Addendum and substitution thereto in Draft Report on Classification of Sectors in to Red, Orange, Green, White and Blue Categories

NOTE:

1. During July 2023, CPCB has published "*Draft Report on Classification of Sectors in to Red, Orange, Green, and White Categories*" on its website for public comments (weblink: https://cpcb.nic.in/openpdffile.php?id=TmV3c0ZpbGVzLzEwMl8xNjkzODI1NzI0X21lZGlhcGhvdG8zMDI0MC5wZGY=). Last date of receiving comments was 30.09.2023. It is proposed to make few addendums in the said draft report. Accordingly, proposed addendum and substitution thereto in Section 6 and 9 of the said report is annexed herewith for ready reference.
2. Comments/Suggestions limited to the aforesaid Section 6 and 9 as annexed are invited from Stakeholders/Associations/SPCBs/PCCs/academia/ etc. including general public preferably through email- **ipc6.cpcb@gov.in**, with the subject title: "Comments on draft report on classification", and the same be reached to us not later than **11.08.2024.**

Central Pollution Control Board
(Ministry of Environment, Forest & Climate Change, GoI)
"Parivesh Bhawan", East Arjun Nagar
Delhi-110032

(July 2024)

ANNEXURE

Addendum in and substitution thereto in Draft Report on Classification of Sectors in to Red, Orange, Green, White and Blue Categories

(In continuation to the Draft Report on Classification of Industrial Sectors into Red, Orange, Green and White Categories: A Tool for Progressive Environmental Management- July 2023)

A. Substitution of 'Section-6: Types of sectors based on their activities' with following section as below:

6. Types of sectors considered for classification.

The revised methodology of classification will be applicable to all industries which may have potential for generation of environmental pollutants. As per the Section 2(j) of the Industrial Disputes Act, 1947, "Industry" means any business, trade, undertaking, manufacture, or calling of employers and includes any calling, service, employment, handicraft or industrial occupation or avocation of workman", however, based on type of operational activities, the industries are divided into following four sectors:

i. Industrial Sectors
ii. Essential Environmental Services (EES)
    a. EES for Industrial Waste
    b. EES for Domestic Waste (Blue Category Sector)
iii. Service/Infrastructure Development Sectors
iv. Others/Special Category Sectors

The sectors which are involved in production of goods, products, etc. are considered under "Industrial Sectors". The sectors covered under "Essential Environmental Services (EES)" are those facilities which are essential to control, abate and mitigate pollution generated from Domestic and Industrial activities. These services are essential facilities which are required to reduce pollution load on the environment, such as sewage treatment plants, common bio-medical waste treatment facilities, construction & demolition waste processing plants, etc. Essential Environmental Services Sectors are sub classified as "EES for industrial waste" and "EES for domestic waste (Blue category sectors which do not handle or generate infectious or hazardous

waste)". On the other hand, sectors which carry out service-related activities such as infrastructure projects, railways, airports, hospitals, etc. are covered under "Service/infrastructure development sectors".

"Other/special category sectors" include those projects which cannot be classified based on the scoring methodology of pollution index but require classification based on precautionary principle and considering the potential of ecological damage/ health and environment related risk, etc. Few such sectors are sand mining, hydel power plants, etc.

The revised methodology of classification, sub-categorises the main sector based on the usage of cleaner technology/cleaner production/cleaner fuel which has proven reduction in trade effluent generation, emissions, waste, etc., for better environmental management, resulting into overall reduction of pollution index compared to main sector. For example, if coffee seeds processing industries use eco-pulping technology, which generates less water pollution, the pollution index of the said sector gets reduced and category changes from orange to green. Similarly, variation in type/scale of activities in a particular sector is also considered for classification of sub-sectors.

6.1. Blue Category Projects- Essential Environmental Services for management of environmental pollution arising from domestic/household activities

Essential Environmental Services may be defined as those facilities which are essential to control, abate and mitigate pollution generated from Domestic and Industrial activities. Such Essential environment services for Industrial Activity includes CETP, CHWTSDF, Effluent conveying system etc. and essential environment services for domestic activities includes STP, MSW etc. Both the type of EES plays a vital role in Environment Management. However, during the treatment of waste, some EES generates/handle hazardous waste/infectious waste. The EES which do not generate Hazardous Waste and which otherwise have large littering potential can be categorised as Blue Category Projects. Further, there are past legal references wherein Hon'ble Apex court has also considered the importance and requirement of such Essential Environment services.

