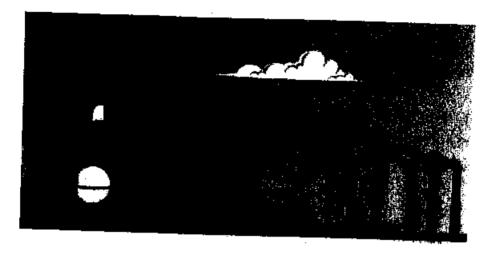
# Final Report

# Inventorization of 17 category/ GPI/ Red Category Industries



Prepared by

Working Group for "Inventorization of 17 category/ GPI/ Red Category Industries"

Constituted by



Central Pollution Control Board



# Preface

This report is a result of the project scheme and guidelines formulated by the Central Pollution Control Board and the initiatives of the Working group members. Credit for the successful completion of the project goes entirely to the members of the Working group consisting of Maharashtra Pollution Control Board, Madhya Pradesh Pollution Control Board, Orissa State Pollution Control Board and Assam Pollution Control Board & Central Pollution Control Board and others who have contributed directly or indirectly in the execution of the project and in the preparation of the project report.

The members of the Working group would like to convey their gratitude to the Gujrat Pollution Control Board and Tamilnadu Pollution Control Board for providing technical knowledge-based support and guidance in finalising the report.

Active participation of all the members of the Working Group has made the task easy. Their Support is acknowledged with thanks.

The Working group like to convey their gratitude to Shri J.S Kamyotra, Member Secretary, CPCB & Shri R.S Kori, Additional Director, CPCB for their immense support and guidance.

I believe that the findings and recommendations of the report would help moving the agenda forward in implementing the Environmental regulations and support the demands of industrial growth.

S.Mukherjee, IFS

Member Secretary,

West Bengal Pollution Control Board

 $g_{\Sigma}$ 

Convenor, Working Group

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# Members of the Working Group

CPCB has constituted the Working Group on "Inventorization of 17 Category/ Grossly polluting Industries and Red Category Industries". The Composition of the Group are as follows:

Convenor:

West Bengal Pollution Control Board

Wembers:

Madhya Pradesh Pollution Control Board





Maharashtra Pollution Control Board



Orissa State Polintion Control Board



Central Pollution Control Board



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Assam Pollution Control Board



Industrial Development has prime importance in the development of mankind. However, protection of natural resources viz air, water, plants and animal life and above all the human being, from ill effects of pollution has prime concern to ensure sustainable industrial development.

In view of this, Government of India and different State Governments have enacted several legislations and regulations to minimise the impact of industrial pollution on the environment. In our country, SPCBs/ PCCs have been entrusted the statutory responsibility to ensure protection of environment and to regulate the impact of industrial pollution. Under the provisions of the Water Prevention and Control of Pollution Act 1974: Air Prevention and Control of Pollution Act, 1981 and Environment (Protection) Act, 1986 and the Rules thereunder obtaining Consent to Establish and then Consent to Operate is mandatory for each industry / activity having covered under the provisions of Law.

Ministry of Environment & Forest also notified "EIA notification, 2006" for obtaining environmental clearance for good nos. of industrial activities and infrastructure projects.

In this regard Central Pollution Control Board previously had identified 54 types of industries under Red Category of Industries. However, it is observed that States have their own categorisation of industries covered under Red, Orange & Green Category; wherein, an industry cover under Red Category in one state may be in the category of Orange in other state. Therefore, there is an urgent need to rationalize the list of Red Categories of Industries to remove any ambiguity in categorisation of industries.

Apart from this it has been observed that a large no. of industries, processes are not covered in the list and / or the existing categories need changes due to changes in technology and or sensitivity of land uses, also advanced technologies in pollution prevention and control and waste minimisation has reduced pollution potentials of industries. Therefore, in order to facilitate process of grant of consent by bringing more transparency and also to ensure protection of natural resources it was proposed to consider the review of Categorisation of industries.

Considering the need, one working group for "Inventorization of 17 category of idustries/ Grossly polluting industries and Red category industries " have been constituted by CPCB in pursuance of the decision taken in 56th Conference of Chairman and Member Secretaries, belo in New Delhi, 2010. This committee includes members from collution Control Secrets of West Bengal Assam, Crisca Madhya Cradosh, Maharastru /z 1948.

# Chapter 1: Introduction

During the 56th Conference of Chairman & Member Secretaries of Pollution Control Boards/Pollution Control Committees held on 31st August, 2010 at New Delhi, it has been emphasized that inventorization of polluting industries and pollutants quantity generated by them and gaseous emissions emanated is essential to assess the pollution load in the environment by industrial sectors. It was recognized that an updated inventorization is also required for formulation of policy, monitoring enforcement & compliance.

India has an extensive environmental management system with a comprehensive set of environmental laws, specific statutory mandates, regulatory instruments and institutional frameworks to implement and enforce environmental policy objectives. It involves a shared responsibility between the Center and the States, with the Central Government having the responsibility for policy and regulatory formulations and the State Governments for ensuring implementation and enforcement of national policies and laws.

Central Pollution Control Board (CPCB) has already identified 54 types of industries under RED category of industries (TABLE-1.1) & 17 Category of highly polluting industries (TABLE 1.2). However, it is observed that different SPCBs / PCCs follow their own category list of Industries. So, the categorization of industries vary from State to State. Therefore, there is an urgent need to rationalize the list of Red category of industries to remove any ambiguity in categorization of industries.

It has been also assessed that refinement of the data base management of the 17 categories/ Grossly Polluting Industries under NRCD and Red Category industries is required along with harmonization of Red, Orange & Green categories of industries across the country. All Boards agreed on the need for uniform categorization of industries under the Red, Orange and Green industries.

CPCB has constituted the Working Group on "Inventorization of 17 Category/ Grossly colluting Industries and Red Category Industries" consisting of :

- 1. West Bengal Pollution Control Board, Convenor
- Madhya pradesh Pollution Control Board, Member
- 3. Maharashtra Follution Control Board
- 4. Oriesa State Pollution Control Board
- $U_{ij}$  Assam Pollution Control Board  $U_{ij}$  .
- o. Central Follution Control Board

The committee had several sitings and based on the review, statutory provisions of pollution control acts, industrial guidelines issued by Central Government/ State Governments and the field expertise of the members a draft new list of categorization of industries are proposed. This list has been prepared by considering the 54 Red category list identified by CPCB and other categorization list of industries followed by different SPCBs/PCCs.

An important attempt has been made to categorise the industries based on its pollution potential and likely impact of pollution on the environment, type of pollution viz. air, water, noise and hazard potential of an industry are given consideration to classify the industries. Whether possible, scale of industries (Large/ Medium/ Small based on their investment) and fuel use has been also given consideration.

CPCB designated the West Bengal Pollution Control Board to lead the Working Group on "Inventorization of 17 Category of Industries/grossly polluting industries and Red category of industries" and issued the Terms of Reference of the Working Group vide memo no. MSCB/11/2010 dated 10<sup>th</sup> December, 2010, which include:-

- o To prepare the methodology for preparation of inventory of 17 category & Grossly polluting industries;
- o To update the National Inventory of Large Scale 17 category of highly polluting industries;
- o To prepare the updated national inventory of grossly polluling industries;
- To prepare a uniform criteria /categorization all over the country on the types of the industries (viz. Electroplating, Asbestos etc.) falling under Red, Orange, Green categories of industries;
- To advice and help , SPCBs/PCCs for preparation of inventory as per standard format developed by CPCB for preparation of inventory under 17 category of highly polluting industries, grozely polluting industries & Red category of industries;
- . To follow up with SPCBMPCCS for getting the information/inventory

#### TABLE-1.1

г	1 A D ( L - 1, 1
SI.	Existing List of 54 Red Category Industries as per Central Pollution Control Board
1.	Anodizing
2.	Asbestos and asbestos based industries
3.	Automobiles Manufacturing / Assembling
4.	Ceramic / Refractories
5.	Chemical, petrochemical and electro chemicals including manufacture of acids such as sulphuric acid, nitric acid, phosphoric acid and so on
6.	Chlorates, per-chlorates and peroxides
7.	Chlorine, fluorine, bromine, iodine, and their compounds
8.	Coke making , coal liquefaction, coal tar distillation or fuel gas making
9.	Common effluent treatment plant
10.	
11.	Explosives including detonators, fuses, and so on
12.	Fermentation industry including manufacture of yeast, beer and so on
13.	Fire crackers
14.	Foundries
15.	Glass and fibre glass production and processing
16.	Glue and gelatin
17.	Heavy engineering
	Hospitals
	Hot mix plants
20.	Hydrocyanic scid and its derivatives
21.	Incineration Plants
22.	Industrial carbon including electrodes and graphite blocks, activated carbon, carbon black
] 	Industrial inorganic gases namely:  a) Chemical gases: Acetylene, hydrogen, chlorine, fluorine, ammonia, sulphur dioxide, ethylene, hydrogen sulphide, phosphine b) Hydrocarbon gases: Methane, ethane, propane
_24, 	Industry or process involving electroplating operations
<u> 25,                                    </u>	Industry or process involving foundry operations
26. 	Industry or process involving metal treatment or process such as pickling, paint stripping, heat treatment, phosphating or finishing and so on
_27]	Lead re-processing and manufacturing including lead smelting
28.	Lime manufacturing
20.	Lubricating oils, greases or petroleum based products
- ·	Milk processing and dairy products (integrated project)
	Mining or ore benification
	Organic chemical manufacturing
- —- j.	Parboiled rice milis
· · · · · ·	wints, Varnishes, (evoluting blending/ mixing)
Т	

S1. No.	Existing List of 54 Red Category Industries as per Central Pollution Control Board
35.	Petroleum products manufacturing and oil/crude oil/residue reprocessing
36.	Phosphate rock processing plant
37.	Phosphorous and its compounds
38.	Photographic films and its chemicals
3 <del>9</del> .	Pigments and intermediates
40.	Potable alcohol (IMFL) & distillation of alcohol
41.	Power generating plants (excuding DG sets)
42.	Processes involving chlorinated hydrocarbons
43.	Ship breaking
44.	Slaughter houses and meat processing industries
45.	Steel and steel products including coke plants involving use of any of the equipments such as blast furnaces, open furnace, induction furnace or an arc furnace and so on, or any of the
	operations or processes such as heat treatment, acid pickling, rolling or galvanising and so
46.	operations or processes such as heat treatment, acid pickling, rolling or galvanising and so
46. 47.	operations or processes such as heat treatment, acid pickling, rolling or galvanising and so
	operations or processes such as heat treatment, acid pickling, rolling or galvanising and so on  Stone crusher
47.	operations or processes such as heat treatment, acid pickling, rolling or galvanising and so on  Stone crusher  Surgical and medical products involving prophylactics and latex
47. 48.	operations or processes such as heat treatment, acid pickling, rolling or galvanising and so on  Stone crusher  Surgical and medical products involving prophylactics and latex  Synthetic detergent and soap
47. 48. 49.	operations or processes such as heat treatment, acid pickling, rolling or galvanising and so on  Stone crusher  Surgical and medical products involving prophylactics and latex  Synthetic detergent and soap  Synthetic fibre including rayon, tyre cord, polyster filament yarn
47. 48. 49. 50.	operations or processes such as heat treatment, acid pickling, rolling or galvanising and so on  Stone crusher  Surgical and medical products involving prophylactics and latex  Synthetic detergent and soap  Synthetic fibre including rayon, tyre cord, polyster filament yarn  Synthetic resins
47. 48. 49. 50.	operations or processes such as heat treatment, acid pickling, rolling or galvanising and so on  Stone crusher  Surgical and medical products involving prophylactics and latex  Synthetic detergent and soap  Synthetic fibre including rayon, tyre cord, polyster filament yarn  Synthetic resins  Synthetic rubber excluding molding

#### Table 1.2: Existing list of 17 Category of Industries

- f. Aluminium smelter
- 2. Cement
- 3. Chlor Alkali
- 4. Copper smelter
- 5. Distillery including Fermentation industry
- 6. Dyes and Dye-Intermediates
- 7. Fertilizer (basic) (excluding formulation)
- 8. Iron and Steel (involving processing from one/integrated steel plants and
- 9. Oil Refinery (Mineral Oil or Petro Refineries)
- 10. Pesticides (Technical) (excluding formulation)
- 11. Petrochemicals (Manufacture of and not merely use of as raw materia))
- 12. Pharmacenticals (excluding formulation).
- 13. Pulp and Paper (paper manufacturing with or without pulping)
- 14. Sugar (excluding Phandsori)
- 15. Thermal Power Plants
- Jo. Line Smelter
- 17. Tannorlas

## Chapter 2: Initiation of the Work

Depending upon the pollution potential, existing list of industries are classified in to three different categories:

- "RED" category units have maximum pollution potential. Considering the degree of pollution among the RED units, these are further classified into '17 Red category ' units & and 'Other Red category' units
- 'ORANGE' category units have moderate pollution potential.
- 'GREEN' category units have least pollution potential.

The 1st meeting of the Working Groups on "Inventorization of 17 categories /GPI and Red category of Industries" was held on 12th April 2011 at "Paribesh Bhawan "Kolkata.

The meeting was convened with the purpose for refinement of the data base management of the 17 categories /Grossly Polluting Industries and Red Category industries along with harmonization of Red , Orange and Green categories of industries across the country.

West Bengal Pollution Control Board has prepared a detailed report of the list of Red category industries followed by different SPCBs/PCCs vis a vis the existing list of 54 Red category list identified by CPCB. During the meeting, the existing list of 17 category industries have been reviewed. Since West Bengal Pollution Control Board has a vast list of RED category of industry which has been duly considered as basic reference during preparation of 17 category & Other Red category industries.

