-medical Waste Treatment and Disposal Facility for a locality or region.***

a) *Prescribed authority under the BMWM Rules, 2016 [i.e., State Pollution Control Board (SPCB) in the respective State or Pollution Control Committee (PCC) in the respective Union Territory Administration] is required to prepare an inventory or review with regard to the bio-medical waste generation at least once in five years in the coverage areas of the existing bio-medical waste treatment and disposal facility. The prescribed authority is also required to extrapolate the coverage-area wise bio-medical waste generation for the next ten years.*

b) *SPCB/PCC is required to conduct gap analysis w.r.to coverage area of the bio-medical waste generation and also projected over a period of next ten years, adequacy of existing treatment capacity of the CBWTF in each coverage area of radius 75 KM, as given in* ***Annexure-I****.*

All the SPCBs and PCCs shall conduct the gap analysis and based on the gap analysis, action plan for development of new CBWTFs is required to be prepared and submitted to MoEF & CC & CPCB within six months' time. In case of States/UTs, where no CBWTF is available, in such a case, SPCB/PCC being prescribed authority under the BMWM Rules is required to submit the detailed proposal to MoEF & CC/MoH & FW through the respective State Government or UT Administration. Also, the option of forming association by the group of heath care facilities (HCFs) to develop their own CBWTF also be encouraged following these guideline. In case, any coverage area requires additional treatment capacity , in such a case, action may be initiated by the prescribed authority for allowing a new CBWTF in that locality without interfering the coverage area of the existing CBWTF and beds covered by the existing CBWTF.

c) *SPCB/PCC shall identify the coverage area, which require additional treatment facility and bring it to the notice of the concerned department in the business allocation of land assignment in the respective State Government or UT Administration. The department in the business allocation of land assignment shall be responsible for providing suitable site in the identified coverage area for setting up of a CBWTF, in consultation with the prescribed authority (i.e., SPCB/PCC), other stakeholders and in accordance with these guidelines issued by CPCB from time to time.*

d) *Alternately, a CBWTF may also be allowed to be established on a land procured by an entrepreneur in accordance with the location criteria suggested under these guidelines.*

e) *The SPCB/PCC or concerned department in the business allocation of land assignment in the respective State Government or UT Administration may seek expression of interest from the proponents for development of new CBWTF (s) in the identified coverage area. Upon allocation of site to the proponent, the proponent is required to take necessary approvals as required under the Environment (Protection) Act,*

1986 for development of the new CBWTF in accordance with these guidelines.

f) In the absence of expression of interest by any proponent, then SPCB/PCC shall insist health care facilities to form association and to develop its own CBWTF in line with these guidelines or to have captive treatment facilities for ensuring treatment and disposal of generated bio-medical waste as stipulated under the BMWM Rules, 2016.

g) In case of any regulatory action including closure of any existing CBWTF is inevitable, the respective SPCB/PCC may take action under the BMWM Rules including for making alternate arrangement to ensure safe disposal of the bio-medical waste generated from the member health care facilities of such default CBWTF through CBWTF located nearby.

h) In case of hilly areas considering the geography, only one CBWTF with adequate treatment capacity may be developed covering atleast two districts to cater treatment services to the HCFs located in the respective Districts. The selection and allocation of site etc., should be done as per the criteria suggested under these guidelines. The treatment charges to be prescribed by the respective SPCB/PCC in consultation with the State Advisory Committee."

3. He has further submitted that land has been allotted to the Respondents – Bio-medical Facilities in the industrial area just adjacent to the units such as flour mills, etc. which will have adverse health consequences. He has submitted that the requisite guidelines are required for separate allotment of land/setting up of these facilities.

4. In these original applications, the Applicant has also questioned the ECs which have been issued to the PPs on the ground that they have been issued in violation of the Guidelines Annexure-7. The plea of the Applicant is that the ECs are granted in the State of UP in complete violation of the norms in an arbitrary manner.

5. The OA's raise substantial issue relating to compliance of environmental norms.

6. Learned Senior Counsel for the Applicant has also submitted that such a situation is prevailing all over State of UP in respect of all the bio-medical facilities which have been set up after issuance of the revised guidelines within the industrial area.

7. Issue notice to the respondents. The Applicant is directed to serve the respondents and file affidavit of service atleast one week before the next date of hearing.

8. List on 18.11.2024.

Prakash Shrivastava, CP

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

August 06, 2024
Original Application No. 623/2024
With Original Application No. 749/2024
With Original Application No. 750/2024
DV