Human settlements whether located in rural/urban/eco-sensitive area generate sewage, solid waste, and C&D waste, which are required to be managed to prevent adverse impact on environment and human health. Basic environment management facilities are required to be set-up to manage such waste which includes STP, C&D waste processing facility, MSW management facility like

sanitary landfill, material recovery facility & waste processing units, bio-methanation, bio-composting, waste to energy, etc.

These facilities are basically essential environment services which play a vital role in protecting environment and human health. These facilities may also bring value addition by producing various by-products such as secondary raw material, compost, energy, etc. and promotes circular economy and sustainable development by converting waste into wealth. Moreover, these categories do not generate hazardous or infectious wastes.

As the role and importance of these facilities is different in nature as compared to other activities and industries in the sense that they are primarily set-up for prevention, control and abatement of soil, water and air pollution. It is more appropriate to have a separate colour category-Blue Category for essential environmental services facilizes related to environmental pollution arising from domestic/household activities. These activities are required to meet all the prescribed environmental norms/rules notified from time to time and the pollution index for such Essential Environmental Services (EES) shall continue to be calculated as per the formula and consent to operate will be governed based on the pollution index. However, the category of the EES will be termed “BLUE” and as an incentive for the essential services, additional 2 years validity for consent to operate (as per PI) will be provided. List of sectors under Essential Environmental Services is given in the **Table I**.

TABLE I: LIST OF ESSENTIAL ENVIRONMENTAL SERVICES

i. Essential Environmental Services for Industrial Waste

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks
1.0 COMMON EFFLUENT TREATMENT PLANT (CETP)															
1.1	CETP having MEE/spray drier	30	30	35	**95**	25	0	25	**50**	25	50	**75**	98.1	Red	
1.2	CETP (without having MEE/spray drier), Common MEE/common spray driers	25	30	30	**85**	0	0	0	**0**	25	30	**55**	89.1	Red	
1.3	Common Sewage-Effluent Treatment Plant (CSETP)	25	30	30	**85**	0	0	0	**0**	25	20	**45**	88.4	Red	
2.0	Effluent conveyance projects	20	30	35	**85**	0	0	0	**0**	25	10	**35**	87.6	Red	Such projects during O&M operation will generate deposited sludge, spillage etc. in addition regular operation of handling of effluent and its disposal.
3.0 COMMON HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITY															
3.1	Integrated facility (Secured landfill and incinerator)	35	30	15	**80**	25	25	15	**65**	30	70	**100**	100.0	Red	
3.2	Only secured landfill	35	30	15	**80**	0	25	0	**25**	25	70	**95**	97.6	Red	
3.3	Only incinerator	35	30	15	**80**	25	25	15	**65**	30	70	**100**	100.0	Red	
4.0 COMMON BIO-MEDICAL WASTE TREATMENT FACILITY (CBWTF)															
4.1	CBWTF	20	25	20	**65**	35	20	25	**80**	20	20	**40**	90.5	Red	
4.2	CBWTF using cleaner/gaseous fuel	20	25	20	**65**	35	20	10	**65**	20	20	**40**	83.4	Red	

ii. LIST OF BLUE CATEGORY PROJECTS- Essential Environmental Services for Domestic/Household Waste:

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks
1.0 MUNICIPAL SOLID WASTE MANAGEMENT FACILITY															
1.1	Municipal Solid Waste Management Facility (Sanitary landfill/ Integrated Sanitary landfill with material recycling facility/ refused derived fuel, etc.)	35	30	15	**80**	35	25	0	**60**	0	0	**0**	86.0	Blue	
1.2	Waste to energy power plants	0	15	30	**45**	35	25	35	**95**	10	50	**60**	97.6	Blue	
1.3	Bio-mining of legacy waste projects	35	30	25	**90**	35	25	0	**60**	0	0	**0**	93.0	Blue	
1.4	Municipal Solid Waste Bio-methanation plant (Quantity of MSW ≥ 5 TPD)	30	25	25	**80**	0	20	0	**20**	0	0	**0**	82.0	Blue	
1.5	Municipal Solid Waste Composting Facility (Quantity of MSW ≥ 5 TPD)	30	25	15	**70**	0	30	0	**30**	0	0	**0**	74.5	Blue	
1.6	Municipal Solid Waste Material Recovery Facility (Quantity of MSW ≥ 5 TPD)	20	25	15	**60**	0	30	0	**30**	0	0	**0**	66.0	Blue	
2.0	Construction and Demolition (C&D) Waste Processing Plants	10	0	15	**25**	25	25	0	**50**	0	0	**0**	56.3	Blue	Wastewater of high TDS of inorganic nature is generated.
3.0 SEWAGE TREATMENT PLANT															
3.1	Sewage Treatment Plant (5 MLD and above)	20	0	35	**55**	0	20	0	**20**	0	0	**0**	59.5	Blue	
3.2	Sewage Treatment Plant (less than 5 MLD)	20	0	25	**45**	0	20	0	**20**	0	0	**0**	50.5	Blue	