The draft list prepared during the 1<sup>st</sup> meeting was circulated among the other SPCBs/PCCs for their information and specific comments. Few SPCBs have sent their comments which were duly considered during the 2<sup>nd</sup> meeting of the Working Group held on 14<sup>th</sup> -15<sup>th</sup> June,2011 at CPCB, New Delhi. During the meeting the list of other RED category industries was modified and revised list prepared. As advised by the Member Secretary CPCB the working group also deliberated on Green category list of industries and draft list for the same was also prepared.

An decided during the 2<sup>nd</sup> meeting, list of industries which are not covered under Red or Green category of industries will fall under Orange category of industries depending on their pollution potential. Accordingly, an indicative list of Orange Category of industries has been prepared (Annexure-I)

# Chapter 3: Decision of 1" Meeting of the Working Group constituted by CPCB for "Inventorization of 17 Categories/Grossly Polluting Industries and Red Category of Industries"

The 1st Meeting of the Working Group was held on 12st April at 'Paribesh Bhawan Bidhannagar Kolkata -700098, West Bengal. During the meeting, a brief overview of Categorization of Industries followed by the West Bengal Pollution Control Board was presented. The existing list of 17 category of industries and Other 54 Red Category of Industries of CPCB have been reviewed considering the list of other SPCBs. Following decisions are taken during the meeting:

- » RED category industries are classified in two segments:
  - a. 17 Red category and
  - b. Other Red category
- "Sponge Iron Units" are identified under 17 Red category list of industries and added with the item "Iron and Steel (involving processing from ore/integrated steel plants and or Sponge Iron Units". (The list is given in Table 3.1)
- > Considering the pollution potential, few industrial activities are included in the draft list of "Other RED category" of industries. (The comprehensive list is given in Table 3.2)
- > The minutes & findings of the 1st meeting of the Working Group to be circulated among all the SPCBs/PCCs for their feedbacks/inputs. (Minutes is enclosed in Annexure I). Another Meeting to be organised to finalise the draft list on the basis of the feedbacks /comments received from the other SPCbs/PCCs.
- Industrial activities under "ORALIGE" category also to be reviewed during preparation of draft list of "Other RED category" industry during the 2<sup>nd</sup> meeting.

# Table 3.1: Draft list of 17 Red category of industries

- 1. Aluminium smelter
- 2. Cement
- 3. Chlor Alkali
- 4. Copper smelter
- 5. Distillery including Fermentation industry
- 6. Dyes and Dye-Intermediates
- 7. Fertilizer (basic) (excluding formulation)
- 8. Iron and Steel (involving processing from ore/integrated steel plants and or Sponge Iron Units
  9. Oil Refinery (Mineral Oil or Petro Refineries)
- 10. Pesticides (Technical) (excluding formulation)
- 11. Petrochemicals (Manufacture of and not merely use of as raw material)
- 12. Pharmaceuticals (excluding formulation).
- 13. Pulp and Paper (paper manufacturing with or without pulping)
- 14. Sugar (excluding Khandsari) 15. Thermal Power Plants
- 16. Zinc Smelter
- 17. Tanneries

# TABLE 3.2: Draft list of the Other Red Category industries

Sl No.	List of Industries
1.	Airports, Ports & Harbours
2.	Asbestos and asbestos based industries
3.	Automobiles Manufacturing *(Automobile Assembling in ORANGE category)
4.	Ceramic / Refractories
5. —	Chemical, petrochemical and electro chemicals including manufacture of acids such as sulphuric acid, nitric acid, phosphoric acid and so on
6.	Chlorates, per-chlorates and peroxides
7.	Chlorine, fluorine, bromine, iodine, and their compounds
<u>8.</u>	Coke making , coal liquefaction, coal tar distillation or fuel gas making
×9.	Common effluent treatment plant
	Common Hazardous waste /Bio-medical waste /MSW disposal facilities
/11. 	Common Slaughter houses and meat processing industries, bone mill, processing of animal horns, hoofs and other body parts *(to be discussed in next meeting)
/_12.	Dredging Operation
13. 	Dry coal processing/mineral processing, industries involving ore sintering, palletisation, grinding pulvarization and so on
_ [4.]	Explosives including detonators, fuses, and so on
15.	Fermentation industry including manufacture of yeast, heer and so on
16. 	Ferrous and Non ferrous metal extraction involving different furnaces through smelting refining, reprocessing casting and allow making etc.
<u>-</u> <u>-</u> L	Fire crackers
10.	Fly ach export. Iransport and disposal through pipeline by pneumatic pressure.

17.	Glass and fibre glass production and processing (excluding molding) *(Moulding in ORANGE Category)
20.	Health care establishment *(to be discussed in Next Meeting).
21.	Heavy engineering (With investment on Plant & Machineries more than \$ 10 Crores)
22.	Hot mix plants
23.	Hydrocyanic acid and its derivatives
24.	Incineration Plants
25.	Industrial carbon including electrodes and graphite blocks, activated carbon, carbon black and so on
26.	Industrial inorganic gases namely:  a) Chemical gases: Acetylene, hydrogen, chlorine, fluorine, ammonia, sulphur dioxide, ethylene, hydrogen sulphide, phosphine b) Hydrocarbon gases: Methane, ethane, propane
27.	Industry or process involving foundry operations
28.	Industry or process involving metal treatment or process such as pickling, electroplating, paint stripping, heat treatment, phosphating or finishing and anodising and so on.
29.	Isolated storage of hazardous chemicals (as per schedule of Manufacture, Storage & Import of Hazardous Chemicals Rules, 1989), etc.
30.	Lead acid battery manufacturing * (excluding assembling & charging of acid lead battery in micro scale(< \cdot 25 lakhs) - ORANGE category)
31.	Lime manufacturing (Using Lime Kiln)
32.	Lubricating oils, greases or petroleum based products
33.	Manufacturing of Glue and gelatin
34.	Milk processing and dairy products (integrated project)
35.	Mining or ore benification ,Oil & Gas extraction including CBM (offshore & onshore extraction through drilling wells)
36.	Non alcoholic beverage or distillation of alcohol (ENA) *{potable alcohol (IMFL) by blending in ORANGE category)
37.	Oil and gas transportation pipeline
38.	Organic chemical manufacturing
39.	Paints, Varnishes, pigments and intermediate (excluding blending/mixing)
40.	Parboiled rice mills (* Capacity to be discussed in Next Meeting)
41.	Phosphate rock processing plant
42.	Phosphorous and its compounds
43.	Photographic films and its chemicals
44.	Power generating plants (excuding DG sets) *(to be discussed in Next Meeting)
45.	Process involving coal fired boiler /furnace
46.	Processes involving chlorinated hydrocarbons
47.	Reprocessing of used oil, waste oil and manufacturing of cetroleum products
40	Ship breaking

49.	Steel and steel products including <u>metallurgical</u> coke (both recovery and non recovery) plants involving use of any of the equipments such as blast furnaces, open hearth furnace, induction furnace or an arc furnace, <u>submerged</u> arc furnace & so on, or any of the operations or processes such as heat treatment, acid pickling, hot rolling using reheating furnace or galvanising and so on
50.	Stone crusher
51.	Surgical and medical products involving prophylactics and latex
	Synthetic detergent and soap (excluding formulation)
	Synthetic fibre including rayon, tyre cord, polyster filament yarn
	Synthetic rubber excluding molding
55.	Synthetic resins
56.	Tobaco products including cigarettes and tobacco processing
57.	
58.	Yarn/ textile processing involving any effluent/ emission- generating process bleaching, dyeing, printing and scouring

Plote: Items shown in colored underline is new inclusion/modification.

# Based on first meeting :-

- The list of Red category of industries was modified.
- Types of Red categories of industries: 58 + 17 (categories of highly polluting industries)

= 75

# Chapter 4: Feedback from the various SPCBs/ PCCs on draft list of 17 & Other Red category industries

CPCB requested the SPCBs/PCCs to send their comments on draft list of 17 & Other Red category of industries and Water Cess rates. Some of the SPCBs/PCCs have submitted feedbacks. The list of RED/ORANGE/GREEN categories of industries of Kerala, Madhya Pradesh, Andhra Pradesh, Gujarat, Jharkhand, Karnataka, West Bengal and Maharashtra State Pollution Control Boards are also referred. (Annexure VI)

Major Observations are as follows:

#### Orisea:-

- 1. Industries are classified as Red, Orange & Green based on their pollution potential. Any industry, if generating hazardous waste is considered under red category irrespective of its pollution potential.
- 2. The State Board heavily depends on Cess fund reimbursement from MoEF and an upward revision is felt overdue in view of the increasing budgetary expenses of the Board.
- 3. Cess is charged from the industries as per the rates notified by MoEF in 2003.

## Chandigaths

- 1. Industries are classified as Red. Orango & Green based on their pollution potential.
- 2. Cess-rates should be enhanced according to present scenario.
- 3 Validity of Consent- Red: 5 years

Orange: 10 years Green: 15 years

### Damen, Die & Dades Magae Havelis-

- Existing Red Category industries- Distilleries, Chemicals(Flasticizers, organic & inorganic gases), metal industry, dyeing asbestos. All other industries are classified as Orange (Green).
- Validity of Consent- Red: 2 years, Orange: 2 years, Green: 5 years and white: 5 years
- 3. Cers is charged from the industries as per the rates amiffed by Motor in 2003

#### Arsam:

- 1. Cess is charged from the industries as per the rates notified by MoRF in 2003.
- 2. Cess rates should be enhanced according to present scenario

#### Tamilnadu:-

- Cess rates should be enhanced according to present scenario. TNPCB has suggested revised rates for Cess depending upon the purpose for which water is consumed.
- 2. TNPCB has categorized industries in categories namely Ultra red , Red & Orange.
- Validity of consent- Red: 1 year, Orange: 1 year till the industry install ETP, APCD, there about once in 2 years, Green: 2 years.

### Jammy & Kashmir.

1. No Ceas la charge de in park a sur la company de prediction de la company de la com

## Chattisgarh -

- The SPCB adopted the criteria for classification under Red, Orange & Green category as fixed previously by MPPCB.
- 2. Cess is charged from the industries as per the rates notified by MoEF in 2003.

## West Bengal-

- 1. Industries are categorised depending upon pollution potential.
- Cess is charged from the industries as per the rates notified by MoEF in 2003. Apart from that, SPCB has fixed up consolidated rate of water cess for certain clusters of industries.
- Coss rates should be enhanced according to present scenario;
- Validity of Consent : Red- 2 years, Orange- 4 years,

Green- 5 years.

# Chapter 5: Decision of 2<sup>nd</sup> Meeting of the Working Group constituted by CPCB for "Inventorization of 17 Categories/Grossly Polluting & Red Category Industries "

The 2<sup>nd</sup> meeting of the Working Group held on 14<sup>th</sup> -15<sup>th</sup> June,2011 at CPCB, New Delhi. Apart from the members of the Working Group, representatives from the Gujrat Pollution Control Board and Tamilnadu Pollution Control Board were also present as special invitee.

During the meeting Member Secretary, CPCB requested the Working Group to prepare a uniform list of Green category industries also. Accordingly, committee reviewed the list of Green category industries followed by the West Bengal Pollution Control Board as it include large nos. of industrial activities.

Participants of the meeting discussed the draft list of 17 Red category and Other Red category industries prepared during the 1<sup>st</sup> meeting of the Working Group and also give their views regarding preparation of draft list of Green category industries.

Following decisions are taken during the meeting :

- > The draft list of "17 Red "category of industries has been finalised.
- ▶ Based on the feedbacks received and suggestions made by the participants, the draft list of the "Other Red category" industries prepared during the 1<sup>st</sup> meeting was revised further.
- > The draft list of "Green" Category industries has been prepared .
- » It has been unanimously agreed that rate of Water Cess need to be enhanced.

Basad on second meating :-

- The list of Other Red/Green category of industries was monified.
- Types of Red categories of industries: 58 \* 17 (rategories of highly polluting industries) = 55
- Types of Thean categories of Industries: 66

# Chapter 6: Inventorization of 17 category/Grossly Polluting Industries

Rapid economic growth and the resulting changes in consumption patterns are drastically changing the nature and scale of impact on the country's environment and natural resources, thus testing the carrying capacity of the natural ecosystem upon which much of the country's economic growth depends.

Growth of the India's economy is led by robust performance of the industrial sector. Impressive growth in Indian economy is a reflection of growth trends in Industrial sector including iron and steel, mining, textiles, chemical & petrochemical, fertilizer, pharmaceuticals as well as electronics and information technology sector. Many of these industries belong to the Red category and have significant environmental consequences in terms of water effluents and or air emissions and hazardous waste.

It has been emphasized that inventorization of polluting industries and pollutants quantity generated by them and gaseous emissions emanated is essential to assess the pollution load in the environment by industrial sectors. It was recognized that an updated inventorization is also required for formulation of policy, monitoring enforcement & compliance.

As the SPCBs / PCCs are granting Consent to Establish/Consent to Operate and Authorization to industries under Red, Orange and Green categories in their respective states. Therefore a data bank pertaining to industries including the Red Categories will be available with SPCBs / PCCs. It is therefore needed that available information on Red category industries to be documented in prescribed format for proper assessment and analysis purpose. These will help to bring a more focused effort to integrating environmental constrained linked to good environmental management practices.

According to present definition Grossly Polluting Industries means 'Industries discharging effluents into a water course and a) handling hazardous substances or b) effluent having BOD load of 100kg/day or more or c) a combination of (a) & (b). Considering the present scenario and water pollution load in rivers & lakes and looking into the exhausted carrying capacity of most of the water bodies this criteria of 100kg BOD load /day needs to be coduced considerably. Hence, the working group felt the need of reviewing and redefining the criteria for identification of Grossly Polluting Industries.

The Working Group also felt that the allowable BOD load should be reduced from 100 bg/day to 25 bg/day. Working Group also recommends that the conclusion of the study report of ITs doing study in Piver Basin management should also be taken into concidenation of the level of Idolfs.

