Classification of Sectors into Red, Orange, Green, White and Blue Categories

(A tool for progressive environmental management)

Central Pollution Control Board

"Parivesh Bhawan", East Arjun Nagar

Delhi-110032

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तन्मय कुमार, भा.प्र.से.
अध्यक्ष

Tanmay Kumar, I. A. S.
Chairman

सत्यमेव जयते

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
CENTRAL POLLUTION CONTROL BOARD
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA

FOREWORD

The concept of classifying industries into different pollution categories originated in 1989 with the Doon Valley (Uttarakhand) Notification issued by Ministry of Environment and Forests. Subsequently the concept of pollution index was developed by Central Pollution Control Board (CPCB) during 2016 to classify the sectors into different category. The 2016 classification helped State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) in streamlining consent management, prioritizing regulatory oversight & environmental monitoring, taking decision related to siting of units, etc. However, necessity felt for refining the concept of calculating Pollution Index to overcome certain limitation and to bifurcate sub-sectors based on pollution load, scale of operation etc.

Accordingly, draft methodology was prepared and widely circulated for inputs/comments/suggestions by placing the same on CPCB website (public domain) as well as by inviting comments from MoEF&CC/SPCBs/PCCs. As of 11.08.2024, i.e. the extended date for receipt of suggestions, CPCB received 170 representations, comprising over 700 comments from PSUs, NGOs, industries, industrial associations, including feedback from SPCBs of Kerala, Nagaland, Tamil Nadu, Mizoram, West Bengal, Punjab and Lakshadweep. The report has been finalised after examining all the comments by a working committee.

The 2025 classification methodology bifurcates sub-sectors based on pollution load, scale of operation, production technology, and type of fuel used into Red, Orange, Green, White and Blue categories. Red indicates the highest pollution potential, requiring stringent regulatory oversight, while White signifies minimal or no pollution, with much reduced compliance burden of merely intimation to the concerned SPCBs/PCCs. **A new Blue Category has also been introduced to distinguish the Essential Environmental Services** required for management of environmental concerns arising from anthropogenic pollution due to domestic/household activities which otherwise will have large littering potential. Additional 2 years validity for consent to operate (as per Pollution Index) is prescribed for the blue category.

This report also outlines the implementation pathway, which includes guidelines for State Pollution Control Boards/Pollution Control Committees to follow and implement the new classification system. Earlier classified 257 sectors have now been bifurcated and classified into 403 sectors (including sub sectors) and additionally, 16 new sectors have been introduced. Thus, the revised classification of 273 key sectors comprising of total 419 sectors/sub-sectors are further classified into Red Category (125 nos.), Orange Category (137 nos.), Green Category (94 nos.), White Category (54 nos.) and Blue Category (9 nos.). Progression between red, orange and green categories for the industrial sectors is also incorporated based on the use of less polluting available processes and technologies.

The report also comprises provisions for individual units to adopt cleaner technologies and practices resulting in reduction of pollution load in any sector. Incentives, such as extended validity for Consent to Operate (CTO) and reduced inspection frequencies, are outlined to encourage continual improvement of environmental performance. The incentive mechanism allowing progression between categories will thereby promote Ease of Doing Business by extended consent validity and enhance duration between inspections, thereby leading to reduced compliance burden.

To sum up, this report aims to create a more transparent, consistent, and incentivized regulatory mechanism for better environment management, promoting sustainable industrial development and better governance. I hope the report will be useful to all concerned in the field of industrial pollution control in the country and would incentivise the industries to switch over to cleaner process and technology leading to reduced air, water and soil pollution and also encourage setting up of blue category industries.

I would like to place on record my sincere appreciation for the hard work and valuable contributions by the CPCB team comprising of Shri Amit R. Thakkar, Add. Director, Shri Saubhagya Dixit, Scientist D, and Dr. Anantha N. S., SSA under the guidance of Shri Bharat Kumar Sharma, Member Secretary. I would also like to extend my thanks to Dr. Prashant Gargava, former Member Secretary, Shri P. K. Gupta, former Director and Shri Ajay Aggarwal, former Director, for their contribution. I would also express gratitude to the Working Committee, CPCB, MoEF&CC, SPCBs/PCCs and others for their contributions in the preparation of this report.

(Tanmay Kumar)

'परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110 032, भारत
'Parivesh Bhawan, East Arjun Nagar, Delhi-110 032, India
Tel. +91-11-22307233, Tele Fax : +91-11-22304948, e-mail: ccb.cpcb@nic.in

CONTRIBUTORS

Overall Guidance

1. Shri Tanmay Kumar, IAS, Chairman, CPCB
2. Shri Bharat Kumar Sharma, Member Secretary, CPCB

Working Committee

1.	Shri B. Vinod Babu, Scientist 'F' and Div. Head, WM-II & IT, CPCB, Delhi	:	Chairman
2.	Shri V. P. Yadav Scientist 'F' and Div. Head, WM-I, CPCB, Delhi	:	Member
3.	Shri Dinabandhu Gauda, Scientist 'F' and Div. Head, IPC-I, CPCB, Delhi	:	Member
4.	Shri Nazimuddin, Scientist 'F' and Div. Head, IPC-II, CPCB, Delhi	:	Member
5.	Shri Kamlesh Singh, Scientist 'E' and Div. Head, IPC-III, CPCB, Delhi	:	Member
6.	Smt. Anamika Sagar, Scientist 'E' and Div. Head, IPC-IV & V, CPCB, Delhi	:	Member
7.	Shri P. K. Gupta, Scientist 'F' and Div. Head, IPC-VI & VII, CPCB, Delhi	:	Member
8.	Shri Amit Thakkar, Scientist 'E', IPC-VI & VII Division, CPCB, Delhi	:	Member Convenor

Report preparation, finalization and overall coordination

1. Shri P. K. Gupta, Former Scientist 'F', CPCB, Delhi
2. Shri Amit Thakkar, Scientist 'E', and Divisional Head, IPC-VI&VII, CPCB, Delhi
3. Shri Saubhagya Dixit, Scientist 'D', IPC-VI Division, CPCB, Delhi

Development of Online Calculator:

Dr. Anantha N. S., Senior Scientific Assistant, Regional Directorate, Bengaluru

EXECUTIVE SUMMARY

The concept of classification of industrial sectors into red, orange, and green categories based on the size of operations and consumption of resources was first introduced in 1989 for Doon Valley, Uttarakhand. This classification aimed to aid decisions regarding siting of industries. Over the period of time, this concept was extended nationwide to manage consents and establish norms for surveillance and inspection of industry. In 2012, to have uniformity in classification throughout the country, the Central Pollution Control Board (CPCB) issued a standardized list of 244 sectors, classified under red (85 sectors), orange (73 sectors) and green (86 sectors) categories.

In 2016, the Central Pollution Control Board (CPCB) developed a scoring methodology based on the Pollution Index (PI) to harmonize the criteria for categorizing industries. This PI was determined by evaluating water pollution, air pollution, and hazardous waste generation. Using this methodology, CPCB classified 257 industrial sectors into four categories: Red (63 sectors), Orange (91 sectors), Green (65 sectors), and White (38 sectors). The White category was introduced for sectors considered "practically non-polluting" during 2016. Additionally, State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) were authorized to categorize any new or left over sectors according to the CPCB's 2016 methodology.

Further, based on the experience gained over the years, the increased use of cleaner fuels like PNG and bio-CNG, adoption of cleaner technology resulting into reduced wastewater generation, normalisation approach & different formula for calculating PI etc. a need was felt to revisit the classification methodology of 2016 for several such identified areas for improvement. Separate scoring for trade effluent and sewage effluent was also required due to differing characteristics and treatment methods.

Considering the scope of revision, CPCB published a draft report revising the methodology for calculating PI and accordingly classification of sectors into Red, Orange, Green, and White categories based on pollution index range was placed in the public domain for inputs/comments. Around 160 representations comprising more than 700 comments were received. Based on feedback/suggestions and examination of same by the working committee constituted for the purpose, the methodology was finalised. As per the final methodology, the scoring criteria for the following three major pollutant groups are as follows:

i. Water Pollutant Score (PI_W): Assesses the water pollution potential considering the oxygen demand of wastewater, other pollutants in the wastewater and quantity of wastewater generated.
ii. Air Pollutant Score (PI_A): Evaluates the potential air pollution due to process emissions (point source), work zone emissions (fugitive and odour) and type & quantity of fuel used.
iii. Waste Pollutant Score (PI_H): Considering the type and quantity of waste (which are hazardous/toxic/infectious/bulk in nature) generated.

Each pollutant group is scored out of 100, and the Cumulative Pollution Index is calculated. The category of the sector is decided based on the pollution index range, if $PI \geq 80$ the category

of sector is Red, if PI ranges between $55 \leq PI < 80$, the category of sector is orange, similarly for the range of PI between $25 \leq PI < 55$, the category is Green and for $PI < 25$, the category of the sector is white.

Further, based on the stakeholders' comments, a need was felt to introduce a separate "blue category" for Essential Environmental Services (ESS) required for management of waste generated from domestic/household activities and, an incentive mechanism to promote units in a particular sector, taking measures resulting into better environmental performance. An addendum was prepared, shared and presented to all SPCBs/PCCs. The addendum was also placed in the CPCB Website on 11.07.2024 for inputs/comments. 09 representations were received in the addendum. All representations were examined, and classification based on revised methodology is finalised. Based on the revised methodology, CPCB has classified total 419 sectors and sub-sectors under Red (125), Orange (137), Green (94), White (54) and Blue (9) categories.

The report introduced incentive mechanism for the units in any sector that adopt environment friendly practices such as treatment and recovery of 100% wastewater, use of 100% cleaner fuel/renewal energy etc. and ensuring continuous compliance. These incentives are designed to encourage continuous improvement in environmental performance and to reward units that demonstrate proven implementation of sustainable practices and compliances.

Following are the salient features of the revised classification methodology:

- Methodology focusses on "Potential to pollute the environment" by the sector.
- Simplified single formula for Cumulative Pollution Index for all cases.
- Equal weightage to all three pollutant groups- Air, Water, and Waste.
- Cumulative PI based on weighted proportionate scores of pollutant groups.
- Separate scoring criteria for sectors generating sewage (such as Building & construction projects, STPs, Airports, etc.) and bio-medical waste (Health Care Facilities).
- Introduced Blue Category for 9 sectors under Essential Environmental Services required for management of waste generated from domestic/household activities.
- Appropriate weightage to scale of operations by introducing more slabs to bifurcates sub-sectors based on pollution load, scale of operation, production technology and type of fuel used.
- Introduction of sub-categories for sectors based on cleaner technologies, fuel types, integrated/segregated operations etc.
- Motivation to industries for progressive environmental management.
- A tool to assess the Cumulative Pollution Index and category based on revised method.

This report, prepared by the Central Pollution Control Board (CPCB), presents a revised methodology for classifying sectors based on their pollution potential. The classification aims to enhance environmental management and regulatory oversight by classifying sectors into red, orange, green, white, and blue categories. The report covers in detail about the genesis of

classification, need for the revision of 2016 methodology, scoring methodology for calculation of cumulative PI, etc.

The report also outlines guidelines for implementing the classification system. The classification may be used for consent management, inspection frequency, siting criteria, cluster development, pollution control plans, levying environmental compensation, promoting progressive environmental management, etc.

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LIST OF ABBREVIATION

CBG: Compressed Biogas

CNG: Compressed Natural Gas

CPI: Cumulative Pollution Index

CPCB: Central Pollution Control Board

CTE: Consent to Establishment

CTO: Consent to Operate

EC: Environment Compensation

ETP: Effluent Treatment Plant

EES: Essential Environmental Services

Gen-Set: Generator Set

HAPs: Hazardous Air Pollutants

HCFs: Health Care Facilities

HW: Hazardous Waste

MoEF&CC: Ministry of Environment, Forest & Climate Change

LNG: Liquefied Natural Gas

LPG: Liquefied Petroleum Gas

NGT: National Green Tribunal

NOC: No Objection Certificate

OCEMS: Online Continuous Effluent/Emission Monitoring System

PCC: Pollution Control Committee

PM: Particulate Matter

PI: Pollution Index

PI_A: Air pollutant score

PI_H: Waste pollutant score

PI_W: Water pollutant score

PNG: Piped Natural Gas

SPCB: State Pollution Control Board

TTZ: Taz Trapezium Zone

VOCs: Volatile Organic Compounds

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1

Genesis and Journey of Classification

1.1 Introduction

The notifications issued by the Ministry of Environment and Forest during 1989 for Doon Valley, Uttarakhand introduced the concept of classification of industries as red, orange, and green categories. The purpose of this classification was to facilitate decisions related to location of these industries. The criteria for classification of industries was primarily based on quantity of industrial effluent, quantity of fuel/coal, and the number of employees, and amount of waste generated. The notification included list of 129 sectors, classified under red (45), orange (35), and green (39) categories. The criteria used for Doon Valley Notification, 1989 is summarized in the **Figure I**.

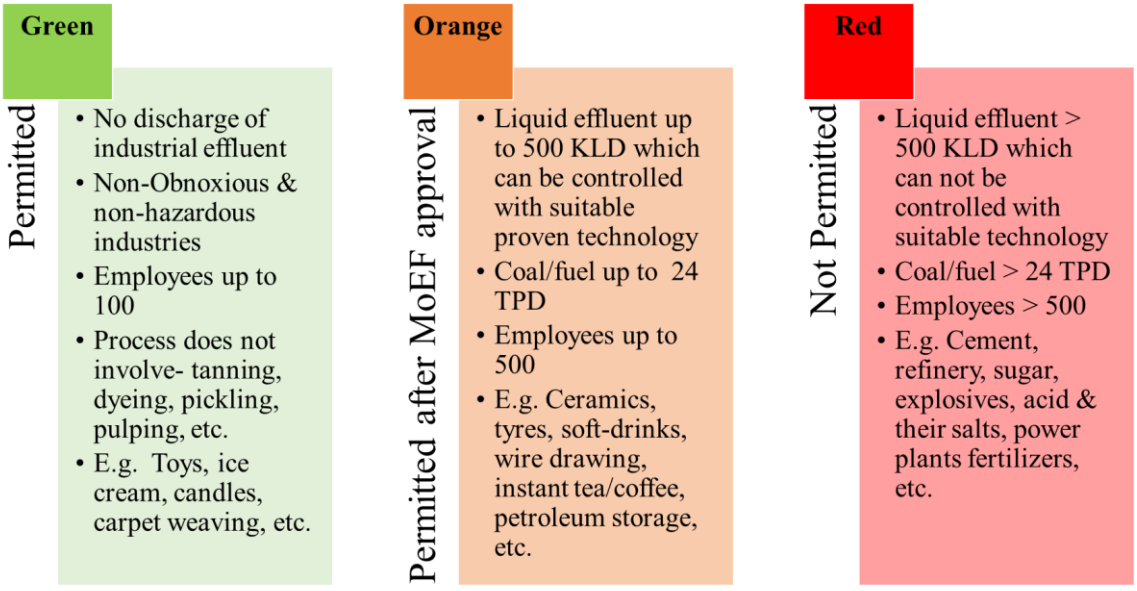

Figure I: Criteria for classification of industries in Doon Valley Notification, 1989

Subsequently, the application of this concept was extended to 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. As the State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) were following different

categorization of industries, to maintain the uniformity across the country, during 2012, CPCB issued a list of 244 sectors, classified under red (85), orange (73) and green (86) categories.

In order to harmonize the criteria for categorization, during the year 2016, CPCB developed the scoring methodology to classify the industries based on the Pollution Index (PI) which was a function of water pollution, air pollution and hazardous waste generation. Based on this methodology, CPCB has classified 257 sectors under red (63), orange (91), green (65) and white (38) categories and directed SPCBs/PCCs to adopt the same. During 2016, CPCB introduced white category as a new category for such sectors which are "practically non-polluting". SPCBs/PCCs were also empowered to categorize any new/left-out sector at their own level, following the methodology prescribed by CPCB. Additionally, during 2020, CPCB also segregated the list of non-industrial operations/facilities. The overall journey of classification may be understood with the help of milestone chart shown in **Figure II**.

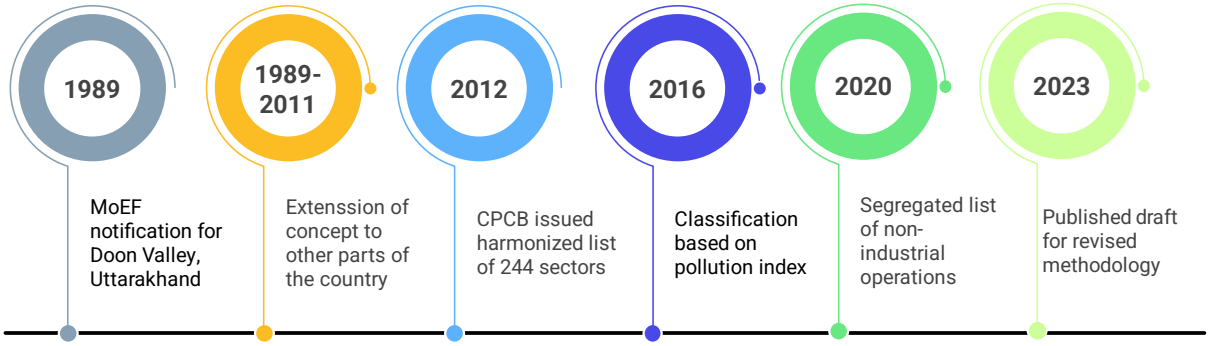

Figure II: Genisis and journey of classification of sectors

The concept of categorization is based on the "Precautionary Principle", which focuses on potential of industries to pollute the environment. 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 minimum pollutants.