B. Insertion of new section after Section-8:

9. Incentives to unit in a sector for adopting measures resulting to better environmental performance

A methodology has been strategized to provide incentives to the unit in a sector which are dedicated to reduce environmental impacts from their operations/process. The objective can be achieved by 100% treatment and reuse of wastewater generated, having complete dependency on cleaner fuel alternatives (such as PNG, LPG, compressed biogas, propane, butane, electricity etc. for meeting energy requirement), implementation & achievements of targets of sector-specific charters of CPCB/SPCB for environmental management, and use of cleaner process/cleaner technology to eliminate generation of toxic/hazardous pollutants.

The units fulfilling the following eligibility criteria may submit their formal proposal to the concerned SPCB/PCC for consideration:

9.1 Eligibility Criteria

- The unit should have completed at least one year of completion of production/operations with demonstrated, verifiable steps and submitted audit report from institute of repute for considering the unit for the purpose by concerned SPCB/PCC. To facilitate verification, the unit must have properly maintained logbooks/bills for production, electricity consumption, fuel, water consumption, wastewater treatment and use of treated wastewater.

- The unit should be located in conforming area with applicable Environment Clearance, Consent to Establishment (CTE) and Consent to Operate (CTO) and hazardous/bio-medical waste authorization from SPCB/PCC.

- Unit should comply with all the norms/conditions stipulated under EC, CTO and Guidelines/Rules issued by CPCB.

- In case, unit using ground water resource, it should have valid permission/NOC and also required to install electronic flowmeter.

- No penalty or legal obligation is imposed/pending against unit for violation of environmental norms. Records for last 5 years may be verified. In case establishment period of the unit is less than 5 years, the past records since the start of production may be verified.

- Unit should not be involved in any sort of accident/incident resulting into emission /discharge into the environment. Records for last 5 years may be verified.
- Recycling facilities/recyclers meeting the Extended Producer Responsibility (EPR) targets for various waste, prescribed by CPCB from time to time.

All such units, interested in availing incentives are required to demonstrate and prove their initiatives to the Committee (to be constituted at the level of concerned SPCB/PCC), comprising of members as mentioned in **Table II**.

Table III: Structure of Committee to evaluate the request of units adopting measures resulting in better environmental performance

Sl. No.	Members	Role
1	Member Secretary, SPCB/PCC	Chairman
2	Subject expert from Indian Institute of Technologies (IITs) or National Institute of Technologies (NITs) or any other institute of repute.	Member
3	Expert from CSIR institute/laboratories, having expertise in industrial process and pollution control technologies/ environmental management	Member
4	Two senior officials of SPCB/PCC (Sr. Scientist/ Superintendent Engineer and above level)	Member

9.2. Evaluation Criteria

9.2.1. Evaluation Criteria for Industries, Service/Infrastructure facilities and Essential Environmental Services for Industries

The committee shall scrutinize the proposals based on the eligibility criteria. The basis of evaluation will be- (i) Measures taken for treatment and reuse of wastewater to reduce freshwater consumption, (ii) Use of alternative cleaner fuel to reduce emissions, and (iii) Use of cleaner technology/ cleaner production which results in reduction in pollution/hazardous waste generation. The unit is required to demonstrate the successful implementation of measures by annual submission of third-party audit report (through institute of repute) regarding performance of environmental management measures. The Committee members may also inspect unit, collect samples, and get it analysed, check logbooks, electricity/water bills, examine system feasibility

through mass-balances, ensure real-time submission of environment data to SPCB/PCC server, etc. The check and balances to examine the claims of the unit are summarized in **Table III.**

Table II: Checks and balances to assess the adequacy of environment management measures