## Chapter 7: Recommendations of the Working Group

 As per ToR issued by CPCB, a proforma for inventorization of Grossly polluting industries & 17 category industries has been prepared which is given in Table 7.1 & Table 7.2.

## Table 7.1: Format for Inventory of Grossly Polluting Industries\*

\*CETPs discharging in water bodies should also be considered as GPIs

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## Table 7.2 :Format for Inventory of 17 Red category Industries

Hante & Address of Industry (with Geographical Co- ordinates)	Size of the Industry (LANS)	(DidUSTry: viz.Sugar/ Dietillerv/TDD	n l	Consent : Status (Air (Mister)	Authorisation Status under HW (M, H&TB Movement) Rules	Water	Elfloent Generation (kid)		1	Staius oi	Compliance	Remarks: lagal status
							Water	Air	Status of ETP (AMA) UCAJP	ADCE/AMIAN	Status (C/PC/ NC)	Le Molice Issued / cour ease lilled ofc
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A- Adequate, iNA- Not adequate, UC- Under construction, UP- Under planning APCE- Air pollution control equipment, C-complying, PC- Fartially complying MC- Not complying

As suggested during the 57th Conference of Chairmen & Member Secretaries, List of 17 Red Category & Other Red category industries are merged and list of Green category and Orange category of industries are modified considering pollution potential of the industrial activities

THE FINAL LIST OF RED, GREEN AND CRANGE CATEGORY IS

# Table 7.3: List of Red category of industries

St No.	List of RED category Industry
1.	Airports, and Commercial Air Strips
2.	Alunuinium smelter
3.	Asbestos and asbestos based industries
4.	Automobiles Manufacturing (Integrated facilities)
5.	Basic Chemicals and electro chemicals and its derivatives including manufacture of acids
6	Ceramic , Refractories
7./	Cement
8.	Chlor Alkali
9.	Chlorates, perchlorates and peroxides
10.	Chlorine, fluorine, bromine, iodine, and their compounds
11	Coal Washeries
12./	Copper smelter
   <u>13</u> ,	Coke making , liquefaction, coal tar distillation or fuel gas making
14.	Common Treatment and disposal facilities (CETP, TSDF, E-Waste recycling, CBMWTF, Effluent conveyance project, incinerators, Solvent/Acid recovery plant, MSW sanitary, landfill sites, STP)
<u> 15/</u>	Distillery including Fermentation industry
' /	Dyes and Dye-Intermediates
17,	Dry coal processing/ mineral processing, industries involving ore sintering, palletisation, grinding pulvarization
18_	Emulsion of oil & water
19	Fermentation industry including manufacture of yeast, beer, distillation of alcohol (ENA)
<u>20,_</u>	Fertilizer (basic) (excluding formulation)
<u>::1.</u>	Ferrous and Hon ferrous metal extraction involving different fornaces through melting reprocessing casting and alloy making
2 <u>2.</u>	Fibre glass production and processing (Excluding moulding)
	Fire crackers manufacturing and bulk storage facilities
	Plates from rejected FET bottle
_ 135.	Fly ash e quari, transport and disposal facilities

26	Health care establishment (As defined in BMW Rules)
27.	Heavy engineering including Ship Building (With investment on Plant & Machineries more than ₹10 Crores)
<u> </u>	Hot mix plants
<u> </u>	Hotels (3 Star & above) and Hotels having 100 rooms and above
	Hydrocyanic acid and its derivatives
31.	Industrial carbon including electrodes and graphite blocks, activated carbon, carbon black
32.	Industrial estates/ parks/complexes/ areas/ export processing zones/ SEZs/ Biotech parks/leather complex
	Industrial inorganic gases namely:-  a) Chemical gases: Acetylene, hydrogen, chlorine, fluorine, ammonia, sulphur dioxide,  ethylene, hydrogen sulphide, phosphine
33.	b) Hydrocarbon gases: Methane, ethane, propane
34.	Industries engaged in recycling /reprocessing/recovery /reuse of Hazardous Waste under schedule IV of Hazardous Waste (M, H&TBM) Rules, 2008 and its amendments
35.	Industry or process involving foundry operations
36.	<del>(</del>
37.	Iron and Steel (involving processing from ore/ integrated steel plants and or Sponge Iron Units
38.	Isolated storage of hazardous chemicals (as per schedule of Manufacture, Storage & Import of Hazardous Chemicals Rules, 1989 as amended)
39.	Lead acid battery manufacturing(excluding assembling & charging of acid lead battery in micro scale[< ₹ 25 lakhs]
40.	Lime manufacturing (Using Lime Kiln)
41.	Manufacturing of Explosives, detonators, fuses including management and handling activities,
42.	Manufacturing of Glass
43.	Manufacturing of Glue and gelatin
44.	Manufacturing of Lubricating oils, greases or petroleum based products
45.	Manufacturing of Paints, Varnishes, pigments and intermediate (excluding blending/mixing)
46.	Manufacturing of Starch/Saggo
47.	Milk processing and dairy products (integrated project)
48	Mineral stack yards/ Railway sidings
	Mining and ore benification
50.	New Highway construction projects
51.	Flori alcoholic beverage (soft drink) & hottling of alcoholic/non-alcoholic products (capital investment on plant & machinery > *1 cross)
<u>52.</u>	Hoolean Power Plants

53.	Oil & Gas extraction including CBM (offshore & onshore extraction through drilling wells)
54,	Oil and gas transportation pipeline
55.	Oil Refinery (Mineral Oil or Petro Refineries)
56.	Organic chemicals manufacturing
57.	Parboiled rice mills (more than 10 TPD)
<u> </u>	Pesticides (Technical) (excluding formulation)
<u> </u>	Petrochemicals (Manufacture of and not merely use of as raw material)
<u>/60.</u>	Pharmaceuticals (excluding formulation).
<u> 7 61.</u>	Pulp and Paper (paper manufacturing with or without pulping)
62.	Phosphate rock processing plant
63.	Phosphorous and its compounds
64.	Photographic films and its chemicals
65.	Ports & Harbours, Jetties and Dredging Operations
66.	Power Generation Plants [Except Wind, Solar and Mini Hydel Power plants of capacity < 25 MW) and DG set of capacity > 5 MVA]
<u>67.</u>	Processes involving chlorinated hydrocarbons
68.	Railway Locomotive workshops / Integrated Road transport workshop/ Authorised service centres
<u>69.</u>	Reprocessing of used oils and waste oils
70	
71.	Slaughter houses (As per the notification S.O.270(E) dated 26.03.2001) and meat processing industries, bone mill, processing of animal horns, hoofs and other body parts
	Steel and steel products using various furnaces like blast furnaces/ open hearth furnace/ induction furnace/ arc furnace/ submerged arc furnace /basic oxygen furnace /hot rolling using reheating furnace
<u>73.</u>	Stone crushers
<u> 74.</u>	Sugar (excluding Khandsari)
	Surgical and medical products involving prophylactics and latex
_ <u>76.</u>	Synthetic detergents and soaps (excluding formulation)
<u> </u>	Synthetic fibres including rayon, tyre cord, polyster filament yarn
<u>73.</u>	Synthetic resins
22	Synthetic rubber excluding molding
_ 80.	Tanneries
01,	Thermal Power Flants
_ 22.	Tobacco products including cigarettes and tobacco/ opium processing
<u>. 33.</u>	Vegetable oils including solvent entraction and refinery/hydrogenered cits
!	ram/ textile processing involving any effluent/ emission- generating process

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Note: 1. Any industry/industrial activity which is not covered in above list having coal fired boiler with steam generation capacity more than 5 T/hr will be covered under Red Category.

Table 7.4: \_\_\_\_ list of Green category units

SL No.	List of Green Category Industry
1	Assembling of Acid lead battery (up to 10 batteries per day excluding lead plate casting)
2	Aluminium utensils from aluminium circles
3	Assembly of air coolers/conditioners, repairing and servicing
4	Assembly of bicycles, baby carriage and other small non-motorised vehicles
5	Automobile fuel outlet (only dispensing)
6	Ayurvedic and Homeopathic medicine (without boiler)
7	Bailing ( hydraulic press) of waste papers
8	Bakery/Confectionery/Sweets production (with production capacity < 1tpd with oil, gas or electrical oven)
9	Bio fertilizer & bio-pesticide without using inorganic chemicals
10	Biomass Briquettes (sun drying)without using toxic or hazardous wastes
11	Biscuit trays etc. from rolled PVC sheet (using automatic vaccum forming machine)
12	Biending and packaging of Tea
13	Blending of melamine resins & different powder, additives by physical mixing
14	Block making for printing without foundry (excluding wooden block making)
15	Brass & Bell metal utensils manufacturing from circle (without re-Rolling facility)
16	Candy
17	Cardboard or corrugated box and paper products (excluding paper or pulp) manufacturing and without using boiler)
18	Carpentry and wooden furniture manufacturing(excluding saw mill) with the help of electrical (motorized) machines such as electric wood planner, steel saw cutting circular blade etc.
19	Cement products (without using Asbestos) like pipe, pillar, jafri, well ring, blocks/tiles etc. (should be done under closed covered shed to control fugitive emissions)
20_	Ceramic colour manufacturing (not using boiler and wastewater recycling process)
2 <u>3</u>	Chalk making from plaster of paris.
<u> 22</u> .	Chilling plant and ice making without use of ammonta
<u>23</u>	Coated electrode manufacturing
	Compact disc, computer floppy & cassette manufacturing
_05	Compressed onveen gas from could liquid onygen
$\lfloor \pm 26 \rfloor$ .	CCC recovery

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<u>27</u> .	Cotton and woolen hosiery making (SSI & Cottage industries)
28	Cotton spinning & weaving (small scale)
29_	Decoration of ceramic cups & plates by electric furnace
30	Diesel Generator sets (15 KVA to 1 MVA)
31	Diesel pump repairing & servicing
32	Distilled water
33	Electric lamp (buib) manufacturing (small scale)
34	Electrical & electronic items assembling
35	Flavoured bettle nut production/grinding.
_36_	Flour mills (dry process)
37	Fly ash bricks/blocks manufacturing
38	Fountain pen manufacturing
3.9	Glass ampules & vials making from glass tubes.
40	Glass putty and sealant
41	Glass, ceramic, earthen potteries and tile manufacturing using electrical kiln or not involving fossil fuel kilns
	Gold and Silver smithy (nurification with acid constitution)
42	polishing operation) (using less than or equal to 1 litre of Sulphuric Acid / Nitric Acid per month)
43	
<u></u>	Groundnut decorticating (dry)
—_ <del>= 1</del> 45	Handloom/ Carpet weaving (without dyeing and bleaching operation)
<u></u>	Hotels(up to 20 rooms)  Insulation and other coated papers (excluding paper or pulp manufacturing)
. <u>46</u> .	manufacturing paper or pulp manufacturing)
<u>47</u> _	Jobbing and machining
48	Leather cutting and stitching (more than 10 machines and using motor)
49	Leather footwear and leather products (excluding tanning and hide processing)  (except cottage scale)
	Lubricating oils, greases or petroleum based products (only blending at normal temperature)
<u> 50</u>	temperature) temperature)
<u> </u>	Manufacturing of coir items from coconut husk
- <u>52</u>	Manufacturing of metal caps, containers etc.
<u>_5</u> 3	Manufacturing of optical lenses (using electrical furnace)
_ <u>54</u>	Manufacturing of pasted veneers without using boiler or Thermic Fluid Heater or
<u> 55</u>	Manufacturing of shoe brush & wire brush
	Manufacturing of silica gel (without furnace)
	Medical oxygen
<u>. 58</u>	Mineralized water
<u>59</u>	Oil mill ghani & extraction (no hydrogenation/refining)
<u>69</u>	Organic and inorganic nutrients (by physical mixing)
_ <u>51</u> [	Organic quantite ( manual mining).
	aints and varnishes (mixing and blending) (without ball mill)
<u></u> [i	sching of powdered milk

64	Paper pins and U-clips
65_	Phenyl/Toilet cleaner formulation & Bottling
66	Reel manufacturing
<u>67</u>	Polythene & plastic processed products manufacturing (virgin plastics)
_68	Poultry, hatchery, Piggery
69	Power looms (without dyeing and bleaching)
70	Printing press
71	Puffed rice (muri) (using oil, gas or electrical heating system)
72	Ready mix cement concrete
73	Reprocessing of waste cotton
74	Rope (Cotton & Plastic)
75	Rubber goods industry (with baby boiler only)
76_	Scientific and mathematical instruments manufacturing
77.	Soap manufacturing (Handmade without steam boiling)
78	Solar module (Non conventional energy apparatus) manufacturing unit
79	Solar power generation through solar photovoltic cell, wind power & mini hydel power (< 25 MW)
80	Spice grinding (< 20 HP motor)
81	Steel furniture without spray painting
82	Steeping and processing of grains
83	Surgical and medical products not involving effluent/emission generating processes
84	Synthetic detergent formulation
85	Teflon based products
86	Tyres and tubes retreading (without boiler)

Mote: Items shown in colored underline is new inclusion/modification.