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2

Modified Methodology for Classification

2.1 Need and scope for revision of methodology

Based on the experience gained over the years, a need was felt to revisit the 2016 methodology for classification of sectors considering following scope of improvement:

i. Assessment of Pollution Index:

The category of any industrial sector depends on the Pollution Index (PI), which comprises of scores of three pollutant groups i.e., air pollution, water pollution and hazardous waste. The water and air pollutants were each assigned a weight of 40%. However, the hazardous waste generation was given 20% weightage in pollution index.

As per the classification methodology of 2016, in case of absence of any pollutant groups, pollution index was normalized to 100. As a result, different formulas were required to compute pollution index.

Further, the normalization method has certain limitations while comparing pollution potential among sectors having scores for all three pollutant groups verses score only for any one/two pollutant group(s). Moreover, it was also observed that in some sectors normalization involved subjectivity based on perception.

ii. Size of operations of industrial activities:

It was observed that, there was less variation in PI score of industry based on size of operation in same sector. Limited variables/slabs were considered for the quantity of wastewater discharge and fuel consumption. It was also observed that adequate weightage in the considered variables/slabs to account the variation in size of operations of industrial activities need to introduce.

iii. Consideration to segregated industrial activities:

Although there were differences in pollution potential of integrated and standalone units of a particular sector, the classification methodology (2016) classifies the integrated or standalone units in the same sector. For example, standalone cement grinding units will have less pollution potential than integrated cement plants, but both were classified under red category.

iv. Consideration of type of fuel used:

In industrial operations requiring fuels, the amount of emissions is governed by many factors such as the type of fuel and its calorific value, combustion efficiency, emission factors, etc. Use of biomass and cleaner gaseous fuels such as Piped Natural Gas (PNG), Liquefied Petroleum Gas (LPG), Compressed Natural Gas (CNG), bio-CNG etc. have increased significantly in recent years. It was observed that adequate weightage based on type of fuel used is required.

v. Separate scoring for sewage and trade effluent:

It is desirable to have separate wastewater scoring criteria for the sectors generating trade effluent and sewage effluent, as characteristics, treatment method and impact are different for trade effluent generated from industrial sectors and sewage effluent generated from infrastructure & development sectors.

vi. Motivation to industries for progressive environmental management:

In the previous classification regime, there was no effective provision for change in category of industries based on the variation in pollution potential of a sector, even if the industries adopt cleaner technologies or switch over to cleaner raw material/cleaner fuel etc., resulting into reduction in pollution index.

2.2 Modified methodology for classification of sectors

Considering the scope of revision, CPCB prepared a draft report on "Classification of Industrial Sectors into Red, Orange, Green and White Categories: A Tool for Progressive Environmental Management". As per the draft report, a revised methodology for the classification is proposed which incorporates, water pollutant score, air pollutant score and waste generation score, based on the pollution potential of a sector on the environment. Scores out of 100 were given to each three pollutant groups and formula for calculating cumulative score based on the impact pollutant is devised. These scores are used for computation of pollution index for deciding the

category of industrial sector. The cut-offs for deciding the category were based on the quartiles of pollution indices, pollution potential of sectors, etc. The draft report was placed on CPCB website in July 2023, for comments/feedback from stakeholders.

CPCB received 161 representations, comprising more than 700 comments from various State Pollution Control Boards, research and technical institutions, industrial associations, NGOs, individual industries, and the public. The stakeholder-wise representations are shown with the help of pie-chart in **Figure III**.

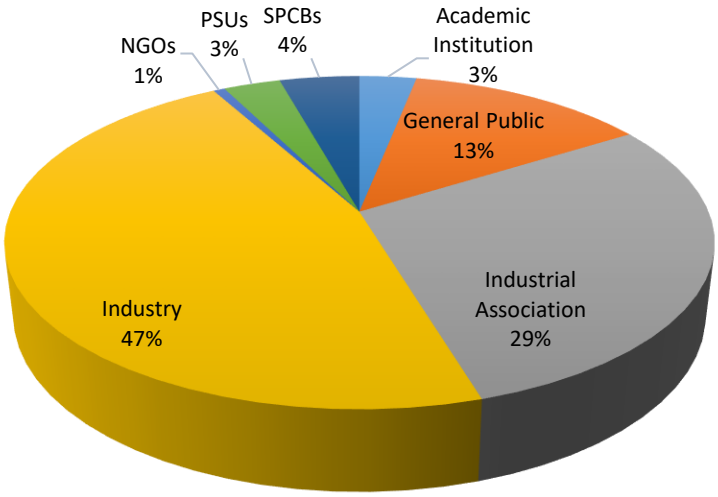

Figure III: Stakeholder-wise representations received

Subsequently, CPCB constituted a committee to critically examine and analyse the comments and to make recommendations for suitable incorporation in the final methodology and classification. After incorporating the feedback received from stakeholders, the Committee has finalized the basic methodology which can be used as a yardstick for classification of the sectors into Red, Orange, Green and White Categories.

Further, based on the stakeholders' comments, a need was felt to introduce a separate "blue category" for Essential Environmental Services (ESS) required for management of waste generated from domestic/household activities and, an incentive mechanism to promote units in a particular sector, taking measures resulting into better environmental performance. An addendum was prepared, shared and presented to all SPCBs/PCCs. The addendum was also placed in the CPCB Website on 11.07.2024 for inputs/comments. Till last date (i.e. 11.08.2024) 09 representations were received in the addendum. All representations were examined, and classification based on revised methodology is finalised.

It is worth to mention that to safeguard the environment, following the fundamental principle of classification i.e., “Precautionary Principle", scope is always available for application of mind and collective wisdom. As per the precautionary principle, when human activities may lead to morally unacceptable harm that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. Therefore, variation from methodology is possible in case of projects having high chances of damage to the environment/eco-system such as river mining, etc. or having associated accidental risk such as major accident hazards installations wherein risk is associated with industrial activities having potential in terms of operation or process, manufacturing, transportation, and storage of one or more hazardous chemicals as prescribed by the Manufacture, Storage, and Import of Hazardous Chemical Rules, 1989.

Considering the above issues, the classification methodology was modified based on the potential of three pollutant groups, namely, water pollutant, air pollutant and waste pollutant (which are hazardous/toxic/infectious/bulk in nature), which have been given scores out of 100, each. Slabs are assigned for selection of pollutant groups respectively for water, air, and waste. Score can be decided based on dominant pollutants in the pollutant groups and quantity as detailed in Table-I, Table-II and Table-III. These scores are used for computation of pollution index for deciding the category of sector. The scoring methodology is based on the pollution potential during generation and not at the end of pipe/ after treatment considering the fact that all pollutants need to be treated and disposed as per the provisions/rules notified 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 and as amended.

The details of scoring criteria for PI_W for “water pollutant,” PI_A for “air pollutant” and PI_H for “waste generating sector” are as follows:

2.2.1 Scoring criteria for Water Pollutant “PI_W”

Water pollution score consider the potential water pollution load from any sector in terms of characteristics and quantity of untreated trade effluent (wastewater). The “trade effluent” includes any liquid, gaseous or solid substance which is discharged from any premises used for carrying on any [industry, operation or process, or treatment and disposal system], other than domestic sewage.

The water pollutant score (PI_W) is the addition of three sub-scores which are based on organic content in terms of oxygen demand of wastewater (W1), potential of other pollutants (W2) and

quantum of wastewater (W3). The weightages of W1, W2 and W3 in the water pollution score are 35%, 30% and 35%, respectively.

Proportionate higher scores are assigned to the sectors generating trade effluent of high BOD and/or high COD, heavy metals/toxic compounds, and large volume of wastewater. The scores are assigned considering the potential for causing damage to the environment. It may be noted that for sectors generating industrial effluent, dominant quantity of trade effluent is considered in score W3 (W3-1 to W3-5). Whereas, for sectors generating huge volume of sewage effluent such as railway stations, STPs, residential building projects, airports etc., the separate scores W3 (W3-6 to W3-10) are assigned. The term used, "Sewage effluent" means effluent from any sewerage system or sewage disposal works and includes sullage from open drains. The scoring criteria for water polluting sectors are given in **Table-I**.

Table I: Scoring Criteria for Water Polluting Sector

Water Pollutant Group	Description	Score
Score W1: Score based on the oxygen demand of wastewater (Maximum of the following scores to be considered)		
W1-1	BOD ≥ 5,000 mg/l or COD ≥ 10,000 mg/l	35
W1-2	1000 ≤ BOD < 5,000 mg/l or 5000 ≤ COD < 10,000 mg/l	30
W1-3	500 ≤ BOD < 1,000 mg/l or 1000 ≤ COD < 5,000 mg/l	25
W1-4	100 ≤ BOD < 500 mg/l or 250 ≤ COD < 1,000 mg/l	20
W1-5	10 ≤ BOD < 100 mg/l or 50 ≤ COD < 250 mg/l	10
Score W2: Score based on other pollutants in the wastewater (Maximum of the following scores to be considered)		
W2-1	Pollutants like pesticides, heavy metals, and toxic compounds: *(Aluminium, Anionic detergents, Barium, Chloramines, Copper, Fluoride, Total residual chlorine, Iron, Manganese, Mineral oil, Phenolic compounds, Selenium, Silver, Sulphide, Cadmium, Cyanide, Lead, Zinc, Mercury, Tin, Vanadium, Antimony, Benzene, Benzo-a-pyrene, Molybdenum, Nickel, Phosphates, Polychlorinated biphenyls, Polynuclear aromatic hydrocarbons, Arsenic, Total/Hexavalent Chromium, Trichloroethane, Trichloroethylene, Adsorbable Organic Halogens (AOx), Pesticides compounds, Residual antibiotic, Radioactive materials, etc.)*	30
W2-2	Pollutants like Nitrate Nitrogen, Nitrate, Ammonical Nitrogen, Total Kjeldahl Nitrogen (TKN), Oil & grease, pH<5.5 or > 9	25
W2-3	Pollutants mainly in terms of inorganic dissolved solids and associated other impurities due to process e.g. wastewater generated from DM water rejects, boiler blowdowns, brine solution rejects, fresh-water RO rejects, etc.	20
W2-4	Pollutants mainly in terms of inorganic dissolved solids e.g. wastewater from cooling towers, cooling-re-circulation processes, etc.	15

Score W3: Score based on quantity of wastewater generated		
A. For sectors generating Industrial Trade effluent (Maximum score to be considered)		
W3-1	Wastewater ≥ 500 KLD	35
W3-2	100 KLD ≤ Wastewater < 500 KLD	30
W3-3	50 KLD ≤ Wastewater < 100 KLD	25
W3-4	10 KLD ≤ Wastewater < 50 KLD	20
W3-5	Wastewater < 10 KLD	15
B. For sectors such as STPs, building projects, etc. generating/handling only high-volume Sewage (Maximum score to be considered)		
W3-6	Sewage ≥ 5,000 KLD	35
W3-7	2,000 KLD ≤ Sewage < 5,000 KLD	30
W3-8	500 KLD ≤ Sewage < 2,000 KLD	25
W3-9	100 KLD ≤ Sewage < 500 KLD	20
W3-10	Sewage < 100 KLD	15
Water Pollutant Score (PI_W) = W1+W2+W3		

2.2.2 Scoring criteria for Air Pollutant "PI_A":

Air pollution score consider the potential air pollution load from any sector in terms of characteristics of emissions and its quantum/scale in terms of quantity of fuel. The air pollutant score is based on generation of emission. The "air pollutant" means any solid, liquid, or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

The air pollution score (PI_A) is the addition of three sub-scores which are based on the type of pollutants in emissions (A1), work zone emission/fugitive emissions & odour nuisance (A2), and fuel type & quantity (A3). The weightages of A1, A2 and A3 in air pollution score are 35%, 30% and 35%, respectively.

Proportionate higher scores are assigned to the sectors generating emissions with hazardous air pollutants, process-based fugitive emissions and using solid/liquid fuels, as such pollutants have higher potential to damage the environment.

The California Air Resources Board defines fugitive emissions as "Emissions not caught by a capture system which are often due to equipment leaks, evaporative processes and windblown disturbances." The fugitive emissions from any process having acid mist, VOCs, etc. are given higher weightage (score A2=30) as compared to the fugitive emissions of inert material (score A2=25). Sectors having persistent foul odour issue, will get score A2=20. Sectors/units using solid/liquid fuel will get higher score-A3, compared to the sectors using cleaner gaseous fuel or electricity. The scoring criteria for air polluting sectors are given at **Table-II.**

Table II : Scoring criteria for air polluting sectors

Air Pollutant Group	Description	Score
Score A1: Score based on Process emissions (point source) (Maximum of the following scores to be considered)		
A1-1	Hazardous Air Pollutants (HAPs) and heavy metals: *HAPs (Phosgene, Benzene, Benzo(α)pyrene, Butadiene, Toluene Di-isocyanate, Methylene-di-phenyl Di-isocyanate, Ethylene Oxide, Ethylene Di Chloride, Acrylonitrile, Propylene Oxide), Dioxins & Furans, Asbestos, Polycyclic Aromatic Hydrocarbons (PAHs), HCN, Cd, Th, Hg, Sb, As, Pb, Co, Cr, Cu, Mn, Ni, V, etc.*	35
A1-2	Halogens, acids, and pesticides-based pollutants: *H_2S, HF, HBr, P_2O_5 as H_3PO_4, NH_3, TOC, Cl, HCl, SO_3, CH_3Cl, Total Fluoride, PM having pesticide compounds/other organic compounds, Acid mist, etc.*	30
A1-3	Pollutants due to combustion of fuel or due to process: *PM, CO_2, CO, NOx, SO_2, etc.*	25
A1-4	Volatile Organic Compounds (VOCs): *Ethyl benzene, Styrene, Toluene, Xylene, Aromatics, Propylene Glycol, Ethylene Glycol, etc.*	20
Score A2: Score based on fugitive emissions and odour nuisance (Maximum of the following scores to be considered)		
A2-1	Fugitive emissions of Particulate Matter (PM), acid mist, VOCs, etc. from process	30
A2-2	Fugitive emissions of Particulate Matter (PM), acid mist, VOCs, etc. due to storage and handling, etc.	25
A2-3	Odour nuisance, including odour due to the use of binding gums, cements, adhesives, enamels etc.	20
Score A3: Score based on quantity of fuel (Maximum of the following scores to be considered)		
	Coal or liquid fuels	
A3-1	Fuel consumption ≥ 24 TPD	35
A3-2	12 TPD ≤ Fuel consumption < 24 TPD	30
A3-3	Fuel consumption < 12 TPD	25
	Biomass-based fuels	
A3-4	Fuel consumption ≥ 48 TPD	25
A3-5	24 TPD ≤ Fuel consumption < 48 TPD	20
A3-6	Fuel consumption < 24 TPD	15
	Cleaner/gaseous fuels, such as, PNG, CNG, LPG, Compressed Biogas (CBG), propane, butane etc.	
A3-7	Fuel consumption ≥ 120 TPD	20
A3-8	60 TPD ≤ Fuel consumption < 120 TPD	15
A3-9	Fuel consumption < 60 TPD	10
A3-10	Electricity	0
Air Pollutant Score (PI_A) =A1+A2+A3		
Note: In case, any sector/unit is using more than one type of fuel, the most polluting fuel category, will be considered.		

2.2.3 Scoring criteria for Industrial Waste Generating Sector "PI_H"

Industrial waste generating sectors are considered based on the generation of hazardous waste/high volume low effect waste. As per the Hazardous and Other Wastes (Management & Trans-boundary Movement) Rules, 2016, the "hazardous waste" means any waste which by reason of characteristics such as physical, chemical, biological, reactive, toxic, flammable, explosive or corrosive, causes danger or is likely to cause danger to health or environment, whether alone or in contact with other wastes or substances and shall include waste as per the Schedule I, Schedule II and Schedule III of the rule. Further, scores are also assigned to the high-volume low effect wastes such as fly ash, phosphogypsum, red mud, jarosite, slags from pyro-metallurgical operations, mine tailings and ore beneficiation rejects.

The score for waste comprises of two sub-scores H1 and H2. The H1 score is based on the different type of hazardous waste which are generated during the process, and which required to be managed/disposed through common facility OR based on the generation of high-volume low effect waste/ HW like contaminated bags/ drums etc. The H2 score is based on the total quantum of waste generated.

The desirable disposal method such as incineration, landfill after treatment, landfill etc. signifies the potency of hazardous waste. In recent time, the utilization of hazardous waste as per the Rule-9 of Hazardous and Other Wastes (Management & Trans-boundary Movement) Rules, 2016, as alternate fuel and raw material in cement kilns, as recyclable hazardous waste etc. has increased. The classification is based on the pollution potential due to generation of such types of hazardous waste from any sector. The score for the quantum of hazardous waste is total potential of generation of such hazardous waste by any sector., Score H1: Based on potency of hazardous waste and score H2: Based on quantum of hazardous waste, are given weightage of 30% and 70%, respectively. Considering the higher risk due to amount of hazardous waste generated rather than its disposal method, more weightage is given to the quantity. Overall waste generation score in case of waste generating sector will be PI_H =H1+H2. The scoring criteria for hazardous waste generating sectors are given at **Table-III**.

A separate scoring criterion has been included for sectors generating bio-medical waste. Bio-medical waste means any waste, which is generated during the diagnosis, treatment or immunisation of human beings or animals or research activities pertaining thereto or in the production or testing of biological or in health camps, including the categories mentioned in Schedule-I appended to the Bio-Medical Waste Management Rules, 2016. As any Health Care

Facilities (HCFs) generates all types of bio-medical waste (red, yellow, blue, and white) and quantities of such wastes may vary considerably based on the type of facility/location of facility (rural/urban), and other such factors. Therefore, scoring based on number of beds in a healthcare facility is considered as sole criteria for assigning waste score (H: B-1 to B-7) as tabulated in **Table-III**.

