S.L. No. 26/24

BEFORE THE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA

Original Application No. 67/2024/EZ
(Earlier Original Application No. 22/2024/PB)

IN THE MATTER OF:
KRISHNA MANDAL

...PETITIONER

VERSUS

STATE OF JHARKHAND & OTHERS.

...RESPONDENTS

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Dated: 21. 6. 2024
Place: Kolkata

Mrinal Kanti Biswas
Scientist E & Regional Director,
CPCB, Kolkata
Filed through
Counsel

21 JUN 2024

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KRISHNA MANDAL

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...RESPONDENTS

REPLY ON BEHALF OF THE RESPONDENTS NO. 4 i.e. CENTRAL POLLUTION CONTROL BOARD (CPCB)

I, Mrinal Kanti Biswas S/o Shri Saroj Kumar Biswas, aged about 42 years, working as Regional Director & Scientist E, at Central Pollution Control Board, Kolkata, having its office at Southend Conclave' Block No. 502, 5th & 6th Floor, 1582, Rajdanga Main Road, Kolkata-700107, do hereby state as follows:

1. That I, in capacity of Regional Director & Scientist E, Central Pollution Control Board (hereinafter referred as "CPCB" or "Answering Respondent"), have made myself acquainted with the facts and circumstances of the instant case due to the official capacity as mentioned above and on the basis of available records, I am well versed with the facts and circumstances of the matter and as such competent & authorized to submit this reply on behalf of this Answering Respondent No. 4.

2. That, I have read and understood the averments made by Applicant in the letter petition and at the outset it is respectfully submitted that all averments made in the present Original Application (hereinafter referred to as "OA") are denied unless specifically admitted by the Answering Respondent No. 4 and are also borne out of available record of the case.

3. That the CPCB, i.e. Respondent No. 4 herein has been constituted under Section 3 of The Water (Prevention & Control of Pollution), Act 1974 (hereinafter referred to as "Water Act"). It performs functions under the Water Act, 1974, The Air (Prevention & Control of Pollution), Act 1981 (hereinafter referred to as "Air Act"), and under The Environment (Protection) Act, 1986. It is further submitted that the State Pollution

2 [illegible] 2024

"SPCBs/PCCs") have been constituted in States/Union Territories under the Water Act, 1974 and the Air Act, 1981 to perform the functions and implement the provisions of these Acts in respect of their territorial Jurisdiction.

4. That the present Application was registered by the Hon'ble National Green Tribunal, Principal Bench (hereinafter referred to as "NGT") on the basis of the letter petition, wherein, the applicant has raised the issues with regard to Air and Noise pollution caused due to operation of a rice and flour mill on Diesel Engine by Shri Nandlal Mandal at Village Sarsazol, Thana Shikaripada, District Dumka, Jharkhand.

5. The Hon'ble NGT vide its order dated 19.02.2024 in OA No. 22/2024 constituted a Joint Committee comprising of representatives from CPCB, Jharkhand State Pollution Control Board (hereinafter referred to as "JSPCB", District Magistrate, Dumka, to verify the factual position and suggest appropriate remedial action to the concerned Authorities. The JSPCB was directed to be the nodal agency.

6. That it is humbly submitted, as per the modified directions dated March 07, 2016 issued by CPCB to all the SPCBs/PCCs under section 18(1)(b) of the Water Act, 1974 and the Air Act, 1981, "Rice Mills (Rice hullers only) and flour mills (dry process)" are categorized under 'Green' category and required to obtain Consent to Establish (hereinafter referred to as "CTE") and Consent to Operate (hereinafter referred to as "CTO"). A copy of the modified directions dated March 07, 2016 is annexed as **Annexure-I**.