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TABLE - 75

## List of Orange category units

Si No.	List of Industries
1	Almirah , Grill Manufacturing
2	Aluminium and copper extraction from scrap using oil fired furnace
3	Automobile servicing, repairing and painting (excluding only fuel dispensing)
$-\frac{5}{4}$	Ayurvedic and Homeopathic medicine
5	Bakery & confectionery units with production capacity > 1 tpd]
6	Biaxially oriented PP film alongwith metalising operation
7	Brickfields (excluding fly ash brick manufacturing using lime process)
8	Building & construction projects more than 20,000 Sq mtr built up area
9	Cashew nut processing
10	Chanachur and ladoo from puffed and beaten rice(muri and chira)using husk fired oven
11	Chilling plant, cold storage and Ice making
12	Coffee seed processing
13	Coke briquetting (sun drying)
14	Cotton spinning and weaving (medium and large scale)
15	Cutting, sizing and polishing of marble stones
16	Dairy and dairy products (small scale) (capital investment on plant & machinery < ₹ 1 crore).
17	Dal Mills
18	DG Set of capacity >1 MVA but < 5 MVA)
19	Digital printing on PVC cloth
_ 20	Dismantling of rolling stocks(wagons/coaches)
21	Dry cell battery (excluding manufacturing of electrodes) & assembling & charging of acid lead battery in micro scale[< ₹25 lakhs]
22	Emery powder(fine dust of sand) manufacturing
23	Engineering and fabrication units (With investment on Plant & Machineries < ₹ 10   Crores)
24	Excavation of sand from the river bed(excluding manual excavation)
25	Facility of handling storage and transportation of food grains in bulk.
26	Fertiliser (granulation and formulation only)
27	Fish feed, poultry feed and cattle feed
_28_	Fish processing and packaging (excluding chilling of fish)
_29	Poam manufacturing
_30	Food & food processing including fruits & vegetable processing
3)	Forging of ferrous & non-ferrous metal (using oil or gas fired boilers)
32	Formulation/palletization of camphor tablets, napthalene balls from camphor/napthalene powdes
_ <u>33</u>	Class, corataic, earthen potteries and 61s manufacturing using oil or gas tired biht.Coating on glasses using cerium fluoride,magnesium fluoride etc.
3.4	Glue from starch (phys)cal misting)

<u>51 Na</u>	List of industries
35	Gravure printing, digital printing on flex, viny?
<u> 36</u>	Heat treatment using oil fired furnace (excluding cyaniding)
37	Hotels (Less than 3 star) or hotels having > 20 rooms and less than 100 rooms.
38	Ice cream
<u> 39</u> _	Infrastructure development project
<u>40</u>	Jute processing without dyeing
41	Liquid floor cleaner , black phenyl , liquid soap , glyserol monosteara manufacturing.
<u>42</u> _	Manufacture of mirror from sheet glass
43	Manufacturing of iodized salt from crude/raw salt
_44	Manufacturing of mosquito repellent coil
<u>45</u> 46	Manufacturing of tooth powder, toothpaste, talcum powder and other cosmet
40_	Mechanized laundry using oil fired boiler
47	Modular wooden furniture from particle board, MDF, swan timber etc. Celling tiles partition board from saw dust, wood chips etc. & other agricultural waste using synthetic adhesive resin, wooden box making
48_	Packing materials manufacturing from non asbestos fibre, vegetable fibre yarn
49	rant bending & mixing (Ball mill)
50	Pharmaceutical formulation and for RED
<u></u>	release of drugs only and not for commercial purpose)  Plyboard manufacturing (including rivers 2)
<u>51</u>	Plyboard manufacturing (including vineer & laminate) with oil fired boiler/thermic fluid heater (without resin plant)
<u>52</u> _	Potable alcohol (IMFL) by blending , bottling of alcoholic products (capital investment on plant & machinery < ₹1 crore
<u>53</u>	Power press
<u>54</u>	Printing ink manufacturing
<u>55</u>	Printing or etching of glass sheet using hydrofluoric acid
56	Producer gas plant using conventional up-drift coal gasification(linked to rolling mills, glass and ceramic industry, refractories for dedicated fuel supply)
<u>5</u> 2 _	Pulverisation of bamboo and scrap wood
	Repairing of electric motor & generator
	Reprocessing of waste plastic (excluding PVC)
	Cice mill less than 10 TPD & rice hullers
一十	Colling Mill (oil or gas fired) and cold Rolling mill
	aw mill
-	
	easoning of wood in steam heated chamber.
	ill screen printing, Saree printing by wooden blocks
	pice stinding (> 20 HP motor)
	pray painting, paint baking, paint stripping
_  T	smartind poyeder anamufacturing

Si No.	List of Industries
68	Tea processing
69	Thermocol manufacturing
70	Thermometer making
71_	Transformer repairing/manufacturing
72	Tyres and tubes vulcanization/hot retreading
73	Wire drawing & Wire netting

## Team of the Working Group

Shri S. Mukherjee, 1FS Member Secretary, West Bengal Pollution Control Board

Dr. T.K Gupta
Chief Engineer, West Bengal Pollution Control Board

Shri R.S Kori Additional Director, Central Pollution Control Board

Dr. A.K Swar

Senior Environmental Engineer, Orissa State Pollution Control Board

Shri V.B Waghjale

Assistant Secretary (Technical), Maharastra Pollution Control Board

Shri R.K Shrivastava

Senior Engineer, Madhya Pradesh Pollution Control Board

Shri B.K Barua

Senior Environmental Engineer, Assam Pollution Control Board

Shri D.Sarkar

Senior Environmental Engineer, West Bengal Pollution Control Board

Special Invitee:

Dr. K. Karthikeyan

Joint Thick Environmental Engineer, Tamilnadu Pollution Control Board

Shri LA Tai

Environmental Engineer, Gujrat Polintion Control Board

Proceedings of the 1<sup>st</sup> Meeting of the Working Groups constituted by CPCB for "Inventorization of 17 Categories/Grossly Polluting Industries and Red Category of Industries" held on 12<sup>th</sup> April at 'Paribesh Bhawan ,Bidhannagar Kolkata -700098, West Bengal.

During the 56th Conference of Chairmen & Member Secretaries of SPCBs/PCCs held on 31 st August,2010 at New Delhi, it was decided to constitute the Working Groups on Inventorization of 17 Category/ GPI Industries & RED Category Industries' for uniform categorization of industries and to harmonize the categorization criteria of industries adopted by different SPCBs/PCCs. Accordingly CPCB has constituted the Working Group.

The composition of the said group is as follows:

West Bengal Pollution Control Board - Convenor

Maharastra SPCB- Member

Orissa SPCB- Member

Madya Pradesh SPCB- Member

Assam SPCB- Member

CPCB- Member.

The 1st Meeting of Working Group on "Inventorization of 17 Category/ GPI Industries & RED Category Industries " was held on April 12,2011 at Paribesh Bhawan, Bidhanagar, West Bengal.

Sri S.Mukherjee, Member Secretary, WBPCB chaired the meeting and welcome all the participants. He mentioned that a uniform list of categorization of industries is required to be prepared to remove any ambiguity in categorization of industries. He also welcomes the initiatives taken by CPCB on the issue.

Dr. T.K Gupta, Chief Engineer (Planning), WBPCB gave a brief presentation on existing categorization of industries followed by the WBFCB. In his presentation be touched upon the industrial siting policy for seiting up of industries in the State of West Bengal.

During the meeting, the present list of 17 valagories of industries identified by MoRF and SA RBD tategories of industries identified by CFCS has been discussed at length.

Item wise industrial activities mentioned in the above list have been reviewed and all the participants present in the meeting deliberated on the issue and gave their valuable opinion/suggestion and inputs. Few activities of other type which have not been covered under 54 RED category list also discussed.

After thread bare discussion, a draft list of RED category industries has been prepared which is enclosed in TABLE 3.1. It was decided that some of the industrial activities in the draft list needs further discussion particularly regarding the criteria /threshold quantity/capacity to be considered as RED category.

As regards, 17 category of industries it is suggested that sponge iron units may be add with 'Integrated Iron & Steel Plants' i.e "Integrated Iron & Steel Plants and/or sponge iron units" (Table 3.2)

Sri R.S Kori, Additional Director, CPCB suggested that industrial activities under ORANGE category should also be reviewed during preparation of draft RED category list.

Dr. T.K Gupta, Chief Engineer, Planning, WBPCB informed that proceedings of the meeting along with draft RED category list will be sent to all the SPCBs/PCCs including CPCB by 20 th April ,2011 for their opinion/suggestion , if any which will be discussed in the second meeting of the working group. Sri R.S Kori, Addl. Director, CPCB was requested to pursue all the SPCBs/PCCs for sending comments on the draft RED category list.

It was decided that the second meeting of the working group will be held on 5th May,2011 at Bhubaneswar, Orissa. Dr. A.K. Swar, Sr. Environmental Engineer, OSPCB was requested to organize the same. Accordingly a formal request will be made to the Member Secretary, Orissa State Pollution Control Board.

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The meeting was concluded with vote of thanks to and from the chair.

sd/-(S.Mukherjee) Member Secretary West Bengal Pollution Control Board

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Convenor, Working Group

Proceedings of the 2<sup>nd</sup> Meeting of the Working Groups constituted by CPCB for "Inventorization of 17 Categories / Grossly Polluting Industries and Red Category of Industries" held on 14<sup>th</sup> - 15<sup>th</sup> June, 2011 at 'Central Pollution Control Board', New Delhi.

CPCB has constituted the Working Group on "Inventorization of 17 Category / Grossly Polluting Industries and Red Category Industries." The Composition of the group are as follows:

West Bengal Poliution Control Board - Convenor

Maharastra SPCB - Member

Orisså SPCB - Member

Madya Pradesh SPCB - Member

Assam SPCB - Member

CPCB - Member

The 1st Meeting of the Working Group was held on 12th April, 2011 at Paribesh Bhawan, West Bengal Pollution Control Board, and Kolkata. In the said meeting members of the Working Group discussed 54 Red Category list identified by CPCB and a revised draft list of Red Category Industries had been prepared. Also a revised draft list of 17 Category Industries had been prepared. The draft revised lists were forwarded to SPCBs / PCCs for necessary comments. Accordingly, few SPCBs including TNPCB and GPCB have sent their feedbacks.

As a large no. of 17 Categories, GPIs and Red Category Industries are being operated in the State of Gujarat and Tamilnadu, Member Secretary, CPCB has requested the Member Secretaries of TNPCB and GPCB for attending the 2<sup>nd</sup> meeting of the Working Group held on 14<sup>th</sup> - 15<sup>th</sup> June, 2011 at CPCB, New Delhi to share their valuable suggestions / inputs during the meeting.

Apart from the Convenor and Members of the Working Group, Senior Officials from GPCB, TNPCB, WBPCB and CPCB were participated in the  $2^{nd}$  meeting of the Working Group. List of participants is enclosed in Annexure-V.

Member Secretary, West Bengal Follution Control board and Convenor of the Working Group initiated the meeting.

Edember Secretary, CPCS welcomed all the participants. To requested all the participants to share their valuable suggestions to prepare the list of 17 Categories of industries and field Category of industries. MS CPCC informed that meeting of the Chairman and Member.

Secretaries of SPCBs / PCCs is scheduled to be held in August 2011. Therefore, he requested the Working Group to finalise their report and to submit the same within first week of July, 2011. He also requested the Working Group to prepare the list of Green Category of industries during the meeting. During the introductory speech the Member Secretary, CPCB touch upon the issues on reviewing the criteria for selection of Grossly Polluting Industries and issues related to the need for enhancement of rate for water cess.

During the meeting draft revised list of 17 Categories and Red Categories of industries as prepared in the 1\* meeting of the Working Group were discussed at length. All the participants present in the meeting unanimously approved the draft revised list of 17 Categories of industries (Table A.1). Draft list of Red Category industries has been reviewed item-wise and on the basis of the valuable opinion / suggestions of the participants, a revised list of Red Category Industries has been prepared (Table A.2).

As advised by the Member Secretary, CPCB a draft list of Green Category industries has also been prepared (Table A.4).

As suggested by Member Secretary, CPCB regarding the review of the criteria for selection of Grossly Polluting Industries, all the participants discussed the matter at length. It was decided that criteria for selection of Grossly Polluting Industries identified under NRCD should be more stringent and "100Kg/Day BOD load before treatment" should be reduced suitably considering the changed scenario of water availability in rivers and lakes. MoEF may be requested to consider the issue.

As regards, revision for rate of water cess all the participants unanimously agreed that rate of water cess need to be enhanced. WBPCB has submitted a proposal in this regard. Detailed report on this issue will be prepared by the CPCB.

It was decided that CPCB will provide the list of 17 Category, Red Category and Green Category of industries as prepared during the 2<sup>nd</sup> meeting of the Working Group to SPCBs / PCCs for their opinion /suggestions if any, by 30<sup>th</sup> June, 2011. The 3<sup>rd</sup> and Final Meeting of the Working Group for preparation of the final report will be held tentatively on 8<sup>th</sup> July, 2011 at CPCB, New Delhi.