Least score of 25 is given to non-bedded healthcare facilities and maximum score of 100 is given to facilities having more than 1,000 beds. Overall waste generation score in case of bio-medical waste generating sector will be PI_H.

Table III: Scoring criteria for waste generating Sectors

Waste Pollutant Group	Description	Score
A. Score for sectors generating hazardous waste		
Score H1: Score based on the hazardous waste management/disposal method. (Maximum of the following scores to be considered)		
H1-1	Hazardous wastes which are flammable, ignitable, corrosive, oxidizing toxic, etc. and requiring disposal through incineration	30
H1-2	Hazardous wastes which are reactive, capable of yielding another material post disposal, etc. and requiring disposal in secured landfill after stabilization/treatment	25
H1-3	Hazardous wastes which are requiring direct disposal in secured landfill without stabilization	20
H1-4	High volume and low effect wastes, contaminated bags/ drums/ containers etc.	10
Score H2: Score based on quantity of hazardous waste generation. (Maximum of the following scores to be considered)		
H2-1	Hazardous Waste ≥ 5000 TPA	70
H2-2	1000 TPA ≤ Hazardous Waste < 5000 TPA	50
H2-3	200 TPA ≤ Hazardous Waste < 1000 TPA	30
H2-4	10 TPA ≤ Hazardous Waste < 200 TPA	20
H2-5	Hazardous Waste < 10 TPA	10
B. Scores for the sectors generating bio-medical waste		
B-1	No. of beds ≥ 1,000	100
B-2	500 ≤ No. of beds < 1,000	80
B-3	200 ≤ No. of beds < 500	60
B-4	50 ≤ No. of beds < 200	50
B-5	10 ≤ No. of beds < 50	40
B-6	No. of beds < 10	30
B-7	Non-bedded facility	25
For sectors generating hazardous waste PI_H =H1+H2 **For sectors generating bio-medical waste PI_H =B**		

2.3 Computation of Cumulative Pollution Index and criteria for deciding category of sector

In the revised methodology of classification (2025), all three pollutant scores due to water, air and industrial waste generation are taken into account while computing pollution index. The formula for computing cumulative pollution index (PI) is as follows:

$$PI = i_{max} + (100 - i_{max})\left(\frac{i_2 + i_3}{200}\right)$$

Where, $i_{max,}$ is the maximum score among Water (PI_W), Air (PI_A), and Waste (PI_H) pollutant scores and i_2 & i_3 are the remaining pollutant scores.

The category of the sector will be decided based on the pollution index ranges given at **Table-IV.**

Table IV: Ranges of Cumulative Pollution Index for different categories

Cumulative Pollution Index (PI)	Category of industrial sector
PI ≥ 80	Red
55 ≤ PI < 80	Orange
25 ≤ PI < 55	Green
PI < 25	White

The purpose of classification is to have uniform consent mechanism, defined routine monitoring frequency by concerned SPCB/PCC, environmental protection plans etc. Modified methodology also considers the variation in pollution potential due to various type of activities and operations in a particular sector.

The scores/pollution index/category of any two sectors may be same, however, comparing two different sectors based on the category or pollution index is not desirable as the cumulative PI is a function of air pollutant, water pollutant, and waste pollutant and the cumulative score is arithmetically relates the maximum score of one pollutant with the remaining other two pollutants. Hence, PI/category of sectors may be same but may have different impact on environment.

2.4 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 Category sector" and as an incentive for the essential services, additional 2 years validity for consent to operate (as per PI) will be provided.

The list of EES facilities is given at **Annexure-II**.

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3

Classification of Sectors as per Revised Methodology

3.1 Types of sectors based on their activities

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.

The methodology and scores have been screened through stakeholder feedback/consultation and public opinion. Available standard literature, various documents and guidelines, inspection reports, etc. were also referred, while assessing the scores for water pollution, air pollution, and waste generation for classification of sectors. Based on the modified methodology, the list of sectors and sector specific sub-classification is given at **Annexure-I to Annexure-IV**. Summary of classified sectors is given in **Table-V**.

Table V: Number of sectors classified under different categories

Sl. No.	Type of sector	Total number of sectors/sub-sectors	Red	Orange	Green	White	Blue
1.	Industrial Sectors	**359**	**108**	**120**	**80**	**51**	-
2.	Essential Environmental Services (ESS)						
2.a.	ESS for domestic waste	**9**	**-**	**-**	-	-	**9**
2.b.	ESS for industrial waste	**9**	**8**	**-**	1	-	-
3.	Service/Infrastructure Development Sectors	**37**	**7**	**15**	**13**	**2**	-
4.	Others/Special Category Sectors	**5**	**2**	**2**	`	**1**	-
	Total	**419**	**125**	**137**	**94**	**54**	**9**

3.2. Usage of classification of sectors

The classification of sectors may be used for the following purposes:

i. **Consent management:** SPCBs/PCCs may grant Consent to Operate (CTO) to red, orange, and green categories of industries for validity up to 5 years, 10 years, and 15 years, respectively as per existing provisions which would be later governed as per the provisions/guidelines under Jan Vishwas (Amendment of Provisions) Act, 2023/Water Act, as amended. The validity of blue category sectors will be 2 years more than the category based on PI.

ii. **Inspection frequency:** SPCBs/PCCs may prioritize their environmental surveillance programs based on the categories of sectors. SPCBs/PCCs are required to ensure inspection of red, orange, and green category of industries at least once in six-months, one-year, and two-years, respectively. Common facilities and 17 categories of industries are to be inspected at least once in every three-months.

iii. **Siting criteria:** The categorization may be used as a tool for deciding the location/siting of an industry in a particular location.

iv. **Development of cluster:** The classification will help in planning of sector specific cluster, based on scoring of various pollutants and development of adequate environment management infrastructure facility, accordingly.

v. **Sector specific plans for pollution control:** The plans for control of pollution may be prepared and implemented on priority for the sectors having higher pollution index and overall higher pollution load.

vi. **Levying environmental compensation:** Pollution index may be used for determining and levying environmental compensation on industries violating the environmental norms.

vii. **A tool for progressive environmental management:** Industrial units may adopt cleaner technologies, cleaner fuels, etc. which may result in reduction of pollution index, thus, moving to lower pollution potential category. It will provide incentives to industries in terms of less consent renewal fees, less environmental surveillance/compliance burden, more validity period for consents/authorizations, etc.

3.3 Classification of left-out/new sectors

The revised methodology of classification (2025) and list of sectors classified by CPCB is required to be adopted and implemented by all SPCBs/PCCs. In case of any new or left-out

sector, the SPCB/PCC may categorize the sector at its own level. For this purpose, a committee headed by the Member Secretary, SPCB/PCC and comprising of at least two senior cadre engineers/scientists of the SPCB/PCC (as nominated by the Member secretary of the concerned SPCB/PCC) may be constituted to examine the matter and classify the sector in accordance with the methodology prescribed by CPCB. The State Level Committee may also co-opt subject experts, industrial association representative, etc., as member, as per requirement. CPCB has also developed a tool to assess the Cumulative Pollution Index and category of any sector, which is available on CPCB website (https://cpcb.nic.in/categorization-of-industrial-sectors/).

In addition, all SPCBs/PCCs are required to submit list of all such sector classified under white category to CPCB in the prescribed format (**Annexure-V**), for notification as per provisions of Jan Vishwas (Amendment of Provisions) Act, 2023.

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4

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, EPR obligations 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:

4.1 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.

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 VI**.

Table VI: 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/university of repute.	Member
3	Expert from CSIR institute/laboratories, having expertise in industrial process and pollution control technologies/ environmental management	Member
4	Two officials of concerned SPCB/PCC, as nominated by the Member Secretary, SPCB/PCC	Member

4.2. Evaluation Criteria

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 (iv) Recycling units identified for EPR obligations and has fulfilled all requirement including Environmentally Sound Management Facility for recycling.

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 industry claims are summarized in **Table VII.**

Table VII: 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 as per the authorization issued by the concerned SPCB/PCC and timely submission of Form-IV as per the requirement of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
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	• 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).

Biogas (CBG), propane, butane, etc.	• 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.

4.3. Re-assessment of Pollution Index (PI)

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 Sectors for management of waste.

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 VIII**.

Table VIII: 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 existing PI score by 25%, by meeting evaluation criteria/check and balances, as mentioned in **Table III** to qualify for change in category to Blue*.

4.4 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 IX**.

Table IX: 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 and for calculation of EC, the PI of original category shall be considered.

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5 Implementation pathway/guidelines

The revised methodology and classification of sectors will be implemented in prospective manner. For this purpose, following guidelines may be referred:

i. All pending application for consideration of CTE/CTO and future such application shall be processed as per the revised methodology of classification. In case CTE granted before the revised classification, applicability of CTO will be as per new classification.

ii. New classification will be applicable to existing units at the time of renewal of CTO or within one year from the date of directions issued by CPCB regarding implementation of revised classification, whichever is earlier. The annual fees or cumulative fees for the remaining period shall be as per the revised category.

iii. SPCBs/PCCs may grant Consent to Operate (CTO) to units under red, orange, and green categories for maximum validity up to 5 years, 10 years, and 15 years, respectively as per existing provisions which would be later governed as per the provisions/guidelines under Jan Vishwas (Amendment of Provisions) Act, 2023/Water Act, as amended. SPCBs/PCCs may grant Consent to Operate (CTO) to units under Blue Category sectors with additional 2 years validity, considering their role as Essential Environmental Services for management of waste generated from domestic/household activities.

iv. Requirement of intimation/consent for white category of industries, shall be governed as per the provisions/guidelines under Jan Vishwas (Amendment of Provisions) Act, 2023//Water Act, as amended.

v. All sectors irrespective of category shall follow guidelines for pollution control, if any, issued by SPCB/PCC/CPCB time to time.

vi. Siting of units shall be only in the conforming area as per the guidelines of CPCB/SPCB/PCC. Further, as per the Section 17(1)(n) of the Water Act, 1974 and the Section 17(1)(h) of the Air Act, 1981, SPCB/PCC may also frame policies/advisory with respect to the location of any industry/operations, the carrying on of which is likely to cause air/water pollution, considering the scale/type of industries and sensitivity of area. Siting of units in eco-sensitive area will be governed by their respective notifications.

vii. The classification of sectors shall not be linked to sanction of loans/finance of bank proceedings.

viii. In the matter of Taz Trapezium Zone (TTZ), for air pollution scores of 10 and 20 (as per 2016 methodology), equivalent scores of 30 and 60 (as per 2025 methodology), respectively, may be considered for sectoral guidelines/opinion from NEERI (Ref: Order dated 08.12.2021, in the matter of M.C. Mehta v/s Union of India, Writ Petition (Civil) No.13381/1984, before Hon'ble Supreme Court).

ix. As per CPCB directions dated 12.12.2019, issued under Section 18(1)(b) of the Water Act, 1974 and the Air Act, 1981, SPCBs/PCCs are required to ensure inspection of red, orange, and green category of industries at least once in six-months, one-year, and two-years, respectively. Common waste treatment facilities and 17 categories of industries are to be inspected at least once in every three-months. (Ref: Order dated 05.11.2019, in the matter of Shailesh Singh v/s State of Haryana & Ors., OA No.639/2018, before Hon'ble National Green Tribunal, Principal Bench).

x. The sectors which are classified under white or green category and if such sectors have installed Genset(s) of higher capacity which are classified under orange/green category, then such sector will be considered under higher category.

xi. All Industrial units are encouraged to adopt measures such as cleaner technology/cleaner production, cleaner raw material, cleaner fuel etc., for better environmental management. If such measures result into overall reduction of pollution

index, request regarding change in category of such sectors/units may be made to concerned SPCB/PCC as detailed under Section 8 of this report.

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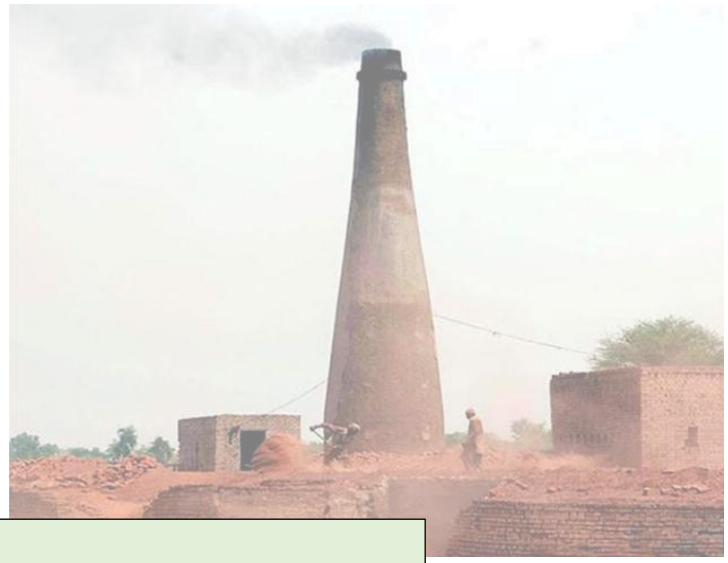


ANNEXURE-I

(LIST OF INDUSTRIAL SECTORS CLASSIFIED UNDER RED, ORANGE, GREEN, AND WHITE CATEGORIES)

LIST OF INDUSTRIAL SECTORS

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
						~A~										
1	Manufacturing of **Automobiles** (integrated facilities)	20	30	25	**75**	0	25	0	**25**	25	20	**45**	83.8	Red	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 or may have stand-alone units. In such cases, after thorough inspection of such units by concerned SPCB, re-categorization of the industry shall be made accordingly.	IPC-V
2	**Asbestos** and asbestos based industries	10	30	25	**65**	35	30	30	**95**	25	30	**55**	98	Red	Asbestos is carcinogenic and banned in many countries.	IPC-II
3	**Almirah**, Grill Manufacturing (Dry Mechanical Process)	0	0	0	**0**	0	30	0	**30**	0	0	**0**	30	Green		IPC-V
						~B~										
4.0	**BAKERY**, CONFECTIONERY AND SWEETS PRODUCTS															
4.1	Bakery, confectionery, sweets with production capacity ≥ 1 TPD	25	0	20	**45**	25	0	25	**50**	0	0	**0**	61.3	Orange		IPC-III

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
4.2	Bakery, confectionery, sweets with production capacity ≥ 1 TPD. (using cleaner/gaseous fuel)	25	0	20	**45**	25	0	10	**35**	0	0	**0**	54.6	Green		IPC-III
5.0	**BRICK** MANUFACTURING															
5.1	Brick kilns using coal as fuel	0	0	0	**0**	25	25	25	**75**	0	0	**0**	75	Orange		IPC-V
5.2	Brick kilns using biomass as fuel	0	0	0	**0**	25	25	15	**65**	0	0	**0**	65	Orange		IPC-V
5.3	Tunnel brick kilns (gas fired)	0	0	0	**0**	25	25	10	**60**	0	0	**0**	60	Orange		IPC-V
6.0	MANUFACTURING OF AUTOCLAVED AERATED CONCRETE (AAC) **BRICKS/BLOCKS.**															
6.1	AAC bricks/blocks manufacturing using coal as fuel (12 TPD and above)	0	0	0	**0**	25	25	30	**80**	0	0	**0**	80	Red		IPC-V
6.2	AAC bricks/blocks manufacturing using coal as fuel (less than 12 TPD)	0	0	0	**0**	25	25	25	**75**	0	0	**0**	75	Orange		IPC-V
6.3	AAC bricks/blocks manufacturing using biomass as fuel	0	0	0	**0**	25	25	20	**70**	0	0	**0**	70	Orange		IPC-V
6.4	AAC bricks/blocks manufacturing using gas as fuel	0	0	0	**0**	25	25	15	**65**	0	0	**0**	65	Orange		IPC-V
7.0	FLY ASH **BRICKS / BLOCK** MANUFACTURING															
7.1	Fly ash bricks/ block manufacturing (with boiler)	0	0	0	**0**	25	25	25	**75**	0	0	**0**	75	Orange		IPC-V
7.2	Fly ash bricks/ block manufacturing (without boiler)	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V
8.0	MANUFACTURING OF NON-ALCOHOLIC **BEVERAGES**															
8.1	Wastewater generation ≥ 100 KLD	25	20	30	**75**	25	0	25	**50**	0	0	**0**	81.3	Red		IPC-III
8.2	Wastewater generation < 100 KLD	25	20	25	**70**	25	0	25	**50**	0	0	**0**	77.5	Orange		IPC-III