Criteria	Checks and balances
I. Wastewater management	
Installation of wastewater recovery system resulting into treatment and 100% reuse of treated wastewater in industrial process.	• Unit must have adequate operational Effluent Treatment Plant (ETP). The freshwater requirement of the unit has shown proportionate reduction. • There should not be any flow/ponding of wastewater inside the premises or discharge outside from the premises. Further, there should not be any by-pass. • Electronic flowmeters and Pan-tilt-zoom (PTZ) camera should have been installed with connectivity for continuous transmission of data to SPCB/PCC and CPCB servers (as applicable). • Recirculation system should be clearly mapped and visible for inspection and flow meter should be installed at required locations with records. • Mass/water balance based on actual production need to be checked. The claim regarding reduction in freshwater consumption should have concurrency with the readings of flow meters, water bill, log-books, etc. • Treated wastewater should not be used for horticulture or agriculture purposes. • Sludge generated from treatment of wastewater should be managed properly.
II. Air pollution management	
100% fuel dependency on cleaner fuels, such as- Piped Natural Gas (PNG), Compressed Natural Gas (CNG), Liquefied Natural Gas (LNG) Liquefied Petroleum Gas (LPG), Compressed Biogas (CBG), propane, butane, etc.	• No other fuel (coal, pet-coke, furnace oil, etc.) should be stored/used in the unit premises. Diesel for Gensets (as an auxiliary power source) may be allowed. Preference may be given to the units using gas based Gensets. • Adequate facility for stack monitoring (port holes, zig-zag ladder etc.) should be available with provision of OCEMS (as applicable). • Use of upgraded air pollution control devices with higher efficiency for the reduction of emissions. • Adoption of cleaner technology, advanced pollution control systems etc. to control fugitive/emissions • Use of alternate cleaner raw material for generation of less pollution. • Use of renewable energy as an alternate to conventional fuel/power should be considered.

III. Waste Management	
The unit has adopted cleaner technology/ cleaner production which results in reduction in pollution/ hazardous waste generation	• Reduction in generation of pollution/waste due to adoption of cleaner technology/change in raw material etc. • Mass balance based on actual production need to be checked. There should be concurrency in generation of hazardous waste, utilization, disposal, etc. with respect to net reduction in generation.
IV. EPR Targets (for recycling facilities)	
Recycling units identified for EPR obligations and has fulfilled all requirement including Environmentally Sound Management Facility for recycling.	• Complying with the requirement of EPR obligation identified by CPCB from time to time.

9.3. Re-assessment of category of the unit taking measures for better environmental performance

The purpose of giving star category is to classify the unit in the sector as star performing units. The category of the unit may be re-assessed as detailed below:

a. For Industries, Service/Infrastructure facilities and Essential Environmental Services for Industries

The pollution index of the units in any sector which have proven reduction in trade effluent generation and/or air pollution management and/or waste management measures, can be calculated based on submission of same with the supporting documents for considering the modified score based on the same methodology. The revised cumulative pollution index (PI) will be calculated with modified air/water/waste scores as discussed in the methodology given in previous section. If revised, cumulative PI results to change in the category of unit in the sector, the nomenclature for revised category will be as per the **Table IV**.

Table IIII: Nomenclature for revised category

Change in category	Nomenclature of revised category
Red to Orange	Red*
Orange to Green	Orange*
Green to White	Green*

b. Essential Environmental Service Sectors for Domestic/Household Waste- Blue Category Sectors:

Units under Blue Category are required to reduce their PI score by 25%, by meeting evaluation criteria/check and balances, as mentioned in **Table III** to qualify for change in category to Blue*.

9.4 Incentives to the units for better environmental management

Units which have demonstrated the successful implementation of environmental management measures and verified by the Committee, shall be eligible for the incentives, as listed in the **Table V**.

Table V: Incentives to units for better environmental performance

Category	Incentives
Red*	• CTO may be granted for the validity of max. 10 years. • Prescribed random environmental surveillance inspection frequency may be once a year, considering the change in category.
Orange*	• CTO may be granted for the validity of max. 15 years. • Prescribed random environmental surveillance inspection frequency may be once in two years, considering the change in category.
Green*	• CTO may be granted for the validity of max. 20 years. • Prescribed random environmental surveillance inspection frequency may be once in four years, considering the change in category and given incentives twice the original category.
Blue*	• CTO may be granted with additional 3 years validity period. • Prescribed random environmental surveillance inspection frequency may be once in 3 months.

In case of non-compliance(s) observed in future, the State Board can remove the star status. In case of calculation of EC, the PI of original category shall be considered.

*****