The meeting was concluded with a vote of thanks to and from the chair.

sd/-(S.Mukherjee) Member Secretary , West Bongal Pollution Control Board

Convener, Madding Group

#### Table A.1: Proposed list of 17 Red category of industries

- 1. Aluminium smelter
- 2. Cement
- 3. Chlor Alkali
- 4. Copper smelter
- 5. Distillery including Fermentation industry
- 6. Dyes and Dye-Intermediates
- 7. Fertilizer (basic) (excluding formulation)
- 8. Iron and Steel (involving processing from ore/integrated steel plants and or Sponge Iron Units
- 9. Oil Refinery (Mineral Oil or Petro Refineries)
- 10. Pesticides (Technical) (excluding formulation)
- 11. Petrochemicals (Manufacture of and not merely use of as raw material)
- 12. Pharmaceuticals (excluding formulation).
- 13. Pulp and Paper (paper manufacturing with or without pulping)
  14. Sugar (excluding Khandsari)
- 15. Thermal Power Plants
- 16. Zinc Smelter
- 17. Tanneries

#### Table: A.2:

SI No.	Proposed list of Other Red Category Industry
1	Airports, and Commercial Air Strips
2	Asbestos and asbestos based industries
3	Automobiles Manufacturing (Integrated facilities)
. 4	Basic Chemicals and electro chemicals and its derivatives including manufacture of acids
5	Ceramic , Refractories
6	Chlorates, perchlorates and peroxides
7	Chlorine, fluorine, bromine, iodine, and their compounds
8	Coal Washeries
9	Coke making , Ilquefaction, coal tar distillation or fuel gas making
10	Common Treatment and disposal facilities (CETP, TSDF, E-Waste recycling, CBMWTF, Effluent conveyance project, incinerators, Solvent/Acid recovery plant, MSW sanitary landfill sites, STP)
11.	Dry coal processing/ mineral processing, industries involving ore sintering, palletisation, grinding ,pulvarization
12	Emulsion of oil & water
13	Fermentation industry including manufacture of yeast, beer, distillation of alcohol (ENA)
14	<u>Ferrous and Non ferrous metal extraction involving different furnaces through melting refining, reprocessing casting and alloy making</u>
15	Fibre glass production and processing (Excluding moulding)
16	Fire crackers manufacturing and bulk storage facilities
17	Flakes from rejected PET bottle
18	Fly ash export, transport and disposal facilities
$-\frac{1}{19}$	Health care establishment (As defined in BMW Rules)
20	Reavy engineering including Ship Shilding (With investment on Flant C Machinerics more than \$10 Crores)

21	Hot mix plants
22	Hotels (3 Star & above)
23	Hydrocyanic acid and its derivatives
24	Industrial carbon including electrodes and graphite blocks, activated carbon, carbon
25	Industrial estates/parks/complexes/areas/export processing zones/SEZs/ Biotech parks/ leather complex
26	Industrial inorganic gases namely:- a) Chemical gases: Acetylene, hydrogen, chlorine, fluorine, ammonia, sulphur dioxide, ethylene, hydrogen sulphide, phosphine b) Hydrocarbon gases: Methane, ethane, propane
27	Industries engaged in recycling /reprocessing/recovery /reuse of Hazardous Waste under schedule IV of Hazardous Waste (M, H&TBM) Rules, 2008 and its amendments
<u>28</u>	Industry or process involving foundry operations
29	Industry or process involving metal surface treatment or process such as pickling/ plating/electroplating/ paint stripping/ heat treatment/ phosphating or finishing and anodising/ enamelling/ galvanising
30	Isolated storage of hazardous chemicals (as per schedule of Manufacture, Storage & Import of Hazardous Chemicals Rules, 1989 as amended)
31	Lead acid battery manufacturing(excluding assembling & charging of acid lead battery in micro scale[<₹25 lakhs]
32	Lime manufacturing (Using Lime Klin)
	Manufacturing of Explosives, detonators, fuses including management and handling activities,
34	Manufacturing of Glass
35	Manufacturing of Glue and gelatin
36	Manufacturing of Lubricating oils, greases or petroleum based products
37	Manufacturing of Paints, Varnishes, pigments and intermediate (excluding blending/
	Manufacturing of Starch/Saggo
39	Milk processing and dairy products (integrated project)
40	Mineral stack yards/ Railway sidings
	Mining and ore benification
	New Highway construction projects
43	Non alcoholic beverage (soft drink) & bottling of alcoholic/non-alcoholic products (capital investment on plant & machinery > ? 1 crore)
<u> </u>	Nuclear Power Plants
	Oil & Gas extraction including CBM (offshore & onshore extraction through drilling
	Dil and gas transportation pipeline
	organic chemicals manufacturing
13 JF	arboiled rice mills (more than 10 TPC)
49 6	hosphabs rock processing plant
—— <del>——</del> ——	hosphorous and its compounds

51	Photographic films and its chemicals	
52	Ports & Harbours, Jetties and Dredging Operations	
53	Power Generation Plants (Except Wind, Solar and Mini Hydel Power plants of capacity <25 MW) and DG set of capacity > 5 MVA]	
54	Processes involving chlorinated hydrocarbons	
55	Railway Locomotive workshops / Integrated Road transport workshop/ Authorised service centres	
56	Reprocessing of used oils and waste oils	
57	Ship breaking activities	
58	Slaughter houses (As per the notification S.O.270(E) dated 26.03.2001) and meat processing industries, bone mill, processing of animal homs, hoofs and other body parts	
59	Steel and steel products using various furnaces like blast furnaces/ open hearth furnace/ induction furnace/ arc furnace/ submerged arc furnace /basic oxygen furnace/hot rolling using reheating furnace	
60	Stone crushers	
61	Surgical and medical products involving prophylactics and latex	
62	Synthetic detergents and soaps (excluding formulation)	
63	Synthetic fibres including rayon, tyre cord, polyster filament yarn	
64	Synthetic resins	
65	Synthetic rubber excluding molding	
66	Tobacco products including cigarettes and tobacco/ opium processing	
67	Vegetable oils including solvent extraction and refinery/ hydrogenated oils	
68	Yarn/ textile processing involving any effluent/ emission- generating process bleaching, dyeing, printing and scouring	

Note: 1. Any industry/industrial activity which is not covered in above list having coal fired boiler with steam generation capacity more than 5 T/hr will be covered under Red Category.

#### Table A.3

SI No.	Proposed list of Orange Category Industries
	Almirah , Grill Manufacturing
2	Aluminium and copper extraction from scrap using oil fired furnace
3	Automobile servicing, repairing and painting (excluding only fuel dispensing)
4	Ayurvedic and Homeopathic medicine
5	Bakery & confectionery units with production capacity $> 1 \; \text{tpd}$
5	Biaxially oriented PP film alongwith metalising operation
7	Brickfields (excluding fly ash brick manufacturing using lime process)
[ _8 _	Building & construction projects more than 20,000 Sq mtc built up area
	Cashew nutr processing
<u>[ i9</u>	Chanacher and Isdoo from puffed and beaten rice(mud and chira)using hust, fired even

11	Chilling plant, cold storage and Ice making		
12	Coffee seed processing		
13	Cake briquetting (sun drying)		
1.4	Cotton spinning and weaving (medium and large scale)		
2.5	Cutting, sizing and polishing of marble stones		
1.6	Dairy and dairy products (small scale) (capital investment on plant & machinery < ₹ ] crore)		
17	Dal Mills		
18	DG Set of capacity >1 MVA but < 5 MVA)		
19	Digital printing on PVC cloth		
20	Dismantling of rolling stocks(wagons/coaches )		
21_	Dry cell battery (excluding manufacturing of electrodes) & assembling & charging of eacid lead battery in micro scale[ $< \frac{\pi}{2}$ 25 lakhs]		
22	Emery powder(fine dust of sand) manufacturing		
23	Engineering and fabrication units (With investment on Plant & Machineries < ₹ 10		
24	Excavation of sand from the river bed(excluding manual excavation)		
<u> 2</u> 5_	Facility of handling ,storage and transportation of food grains in bulk.		
26	Fertiliser (granulation and formulation only)		
<u> 27</u>	Fish feed, poultry feed and cattle feed		
28_	Fish processing and packaging (excluding chilling of fish)		
<u> 29</u>	Foam manufacturing		
_30_	Food & food processing including fruits & vegetable processing		
<u> 31</u>	Forging of ferrous & non-ferrous metal (using oil or gas fired boilers)		
32_	Formulation/paletization of camphor tablets, napthalene balls from camphor/napthalene powders		
33	Glass, ceramic, earthen potteries and tile manufacturing using oil or gas fired kiln,Coating on glasses using cerium fluoride,magnesium fluoride etc.		
34	Glue from starch (physical mixing)		
[3 <u>5</u> ]	Gravure printing, digital printing on flex, vinyl		
36	Heat treatment using oil fired furnace (excluding cyaniding)		
	Hotels (Less than 3 star)		
	Ice cream		
 39	Infrastructure development project		
'	lute processing without dyaing		
— - — t	Liquid floor classes Start etc		
11_	manufacturing.		

42	Manufacture of mirror from sheet glass		
43	Manufacturing of lodized salt from crude/raw salt		
44	Manufacturing of mosquito repellent coil		
45	Manufacturing of toothpowder, toothpaste, talcum powder and other cosmetic items		
46	Mechanized laundry using oil fired boiler		
47	Modular wooden furniture from particle board , MDF, swan timber etc, Ceilling tiles/partition board from saw dust, wood chips etc. & other agricultural waste using synthetic adhesive resin, wooden box making		
48	Packing materials manufacturing from non asbestos fibre, vegetable fibre yarn		
49	Paint blending & mixing (Ball mill)		
50	Pharmaceutical formulation and for R&D purpose(for sustained release/extended release of drugs only and not for commercial purpose)		
51	Plyboard manufacturing (including vineer & laminate) with oil fired boiler/ thermic fluid heater (without resin plant)		
52	Potable alcohol (IMFL) by blending , bottling of alcoholic products (capital investment on plant & machinery $<$ 7 crore		
53	Power press		
54	Printing ink manufacturing		
55	Printing or etching of glass sheet using hydrofluoric acid		
56	Producer gas plant using conventional up-drift coal gasification(linked to rolling mills , glass and ceramic industry, refractories for dedicated fuel supply)		
57	Pulverisation of bamboo and scrapwood		
58	Repairing of electric motor & generator		
59	Reprocessing of waste plastic (excluding PVC)		
60	Rice mill less than 10 TPD & rice hullers		
61	Rolling Mill (oil or gas fired) and cold Rolling mill		
62	Saw mill		
63	Seasoning of wood in steam heated chamber.		
_ 6 <u>4</u> _	Silk screen printing,Saree printing by wooden blocks		
<u>65_</u>	Spice grinding (> 20 HP motor)		
6 <u>6</u>	Spray painting, paint baking, paint stripping		
: <u> </u>	Tamarine powder manufacturing		
6 <u>8</u>	Tea processing		
$\begin{bmatrix} -69 \end{bmatrix}$	Thermocol manufacturing		
$\left  \frac{1}{2} \right $	Thermomeratinaking		
[ _72	Transforms repairing/osamulacturing		

72	Tyres and tubes vulcanization/not retreading
73	Wire drawing & Wire netting
SI. M	Table: A.4
· _	
1	Assembling of Acid lead battery (up to 10 batteries per day excluding lead plate casting)
2	Aluminium utensils from aluminium circles
3	Assembly of air coolers/conditioners, repairing and servicing
4	Assembly of bicycles, baby carriage and other small non-motorised vehicles
5_	Automobile fuel outlet (only dispensing)
6	Ayurvedic and Homeopathic medicine (without boiler)
7	Bailing ( hydraulic press) of waste papers
8	Bakery/Confectionery/Sweets production (with production capacity < 1tpd with oil, gas or electrical oven)
9	Bio fertilizer & blo-pesticide without using inorganic chemicals
10	Biomass Briquettes (sun drying)without using toxic or hazardous wastes
11	Biscuit trays etc. from rolled PVC sheet (using automatic vaccum forming machine)
12	Blending and packaging of Tea
13	Biending of melamine resins & different powder, additives by physical mixing
14_	Block making for printing without foundry (excluding wooden block making)
15	Brass & Bell metal utensils manufacturing from circle (without re-Rolling facility)
16_	Candy
	Cardboard or corrugated box and paper products (excluding paper or pulp manufacturing and without using boiler)
18	Carpentry and wooden furniture manufacturing(excluding saw mill) with the help of electrical (motorized) machines such as electric wood planner, steel saw cutting circular blade etc.
	Cement products (without using Asbestos) like pipe, pillar, jafri, well ring, blocks/tiles etc. (should be done under closed covered shed to control rugitive emissions)
20	Ceramic colour manufacturing (not using boiler and wastewater recycling process)
<u> </u>	Chalk making from plaster of paris.
<u> </u>	Chilling plant and Ice making without use of ammonta
73	Coated electrode manufacturing
	Compact disc, computer floppy & cassette manufacturing
	Compressed byggen gas from crude liquid oxygen

26	CO2 recovery
27	Cotton and woolen hosiery making (SSI & Cottage industries)
28	Cotton spinning & weaving (small scale)
29	Decoration of ceramic cups & plates by electric furnace
30	Diesel Generator sets (15 KVA to 1 MVA)
31	Diesel pump repairing & servicing
32	Distilled water
33	Electric lamp (bulb) manufacturing (small scale)
34	Electrical & electronic items assembling
35	Flavoured bettle nut production/grinding.
36	Flour mills (dry process)
37	Fly ash bricks/blocks manufacturing
38	Fountain pen manufacturing
39	Glass ampules & vials making from glass tubes.
40	Glass putty and sealant
41	Glass, ceramic, earthen potteries and tile manufacturing using electrical kiln or not involving fossil fuel kilns
42	Gold and Silver smithy (purification with acid, smelting operation and sulfuric acid polishing operation) (using less than or equal to 1 litre of Sulphuric Acid / Nitric Acid per month)
43	Groundnut decorticating (dry)
44	Handloom/ Carpet weaving (without dyeing and bleaching operation)
45	Hotels(upto 20 rooms)
46	Insulation and other coated papers (excluding paper or pulp manufacturing) manufacturing
47	Jobbing and machining
48	Leather cutting and stitching (more than 10 machines and using motor)
49_	Leather footwear and leather products (excluding tanning and hide processing) (except cottage scale)
	Eubricating oils, greases or petroleum based products (only blending at normal temperature)
<u> 5</u> i_	Manufacturing of coir items from coconut husk
52	Manufacturing of metal caps, containers etc.
	Manufacturing of optical lenses (using electrical furnace)
<u>54</u>	Manufacturing of pasted veneers without using boiler or Thermic Fluid Heater or by sundrying
58	Manufacturing of shoe brush () wire brush
= <u></u> _56	Menufacturing of silice gal (without furnace)
	in the second se

57	Medical oxygen
58	Mineralized water
59	Oil mill ghani & extraction (no hydrogenation/refining)
60	Organic and inorganic nutrients (by physical mixing)
61	Organic manure ( manual mixing).
<u>62</u>	Paints and varnishes (mixing and blending) (without ball mill)
63	Packing of powdered milk
54	Paper pins and U-clips
65	Phenyl/ Toilet cleaner formulation & Bottling
66	Reel manufacturing
67	Polythene & plastic processed products manufacturing (virgin plastics)
68	Poultry, hatchery, Piggery *
69	Power looms (without dyeing and bleaching)
70	Printing press
71	Puffed rice (muri) (using oil, gas or electrical heating system)
_ 72	Ready mix cement concrete
73	Reprocessing of waste cotton
74	Rope (Cotton & Plastic)
<u>75</u>	Rubber goods industry (with baby boiler only)
76	Scientific and mathematical instruments manufacturing
77	Soap manufacturing (Handmade without steam boiling)
78	Solar module (Non conventional energy apparatus) manufacturing unit
79	Solar power generation through solar photovoltic cell, wind power & mini hydel power(< 25 MW)
$-\overline{80}$	Spice grinding (< 20 HP motor)
81	Steel furniture without spray painting
<u> </u>	Steeping and processing of grains
[ [03]	Surgical and medical products not involving effluent/emission generating processes
<u> </u>	Synthetic detergent formulation
	Tellon based products
	Tyres and tubes retreading (without boiler)
[7] (E	he industry which do not fall any of the above mentioned three categories (i.e RED/ORANGE/ SREEN), decision with regard to their categorization will be taken by a committee constituted by respective SPCBs/PCCs.