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
9.0	**BATTERY** MANUFACTURING															
9.1	Lead-acid **Battery** manufacturing (excluding assembling and charging of lead acid **Battery** in micro-scale)	0	30	20	**50**	35	30	25	**90**	25	10	**35**	94.3	Red		IPC-V
9.2	Dry cell **Battery** (excluding manufacturing of electrodes) and assembling & charging of acid lead battery on micro scale	0	30	15	**45**	25	25	10	**60**	25	10	**35**	76	Orange		IPC-V
9.3	**Battery** manufacturing without boiler (excluding lead acid battery)	0	0	0	**0**	0	25	0	**25**	25	10	**35**	43.1	Green		IPC-V
10	**Briquette** manufacturing (coal/biomass/coke)	0	0	0	**0**	0	30	0	**30**	0	0	**0**	30	Green	The process involves mixing, mechanized compression and drying.	IPC-II
11	Assembly of **Bicycles** , **Baby** carriages and other small non motorizing vehicles	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
12	**Bailing** (hydraulic press) of waste papers	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
13	**Bio fertilizer** and bio-pesticides without using inorganic chemicals	0	0	0	**0**	0	20	0	**20**	0	0	**0**	20	White		IPC-V
14	**Block** making of printing without foundry (excluding wooden block making)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
15	Flavoured **Betel** nuts production/ grinding (completely dry mechanical operations)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
16	Manufacturing of shoe **Brush** and wire **Brush**	0	0	0	**0**	0	20	0	**20**	0	0	**0**	20	White		IPC-V
~C~																
17.0	MANUFACTURING OF INDUSTRIAL **CARBON** INCLUDING ELECTRODES AND GRAPHITE BLOCKS, ACTIVATED **CARBON**, **CARBON BLACK**															
17.1	Carbon black manufacturing	20	15	20	**55**	25	30	30	**85**	30	20	**50**	92.9	Red		IPC-I
17.2	Industrial carbon including electrodes & graphite blocks and calcined pet coke	20	15	20	**55**	25	25	25	**75**	30	10	**40**	86.9	Red		IPC-II
17.3	Activated carbon manufacturing (with steam activation)	20	15	20	**55**	25	25	15	**65**	0	0	**0**	74.6	Orange		IPC-V
18.0	INORGANIC **CHEMICALS**															
18.1	Basic inorganic chemicals and electro chemicals and its derivatives including manufacturing of acid	10	30	25	**65**	30	30	20	**80**	20	20	**40**	90.5	Red		IPC-I
18.2	Phosphorous and its compounds, including phosphorous rock processing	20	30	20	**70**	35	25	10	**70**	10	30	**40**	86.5	Red		IPC-I
18.3	Chlorates, per-chlorates & peroxides	20	30	20	**70**	30	20	25	**75**	20	20	**40**	88.8	Red		IPC-I
18.4	Chlorine, fluorine, bromine, iodine, and their compounds	10	30	25	**65**	35	20	10	**65**	20	20	**40**	83.4	Red		IPC-I
19	Coke oven plant, coal liquefaction, coal tar distillation and fuel gas-making	30	30	30	**90**	25	30	35	**90**	25	50	**75**	98.3	Red		IPC-II

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
20.0	**CEMENT** PLANTS															
20.1	With co-processing with CPP (Captive Power Plant)	20	25	35	**80**	35	30	35	**100**	10	50	**60**	100	Red		IPC-II
20.2	With co-processing without CPP	20	0	20	**40**	35	30	35	**100**	30	20	**50**	100	Red		IPC-II
20.3	Without co-processing with CPP	10	25	35	**70**	35	30	35	**100**	10	50	**60**	100	Red		IPC-II
20.4	Without co-processing without CPP	0	0	0	**0**	25	30	35	**90**	30	10	**40**	92	Red		IPC-II
20.5	Stand-alone grinding units with CPP	20	25	35	**80**	25	30	35	**90**	10	50	**60**	97	Red		IPC-II
20.6	Stand-alone grinding units without CPP	0	0	0	**0**	25	30	0	**55**	30	10	**40**	64	Orange		IPC-II
20.7	Bulk terminals for storage and packaging of cement	0	0	0	**0**	0	30	0	**30**	0	0	**0**	30	Green		IPC-II
21.0	**CHLOR** ALKALI															
21.1	Chlor alkali	10	20	25	**55**	30	25	25	**80**	20	20	**40**	89.5	Red		IPC-I
21.2	Chlor alkali using washed salt	10	20	15	**45**	30	25	25	**80**	20	10	**30**	87.5	Red		IPC-I
21.3	Chlor alkali using cleaner/gaseous fuel	10	20	25	**55**	30	25	10	**65**	20	20	**40**	81.6	Red		IPC-I
21.4	Chlor alkali using cleaner/gaseous fuel and washed salt	10	20	15	**45**	30	25	10	**65**	20	10	**30**	78.1	Orange		IPC-I
22	Manufacturing of **Compact** disc **Computer** (CD/DVD) / cassette manufacturing / reel manufacturing	0	15	15	**30**	30	0	0	**30**	20	10	**30**	51	Green		IPC-V
23.0	MANUFACTURING OF **COIR/COIR** PITH AND **COIR** PRODUCTS															
23.1	Coir bleaching and dyeing/printing units	25	0	25	**50**	25	25	20	**70**	0	0	**0**	77.5	Orange		IPC-V
23.2	Coir fibre/pith processing units generating effluent	25	0	20	**45**	0	25	0	**25**	0	0	**0**	51.9	Green		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
23.3	Coir fibre/pith processing and/or Manufacturing of coir products from coir (only dry process)	0	0	0	**0**	0	20	0	**20**	0	0	**0**	20	White		IPC-V
24.0	**CERAMICS**															
24.1	Ceramics/ Glass /Earthen potteries and tile manufacturing using coal/oil fired kilns (fuel consumption: 12 TPD and above)	0	0	0	**0**	25	25	30	**80**	0	0	**0**	80	Red		IPC-V
24.2	Ceramics/ Glass /Earthen potteries and tile manufacturing using coal/oil fired kilns (fuel consumption: less than 12 TPD)	0	0	0	**0**	25	25	25	**75**	0	0	**0**	75	Orange		IPC-V
24.3	Ceramics/ Glass /Earthen potteries and tile manufacturing (using gas fired kilns)/tunnel kiln	0	0	0	**0**	25	25	10	**60**	0	0	**0**	60	Orange		IPC-V
24.4	Ceramics/ Glass /Earthen potteries and tile manufacturing (using only electrical kiln)	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V
25	**Coal Washeries**	20	25	30	**75**	0	25	0	**25**	0	0	**0**	78.1	Orange		IPC-II
26	Liquid floor **Cleaner**, black phenyl, liquid soap, glycerol mono-stearate manufacturing	25	25	15	**65**	0	20	0	**20**	0	0	**0**	68.5	Orange		IPC-V
27	Phenyl/toilet **Cleaner** formulation and bottling	10	0	15	**25**	0	20	0	**20**	0	0	**0**	32.5	Green		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
28	**Cashew** nut processing	20	0	15	**35**	25	20	15	**60**	0	0	**0**	67	Orange		IPC-III
29.0	**COFFEE** SEEDS PROCESSING INDUSTRY															
29.1	Coffee seeds processing (wet process)	35	0	20	**55**	25	0	15	**40**	0	0	**0**	64	Orange		IPC-III
29.2	Coffee seeds processing with eco-pulper	20	0	15	**35**	25	0	15	**40**	0	0	**0**	50.5	Green		IPC-III
30	Manufacturing of **Candy**	10	0	15	**25**	0	0	0	**0**	0	0	**0**	25	Green		IPC-V
31	**Cardboard** or corrugated box and paper products (excluding paper or pulp manufacturing and without using boilers)	0	0	0	**0**	0	20	0	**20**	0	0	**0**	20	White		IPC-V
32	Manufacturing of precast **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)	0	0	15	**15**	0	25	0	**25**	0	0	**0**	30.6	Green		IPC-V
33	Manufacturing of **Ceramic Colour** by mixing & blending only (not using boiler and wastewater recycling process)	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V
34.0	**CHILLING** PLANT, COLD STORAGE AND ICE-MAKING															
34.1	Chilling plant	20	15	15	**50**	0	0	0	**0**	0	0	**0**	50	Green		IPC-IV
34.2	Cold storage	0	15	15	**30**	0	0	0	**0**	0	0	**0**	30	Green		IPC-V
34.3	Ice Making	0	20	15	**35**	0	0	0	**0**	0	0	**0**	35	Green		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
35	Decoration of **Ceramic Cup**s and plates by electric furnace	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V
36	Ready mix **Cement Concrete**	0	0	0	**0**	0	30	0	**30**	0	0	**0**	30	Green		IPC-V
37	**CO2** recovery plant	0	0	0	**0**	0	0	0	**0**	20	10	**30**	30	Green	Exhausted molecular sieves are generated as hazardous waste.	IPC-V
38	Assembly of air **Coolers/Conditioners**, repairing and servicing	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
39	**Chalk** making from plaster of Paris (only casting without boilers etc.(sun drying / electrical oven)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
40	Standalone manufacturing of **Concrete** admixtures up to 1000 MT per Month capacity by physical mixing (without boiler and reactor and no generation of wastewater)	0	0	0	**0**	0	0	0	**0**	10	10	**20**	20	White	The sector may become green category if it generates wastewater. The unit needs to be re-classified as per the methodology in case the capacity exceeds 1000 MT per Month.	IPC-V
										c						
41	Used **Cooking** oil (UCO) collection centers	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
~D~																
42.0	**DYES, DYE** INTERMEDIATES AND PIGMENT PRODUCTIONS															
42.1	Dyes, Dye Intermediates and Pigments produced by chemical synthesis	35	30	25	**90**	30	20	25	**75**	30	20	**50**	96.3	Red		IPC-I
42.2	Natural Dye and Pigments requiring acidic/ alkaline/ solvent extraction	30	30	20	**80**	25	20	25	**70**	20	10	**30**	90	Red		IPC-I
42.3	Natural Dye and Pigments not require acidic/ alkaline/ solvent extraction	30	20	20	**70**	25	0	25	**50**	0	0	**0**	77.5	Orange		IPC-I
43.0	SYNTHETIC **DETERGENT** AND SOAPS															
43.1	Synthetic detergents and soaps (wastewater generation ≥ 100 KLD)	20	20	30	**70**	25	0	25	**50**	25	10	**35**	82.8	Red		IPC-I
43.2	Synthetic detergents and soaps (wastewater generation < 100 KLD)	20	20	25	**65**	25	0	25	**50**	25	10	**35**	79.9	Orange		IPC-I
43.3	Synthetic detergents and soaps (only formulation)	0	0	0	**0**	25	0	25	**50**	0	0	**0**	50	Green		IPC-I
43.4	Soap manufacturing (handmade -without steam boiling / boiler)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
DISTILLERIES AND FERMENTATION SECTORS																
44.0	**DISTILLERIES** AND FERMENTATION INDUSTRIES															
44.1	Distillery (Molasses based)	35	25	35	**95**	25	25	35	**85**	0	0	**0**	97.1	Red		IPC-III
44.2	Distillery (Grain based)	35	25	30	**90**	25	25	25	**75**	0	0	**0**	93.8	Red		IPC-III
44.3	Distillery (Grain based) with Distiller's Dried Grains with Soluble (DDGS) as by-product	25	25	20	**70**	25	25	25	**75**	0	0	**0**	83.8	Red		IPC-III
44.4	Standalone yeast manufacturing units	35	25	35	**95**	25	20	25	**70**	0	0	**0**	96.8	Red		IPC-III

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
44.5	Breweries and malteries industry (with fermentation)- Wastewater generation ≥ 100 KLD	30	15	30	**75**	25	0	25	**50**	0	0	**0**	81.3	Red		IPC-III
44.6	Breweries and malteries industry (with fermentation)- Wastewater generation < 100 KLD	30	15	25	**70**	25	0	25	**50**	0	0	**0**	77.5	Orange		IPC-III
44.7	Potable alcohol by blending, bottling of alcohol products	20	0	25	**45**	0	0	0	**0**	0	0	**0**	45	Green		IPC-III
45	**Diesel** pump repairing and servicing (complete mechanical dry process)	0	0	0	**0**	0	0	0	**0**	10	10	**20**	20	White		IPC-V
~E~																
46	Manufacturing of **Explosives**, detonators, fuses, etc.	25	30	15	**70**	0	30	0	**30**	30	10	**40**	80.5	Red	Explosives manufacture contribute to release of hazardous pollutants, including generation of other toxic chemicals. Accident/safety hazard is also associated with such sector during manufacturing and usages.	IPC-I
47	Manufacturing of coated **Electrode**	0	15	15	**30**	0	25	0	**25**	0	0	**0**	38.8	Green	Process involves preparation of core wire / rod, preparation of dry mix, preparation of wet mix, application of coating by extrusion, baking of coated electrodes.	IPC-V
48	**Emery** powder (fine dust of sand) manufacturing	0	0	0	**0**	0	30	0	**30**	0	0	**0**	30	Green	Fugitive emissions from grinding operations.	IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
49	**Electric** lamp (bulb) and CFL manufacturing by assembling only	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
50	**Electrical** and electronic item assembling (completely dry process)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
51	**Engineering** and fabrication units (dry process without any heat treatment / metal surface finishing operations / painting)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
	~F~															
52.0	**FIBRE** GLASS (FIBRE REINFORCED PLASTIC) PRODUCTION															
52.1	Fibre glass (containing lead) production and processing (excluding moulding)	0	0	0	**0**	35	0	25	**60**	25	20	**45**	69	Orange		IPC-V
52.2	Fibre glass (without lead) production and processing (excluding moulding)	0	0	0	**0**	30	0	25	**55**	25	20	**45**	65.1	Orange	The use of styrene in most methods of fibre glass production causes hazardous air pollution that is harmful to breathe at excessive levels.	IPC-V
53	Manufacturing of **Firecrackers** including improved crackers/green crackers, etc.	0	0	0	**0**	35	30	0	**65**	30	10	**40**	72	Orange	Various hazardous chemicals are used in the manufacturing process. Accident/safety hazard is also associated with such sector during manufacturing and usages.	IPC-V
54.0	SYNTHETIC **FIBRES** MANUFACTURING															
54.1	Synthetic fibres-PSF & PFY, generated from petrochemical	35	30	35	**100**	30	25	35	**90**	30	20	**50**	100	Red		IPC-I

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
54.2	Synthetic fibres including rayon, tyre cord, viscose filament yarn/staple fibre, acrylic fibres	25	20	25	**70**	30	20	25	**75**	20	10	**30**	87.5	Red		IPC-I
54.3	Synthetic fibres including rayon, tyre cord, viscose filament yarn/staple fibre, acrylic fibres using cleaner/gaseous fuel	25	20	25	**70**	30	20	10	**60**	20	10	**30**	83.5	Red		IPC-I
55.0	**FERTILIZERS** PRODUCTION															
55.1	Fertilizers (Urea)	10	30	35	**75**	30	30	20	**80**	20	30	**50**	92.5	Red		IPC-I
55.2	Fertilizers (Calcium Ammonium Nitrate/Ammonium Nitrate)	10	30	25	**65**	30	25	25	**80**	20	20	**40**	90.5	Red		IPC-I
55.3	Fertilizers (NPK)	10	30	25	**65**	30	25	25	**80**	20	20	**40**	90.5	Red		IPC-I
55.4	Fertilizers (Straight Phosphatic Fertilizers)	10	30	25	**65**	30	25	25	**80**	20	20	**40**	90.5	Red		IPC-I
55.5	Fertilizer (granulation /formulation / blending) generating wastewater through floor washings, cooling towers etc.	10	30	15	**55**	30	30	0	**60**	10	10	**20**	75	Orange		IPC-I
55.6	Fertilizer (granulation /formulation / blending) not generating wastewater	0	0	0	**0**	30	30	0	**60**	10	10	**20**	64	Orange		IPC-I
56.0	**FOOD** AND **FOOD PROCESSING** INCLUDING FRUITS AND VEGETABLE PROCESSING															
56.1	Wastewater generation ≥ 10 KLD	25	0	25	**50**	25	0	25	**50**	0	0	**0**	62.5	Orange		IPC-III
56.2	Wastewater generation < 10 KLD (without boiler)	25	0	15	**40**	0	0	0	**0**	0	0	**0**	40	Green		IPC-III
57.0	**FISH** FEED, POULTRY FEED AND CATTLE FEED															
57.1	Fish feed, poultry feed and cattle feed (with boiler)	0	20	15	**35**	25	25	25	**75**	0	0	**0**	79.4	Orange		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
57.2	Fish feed, poultry feed and cattle feed (without boiler)	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V
58	**Fish** processing and packing (excluding chilling of fishes)	25	25	20	**70**	0	20	0	**20**	0	0	**0**	73	Orange		IPC-IV
59.0	MANUFACTURING OF MODULAR WOODEN **FURNITURE**															
59.1	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)	0	0	0	**0**	25	25	10	**60**	0	0	**0**	60	Orange		IPC-V
59.2	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 (Without boiler)	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V
60.0	CARPENTRY & WOODEN **FURNITURE** MANUFACTURING															
60.1	Carpentry & wooden furniture manufacturing with spray painting (excluding saw mill) with the help of electrical (motorized) machines such as electrical wood planner, steel saw cutting circular blade, etc.	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
60.2	Carpentry & wooden furniture manufacturing without spray painting (excluding saw mill) with the help of electrical (motorized) machines such as electrical wood planner, steel saw cutting circular blade, etc.	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
61	**Foam** manufacturing	0	0	0	**0**	35	0	0	**35**	20	10	**30**	44.8	Green	Emissions of VOCs and HAPs. Raw materials are polyurethane, latex etc.	IPC-V
62	**Flour** mills (dry process)	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green	Separate classification for domestic flour mills may not require.	IPC-V
63.0	STEEL **FURNITURE** INDUSTRY (Obnoxious gases from welding.)															
63.1	Steel furniture with spray painting	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V
63.2	Steel furniture without spray painting	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
~G~																
64.0	MANUFACTURING OF **GLUE** AND **GELATIN**															
64.1	Manufacturing of glue and gelatin using coal/liquid fuel	25	20	15	**60**	25	20	25	**70**	10	10	**20**	82	Red		IPC-I
64.2	Manufacturing of glue and gelatin by using biomass/cleaner fuel	25	20	15	**60**	25	20	15	**60**	10	10	**20**	76	Orange		IPC-I
65.0	MANUFACTURING OF **GLASS** (INCLUDING PRINTING OR ETCHING OF **GLASS** SHEET USING HYDROFLUORIC ACID)															
65.1	Manufacturing of glass (Oil/coal fired)	0	15	15	**30**	25	25	25	**75**	0	0	**0**	78.8	Orange		IPC-V
65.2	Manufacturing of glass (gas fired)	0	15	15	**30**	25	25	10	**60**	0	0	**0**	66	Orange		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
66	Producer **Gas** plant using conventional coal **Gasification**	20	25	15	**60**	25	0	25	**50**	30	10	**40**	78	Orange		IPC-V
67.0	COMPRESSED **BIOGAS** (CBG)/BIO-CNG PLANTS															
67.1	CBG plants based on Municipal Solid Waste (MSW) as feed	30	25	25	**80**	0	20	0	**20**	0	0	**0**	82	Red		IPC-III
67.2	CBG plants based on crop residue (paddy straw /wheat straw /corn sweet sorghum/ Napier grass, etc.) as feed	30	25	25	**80**	0	20	0	**20**	0	0	**0**	82	Red		IPC-III
67.3	CBG plants based on process waste (industrial/ process liquid effluent & solid waste like press mud, organic sludge, molasses, etc.) as feed	30	25	20	**75**	0	20	0	**20**	0	0	**0**	77.5	Orange		IPC-III
67.4	CBG plants based on animal waste (dairy farms, poultry farms, and other animal waste) as feed	30	25	20	**75**	0	20	0	**20**	0	0	**0**	77.5	Orange		IPC-III
67.5	CBG plants producing Fermented Organic Manure (FOM) & Liquid Fermented Organic Manure (LFOM) as by-products	0	0	0	**0**	0	20	0	**20**	0	0	**0**	20	White	CBG plants producing FOM & LFOM as by-products in conformity with requirements of Gazette Notification No. 2051 dated 14.07.2020 & No. 1972 dated 01.06.2021, respectively, and utilizing entire FOM & LFOM as a fertilizer or manure on land and also not discharging any waste-water, to be considered under White category, subject to verification by SPCB on case-to-case basis.	IPC-III

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
68.0	STANDALONE PRODUCTION OF **HYDROGEN** AND/OR **AMMONIA** (WITHOUT CAPTIVE POWER PLANT USING FOSSIL FUEL)															
68.1	Integrated unit for production of Ammonia through Hydrogen generated by pyrolysis/gasification	20	25	20	**65**	20	25	25	**70**	30	20	**50**	87.3	Red	i. Pyrolysis of biomass will generate syn gas and other condensable gases having hydrocarbons and other impurities. ii. Purification of gas will generate wastewater having high organic content and tarry residue as hazardous waste. iii. The process will generate fugitive emissions and due to pyrolysis operation.	IPC-I
68.2	Integrated unit for production of ammonia through Hydrogen generated by electrolysis using renewable energy (capacity ≥ 15 TPD)	10	25	35	**70**	0	20	0	**20**	30	20	**50**	80.5	Red	i. Ammonia manufacturing process (Haber process) and associated safety hazards remain same as per the chemical properties of ammonia. ii. Wastewater generation due to the production of hydrogen through electrolysis and condensation of ammonia, other scrubbed liquid etc. iii.Generation of ETP sludge, exhausted membranes, molecular sieves, spent catalysts, etc. as hazardous waste.	IPC-I

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
68.3	Integrated unit for production of Ammonia through hydrogen generated by electrolysis using renewable energy (Capacity < 15 TPD)	10	25	20	**55**	0	20	0	**20**	30	10	**40**	68.5	Orange	i. Ammonia manufacturing process (Haber process) and associated safety hazards remains same as per the chemical properties of ammonia. ii. Wastewater generation due to production of hydrogen through electrolysis and condensation of ammonia, other scrubbed liquid etc. iii.Generation of ETP sludge, exhausted membranes, molecular sieves, spent catalysts, etc. as hazardous waste.	IPC-I
68.4	Hydrogen production through pyrolysis/gasification	20	25	20	**65**	20	25	25	**70**	30	10	**40**	85.8	Red	i. Pyrolysis of biomass will generate syn gas and other condensable gases having hydrocarbons and other impurities. ii. Purification of gas will generate wastewater having high organic content and tarry residue as hazardous waste. iii.The process will generate fugitive emissions and due to pyrolysis operation.	IPC-I

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
68.5	Hydrogen production through electrolysis using raw/seawater and renewable energy (capacity ≥ 2.5 TPD)	0	20	35	**55**	0	0	0	**0**	30	10	**40**	64.0	Orange	i. Type of electrolysers may include Alkaline Water Electrolyser (AWE), Proton Exchange Membrane (PEM), Solid Oxide Electrolyser Cell (SOEC) and Anion Exchange Membrane (AEM), etc. ii. Generation of DM reject, cooling tower blowdown, draining of alkaline/electrolyser water during maintenance, etc. as wastewater. iii. Generation of ETP sludge, exhausted membranes, molecular sieves, spent catalysts, etc. as hazardous waste.	IPC-I
68.6	Hydrogen production through electrolysis using raw/sea water and renewable energy (capacity < 2.5 TPD)	0	20	20	**40**	0	0	0	**0**	30	10	**40**	52.0	Green	i. Type of electrolysers may include Alkaline Water Electrolyser (AWE), Proton Exchange Membrane (PEM), Solid Oxide Electrolyser Cell (SOEC) and Anion Exchange Membrane (AEM), etc. ii. Generation of DM reject, cooling tower blowdown, draining of alkaline/electrolyser water during maintenance, etc. as wastewater. iii. Generation of ETP sludge, exhausted membranes, molecular sieves, spent catalysts, etc. as hazardous waste.	IPC-I
68.7	Hydrogen production through electrolysis (using	0	0	0	**0**	0	0	0	**0**	0	10	**10**	10.0	White	i. DM water as feed water for electrolyser and cooling/chilling	IPC-I

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
	renewable energy) on BOO/BOOT/BOT, mode etc., located in the premises of end user industry and directly using de-mineralized water & other utilities (cooling tower, ETP, etc.) sourced from end user industry														water requirement to be met by the end user industry. ii. Wastewater and other waste generated during O&M shall also be managed by the end user industry.	
69	**Glue** from starch (physical mixing) with Gas/ electrically operated oven /boiler.	0	0	0	**0**	25	0	10	**35**	0	0	**0**	35	Green		IPC-V
70	**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)	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V
71	Compressed oxygen **Gas** from crude liquid oxygen (without use of any solvents and by maintaining pressure & temperature only for separation of other **Gases**)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
72	**Glass** and ampules and vials making from **Glass** tubes	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
73	**Ground** nut decorticating	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
74	**Medical Oxygen**	0	0	0	**0**	0	0	0	**0**	10	10	**20**	20	White	The sector may become green category if it generates wastewater	IPC-V
~H~																
75.0	**HOT** MIX PLANTS															
75.1	Hot mix plants using oil as fuel	0	0	0	**0**	25	25	25	**75**	0	0	**0**	75	Orange		IPC-V
75.2	Hot mix plants using gaseous as fuel	0	0	0	**0**	25	25	10	**60**	0	0	**0**	60	Orange		IPC-V
76	**Hazardous** waste pre-processing/processing facility including spent acid processing, spent solvent recovery, etc.	25	30	15	**70**	25	25	15	**65**	30	20	**50**	87.3	Red		WM-I
77	**Handloom**/ carpet weaving (without dying and bleaching operation)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
~I~																
78	**Ice** cream manufacturing units	25	25	20	**70**	25	0	25	**50**	0	0	**0**	77.5	Orange		IPC-IV
79	Printing **Ink** Manufacturing	20	30	15	**65**	0	20	10	**30**	30	10	**40**	77.3	Orange	In the process pigments, binders and solvents are used. VOCs are generated.	IPC-I

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
80	Manufacturing of scientific and mathematical **Instrument** (assembling only)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
							~J~									
81.0	**JUTE** PROCESSING															
81.1	Jute processing (with dyeing / with boiler)	25	20	25	**70**	25	0	25	**50**	0	0	**0**	77.5	Orange		IPC-III
81.2	Jute processing (without dyeing / without boiler)	20	0	20	**40**	0	0	0	**0**	0	0	**0**	40	Green		IPC-III
81.3	Manufacturing of products from jute (without dyeing/ without boiler)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-III
							~L~									
82	**Lime** manufacturing (using lime kiln)	0	0	0	**0**	25	0	30	**55**	0	0	**0**	55	Orange		IPC-V
83	**Leather** foot wear and **Leather** products (excluding tanning and hide processing)	0	0	0	**0**	0	20	0	**20**	0	0	**0**	20	White	Fumes due to use of adhesives / gums.	IPC-IV
84	Manufacturing of optical **Lenses** (using electrical furnace)	0	20	15	**35**	0	0	0	**0**	0	0	**0**	35	Green		IPC-V
85	**Leather** cutting and stitching (more than 10 machine and using motor)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
~M~																
86	**Mobile** towers using genset(s)	0	0	0	**0**	25	0	25	**50**	0	0	**0**	50	Green	i. The used oil/waste oil generated during repair and maintenance need to be disposed through authorized hazardous waste recycler by service provider/OEM. ii. Order dated 24.08.2017 in the related matter with OA No. 83(THC) OF 2012 (Bharti Infratel Ltd.) may be referred for issuance of composite consent in case of mobile towers.	UPC-I
87.0	**MILK** PROCESSES AND DAIRY PRODUCTS															
87.1	Milk processes and dairy products (integrated project)	30	25	30	**85**	25	20	30	**75**	0	0	**0**	90.6	Red		IPC-IV
87.2	Dairy and dairy products (Small scale units), using coal/biomass as fuel (Wastewater generation ≥ 100 KLD)	25	25	30	**80**	25	0	25	**50**	0	0	**0**	85	Red		IPC-IV
87.3	Dairy and dairy products (Small scale units), using coal/biomass as fuel (Wastewater generation < 100 KLD)	25	25	20	**70**	25	0	25	**50**	0	0	**0**	77.5	Orange		IPC-IV
87.4	Dairy and dairy products, (Small scale units), using PNG as fuel	25	25	20	**70**	0	0	10	**10**	0	0	**0**	71.5	Orange		IPC-IV
88.0	**MINING** AND ORE BENEFICIATION															
88.1	Open-cast coal mining	10	25	35	**70**	25	30	35	**90**	10	70	**80**	97.5	Red		IPC-II
88.2	Underground coal mining	0	25	35	**60**	25	30	35	**90**	0	0	**0**	93	Red		IPC-II

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
88.3	Mining of major minerals and ore beneficiation	20	30	35	**85**	25	30	35	**90**	25	70	**95**	99.4	Red	Includes captive limestone mining.	IPC-II
88.4	Mining of minor minerals (except Sand/riverbed material mining)	10	0	20	**30**	25	25	25	**75**	0	0	**0**	78.8	Orange		IPC-II
88.5	Grinding, processing, and screening of minor minerals	0	0	0	**0**	25	30	0	**55**	0	0	**0**	55	Orange		IPC-II
89	Manufacturing of **Mirror** from sheet glass	0	0	0	**0**	30	20	0	**50**	25	10	**35**	58.8	Orange		IPC-V
90	**Mineral** processing, industries involving ore sintering, pelletisating, grinding & pulverization	0	0	0	**0**	25	25	25	**75**	0	0	**0**	75	Orange		IPC-II
91	**Malteries** (without fermentation)	30	15	25	**70**	25	0	25	**50**	0	0	**0**	77.5	Orange		IPC-III
92	Manufacturing of **Mosquito** repellent & coil	0	0	0	**0**	30	0	25	**55**	0	0	**0**	55	Orange	Toxic fumes may be released.	IPC-V
93	Organic **Manure** (physical mixing)	0	0	0	**0**	0	20	0	**20**	0	0	**0**	20	White		IPC-V
94	Packing of powdered **Milk**	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
METALS AND METALLURGICAL SECTORS																
95.0	**IRON & STEEL** (PRIMARY PROCESSING FROM ORE, INTEGRATED STEEL PLANTS AND SPONGE IRON UNITS)															
95.1	Integrated iron and steel plants	25	30	35	**90**	25	30	35	**90**	25	50	**75**	98.3	Red		IPC-II
95.2	Stand-alone sintering/palletisation	0	0	0	**0**	25	30	35	**90**	0	0	**0**	90	Red		IPC-II
95.3	Sponge iron with CPP (Captive Power Plant)	20	25	35	**80**	25	30	35	**90**	10	50	**60**	97	Red		IPC-II

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
95.4	Sponge iron without CPP	20	15	30	**65**	25	30	35	**90**	10	50	**60**	96.3	Red		IPC-II
95.5	Stand-alone coke oven gas plants	25	30	30	**85**	25	30	35	**90**	25	50	**75**	98	Red		IPC-II
96.0	**ALUMINIUM** PROCESSING															
96.1	Aluminium Refinery	10	30	35	**75**	25	25	35	**85**	10	70	**80**	96.6	Red		IPC-II
96.2	Aluminium Smelter	10	30	35	**75**	30	25	35	**90**	25	70	**95**	99.1	Red		IPC-II
97	**Copper Smelter**	10	30	35	**75**	30	25	35	**90**	10	70	**80**	97.8	Red		IPC-II
98	**Zinc smelter**	10	30	35	**75**	30	25	35	**90**	10	70	**80**	97.8	Red		IPC-II
99.0	**FERROUS AND NON-FERROUS METAL** SECONDARY PROCESSING/REPROCESSING UNITS INVOLVING DIFFERENT FURNACES THROUGH MELTING, REFINING, CASTING, ALLOY-MAKING															
99.1	All Ferrous and Non-ferrous metal secondary processing/reprocessing units involving different furnaces through melting, refining, casting, alloy-making (using coal/liquid fuels)	0	15	15	**30**	25	25	25	**75**	25	10	**35**	83.1	Red		IPC-V
99.2	Ferrous and Non-ferrous metal (excluding lead, nickel, and manganese) secondary processing/reprocessing units involving different furnaces through melting, refining, casting, alloy-making (using cleaner fuels/electricity)	0	15	15	**30**	25	25	10	**60**	10	10	**20**	70	Orange		IPC-V
100	Aluminium & copper extraction from scrap using an oil-fired furnace (dry process only)	0	0	0	**0**	25	25	25	**75**	0	0	**0**	75	Orange		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
101.0	INDUSTRY OR PROCESS INVOLVING **METAL** SURFACE TREATMENT OR PROCESS/HEAT TREATMENT															
101.1	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	25	30	20	**75**	30	25	0	**55**	25	30	**55**	88.8	Red		IPC-V
101.2	Plasma electrolytic polishing (electroplating)	25	30	15	**70**	30	25	0	**55**	0	0	**0**	78.3	Orange		IPC-V
101.3	Heat treatment using furnace (without cyaniding)	0	0	0	**0**	25	0	25	**50**	0	0	**0**	50	Green		IPC-V
101.4	Heat treatment with any of the new technology like ultrasound probe, induction hardening, ionization beam, gas carburizing etc.	0	15	15	**30**	0	25	0	**25**	0	0	**0**	38.8	Green		IPC-V
102.0	FORGING OF **FERROUS AND NON- FERROUS METALS**															
102.1	Forging of ferrous and non-ferrous metals using liquid fuel	0	0	0	**0**	25	25	20	**70**	30	10	**40**	76	Orange		IPC-V
102.2	Forging of ferrous and non-ferrous metals using gaseous fuel	0	0	0	**0**	25	25	10	**60**	30	10	**40**	68	Orange		IPC-V
102.3	Forging of ferrous and non-ferrous metals using electricity	0	0	0	**0**	25	25	0	**50**	30	10	**40**	60	Orange		IPC-V
102.4	Forging of ferrous and non-ferrous metals (cold forging, without any heat treatment)	0	0	0	**0**	0	0	0	**0**	30	10	**40**	40	Green		IPC-V
103.0	ROLLING **MILLS**															
103.1	Rolling and pickling	25	30	15	**70**	25	30	25	**80**	25	10	**35**	90.5	Red		IPC-V
103.2	Rolling mills (oil and coal fired)	0	15	15	**30**	25	0	25	**50**	0	0	**0**	57.5	Orange		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
103.3	Rolling mills (gas fired)	0	15	15	**30**	25	0	10	**35**	0	0	**0**	44.8	Green		IPC-V
103.4	Cold rolling mill (without heat treatment)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
104.0	**FOUNDRY OPERATIONS**															
104.1	Cupola furnace	**0**	**0**	**0**	**0**	25	25	25	**75**	10	10	20	77.5	Orange		IPC-V
104.2	Induction furnace/arc furnace	0	0	0	**0**	25	30	0	**55**	10	10	**20**	59.5	Orange		IPC-V
105.0	**WIRE** DRAWING AND **WIRE** NETTING															
105.1	Wire drawing and wire netting (with pickling)	25	30	15	**70**	30	25	0	**55**	10	10	**20**	81.3	Red		IPC-V
105.2	Wire drawing and wire netting (without pickling and with heat treatment)	0	0	0	**0**	25	0	20	**45**	10	10	**20**	50.5	Green		IPC-V
105.3	Wire drawing and wire netting (without pickling and without heat treatment)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
106	**Die-casting** /extrusion process only	0	0	0	**0**	25	0	25	**50**	0	0	**0**	50	Green		IPC-V
107	Manufacturing of aluminium utensils from aluminium circles pressing/ Brass and bell **Metal** utensils manufacturing from circles (dry mechanical operation only)	0	0	0	**0**	0	30	0	**30**	0	0	**0**	30	Green	Emissions during buffing	IPC-V
108	Manufacturing of **Metal** caps containers etc	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
								~N~								
109	Formulation/palletisation of camphor tablets, **Naphthalene** balls from camphor/ naphthalene powders.	0	0	0	**0**	35	20	0	**55**	0	0	**0**	55	Orange	Emissions of benzene, hydrocarbons etc. are expected.	IPC-V
110	Organic and inorganic **Nutrients** by physical mixing (without boiler and without any reactor)	0	0	0	**0**	0	0	0	**0**	10	10	**20**	20	White	The sector may become green category if it generates wastewater	IPC-V
111.0	**ORGANIC** CHEMICALS INCLUDING HALOGENATED HYDROCARBONS															
111.1	Organic chemicals including halogenated hydrocarbons (using solid/liquid fuel)	30	30	25	**85**	35	0	30	**65**	30	20	**50**	93.6	Red		IPC-I
111.2	Organic chemicals including halogenated hydrocarbons (using cleaner fuel)	30	30	25	**85**	35	0	10	**45**	30	20	**50**	92.1	Red		IPC-I
112	**Oil** and gas extraction (offshore & onshore extraction through drilling wells), Coal Bed Methane (CBM) drilling and shale gas, including group gathering stations (GGS), etc.	25	30	15	**70**	20	25	0	**45**	30	10	**40**	82.8	Red		IPC-I
113.0	EDIBLE **OIL** MILLS															
113.1	Vegetable oil manufacturing including solvent extraction and refinery /hydrogenated oils	25	25	20	**70**	25	0	20	**45**	0	0	**0**	76.8	Orange		IPC-III