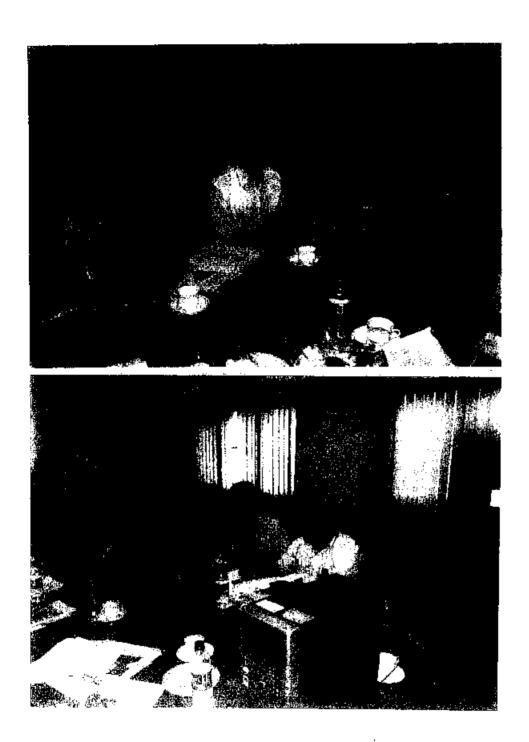
2<sup>nd</sup> Meeting of the Working Groups constituted by CPCB for "Inventorization of 17 Categories / Grossly Polluting Industries and Red Category of Industries" held on 14<sup>th</sup> - 15<sup>th</sup> June, 2011 at 'Central Pollution Control Board', New Delhi.

### List of participants

\$1. No.	Name	Designation	Organisation
1.	Shri J. S. Kamyotea	Member Secretary	CPCB
2.	Shri S. Mukherjee	Member Secretary	WBPCB
3.	Dr. T. K. Gupta	Chief Engineer	WBPCB
4.	Dr. A. K. Swar	SEE	Orissa SPCB
5.	Shri B. K. Baruah	SEE	Assam SPCB
6.	Shri D. Sarkar	SEE	WBPCB
7.	Shri Y. A. Tai	EE	Gujarat SPCB
8.	Dr. K. Karthikeyan	Joint Cluef Env. Engineer	Tamil Nadu SPCB
9.	Shri R. S. Kori	Addl. Director	CPCB
10.	Shri R. K. Shrivastava	SE	МРРСВ
11.	Shri V. B. Waghjale	AST	мрсв
12.	Shri N. K. Gupta	SEE	CPCB
13.	Ms. Reena	AEE	СРСВ

Photographs of  $2^{ad}$  meeting of the Working Group held at CPCB, New Delhi





First egenstrated as  $Z^{\rm rel}$  marking of Working Group held at CPCE, New Yorkin

### KERALA STATE POLLUTION CONTROL BOARD

### CATEGORISATION OF INDUSTRIES FOR CONSENT MANAGEMENT

### !. List of industries under RED category

I.A Industries identified by Ministry of Environment & Forests, Government of India as heavily polluting and covered under Central Action Plan, viz.;

- 1. Aluminium smelter
- 2. Cement
- 3. Chlor alkali
- 4. Copper smelter
- Distillery including Fermentation industry
- Dyes and Dye-Intermediates.
- 7. Fertiliser
- 2. Iron and Steel (Involving processing from ore/scrap/integrated steel plants)
- 9. Oll refinery (Mineral oil or Petro refinerles)
- 10.Pesticides (Technical) (excluding formulation)
- 11. Petrochemicals (Manufacture of and not merely use of as raw material)
- 12. Pharmaceuticals (Basic) (excluding formulation)
- 13. Pulp & Paper (Paper manufacturing with or without pulping)
- 14. Sugar (excluding Khandsari)
- 15. Tanneries
- 16. Thermal power plants
- 17. Zinc smelter

# 1.B Industries manufacturing following products or earrying out following activities:

- 18. Anodizing
- 19. Asbestos and asbestos-based industries
- 20. Automobile manufacturing/assembling
- 21. Ceramic/refractory
- 22. Chemical, petrochemical and electrochemical including manufacture of acids such as sulphuric Acid, Nitric Acid, Phosphoric Acid etc.
- 23. Chlorates, perchlorates and peroxides
- 24. Chlorine, fluorine, bromine, iodine and their compounds
- 25. Coke making, coal liquefaction, coaltar distillation or fuel gas making
- 26. Common Effluent Treatment Plant
- 27. Dry coal processing/Mineral processing industries like ore sintering, pattetization etc.
- 28. Explosives including detonators, luses etc.
- 29. Fermentation including manufacture of yeast, beer etc.
- 30. Fire crackers
- Foundries
- 32. Glass and fibre glass production and processing (excluding moulding)
- Glue and gelatine
- 34. Heavy Engineering
- 35. Hospitals
- 36. Hot Mix plants
- 37. Hydro cyanic acid and its derivatives
- 38. Incineration plants
- Industrial carbon electrodes, graphite blocks, activated carbon, carbon black sto.
- io. Industrial or inorganic gases namely
- (a) Chemical Gases: Acetylene, Hydrogen, Chlorine, fluorine, Ammonia, Sulphur Dioxide, Eilhylene, Hydrogen Sulphide, Phosphine,
  - (b) Hydrocarbon Gases: Methane, Butane, Ethane, Propane
- 11. Industry or process involving electroplating operations
- i... Industry or process involving foundry operations
- 4. Industry or process involving metal treatment or process such as picking, paint stripping.

heat treatment, phosphating or finishing etc.

- 44. Lead re-processing & manufacturing including lead smelting
- 45. Lime manufacturing
- 46. Lubricating oils, greases or petroleum based products
- 47. Milk processing and dairy products (Integrated Project)
- 48. Mining and ore-beneficiation
- 49. Organic Chemical manufacturing
- 50. Parbolled rice mills
- 51. Paints and varnishes (including blending/mixing)
- 52. Petroleum products manufacturing and oil/crude oil/ residues reprocessing
- 53. Phosphate rock processing plants
- 54. Phosphorous and its compounds
- 55. Photographic films and chemicals
- 56. Pigments and intermediates
- 57. Potable alcohol (IMFL) by blending or distillation of alcohol
- 58. Power generating plants (including D.G. Sets).
- 59. Processes involving chlorinated hydrocarbons
- 60. Ship-breaking
- 61. Slaughter houses and meat processing units
- 62. Steel and steel products including coke plants involving use of any of the equipment's such as blast furnaces, open hearth furnace, induction furnace or arc furnace etc. or any of the operations or processes such as heat treatment, acid pickling, rolling or galvanising etc.
- 63. Stone crushers
- 64. Surgical and medical products involving prophylactics and latex
- 65. Synthetic detergent and soap (not covered under orange & green list).
- 66. Synthetic fibre including rayon, tyre cord, polyester filament yarn
- 67. Synthetic resins
- 68. Synthetic rubber excluding moulding
- 69. Tobacco products including cigarettes and tobacco processing
- 70. Vegetable oils including solvent extracted oils, hydro-generated oils.
- 71. Yarn & textile processing involving scouring, bleaching, dyeing, printing or any effluent /emission generating process.
- II. List of Industries under 'ORANGE' Category.
- 72. Automobile servicing and repairs stations
- 73. Brick manufacturing
- 74. Cashew nut processing plants (dry process)
- 75. Cement clinker grinding units
- 76. Cotton ginning, spinning and weaving
- 77. Fishing processing
- 78. Flour mills (excluding Domestic Aatta Chakki)
- 79. Food additives, nutrients and flavours
- 80. Food including fruits and vegetable processing
- 81. Fragrances and industrial perfumes
- 82. Hotels and restaurants
- 83. Instant tea/coffee, coffee processing
- 84. Khandsari sugar
- 85. Laboratory chemicals involving distillation, purification process
- 86. Laboratory-wares
- 87. Lead-acid batter reconditioning/assembling
- 88. Malted food
- 89. Manufacture of mirror from sheet glass and photo framing
- 90. Manufacture of synthetic detergent intermediates (other than formulated synthetic detergent products)
- Manufacture of soaps (process generating trade eliluent)
- 92. Metal treatment or process involving surface coating and paint backing
- 93. Non-alcoholic beverages (soft drinks)
- Sat. IJPK Fertilisers/Granulation.
- 95. Organic nutrients
- 96. Pasticidas/ Insecticidas/ Fungicidas/ Herbicidas/ Agrochemical formulation
- 37. Petroleum products/orads ell storage and transfor excluding cross-country pipeline

- 98. Pharmaceuticals formulation
- 99. Plywood and Board manufacturing
- 100.Pre-boiled rice mills
- 101. Pulping and fermenting of coffee beans
- 102.Pulverizing units
- 103. Surgical and medical products involving effluent/emission generating processes
- 104. Tyres and tubes vulcanisation, vulcanisation, re-treading moulding
- 105. Wire drawing (cold process) and bailing straps.

### III. List of industries under "GREEN" category.

- 1. Apparel making
- 2. Assembly of air coolers, conditioners
- 3. Assembly of bicycles, baby carriage and other small non-motorised vehicles
- 4. Atta-chakkles
- 5. Bakery products, biscuits confectionery
- 6. Bamboo and cane products (only dry operations)
- 7. Block making for printing
- 8. Bulk Cement terminal
- 9. Cardboard or corrugated box and paper products (Paper or pulp manufacturing excluded).
- 10. Carpet weaving
- 11. Chilling plants and cold storage
- 12. Colton and woollen hosiery
- 13. Dal mills
- 14. Electronic and electrical goods
- 15. Electronics equipment (Assembly)
- 16. Foolwear (rubber and PVC).
- 17. Fountain pens.
- 18. Garments stitching, tailoring
- 19. Gold and silver smithy
- 20. Gold and silver thread sari work
- 21. Groundnut decorticating (dry)
- 22. ice-cream or ice-making
- 23. Industrial Gases, namely; Air, Oxygen, Nitrogen, Argon, Heilum, Carbon dioxide, Nitrous
- 24. Insulation and other coated papers (Paper or pulp manufacturing excluded).
- 25. Jobbing and machining
- 26. Leather footwear and leather products excluding tanning and hide processing
- 27. Light engineering
- 28. Manufacture of formulated synthetic detergent products
- 29. Manufacture of soaps involving process without generation of trade effluent (saponifaction of fats and fatty acids only)
- Medical and surgical instruments
- 31. Mineralised water
- 32. Musical instruments manufacturing
- 33. Oil ginning/expelling (no hydrogenation/refining)
- 34. Optical frames
- 35. Paint (by mixing process only)
- Paper pins and U-clips
- 87. Plastic & PVC processed goods
- 30. Polythene, plastic and P.V.C. goods through injection/ extrusion moulding
- © Power looms/handlooms (without dyeing & bleaching)
- 40. Printing press
- Radio assembling
- Clice mullors.
- ്. Rope (coiton and plastic)
- 44. Rubber goods industry
- 65 Golentific and mathematical instruments
- 22. Shoelace manufacturing
- Operis goods
- 🌝 sieseing and processing of grains
- " reori (Beletinoi) and massls ganding

- 50. Thermometer making
- 51. Toys
- 52. Wasting of used sand by hydraulic discharge
- 53. Water softening and demineralised plants.

Note: The industry which do not fall under any of the above mentioned categories (i.e. Red/Orange/Green), decision with regard to their categorisation will be taken by a Committee constituted by the Board including the Member Secretary and two senior officers of the Board.

By order of the Governor, K.RAMAMOORTHY SECRETARY TO GOVERNMENT

### **MADHYA PRADESH POLLUTION CONTROL BOARD**

Classification of Industries For Consent Management [Categories: Red, Orange & Green]

- I. List of Industries under 'RED' Category:-
- A. Industries identified by Ministry of Environment & Forests, Govt. of India as heavily polluting and covered under Central Action Plan, viz.
- 1) Aluminum smelter
- 2) Cement
- 3) Chlor alkali
- 4) Copper smelter
- 5) Distillery including Fermentation industry.
- 6) Dyes and Dye-intermediates.
- 7) Fertiliser.
- 8) Iron and Steel (Involving processing from ore/ scrap/Integrated steel plants)
- 9) Oil refinery (Mineral oil or Petro refineries).
- 10) Pesticides (Technical) (excluding formulation).
- 11) Petrochemicals (Manufacture of and not merely use of as raw material).
- 12) Pharmaceuticals (Basic) (excluding formulation).
- 13) Pulp & Paper (Paper manufacturing with or without pulping).
- 14) Sugar (excluding Khandsari)
- 15) Tanneries
- 16) Thermal power plants
- 17) Zinc smelter
- B. Industries manufacturing following products or carrying out following activities
- 18) Anodizing.
- 19) Asbestos and asbestos-based indestries.
- 20) Caramic/ refractories.
- 21) Chemical, petrochemical and electrochemical including manufacture of acids such as Sulphuric Acid, Nitric Acid, Phosphoric Acid etc.
- 22) Cirlorates, per chlorates and perceides.
- 23) Chlorine, fraorine, bromine, iodiac and their compounds.
- 24) Coke making, roaf liquefaction, coal tar distillation or first gas making.
- E) Dry opat processing/Mineral processing industries like one sintering, palletization, etc.
- Od) Epolosiyos induding deionalors, feses etc.

- 27) Fermentation industry including manufacture of yeast, beer etc.
- 28) Fire crackers.
- 29) Glass and fiber glass production and processing.
- (0) Glue and gelatine.
- 31) Hospitals
- 32) Hot Mix plants
- 33) Hydrocyanic acid and its derivatives.
- 34) Incideration plants
- 35) Industrial carbon including electrodes and graphite blocks, activated carbon, carbon black etc.
- 36) Industrial or inorganic gases.
- 37) Industry or process involving electroplating operations.
- 38) Industry or process involving foundry operations.
- 39) Industry or process involving metal treatment or process such as picking, surface coating, paint baking, paint stripping, heat treatment, phosphating or finishing etc.
- 40) Lead processing and battery reconditioning & manufacturing including lead smelting.
- 41) Lime manufacturing
- 42) Lubric ating oils, greases or petroleum based products.
- 43) Milk processing and dairy products (Integrated Project).
- 44) Mining and ore-beneficiation
- 45) Paints and varnishes (excluding blending/mixing).
- 46) Petroleum products involving storage, transfer or processing.
- Phosphate rock processing plants.
- 48) Phosphorous and its compounds.
- 49) Photographic films and chemicals.
- 50) Pigments and intermediates.
- 51) Potable alcohol (IMFL) by blending or distillation of alcohol.
- 52) Power generating plants (excluding D.G. Sets).
- 53) Processes involving chlorinated hydrocarbons.
- 54) Slaughter houses and meat processing units.
- 55) Steel and steel products including coke plants involving use of any of the equipment's such as blast furnaces, open hearth furnace, induction furnace
- 56) Surgical and medical products involving prophylactics and latex.
- Synthetic detergent and soap.
- 58) Synthetic fiber including rayon, tyre cord, polyester filament yarn.
- 59) Synthetic resins.
- 60) Synthetic rubber.
- Tobacco products including cigarettes and tobacco processing.
- 62) Tyres and tubes Vulcanisation/Retreading/ moulding).
- 63) Vegetable oils including solvent extracted oils, hydro-generated oils.
- 64) Yarn and textile processing involving scouring, bleaching, dyeing, printing or eny offluent/emission generating process.
- 24. Tyres and tubes vulcanisation, vutcanisation, retreading, moulding.
- 25. Wire drawing (cold process) and bailing straps.

IM. That of Industries under "GREET" category'

A. Industries in Small Scale, Cottage/Village category suggested under notification of the Chates Government for issuance of simplified MOC/ Consent from State Pollution Control

Board, as the case may be.

B. All those industries or processes which are not covered under the "Red" and/or "Orange" category; an illustrative list is provided below.

- 1. Apparel making
- 2. Assembly of air coolers, conditioners.
- 3. Assembly of bicycles, baby carriage and other small non-motorised vehicles.
- 4. Assembly of domestic electrical appliances.
- 5. Atta-chakkies.
- 6. Bakery products, biscuits confectionery.
- 7. Bamboo and cane products (only dry operations)
- 8. Block making for printing.
- 9. Candles.
- Cardboard or corrugated box and paper products (Paper or pulp manufacturing excluded).
- 11. Carpentry (excluding saw mill).
- 12. Carpet weaving.
- 13. Chilling plants and cold storages.
- 14. Cotton and woolen hosiery.
- 15. Dal mills.
- 16. Electronic and electrical goods.
- 17. Electronics equipment (Assembly).
- 18. Footwear (rubber).
- 19. Fountain pens.
- 20. Furniture (wooden and steel).
- 21. Garments stitching, tailoring.
- 22. Gold and silver smithy.
- 23. Gold and silver thread zari work.
- 24. Groundnut decorticating (dry).
- 25. Handloom weaving
- 26. Ice-cream or Ice-making.
- 27. Insulation and other coated papers (Paper or pulp manufacturing excluded).
- 28. Jobbing and machining.
- 29. Leather footwear and leather products excluding tanning and hide processing.
- 30. Manufacture of steel trunks and suitcases.
- 31. Medical and surgical instruments
- 32. Mineralised water.
- 33. Musical instruments manufacturing.
- 34. Oil ginning/expelling (no hydrogenation/refining).
- 35. Optical frames.
- 36. Paint (by mixing process only).
- 37. Paper pins and U-clips.
- 38. Plastic processed goods.
- 39. Polythene, plastic and P.V.C. goods through extrusion moulding.
- 40. Powerlooms //handlooms (without dyeing & bleaching).
- 41. Printing press.
- 42. Radio assembling.
- 43. Rice mull.ors.

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- 44. Rope (cotton and plastic).
- 45. Rubber goods industry.
- 46. Scientific and mathematical instruments.
- 47. Shoelace manufacturing
- 48. Sports goods.
- 49. Steeping and processing of grains.
- 50. Supari (Betelout) and masala grinding.
- 51. Tailoring and garment making.
- 52. Thermometer making.
- 53. Toys.
- 54. Wasting of used sand by hydraulic discharge.
- 55. Water softening and demineralised plants.

Note: The industry which do not fall any of the above mentioned three categories (i.e.Red/Orange/Green), decision with regard to their categorisation will be taken by acommittee at Head. Office level comprising of the Member Secretary and two senior officers of the Board.

## **Andhra Pradesh Pollution Control Board**

### List of Industries under RED category

1	Distillery including Detrientation indicates
2	Sugar (excluding Khandsari)
3	Fertiliser.
4	Pulp & Paper (Paper manufacturing with or without pulping)
5	Chlor alkali
6	Pharmaceuticals (Basic) (excluding formulation)
7	Dyes and Dye-intermediates
8	Pesticides (Technical) (excluding formulation)
9	Oil refinery (Mineral oil or Petro refineries)
10	<u> Panneries</u>
11	Petrochemicals (Manufacture of and not metely use of as raw material)
12	Cement and large size Clinker grinding units (above 50 T/day)
13	Thermal Power Plants
1.8	Iron and Steel (Involving processing from ore/scrap/Integrated steel plants)

15	Zinc smelter	
16	Copper smelter	
17	Aluminium smelter	
18	Tyres and tubes Vulcanisation/Retreading/moudling	
19	Synthetic rubber	
20	Glass and fiber glass production and processing	
21	Industrial carbon including electrodes and graphite blocks, activated carbon, carbon black stc.	
22	Paints and varnishes (excluding blending/ mixing)	
23	Pigments and intermediates.	
24	Synthetic resins.	
25	Petroleum products involving storage, transfer or processing.	
26	Lubricating oils, greases or petroleum- based products	
27	Synthetic fiber including rayon, tyre cord, Polyster filament yarn.	
28	Surgical and medical products involving prophylactics and latex.	
29	Synthetic detergent and soap.	
30	Photographic films and chemicals.	
31	Chemical, petrochemical and Electrochemicals including manufacture of acids such as Sulphuric Acid, Nitric Acid, Phosphoric Acid etc	
32	Chlorates, perchlorates and peroxides.	
33	Glue and gelatin	
34	Yarn and textile processing involving scouring, bleaching, dyeing, printing or any effluent/emission generating process.	
35	Vegetable oils including solvent extracted oils, hydro-generated oils.	
36	Industry or process involving metal treatment or process such as pickling, surface coating, paint stripping, heat treatment, phosphating or finishing etc.	
37	Industry of process involving electroplating operations.	
38	Asbestos and asbestos-based industries.	
19	Slaughter houses and meat processing units.	

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40	Fermentation industry including manufacture of yeast, beer etc.
41	Steel and steel products including coke, plants involving use of any of the equipments such as blast furnace, open hearth furnace, induction furnace or arc furnace etc or any of the operations or processes such as heat treatment, acid pickling, rolling or galvanising etc.
42	Incineration plants.
43	Power generating plants (excluding D.G. Sets)
44	Lime manufacturing
45	Pobacto products including eigareites and tobacto processing
46	Dry coal processing/Mineral processing industries like ore sintering, palletization etc.
47	Phosphate rock processing plants.
48	Coke making, coal liquefaction; coaltar distillation or fuel gas making.
49	Phosphorous and its compounds:
50	Explosives including detonators, fuses etc.
51	Fire crackers
52	Processes involving chlorinated hydrogarbons.
63	Chlorine, fluorine, bromine, todine and their compounds.
54	Hydrocyanic acid and its derivatives.
56	Milk processing and dairy products (Integrated Project)
56	Industry or process involving foundry operations,
57	Potable alcohol (IMICL) by bleading or distillation of alcohol
	Anodizing
59	Ceramic/refractories
60	ead processing and battery reconditions & manufacturing including lead smelting.
	Hot Mix Plants
62	Iospitals
63	dining and ore-benefaction.
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65	Nuclear power and related projects such as heavy water plants, nuclear fuel complex, rar earths. Nuclear fuel
66	Bio-Technology 1194
67	Asphaltic 7000 preheets and allied products
68	- Gement bonded particle boards
69	Common Effluent treatment plant (CETP)
70	Silipon Gerbicle Manufacturing (mineral Processing)
71	Automobile mane facturing / essembling
72	Lesvy:englicamity
78	Rijestro-theringi products (artificial abrusiyes; calcium carbide etc., )
74	Rites w board
75	Industrial gases pamely (a) eliemical gases: Acetylene, Hydrogen, Phosphine, (b) Hydrogerism, Cases: Methane, Butane, Ethane, Propane.
76	Geoking of filters, digesting
77	Alumina storage, handling and transportation
78	Production of Armanic
79	Production of non-ferrous metals
80	Shipi breaking units
81	Paint removers
82	Printing and capying with liquid toner
83	Production or use of materials made with silicones (excluding cements)
84	Production or use of plastics or raw materials for them
85	Production of cosmetics (involving usage of flammable gases or solvents)
86	Production, formulation or use of wood preservatives.
87	LPG Storage and Bottling facilities
88	Production of alloys
89	Production/use of cadmium
90	Production or use of latex

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91	Extraction of Amino acids from hair
92	Petro- chemical Intermediates
93	Manufacture of Furfural.
94	Petroleum products manufacturing and oil / crude oil / residues re-processing.
95	Acid / Alkali storage , handling and transportation.
96	Highway projects
97	Port, Harbours, Air ports (except minor ports and harbour)
98	River valley projects including hydel power, major irrigation and their combination including flood control.
99	Tar Roads in Forest areas.
100	Dredging Operation
101	All Tourism Projects between 200 M • 500 Meters of High Tide Line or at locations with an elevation of more than 1000 meters

# **Gujarat pollution Control Board**

# LIST OF INDUSTRIES UNDER 'RED' CATEGORY

## A. Industries identified by Ministry of Environment & Forests, Government of India as heavily polluting and covered under Central Action Plan. Viz;

- 1. Distillery including Fermentation industry
- 2. Sugar (excluding Khandsari)
- 3. Fertilizer
- 4. Pulp and Paper (Paper manufacturing with or without pulping)
- Chlor alkali
- 6. Pharmaceuticals(Basic) (excluding formulation)
- Dyes and Dye-intermediates
- 8. Pesticides (Technical) (excluding formulation)
- 9. Oil refinery (Mineral oil or Petro refineries)
- 10. Tanneries
- 11. Petrochemicals (Manufacture of and not merely use of as raw material)
- 12. Cement
- Thermal power plants
- 14. Iron and Steel (Involving processing from ore/scrap/Integrated steel plants)
- 15. Zinc smelter
- 16. Copper smelter
- 17. Aluminium smelter
- 18. Tyres and tubes (excluding Vulcanisation /Retreating/moulding)
- 19. Synthetic rubber
- \*\*O. Glass and fiberglass production and processing

21. Industrial carbon including electrodes and graphite blocks, activated carbon, carbon black 22. Paints and varnishes (excluding blending/mixing) 23. Pigments and intermediates 24. Synthetic resins 25. Petroleum products involving storage, transfer or processing 26. Lubricating oils, greases or petroleum-based products 27. Synthetic fibers including rayon, tyre cord, polyester filament yarn 28. Surgical and medical products involving prophylactics and latex 29. Synthetic detergent and soap 30. Photographic films and chemicals 31. Chemical, petrochemical and electrochemical including manufacture of acids such as Sulphuric Acid, Nitric Acid, Phosphoric Acid etc 32. Industrial or inorganic gases 33. Chlorates, per chlorates and peroxides 34. Glue and gelatin 35. Yarn and textile processing involving scouring, bleaching, dyeing, printing or any effluent/ emission generating process 36. Vegetable oils including solvent extracted oils, hydrogenated oils 37. Industry or process involving metal treatment or processes such as pickling, surface

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baking, paint stripping, heat treatment, phosphating or finishing etc

- 38. Industry or process involving electroplating operations
- 39. Asbestos and asbestos-based industries
- 40. Slaughter houses and meat processing units
- 41. Fermentation industry including manufacture of yeast, beer etc
- 42. Steel and steel products including coke plants involving use of any of the equipments such as blast

furnaces, open hearth Furnace, induction furnace or arc furnace etc or any of the operations or processes

such as heat treatment, acid pickling, rolling or galvanizing etc

- 43. Incineration plant
- 44. Power generating plants (excluding DG Sets)
- 45. Lime manufacturing
- 46. Tobacco products including cigarettes and tobacco processing
- 47. Dry coal processing/Mineral processing industries like ore sintering, palletization etc
- 48. Phosphate rock processing plants
- 49. Coke making, coal liquefaction, coal tar distillation or fuel gas making
- 50. Phosphate and detonators, fuses etc.
- Explosive including detonators, etc.
- 52. Fire crackers
- 53. Processes involving chlorinated hydrocarbon
- 54. Chlorine, fluorine, bromine, iodine and their compounds
- 55. Hydrocyanic acid and its derivatives
- 56. Milk processing and dairy products (Integrated project)
- 57. Industry or process involving foundry operations
- 58. Potable alcohol (IMFL) by blending or distillation of alcohol

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- 59. Anodizing
- 60. Ceramic/refractoriness
- 61. Lead processing and battery reconditioning & manufacturing including lead smelting
- 62. Hot mix plants
- 63. Hospitals
- 34. Mining and ore-beneficiation
- 65. Miscellaneous

## JHARKHAND STATE POLLUTION CONTROL BOARD

## ludustries under RED HAZARDOUS category

- 1. Aluminium smelter.
- 2. Cement large including clinker making.
- 3. Chlor alkali.
- 4. Copper smelte.
- 5. Distillery including Fermentation Industry.
- Dyes and dye –intermediatas.
- 7. Fertiliser.
- 8. Iron and Steel (Involving processing from ore/scrap/ integrated steel plants).
- 9. Oil refinery (Mineral oil or petro refineries).
- 10. Pesticides (Technical ) (excluding formulation).
- 11. Petrochemicals (Manufacture of and not merely use of raw materials).
- 12. Pharmaceuticals (Basic).
- 13. Pulp & paper (paper manufacturing with or without pulping).
- 14. Tanneries.
- 15. Thermal power plants.
- 16. Zinc smelter.
- 17. Asbestos and asbestos -based industries.
- 18. Ceramic / refractory.
- 19. Chemical petrochemical and electrochemical including manufacture of acids

Such as Sulphuric Acid, Nitric Acid phosphoric Acid etc.