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
113.2	Oil mills Ghani and extraction without boiler (no refining/ hydrogenation)	10	25	15	**50**	0	0	0	**0**	0	0	**0**	50	Green		IPC-III
							~P~									
114.0	**POWER** GENERATION PLANTS															
114.1	Power plants based on coal	0	15	35	**50**	35	25	35	**95**	10	70	**80**	98.3	Red		IPC-II
114.2	Power plants based on liquid fuels	0	15	35	**50**	25	25	35	**85**	30	20	**50**	92.5	Red		IPC-II
114.3	Waste to energy power plants	0	15	30	**45**	35	25	35	**95**	10	50	**60**	97.6	Red		IPC-II
114.4	Biomass-based power plants	0	15	30	**45**	25	25	25	**75**	10	50	**60**	88.1	Red		IPC-II
114.5	Nuclear energy-based power plants (> 220 MW)	0	30	35	**65**	25	0	25	**50**	25	20	**45**	81.6	Red	Overall safety aspects related with radioactivity is regulated by Atomic Energy Regulatory Board (AERB).	IPC-II
114.6	Nuclear energy-based power plants (up to 220 MW)	0	30	35	**65**	25	0	25	**50**	25	10	**35**	79.9	Orange	Overall safety aspects related with radioactivity is regulated by Atomic Energy Regulatory Board (AERB).	IPC-II
114.7	Gas-based power plants	0	15	35	**50**	25	0	20	**45**	0	0	**0**	61.3	Orange		IPC-II
115.0	**PULP & PAPER** (AGRO & WOOD)															
115.1	Manufacturing of bleached chemical pulp, papers, and paperboards	30	30	35	**95**	30	0	35	**65**	30	30	**60**	98.1	Red		IPC-III
115.2	Unbleached or Totally Chlorine Free (TCF) bleaching for manufacturing of chemical pulp, papers, and paperboards	30	20	35	**85**	30	0	35	**65**	10	30	**40**	92.9	Red		IPC-III
115.3	Bleached grades of chemical pulp, paper, and paperboard having Totally Chlorine Free (TCF) bleaching	30	20	35	**85**	30	0	35	**65**	10	30	**40**	92.9	Red		IPC-III

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
116.0	**PULP AND PAPER** (RECYCLED FIBRE/WASTE PAPER BASED)															
116.1	Pulp & Paper (With bleaching)	30	15	35	**80**	25	0	25	**50**	10	30	**40**	89	Red		IPC-III
116.2	Pulp & Paper (Without bleaching, capacity ≥15 TPD)	25	15	35	**75**	25	0	25	**50**	10	30	**40**	86.3	Red		IPC-III
116.3	Pulp & Paper (Without bleaching; plant capacity <15 TPD)	25	15	20	**60**	25	0	25	**50**	10	10	**20**	74	Orange		IPC-III
117.0	MANUFACTURING OF **PAINTS**, VARNISHES (The process may cause considerable emissions of volatile organic compounds (VOC).)															
117.1	Manufacturing of solvent-based paints/varnish	35	30	20	**85**	25	20	25	**70**	25	30	**55**	94.4	Red		IPC-I
117.2	Manufacturing of water-based paints	25	30	20	**75**	25	20	25	**70**	20	20	**40**	88.8	Red		IPC-I
117.3	Manufacturing of powder coatings	0	15	15	**30**	20	30	25	**75**	10	20	**30**	82.5	Red		IPC-I
117.4	Manufacturing of paint and varnishes (only blending and mixing)	20	30	15	**65**	0	20	0	**20**	30	20	**50**	77.3	Orange		IPC-I
118.0	**PESTICIDE** INDUSTRIES															
118.1	Pesticide technical (organic chemicals based)	30	30	20	**80**	30	25	25	**80**	30	30	**60**	94	Red		IPC-I
118.2	Pesticide technical (inorganic chemicals based like Zinc Phosphide and Aluminium Phosphide)	20	30	20	**70**	30	25	25	**80**	20	20	**40**	91	Red		IPC-I
118.3	Pesticide formulation industries (Liquid formulation only) having boiler/thermopack	20	30	20	**70**	25	20	25	**70**	20	20	**40**	86.5	Red		IPC-I
118.4	Pesticide formulation industries (Liquid formulation only) without having boiler/thermopack	20	30	20	**70**	0	20	0	**20**	20	20	**40**	79	Orange	Considering that dry formulation industries can also generate effluent because of equipment cleaning, the water pollution score is given	IPC-I

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
118.5	Pesticide formulation industries (having both liquid and dry formulation or dry formulation only) without having boiler / thermopack	20	30	20	**70**	30	20	0	**50**	20	20	**40**	83.5	Red	Considering that dry formulation industries can also generate effluent because of equipment cleaning, the water pollution score is given	IPC-I
118.6	Pesticide formulation industries (having both liquid and dry formulation or dry formulation only) having boiler / thermopack	20	30	20	**70**	30	20	25	**75**	20	20	**40**	88.8	Red	Considering that dry formulation industries can also generate effluent because of equipment cleaning, the water pollution score is given	IPC-I
119	**Photographic** film and its chemicals	20	20	15	**55**	30	0	25	**55**	20	10	**30**	74.1	Orange	Silver salts and other chemicals are used	IPC-I
120	**Petroleum** oil refineries	35	30	30	**95**	35	20	35	**90**	20	20	**40**	98.3	Red		IPC-I
121.0	**PETROCHEMICALS**															
121.1	Petrochemicals (Naphtha cracker.)	30	30	30	**90**	35	25	35	**95**	30	20	**50**	98.5	Red		IPC-I
121.2	Petrochemicals (Gas cracker)	30	30	30	**90**	35	25	25	**85**	30	20	**50**	96.8	Red		IPC-I
121.3	Petrochemicals (without cracker)	25	30	20	**75**	25	25	15	**65**	20	20	**40**	88.1	Red		IPC-I
121.4	Petrochemicals (without cracker and using cleaner/gaseous fuel)	25	30	20	**75**	25	25	10	**60**	20	20	**40**	87.5	Red		IPC-I
122.0	MANUFACTURING OF LUBRICATING OILS, GREASE AND **PETROLEUM**-BASED PRODUCTS															
122.1	Manufacturing of lubricating oils, grease, and petroleum-based products	20	15	15	**50**	25	20	10	**55**	30	10	**40**	75.3	Orange	Such unit uses distillation columns/ boilers etc	IPC-I
122.2	Manufacturing of lubricating oils, grease, and petroleum-based products (only blending)	0	0	0	**0**	0	25	0	**25**	10	10	**20**	32.5	Green		IPC-I

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
123.0	**PHARMACEUTICAL** INDUSTRY															
123.1	Pharmaceuticals manufacturing	35	30	30	**95**	35	25	35	**95**	30	20	**50**	98.6	Red		IPC-I
123.2	Pharmaceuticals manufacturing using cleaner/gaseous fuel	35	30	30	**95**	35	25	10	**70**	30	20	**50**	98	Red		IPC-I
123.3	Pharmaceuticals (Formulation)	20	15	15	**50**	25	0	25	**50**	30	10	**40**	72.5	Orange		IPC-I
123.4	Pharmaceuticals (Formulation) using cleaner/gaseous fuel	20	15	15	**50**	25	0	10	**35**	30	10	**40**	68.8	Orange		IPC-I
123.5	Vaccine manufacturing	20	15	15	**50**	25	0	35	**60**	30	10	**40**	78	Orange		IPC-I
123.6	Vaccine manufacturing using cleaner/gaseous fuel	20	15	15	**50**	25	0	10	**35**	30	10	**40**	68.8	Orange		IPC-I
123.7	Pharmaceutical R&D facilities	20	15	15	**50**	25	0	25	**50**	30	10	**40**	72.5	Orange		IPC-I
123.8	Ayurvedic or Unani medicines manufacturing	20	15	15	**50**	25	0	25	**50**	30	10	**40**	72.5	Orange		IPC-I
123.9	Ayurvedic or unani medicines manufacturing using cleaner fuel	20	15	15	**50**	25	0	10	**35**	0	0	**0**	58.8	Orange		IPC-I
123.10	Ayurvedic or unani medicines manufacturing (Without boiler)	20	15	15	**50**	0	0	0	**0**	0	0	**0**	50	Green		IPC-I
124	Digital **Printing** on flex /vinyl, PVC etc. (more than 5 machines)	0	0	0	**0**	20	0	0	**20**	30	10	**40**	46	Green		IPC-V
125	Spray **Painting**, Paint baking, Paint shipping	0	0	0	**0**	0	25	0	**25**	30	10	**40**	47.5	Green	Emissions in the form of VOCs and HC are generated.	IPC-V
126	**Plywood**/board manufacturing (including Veneer and laminate) with	20	20	15	**55**	25	20	25	**70**	0	0	**0**	78.3	Orange		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
	biomass fired boiler / thermic fluid heater (without resin plant)															
127	**Printing** press (newspaper, books, magazines, etc./ Gravure printing	20	0	15	**35**	20	0	0	**20**	30	10	**40**	56.5	Orange		IPC-V
128	Manufacturing of bi-axially oriented **Polypropylene** (PP) film along with metalizing operations	0	15	15	**30**	0	0	0	**0**	0	0	**0**	30	Green	Mainly extrusion process involving	IPC-V
129	**Pulse**/Dal Mills	0	0	0	**0**	0	30	0	**30**	0	0	**0**	30	Green		IPC-V
130	Insulation and other coated **Papers** (excluding paper or pipe manufacturing)	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V
131	**Packaging** materials manufacturing from non-asbestos fibre, vegetable fibre yarn	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V
132	**Polythene** and plastic processed products manufacturing (virgin/compostable plastic)	0	15	15	**30**	0	20	0	**20**	0	0	**0**	37	Green		IPC-V
133	**Poultry**, piggery, and hatchery	0	0	0	**0**	30	20	0	**50**	0	0	**0**	50	Green		IPC-V
134	**Puffed** rice (muri) (using gas)	0	0	0	**0**	25	0	10	**35**	0	0	**0**	35	Green		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
135	Biscuits trays etc from rolled **PVC** sheet (using automatic vacuum forming machines)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
136	Fountain **Pen** manufacturing by assembling only	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
137	Glass **Putty** and sealant (by mixing with machine only)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
138	Manufacturing of **Paper** Pins, U-clips, etc.	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
139	Solar **Power** generation through solar photovoltaic cell and wind power	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
~R~																
140	Synthetic **Rubber** excluding molding	20	15	15	**50**	20	0	25	**45**	20	10	**30**	68.8	Orange	Most synthetic rubber is created from two materials, styrene, and butadiene.	IPC-I
141.0	**REFRACTORIES**															
141.1	Refractories based on coal/liquid fuel (fuel consumption: 12 TPD and above)	0	0	0	**0**	25	25	30	**80**	0	0	**0**	80	Red		IPC-V
141.2	Refractories based on coal/liquid fuel (fuel consumption: less than 12 TPD)	0	0	0	**0**	25	25	25	**75**	0	0	**0**	75	Orange		IPC-V
141.3	Refractories based on cleaner fuels	0	0	0	**0**	25	25	10	**60**	0	0	**0**	60	Orange		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
142.0	**RUBBER** PRODUCTS MANUFACTURING															
142.1	Tyre and tube manufacturing	0	15	15	**30**	25	25	25	**75**	0	0	**0**	78.8	Orange		IPC-V
142.2	Tyres and tubes vulcanization/ hot retreading	0	15	15	**30**	25	20	10	**55**	0	0	**0**	61.8	Orange	Emissions of PM, VOCs and obnoxious odour are generated.	IPC-V
142.3	Rubber goods industry (with solid fuel/oil-based boiler)	0	15	15	**30**	25	0	25	**50**	0	0	**0**	57.5	Orange		IPC-V
142.4	Rubber goods industry (with gas-based boiler)	0	15	15	**30**	25	0	10	**35**	0	0	**0**	44.8	Green		IPC-V
143.0	SYNTHETIC **RESINS**															
143.1	Synthetic resins manufacturing	20	15	15	**50**	25	20	25	**70**	20	10	**30**	82	Red		IPC-I
143.2	Synthetic resins manufacturing (using only gaseous fuel)	20	15	15	**50**	25	20	10	**55**	20	10	**30**	73	Orange		IPC-I
144	Blending of melamine **Resins** & different powder, additives by physical mixing, including phenolic resin (without boiler)	0	15	15	**30**	0	30	0	**30**	20	10	**30**	51	Green		IPC-I
145.0	**RICE** MILLS															
145.1	Parboiled rice mill (with soaking and steam/drier)	25	0	20	**45**	25	0	25	**50**	0	0	**0**	61.3	Orange		IPC-V
145.2	Raw rice mill (Without soaking and steam/drier)/ hullers)	0	0	0	**0**	0	30	0	**30**	0	0	**0**	30	Green		IPC-V
146	**Repairing** of electric motors and generators (dry mechanical process)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
147	Manufacturing of plastic or cotton **Rope**	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
148	Tyre **Retraders**	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		WM-III
RECYCLING AND REPROCESSING SECTOR																
149.0	INDUSTRIES ENGAGED IN **RECYCLING/REPROCESSING/ RECOVERY/REUSE** OF HAZARDOUS WASTE UNDER SCHEDULE IV OF H&OW(M & TBM) RULES, 2016 - ITEMS, NAMELY, SPENT CATALYSTS CONTAINING NICKEL, CADMIUM, ZINC, COPPER, ARSENIC, VANADIUM, AND COBALT, INCLUDING DRY BATTERY (EXCEPT LEAD), AND CLEARED METAL CATALYST.															
149.1	Hydro & pyro metallurgy	0	30	15	**45**	35	25	25	**85**	25	10	**35**	91	Red		WM-II
149.2	Hydro & pyro metallurgy (using cleaner/gaseous fuels & without crushing of materials)	0	30	15	**45**	35	25	10	**70**	25	10	**35**	82	Red		WM-II
149.3	Pyro metallurgy (using coal/liquid fuels)	0	0	0	**0**	35	25	25	**85**	20	10	**30**	87.3	Red		WM-II
149.4	Pyro metallurgy (using cleaner/gaseous fuels)	0	0	0	**0**	35	25	10	**70**	20	10	**30**	74.5	Orange		WM-II
149.5	Hydro metallurgy	0	30	15	**45**	30	25	0	**55**	25	10	**35**	73	Orange		WM-II
150.0	E-WASTE DISMANTLING / **RECYCLING**															
150.1	Industry engaged in recycling of e-waste generated from the electrical and electronic Equipment (EEE) listed in the E-Waste (Management) Rules 2022 using pyro/ hydro/ electro-metallurgical processing and recycling of plastic separated from Waste EEE	30	30	20	**80**	35	25	15	**75**	25	20	**45**	92	Red		WM-III

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
150.2	Industry engaged in recycling of e-waste generated from the electrical and electronic equipment (EEE) listed in the E-Waste (Management) Rules 2022 (PCB processing limited to only mechanical processing and separation without pyro/ hydro/ electro-metallurgical processing), production of Al, Cu, and other metals from non-PCB sources and/or recycling of plastic separated from Waste EEE.	0	15	15	**30**	20	25	15	**60**	25	10	**35**	73	Orange		WM-III
150.3	Industry engaged in dismantling (only) of e-waste, generated from the electrical and electronic equipment (EEE) listed in the E-Waste (Management) Rules 2022 and refurbishing centres	0	0	0	**0**	0	25	0	**25**	25	10	**35**	43.1	Green		WM-III
151.0	INDUSTRIES ENGAGED IN **RECYCLING/REPROCESSING/ RECOVERY/REUSE** OF HAZARDOUS WASTE (Items as per Schedule IV of H&OW(M & TBM) Rules, 2016.)															
151.1	Lead Recycling (Lead Acid Batteries with Acids; Lead Scrap Recycling) Rotary Furnace/ Pit Furnace (Mandir/Canopy Bhatti)	0	30	20	**50**	35	30	25	**90**	20	20	**40**	94.5	Red	This also includes 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.”	WM-II

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
151.2	Lead Recycling (Drained Lead Acid Batteries; Lead Scrap Recycling) Rotary Furnace/Mandir Bhatti on Cleaner Fuel	0	30	15	**45**	35	30	10	**75**	20	10	**30**	84.4	Red	This also includes, 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."	WM-II
151.3	Isolated storages (as defined under Manufacture, Storage, and Import of Hazardous Chemicals Rules, 1989 as amended)	10	25	15	**50**	20	25	0	**45**	30	10	**40**	71.3	Orange		IPC-I
151.4	Paint and ink sludge / residues recycling	20	25	15	**60**	0	20	0	**20**	30	10	**40**	72	Orange		WM-II
151.5	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste, excluding lead, paint, and ink sludge	0	30	15	**45**	35	0	25	**60**	20	10	**30**	75	Orange	This includes items namely - Brass Dross, Copper Dross, Copper Oxide Mill Scale, Copper everts, Cake & Residues, Waste Copper and copper alloys in 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 form.	WM-II

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
151.6	Refining of used oil by hydro-treating/using solvent extraction	10	25	25	**60**	25	0	25	**50**	20	20	**40**	78	Orange		WM-II
151.7	Refining of used oil by using thin film evaporation/vacuum distillation with clay treatment	10	25	15	**50**	25	0	15	**40**	20	10	**30**	67.5	Orange		WM-II
151.8	Recycling / reprocessing of waste oil	20	25	15	**60**	25	0	15	**40**	20	10	**30**	74	Orange		WM-II
152.0	**RECYCLING** OF PLASTIC WASTE															
152.1	Manufacturing of flakes/staple fibre/strip from the recycling of PET bottles	20	15	25	**60**	0	20	0	**20**	0	0	**0**	64	Orange		IPC-I
152.2	Plastic waste processing (manufacturing of flakes/granules)	20	15	15	**50**	0	20	0	**20**	0	0	**0**	55	Orange	Process using In-built heaters.Washwater and fugitive emission.	UPC-II
153.0	SCRAPING FACILITIES FOR **RECYCLING** END-OF-LIFE VEHICLES, WAGONS, AND COACHES															
153.1	Collection, Depollution and Dismantling Centers (Without shredding)	0	30	15	**45**	0	30	0	**30**	25	10	**35**	62.9	Orange		WM-II
153.1	Collection, Depollution, Dismantling and shredding Centers	0	30	15	**45**	0	30	0	**30**	25	10	**35**	62.9	Orange		WM-II
153.2	Common Shredders (Standalone)	0	0	0	**0**	0	30	0	**30**	25	10	**35**	44.8	Green		WM-II
153.3	Collection Centers (Without depollution, dismantling and shredding)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		WM-II
	~S~															
154	**Sugar** (excluding khandsari/jaggery)	30	25	35	**90**	25	0	25	**50**	30	10	**40**	94.5	Red	Generates large volume of wastewater.	IPC-III

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
155	**Ship** breaking industries	0	0	0	**0**	0	30	0	**30**	30	20	**50**	57.5	Orange	Ship breaking releases a large number of pollutants, including toxic waste, used/waste oil, poly-chlorinated biphenyls, and heavy metals.	WM-III
156	**Slaughterhouse** / **Slaughterhouse** (with rendering plant)/ integrated slaughtering unit, meat processing units, bone mill, processing of animal horns, hoofs and other body parts	30	25	30	**85**	25	20	25	**70**	0	0	**0**	90.3	Red		IPC-IV
157	Manufacturing of **Silica** gel	10	25	20	**55**	30	0	20	**50**	25	10	**35**	74.1	Orange		IPC-I
158	Manufacturing of Iodized **Salt** from Crude / Raw Salt	10	20	15	**45**	25	0	25	**50**	0	0	**0**	61.3	Orange	Process may involve boiling in evaporators (multiple effect evaporators), centrifuging, iodization, mixing, etc.	IPC-V
159	Manufacturing of **Starch** / Sago / Sorbitol	20	25	25	**70**	25	0	25	**50**	0	0	**0**	77.5	Orange		IPC-III
160	**Stone** crushers	0	0	0	**0**	25	30	0	**55**	0	0	**0**	55	Orange		IPC-V
161	**Stone** crushing/grinding/washing & screening of riverbed material(s)	10	0	25	**35**	25	30	0	**55**	0	0	**0**	62.9	Orange		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
162.0	MANUFACTURING OF **SURGICAL** AND MEDICAL PRODUCTS															
162.1	Manufacturing of **Surgical** and medical products	10	25	15	**50**	25	0	10	**35**	0	0	**0**	58.8	Orange		IPC-V
162.2	Surgical and medical products assembled only (with effluent-generating processes)	10	25	15	**50**	0	0	0	**0**	0	0	**0**	50	Green		IPC-V
162.3	Surgical and medical products assembled only (without effluent-generating processes)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
163.0	**SEMICONDUCTOR** MANUFACTURING INDUSTRIES i. Toxic wastewater is generated due to presence of Hydrofluoric acid (HF), Mixed Nitric HF (HF + HNO3), Phosphoric acid, Sulphuric acid (H2SO4), Hydrogen Peroxide, Isopropyl alcohol (IPA) / Methanol (Methanol Only), Stripper EKC-265 /ACT N396 (ACT N396 Only), BHF – 63 U, Choline etchant, etc. ii. The air pollutants which are being emitted during the manufacturing process are SiH4, PH3, B2H6, HF, HBr, DCS, NF3, SF6, BCl3, Cl2, HCL, NH3, C2F6, CHF3, CF4, C4F8, C2F6 etc. iii. Process waste, used oil etc. are generated as hazardous waste.)															
163.1	Semiconductor fabs manufacturing	25	30	35	**90**	35	30	0	**65**	25	10	**35**	95	Red		WM-III
163.2	Display fabs manufacturing	25	30	35	**90**	25	30	0	**55**	25	10	**35**	94.5	Red		WM-III
163.3	Compound semiconductors/ silicon photonics/ sensor fabs manufacturing	25	30	35	**90**	25	30	0	**55**	25	10	**35**	94.5	Red		WM-III
163.4	Semiconductor Assembly, Testing, Marking and Packaging Facility (ATMP)	0	0	0	**0**	0	25	0	**25**	25	10	**35**	43.1	Green		WM-III
164	**Saw** mills	0	0	0	**0**	0	30	0	**30**	0	0	**0**	30	Green		IPC-V
165	**Spice** grinding	0	0	0	**0**	0	30	0	**30**	0	0	**0**	30	Green		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
166	Cutting, **Sizing** and polishing of marble, granite and other stones	10	0	20	**30**	0	30	0	**30**	0	0	**0**	40.5	Green		IPC-V
167	Manufacturing of **Solar** module/ non-conventional energy apparatus	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
								~T~								
168.0	**TANNERIES**															
168.1	Tanneries (Raw to finish)	35	30	25	**90**	0	20	0	**20**	25	30	**55**	93.8	Red		IPC-IV
168.2	Tanneries (Raw to wet blue)	35	30	25	**90**	0	20	0	**20**	25	30	**55**	93.8	Red		IPC-IV
168.3	Tanneries (Wet blue to finish)	35	30	20	**85**	0	20	0	**20**	25	30	**55**	90.6	Red		IPC-IV
168.4	Vegetable tanning	20	25	25	**70**	0	20	0	**20**	20	10	**30**	77.5	Orange		IPC-IV
169.0	MANUFACTURING OF **TOOTH** POWDER, TOOTHPASTE, TALCUM POWDER AND OTHER COSMETIC ITEMS															
169.1	Manufacturing of toothpaste and other cosmetic items	20	25	20	**65**	25	0	25	**50**	0	0	**0**	73.8	Orange		IPC-V
169.2	Manufacturing of tooth powder, talcum powder	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V
170.0	**THERMOMETER** MANUFACTURING															
170.1	Glass (mercury based) thermometer manufacturing	10	30	15	**55**	25	0	10	**35**	25	10	**35**	70.8	Orange	Process involves making of 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.	IPC-V
170.2	Digital thermometer manufacturing	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
171	Manufacturing of **Teflon**-based products	10	0	15	**25**	25	25	25	**75**	0	0	**0**	78.1	Orange	Due to spraying applications, emissions (HC) are generated	IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
172	**Thermocol** manufacturing (with boiler)	0	20	15	**35**	25	0	25	**50**	0	0	**0**	58.8	Orange		IPC-V
173.0	MANUFACTURING OF **TOBACCO** PRODUCTS INCLUDING CIGARETTES AND TOBACCO PROCESSES															
173.1	Manufacturing of tobacco products including cigarettes and tobacco processes (with boiler)	20	0	15	**35**	25	20	25	**70**	0	0	**0**	75.3	Orange		IPC-V
173.2	Manufacturing of tobacco products including cigarettes and tobacco processes (without boiler)	20	0	15	**35**	0	20	0	**20**	0	0	**0**	41.5	Green		IPC-V
174	**Transformer** repairing/ manufacturing (dry process only)	0	0	0	**0**	0	25	0	**25**	30	10	**40**	47.5	Green		IPC-V
175	**Tyre** Pyrolysis Oil Industries-Applicable for advanced batch automated process / continuous TPO units	10	0	15	**25**	25	25	25	**75**	0	0	**0**	78.1	Orange		WM-III
176	**Tamarind** powder manufacturing	10	15	15	**40**	25	0	10	**35**	0	0	**0**	50.5	Green	Dried tamarind fruits are cleaned, soaked, and boiled in steam jacketed kettle. Then pulp is extracted in pulper and dried in drum type drier.	IPC-V
177.0	**TEA** PROCESSING AND BLENDING															
177.1	Tea processing (with boiler)	10	0	15	**25**	25	0	25	**50**	0	0	**0**	56.3	Orange		IPC-III
177.2	Tea processing (without boiler)	10	0	15	**25**	0	0	0	**0**	0	0	**0**	25	Green		IPC-III
177.3	Blending and packing of tea	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
TEXTILE SECTOR																
178.0	**TEXTILE** INDUSTRY															
178.1	Yarn / Textile processing involving any effluent/emission generating processes including bleaching, dyeing, printing, and colouring, including the garment and apparel manufacturing industry	30	30	30	**90**	25	0	35	**60**	30	20	**50**	95.5	Red		IPC-III
178.2	Yarn to grey fabric manufacturing with water jet machines	20	25	25	**70**	0	0	0	**0**	0	0	**0**	70	Orange		IPC-III
178.3	Garment and apparel manufacturing industry including Doubling / Reeling / TFO-Two for one unit (dry process)-with boiler	0	0	0	**0**	25	0	25	**50**	0	0	**0**	50	Green		IPC-III
178.4	Garment and apparel manufacturing industry including Doubling / Reeling / TFO-Two for one unit (dry process)-without boiler	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-III
179.0	**SAREE/FABRIC PRINTING** BY SCREEN / WOODEN BLOCK /HAND BLOCK															
179.1	Saree/fabric printing by screen / wooden block/hand block	25	0	25	**50**	25	0	20	**45**	30	10	**40**	71.3	Orange		IPC-III
179.2	Hand block printing without effluent generation	0	0	0	**0**	25	0	20	**45**	0	0	**0**	45	Green		IPC-III
180.0	**TEXTILE** SPINNING**,** SIZING AND WEAVING MILLS															
180.1	Textile spinning, sizing and weaving mills (wastewater generation≥ 10 KLD)	10	20	20	**50**	25	0	15	**40**	0	0	**0**	60	Orange		IPC-III

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
180.2	Textile spinning, sizing and weaving mills (wastewater generation <10 KLD)	10	20	15	**45**	25	0	10	**35**	0	0	**0**	54.6	Green		IPC-III
181	**Power looms** (without dye and bleaching)	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-III
182.0	REPROCESSING OF WASTE **TEXTILE** FABRIC															
182.1	Integrated facility for reprocessing of waste textile fabric (including washing, bleaching, dyeing etc.)	30	30	20	**80**	25	25	15	**65**	0	0	**0**	86.5	Red		IPC-III
182.2	Reprocessing of waste textile fabric (dry process)	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-III
183	**Cotton and woollen Hosiers** making (Dry process only without any dying / washing operation)	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0	White		IPC-V
~W~																
184	Seasoning of **Wood** in steam heated chamber	0	0	0	**0**	25	0	25	**50**	0	0	**0**	50	Green		IPC-V
185	Pulverization of bamboo and scrap **Wood**	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25	Green		IPC-V
186	Distilled **Water** (without boiler) with electricity as source of heat	0	20	20	**40**	0	0	0	**0**	0	0	**0**	40	Green		IPC-V
187	Purification of **Water** and packaging (mineralized/non-mineralized water)	0	20	25	**45**	0	0	0	**0**	0	0	**0**	45	Green	RO Rejects.	IPC-V

ANNEXURE-II

(LIST OF ESSENTIAL ENVIRONMENTAL SERVICES)

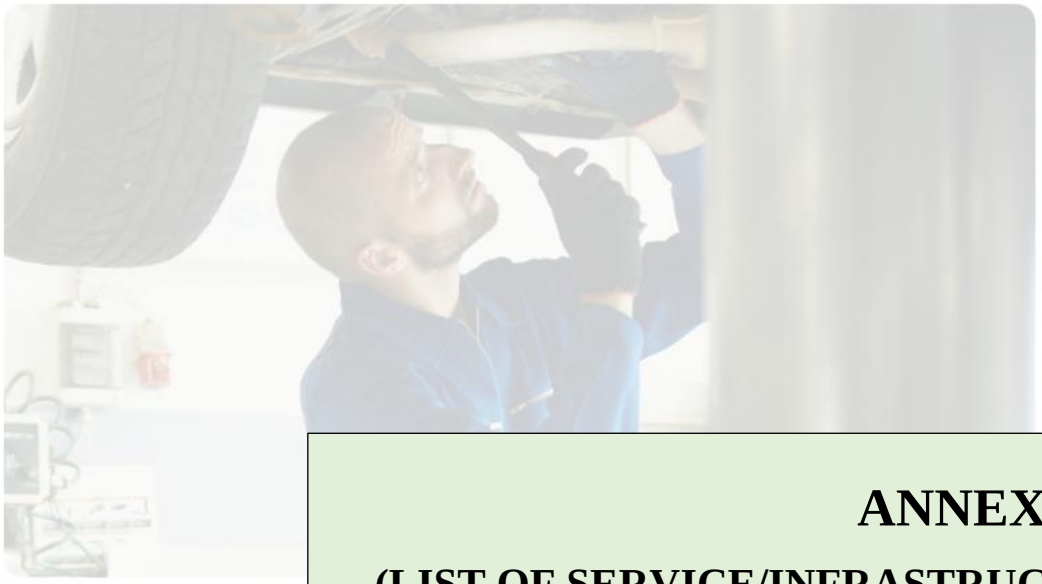
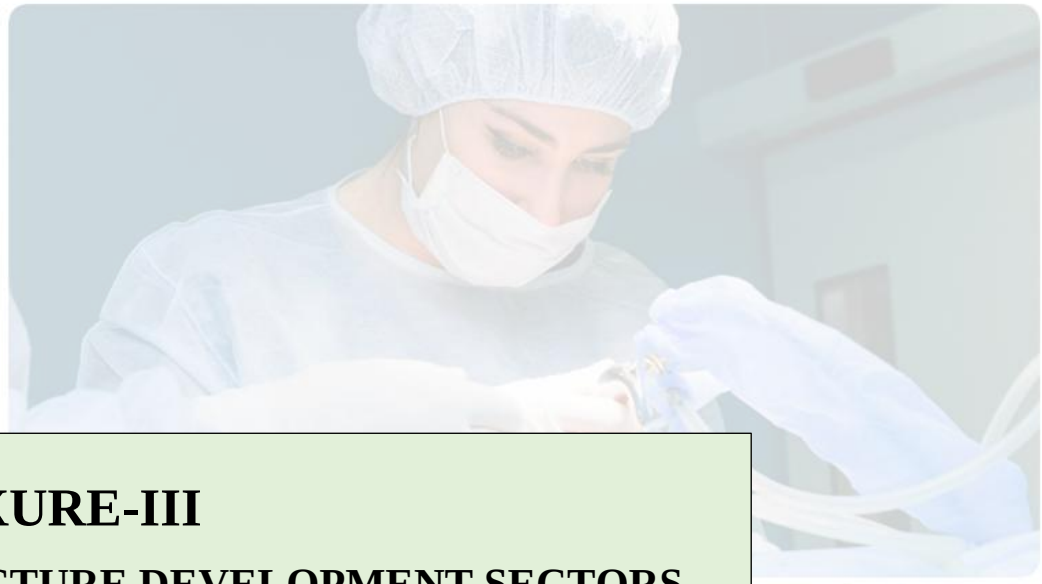
LIST OF ESSENTIAL ENVIRONMENTAL SERVICES