- 20. Chlorates ,perchlorates and peroxides.
- 21. Chlorine, fluorine ,bromine ,iodine and their compounds.
- 22. Coke making, coal liquefaction , coaltar distillation or fuel gas making
- 23. Explosives including detonators ,fuses etc.
- 24. Fire Crackers.
- 25. Foundries excluding induction furnace.
- 26. Glass and Fiber Glass Production and processing (excluding moulding).
- 27. Hydrocyanic acid and its d28. Industrial carbon including electrodes and graphite blocks , activated carbon

.carbon black etc.

- 29. Industrial or inorganic gases namely (a)Chemical Gases; Acetylene
- Hydrogen, Chlorine, Fluorine, Ammonia, Sulphur Dioxide, Ethylene, Hydrogen
- sulphide, phosphine, (b) Hydrocarbon Gases; Methane, Butane Ethane, propane Oxygen gas,
- 30. Industry or process involving electroplating operations.
- 31. Lead re-processing & manufacturing including lead smelting.
- 32. Organic Chemical manufacturing.
- 33. Paints and varnishes (excluding blending/ Mixing).

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equipment's such as blast furnaces .open hearth furnace. Induction furnace or Arc furnace etc. or any of the operations or processes such as heat treatment.

38. Steel and Steel products including Coke Plants involving use of any of the

Acid pickling, rolling or galvanizing etc.

36. Power generating plants (excluding DG Sets).

37. Processes involving chlorinated hydrocarbons.

34. Phosphorous and its compounds.

35. Pigments and intermediates.

- 39. Synthetic resins.
- 40. Vegetable oils including solvent Extracted Oils , Hydro-generated Oils
- 41, Pesticides/ Insecticides/ Fungicides / Herbicides / Agrochemical manufacturing.
- 42. Petroleum products /Crude Oil Storage and Transfer excluding Cross -country pipeline.erivatives.

### Industries under RED MAJOR POLLUTING category (Group-A)

- 1. Sugar (excluding Khandsari).
- 2. Automobile manufacturing.
- 3. Dry coal processing/mineral processing industries like ore sintering palletization etc.
- 4. Fermentation industry including manufacture of yeast, beer etc,
- 5. Heavy Engineering.
- 6. Induction furnace.
- 7. Industry or process involving metal treatment or process such as pickling, paint stripping heat treatment phosphating or finishing etc.
- 8. Lubricating oils ,greases or petroleum -based products.
- 9. Milk processing & dairy products (Integrated project).
- 10. Petroleum products manufacturing & Oil /Crude oil/reprocessing.
- 11. Phosphate rock processing plants.
- 12. Slaughter houses and meat processing units.
- 13. Anodising units.
- 14. Synthetic Detergent and soap (Excluding manual mixing).
- 15. Synthetic fibre including rayon, tyre cord, polyester filament yarn.
- 16. Synthetic rubber excluding moulding.
- 17. Tobacco products including Digarettes and Tobacco processing.
- 18. Yarn and textile processing involving scouring bleaching dyeing printing or any effluent/emission generating process.
- 19. Shellac processing units.
- 20. Utensils manufacturing units having melting and pickling arrangements.
- 21. Breweries /Alchoal botling plantas --having secondary distillation facilities /Non -alcoholic beverage plants.
- 22. Reclamation of rubber, manufacture of rubber solution containing mineral naptha & rubber waste.
- 23. Plyboard manufacturing (with captive manufacturing plant).
- 24. Rolling Mills.
- 25. Preservation/Digestion of Hides.
- 26. Pesticides / Iusecticides / Fungicides / Herbicides / Agrochemical formulation.

#### PART-C: Industries under RED MAJOR POLLUTING category (Group-E)

- 1. Lime manufacturing.
- 2. Photographic Films and Chemicals.

- 3. Potable alcohol (IMFL) by Blending and Distillation of Alcohol
- 4. Ship Breaking.
- 5. Surgical and medical products.
- 6. Tyres and tubes vulcanization/hot retreading (Using boiler) moulding.
- 7. Rubber goods industry (with boiler ).
- 8. Food and food processing (with more than 10lakhs investment on plant &machinery).
- 9. Confectionery (with production capacity less than 4T/d).
- 10. Manufacture o soaps (process generating trade effluent).
- 11. Solvent extraction
- 12. Glass molding units.
- 13. Tobacco Gutka manufacturing units.
- 14. Ceramic cup saucers making units.
- 15. Unit manufacturing ceramic sanitary ware.
- 16. Glue and gelatin.
- 17. Parboiled Rice Mills.
- 18. Large size Clinker /Mineral grinding units (above 50T/d).
- 19. Pulverizing units.
- 20. Casting units using pit Furnace.

# WEST BENGAL POLLUTION CONTROL BOARD

# List of Industries under "SPECIAL RED" Category

- 1. Acid lead batteries including lead plate casting (more than 10 batteries per day)
- 2. All mining activities including queries
- 3. Aluminium smelter
- 4. Asbestos and asbestos-based industries
- 5. Basic drug & pharmaceutical (excluding formulation)
- 6. Calcium carbide manufacturing
- 7. Cast iron foundry
- 8. Cement (excluding simple grinding)
- Chemical, petrochemical and electrochemical, manufacture (including distillation) of mineral acids such as Sulphuric acid, Nitric acid, Hydrochloric acid, Phosphoric acid etc. and their salts, manufacture of alum
- Chlorates, perchlorates and peroxides
- 11. Chlorine, fluorine, bromine, iodine and their compounds
- 12. Chloro alkali
- 13. Coke making, coal liquefaction, coal tar distillation, processing of coal tar distillate or fuel gas making, coke briquetting (excluding sundrying)

- 14. Copper smelter
- 15. Dichromate and chromates & basic chrome sulfate
- 16. Distillery including fermentation industry (including manufacture of yeast & beer)

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- 17. Dyes and dye-intermediates
- 18. Electroplating operations
- 19. Explosives including detonators, fuses etc. & their storage
- 20. Ferrous & Non-ferrous metal extraction (different furnaces & smelting), refining, casting, forging (with coal fired boilers), alloy making etc.
- 21. Fertiliser (Basic) (excluding granulation & formulation only)
- 22. Glass and ceramics (excluding tile manufacturing)
- 23. Hazardous waste/Bio-medical waste disposal facilities
- 24. Hydrocyanic acid and its derivatives
- 25. Incineration plants
- 26. Industry or process involving metal treatment or process such as pickling, surface coating (excluding spray, manual brush, paint baking, paint stripping), heat treatment (only cyniding), phosphating, galvanising, anodising etc.
- 27. Integrated textile mills (processing involving scouring, bleaching, dyeing, printing or any effluent/emission generating process) and dyeing of other fabrics
- 28. Iron and Steel (involving processing from ore / scrap / integrated steel plants) including coke plants and steel products involving use of any of the equipment such as blast furnaces, open hearth furnace, induction furnace or arc furnace etc.
- 29. Isolated storage of hazardous chemicals (as per schedule of Manufacture, Storage & Import of Hazardous Chemicals Rules, 1989), etc.
- 30. Lead smelting, refining and manufacture of its oxides
- 31. Non-alcoholic beverages (soft drinks) and only bottling of alcoholic products (capital investment on plant & machinery > 1 crore)
- 32. Oil refinery (Mineral oil or Petro refineries)
- 33. Paints and varnishes (excluding units with only blending & mixing)
- 34. Pesticides (including formulation)
- 35. Petrochemicals (manufacture of and not merely use of as raw material)
- 36. Phenolic products
- 37. Phosphorous and its compounds

- 38. Pigments and intermediates
- 39. Power plants (including hydel power, thermal power, nuclear power etc.) (excluding Diesel Generator sets and captive power plant)
- 40. Power plant (captive)
- 41. Processes involving chlorinated hydrocarbons
- 42. Pulp & Paper (excluding paper manufacturing by hydropulping and excluding manufacture of Straw board, Gray board & Duplex board)
- 43. Radioactive elements
- 44. Rolling mill (hot) (coal fired)
- 45. Rubber chemicals
- 46. Ship breaking activity
- 47. Slaughter houses and meat processing units
- 48. Sugar
- 49. Synthetic & natural fibre including rayon, tyre cord, polyester filament yarn & raw woolen, raw silk, cellophane paper, cellulose nitrate
- 50. Synthetic resins
- 51. Synthetic rubber
- 52. Tanneries
- 53. Vegetable oils & edible oils including solvent extracted oils, hydrogenated oils
- 54. Waste Oil Processing (any method)
- 55. Zinc smelter
- # Siting policy for Special Red category industries: Industries mentioned in the list of Special Red category cannot be permitted in Municipal areas falling under Kolkata Metropolitan Area (KMA). These can however be set up beyond the Municipal areas of KMA with adequate pollution abatement system subject to site clearance by local bodies. However, for the categories of industries in serial number 23, 25, 29, 40 & 46 of the above list, the consideration for siting in KMA will be location specific and will be decided by the Board.

### List of Industries under "ORDINARY RED" Category

- J. Acid slurry (sulphonation)
- 2. Bitumen processing and products
- 3. Bone Mill
- 4. Composite woollen mill including dewaxing of raw wool and raw silk

- 66. Supari (Betelnut) grinding
- 67. Surgical and medical products not involving effluent/emission generating processes
- 68. Sweet shop
- 69. Synthetic detergent formulation (capital investment on plant & machinery < Rs. 5 lakhs)
- 70. Tea garden only
- 71. Thermocol manufacturing
- 72. Thermometer making
- 73. Toys (only electronic & mechanical) manufacturing
- 74. Transformer repairing/manufacturing (should not be allowed in congested areas)
- 75. Tyres and tubes retreading (without boiler)
- 76. Vineer, laminate (without boiler and thermic fluid heater)
- 77. Washing of used sand by hydraulic discharge
- 78. Washing, chilling of fish and packaging only
- 79. Water softening and demineralised plants

#### Siting policy for Green category industries

List of industries under Green category can be permitted in any area in the state with adequate pollution control measures subject to the site clearance by local body.

### List of Industries under "EXEMPTED" Category.

- 1. Agarbati
- 2. Assembly of domestic electrical appliances, servicing & repairing
- 3. Atta Chakkis (wheat grinding)
- 4. Ball Pen Refill
- 5. Bamboo and Cane products (only dry operation)
- 6. Biogas Plant
- 7. Black smithy (should not be allowed in congested areas)
- 8. Book Binding
- 9. Candles manufacturing
- 10. Carpentry and wooden furniture making (excluding saw mill)
- 11. Coin manufacturing

- 12. Cyber cafe
- 13. Diesel Generator sets (< 15 KVA) sets for residential buildings, commercial buildings and health care organisation
- 14. Earthen potteries & tile manufacturing (not involving kiln)
- 15. Gold and silver smithy (excluding purification/ polishing with any acid and smelting operation)
- 16. Handicraft products like terracotta, conchahell, coconutshell, dokra, cane and bamboo products, baluchari saree, stone carving, wood carving, batik, sola work etc.
- 17. Handloom weaving (without dyeing & bleaching)
- 18. Handmade paper
- 19. Hardware assembling for IT industries
- 20. Leather cutting and stitching (not more than or equal to 10 machines and without using motor)
- $21.\,Leather$  footwear & leather products (excluding tanning & hide processing) (cottage scale only)
- 22. Manual brass painting
- 23. Manufacture of steel trunks & suitcases
- 24. Mashroom Plantation and spawn
- 25. Manufacturing of umbrella (only assembling)
- 26. Musical instrument manufacturing
- 27. Optical frames
- 28. Optical lens manufacturing (without furnace)
- 29. Photo framing
- 30. Radio assembling servicing & repairing work
- 31. Repairing & servicing of bicycles, baby carriage and other non-motorised vehicles
- 32. Repairing & servicing of electronic equipment
- 33. Shoelace manufacturing
- 34. Soap (handmade)
- 35. Soft toys, wooden toys manufacturing
- 36. Software development for information & technology industry
- 37. Sports goods manufacturing

- 38. Tailoring & garment stitching/garment & Apparel manufacturing
- 39. Tea packaging
- 40. Wooden block making for printing
- 41. Xerox & Photocopying
- 42. Zari embroidery work