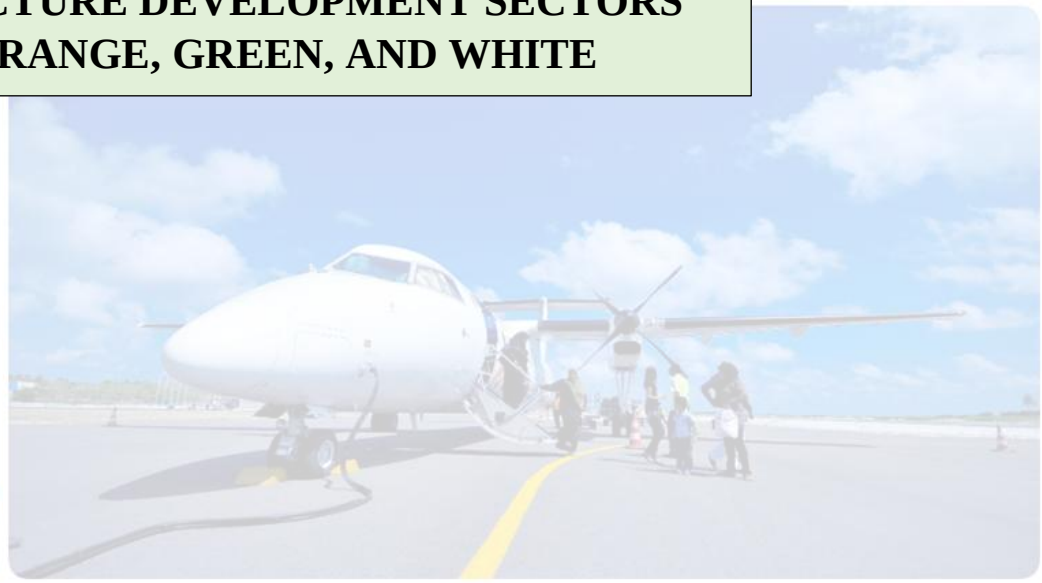
i. Essential Environmental Services for Industrial Waste Management

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
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		IPC-VII
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		IPC-VII
1.3	Common Sewage-Effluent Treatment Plant (CSETP)	25	30	30	**85**	0	0	0	**0**	25	20	**45**	88.4	Red		IPC-VII
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.	IPC-VII
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		WM-I
3.2	Only secured landfill	35	30	15	**80**	0	25	0	**25**	25	70	**95**	97.6	Red		WM-I
3.3	Only incinerator	35	30	15	**80**	25	25	15	**65**	30	70	**100**	100.0	Red		WM-I
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		WM-I
4.2	CBWTF using cleaner/gaseous fuel	20	25	20	**65**	35	20	10	**65**	20	20	**40**	83.4	Red		WM-I

ii. LIST OF BLUE CATEGORY SECTORS- Essential Environmental Services for Domestic/Household Activities:

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
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		UPC-II
1.2	Waste to energy power plants	0	15	30	**45**	35	25	35	**95**	10	50	**60**	97.6	Blue		UPC-II
1.3	Bio-mining of legacy waste projects	35	30	25	**90**	35	25	0	**60**	0	0	**0**	93.0	Blue		UPC-II
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		UPC-II
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		UPC-II
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		UPC-II
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.	UPC-I
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		WQM-I
3.2	Sewage Treatment Plant (less than 5 MLD)	20	0	25	**45**	0	20	0	**20**	0	0	**0**	50.5	Blue		WQM-I



ANNEXURE-III

(LIST OF SERVICE/INFRASTRUCTURE DEVELOPMENT SECTORS CLASSIFIED UNDER RED, ORANGE, GREEN, AND WHITE

SERVICE/INFRASTRUCTURE DEVELOPMENT SECTORS

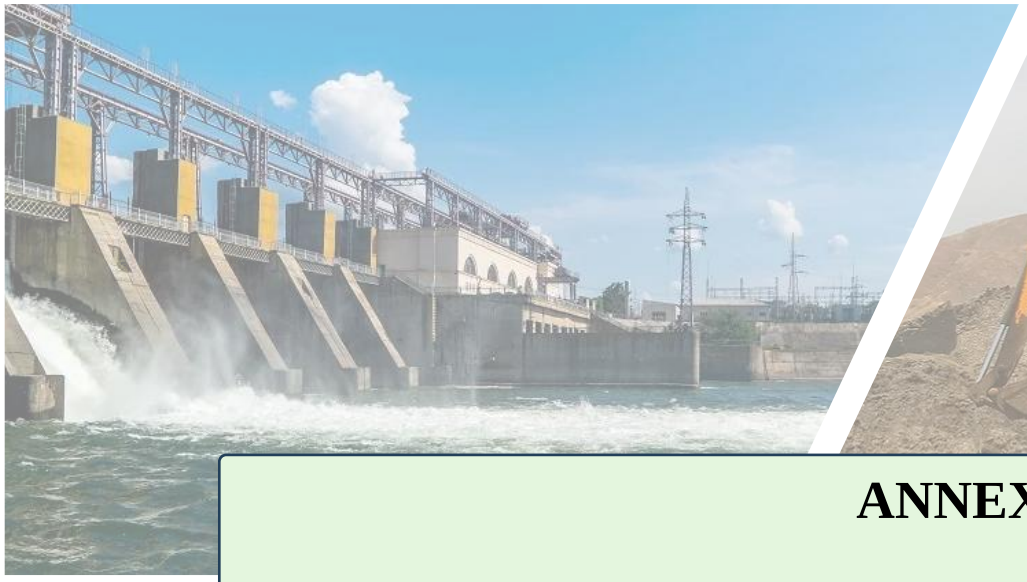
S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
1.0	**STANDALONE GENERATOR SET** (Genset) (i. Standalone genset(s) of total capacity less than 1000 KVA may not require additional classification. The used oil/waste oil generated during repair and maintenance need to be disposed through authorized hazardous waste recycler by service provider/OEM. ii. Projects such data centers etc. having pollution potential due to gensets only, may be classified based on the capacity and fuel used.)															
1.1	Genset(s) of total capacity ≥ 1 MVA, using liquid fuel	0	0	0	**0**	25	0	25	**50**	30	10	**40**	60.0	Orange		UPC-I
1.2	Genset(s) of total capacity ≥ 1 MVA, using cleaner/gaseous fuel	0	0	0	**0**	25	0	10	**35**	30	10	**40**	50.5	Green		UPC-I
2.0	Airports	20	0	35	**55**	25	0	25	**50**	30	10	**40**	75.3	Orange	Airports generates mainly domestic sewage as wastewater. Emissions and generation of hazardous waste due to overall operations in airport are considered.	UPC-I
3.0	**HEALTH CARE FACILITIES (HCFS) (AS DEFINED UNDER BIO-MEDICAL WASTE MANAGEMENT RULES, 2016)** (Sectors generates bio-medical waste. As per methodology scores assigned to H.)															
3.1	HCFs with captive incinerator, irrespective of number of beds	20	0	15	**35**	35	20	25	**80**			**50**	88.5	Red		WM-I
3.2	more than 1000 bedded HCFs	20	0	35	**55**	0	0	0	**0**			**100**	100.0	Red		WM-I
3.3	501 to 1,000 bedded HCFs	20	0	30	**50**	0	0	0	**0**			**80**	85.0	Red		WM-I
3.4	201 to 500 bedded HCFs	20	0	30	**50**	0	0	0	**0**			**60**	70.0	Orange		WM-I
3.5	51 to 200 bedded HCFs	20	0	20	**40**	0	0	0	**0**			**50**	60.0	Orange		WM-I
3.6	11 to 50 bedded HCFs	20	0	20	**40**	0	0	0	**0**			**40**	52.0	Green		WM-I
3.7	Up to 10 bedded HCFs	20	0	15	**35**	0	0	0	**0**			**30**	44.8	Green		WM-I
3.8	Non-bedded HCFs	0	0	0	**0**	0	0	0	**0**			**25**	25.0	Green		WM-I
4.0	**HOTELS/BANQUET HALLS HAVING ROOM FACILITY**															
4.1	Hotels (above 3 star) or having 100 & above rooms	20	25	30	**75**	25	0	25	**50**	0	0	**0**	81.3	Red		UPC-I

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
4.2	Hotels (above 3 star) or having 100 & above rooms (based on cleaner /gaseous fuel)	20	25	30	**75**	25	0	10	**35**	0	0	**0**	79.4	Orange		UPC-I
4.3	Hotels (up to 3 star) or having more than 20 rooms but less than 100 rooms.	20	25	20	**65**	25	0	25	**50**	0	0	**0**	73.8	Orange		UPC-I
4.4	Up to 20 rooms	10	25	15	**50**	0	0	10	**10**	0	0	**0**	52.5	Green		UPC-I
5.0	**RAILWAY LOCOMOTIVE WORK SHOP/ INTEGRATED ROAD TRANSPORT WORKSHOP/ AUTHORIZED SERVICE CENTERS**															
5.1	Railway locomotive work shop/ Integrated road transport workshop/ Authorized service centers (wastewater generation ≥ 10 KLD)	20	25	25	**70**	30	25	0	**55**	30	10	**40**	84.3	Red		IPC-V
5.2	Railway locomotive work shop/ Integrated road transport workshop/ Authorized service centers (wastewater generation <10 KLD)	20	25	15	**60**	30	25	0	**55**	30	10	**40**	79.0	Orange		IPC-V
6.0	**RAILWAY STATIONS**															
6.1	Railway Stations (Wastewater Generation ≥ 5 MLD)ss	20	0	35	**55**	25	0	25	**50**	30	10	**40**	75.3	Orange	Wastewater generating from public toilets, public taps, platform, and apron washing, coach cleaning, laundry, restaurants etc. Emissions and generation of hazardous waste due to overall operations are considered.	UPC-I
6.2	Railway Stations (Wastewater Generation ≥ 100 KLD, but < 5 MLD)	20	0	15	**35**	0	0	0	**0**	0	0	**0**	35.0	Green	Wastewater generating from various domestic uses as public toilets, public taps, platforms, and apron washing, restaurants etc.	UPC-I

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
7.0	**RAILWAY SIDINGS** (Fugitive emissions due to loading, unloading, storage and transportation of the minerals.)															
7.1	Railway sidings / Mineral stock yard	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25.0	Green		UPC-I
7.2	Railway sidings only for defence purpose	0	0	0	**0**	0	0	0	**0**	0	0	**0**	0.0	White		UPC-I
8.0	**PORTS AND HARBOURS**															
8.1	Ports and harbours, jetties and dredging operations	20	30	25	**75**	0	25	0	**25**	30	20	**50**	84.4	Red		WM-I
8.2	Ports and harbours (only containers handling)/ Captive jetties	20	25	20	**65**	0	25	0	**25**	30	10	**40**	76.4	Orange		WM-I
9.0	Automobile service stations/ workshops	20	25	20	**65**	20	0	0	**20**	30	10	**40**	75.5	Orange		IPC-V
10.0	**BUILDING CONSTRUCTION PROJECTS** (i. During the construction phase, the sector is mainly air polluting. However, in post construction phase it is mainly water polluting due to generation of sewage. Consent to Establish/Operate to be taken as per EC conditions, as applicable. ii. Building construction project ≥ 5,000 sq. m., but < 20,000 sq. m. built-up area (with connectivity to terminal STP) may not require separate classification. iii. For projects < 5000 the wastewater shall be managed according to on-site sanitation methods as mentioned in the Manual on Sewerage and Sewage Treatment System (2013), published by the Central Public Health and Environmental Engineering Organisation (CPHEEO), and as amended from time to time.)															
10.1	Building construction project ≥ 20,000 sq. m. built-up area	20	0	25	**45**	25	0	25	**50**	0	0	**0**	61.3	Orange		UPC-I
10.2	Building construction project ≥ 5,000 sq. m., but < 20,000 sq. m. built-up area (without connectivity to terminal STP)	20	0	20	**40**	0	0	0	**0**	0	0	**0**	40.0	Green		UPC-I
11.0	Standalone mechanized laundry (using boiler)	20	0	20	**40**	25	0	25	**50**	0	0	**0**	60.0	Orange		IPC-V
12.0	New highway construction project	0	0	0	**0**	25	25	25	**75**	0	0	**0**	75.0	Orange	Such projects involve use of hot mix plants, ready-mix concrete plants, construction activities generating fugitive emissions, etc.	UPC-I

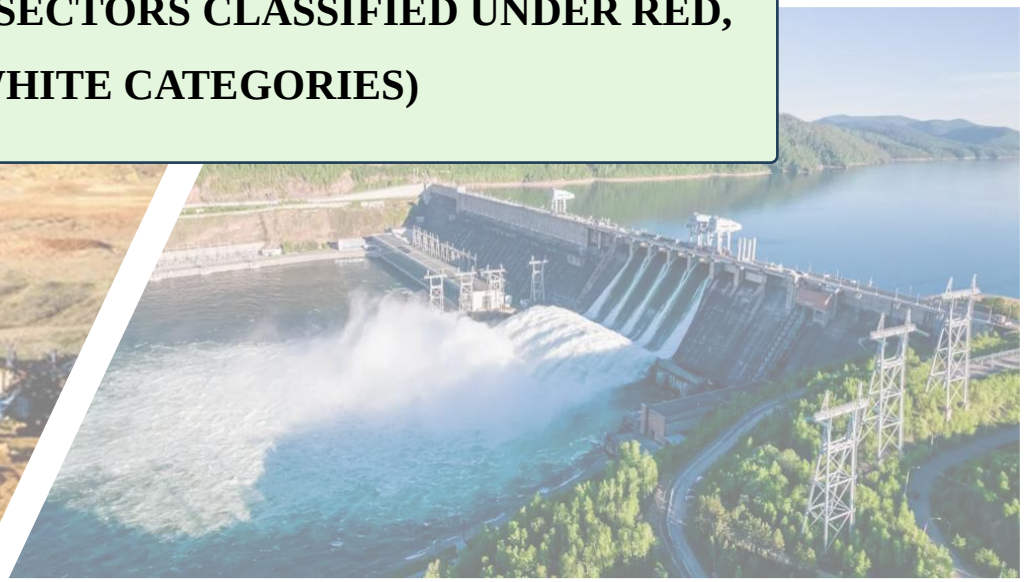
S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
13.0	**DAIRY FARM** (Dairy farms having less than 15 animals do not require separate classification.)															
13.1	Dairy Farm (having more than 500 animals)	30	25	25	**80**	0	20	0	**20**	0	0	**0**	82.0	Red		IPC-IV
13.2	Dairy Farm (having 101 to 500 animals)	30	25	20	**75**	0	20	0	**20**	0	0	**0**	77.5	Orange		IPC-IV
13.3	Dairy Farm (having 15 to 100 animals)	30	25	15	**70**	0	20	0	**20**	0	0	**0**	73.0	Orange		IPC-IV
14.0	Gold Assaying & Hallmarking Centres	0	0	0	**0**	35	0	0	**35**	25	10	**35**	46.4	Green	Lead oxide, nitrous fumes are generated during cupellation and parting acid treatment, respectively contributing to the air emissions.The hazardous waste is generated during fire assay in the form of spent cupels bearing lead, spent acid, scrubbed water etc.	IPC-V
15.0	Facility of handling, storage, and transportation of food grains in bulk	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25.0	Green		IPC-V
16.0	Flyash export or disposal operations	0	0	0	**0**	0	25	0	**25**	0	0	**0**	25.0	Green		IPC-V
17.0	Oil and gas transportation pipeline (excluding pipeline covered under definition of isolated storage of hazardous chemicals, as per Manufacture, Storage, and Import of Hazardous Chemicals Rules, 1989)	0	0	0	**0**	25	0	10	**35**	0	0	**0**	35.0	Green		IPC-I
18.0	Gaushalas	20	0	15	**35**	0	20	0	**20**	0	0	**0**	41.5	Green		IPC-IV

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
19.0	Household bio-digesters/gobar-gas (cow-dung) plants based on biodegradable wastes, etc.	0	0	0	**0**	0	20	0	**20**	0	0	**0**	20.0	White		IPC-V



ANNEXURE-IV

(LIST OF OTHERS/SPECIAL CATEGORY SECTORS CLASSIFIED UNDER RED, ORANGE, GREEN, AND WHITE CATEGORIES)



OTHERS/SPECIAL CATEGORY SECTORS

S. No.	Sector	W1	W2	W3	PI_W	A1	A2	A3	PI_A	H1	H2	PI_H	Pollution Index (PI)	Category	Remarks	Concerned Division
1.0	**HYDEL POWER PLANTS INCLUDING PUMPED STORAGE PROJECTS**															
1.1	Hydel power plants (Capacity > 50 MW)													Red	PI may be considered as 90.	IPC-II
1.2	Mini Hydel power plants (Capacity from more than 25 MVA and up to 50 MW)													Orange	PI may be considered as 67.5.	IPC-II
1.3	Mini Hydel power plants (Capacity ≤ 25 MW)													White	PI may be considered as 12.5.	IPC-II
2.0	**SAND / RIVERBED MATERIAL MINING FROM RIVERBED AND ITS FLOODPLAINS** (excluding manual excavation) (i. Sand / riverbed material mining from riverbed and its floodplains may cause ecological disturbances, erosion of riverbed, change in hydro-geological conditions & river ecosystem, etc. ii. Cluster mining means that the distance of mining lease area is less than 500 m from periphery of another lease area. iii. This categorization is made considering the ecological damages and not based on pollution potential/index. iv. Cluster mining as defined in 'Enforcement & Monitoring Guidelines for Sand Mining, 2020', issued by MoEF&CC.)															
2.1	Mining lease area more than 5 hectares or Mining lease area up to 5 hectares which is part of cluster mining													Red	PI may be considered as 90.	IPC-II
2.2	Standalone mining lease area up to five hectares in areas (not a part of any cluster mining)													Orange	PI may be considered as 67.5.	IPC-II

ANNEXURE-V

FORMAT FOR SUBMISSION OF INFORMATION BY SPCBS/PCCS REGARDING SECTORS CLASSIFIED UNDER WHITE CATEGORY

S. No.	Sector	Water Pollutant Score (PI_W)				Air Pollutant Score (PI_A)				Waste Pollutant Score (PI_H)			Pollution Index (PI)	Remarks (including brief description of process and pollution potential)
		W1	W2	W3	W	A1	A2	A3	A	H1	H2	H		

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"Parivesh Bhawan", East Arjun Nagar, Delhi - 110032