7. That in compliance to the Hon'ble NGT order dated 19.02.2024, Joint Committee visited the site on 16.04.2024. The Joint Committee Report along with Conclusion and Recommendations of the Joint Committee is annexed as **Annexure-II.**

8. As per the Joint Committee report, the rice mill in question, is a Rice Huller unit operated by diesel engine as well as electric motor. The unit has obtained combined consent (CTE/CTO) from JSPCB under 'Green' Category Industry vide Ref. No. JSPCB/RO/DMK/CTO-17221686/2023/187 dated 10.10.2023. The Unit has closed the window facing the complainant's house. A GI sheet barrier has also been provided between the Applicant's premises and the Unit's premises to prevent pollution from rice husk and other activities from being air borne and entering the locality / Applicant's premises. As reported by the Joint Committee, the result of Ambient Air Quality which was monitored near-

by the unit in question in past were observed to be within National Ambient Air Quality Standards as prescribed by CPCB. The result of the Noise Level which was monitored on 16.04.2024 were observed within permissible limit. The Unit is installed on an RCC (Reinforced Cement Concrete) foundation and in an enclosed area / inside a permanent structure (pucca house) the chances of vibration and other air pollutants entering the Applicant's house are negligible.

9. That as per the recommendations of the Joint Committee, the unit will operate only during day time in closed premises and only on electricity. The diesel engine should be removed from the premises. The windows facing the complainant's house should permanently be closed.

10. That in light of the above submission, it is respectfully submitted that this Answering Respondent i.e. CPCB, shall abide by any order(s) or direction(s) passed by this Hon'ble Tribunal in the instant OA.

DEPONANT

VERIFICATION

I, Mrinal Kanti Biswas, the above name deponent do hereby verify that the contents of above affidavit are true and correct to my knowledge based on official record no part of it is false and nothing material has been concealed therefrom.

Signed and verified on this 21st day of ~~May~~ June 2024 at Kolkata.

DEPONENT

Identified by me
Dipayan Ghosh
Advocate
C.P.C.B.
E/1159/2007

Solemaly Affirmed and
Declared before me U/S 139
CPC, (C) CRPC
Notary

Sumitra Bhattacharyya
Notary, Govt. of W.B.
Regd. No. 065 of 2022
City Civil Court, Calcutta

21 JUN 2024

NOTARIAL NOTARIAL

Annexure-I

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

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

March 07, 2016

To

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(Arun Kumar Mehta)
Chairman
7/3/16

Copy to:

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

(A.B. Akolkar) 5.5.16
Member Secretary

Final Document on Revised Classification of Industrial Sectors Under

Red, Orange, Green and White Categories

(February 29, 2016)

cpcb

Central Pollution Control Board

Delhi

Executive Summary

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

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

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

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

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

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

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

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

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

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

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

X

Revised Criteria of Categorization of Industries

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

A: Genesis of Categorization:

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

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

B: Categorization criteria used by SPCBs/PCCs:

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

C: Gap in the process:

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

D: Resolutions made during National Level Conferences

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

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

Accordingly following resolutions were made during the Conferences:

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

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

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

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

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

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

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

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

F : Scoring Methodology :

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

Table F-1 : Water Pollution Scoring Methodology

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

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

Appendix 1

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

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

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

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

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

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

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

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

- **Water Pollutants covered under Group W16**

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

Table F-2 : Air Pollution Score

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

Appendix 2

- Air pollutants covered under Group A1A:

  Cd+Th, Dioxins & Furans, Mercury, Asbestos

- Air Pollutants covered under Group A1B:

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

- Air Pollutants covered under Group A1C:

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

- Air Pollutants covered under Group A1D:

  CO, PM, CO, NOx

- Air Pollutants covered under Group A1E:

  NOx with liquid-fuel, SO2 with liquid-fuel

Table F-3: Hazardous Waste Generation Score

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

Table F-4 : Calculation Sheet

Industrial Sector - .....

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

Note :

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

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

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

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

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

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

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

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

G : Developments :

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Note :

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Note :

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

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

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

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

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

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

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

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

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

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

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

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

Note :

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

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

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

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

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

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

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

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

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

Annexure

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
(पर्यावरण एवं वन मंत्रालय, भारत सरकार)

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

19.08.2015

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

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

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

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

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

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

Encl : As above

[N.K. Gupta]
Incharge - ESS

To:

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

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Annexure- II

REPORT OF THE JOINT COMMITTEE

IN COMPLIANCE OF THE ORDER DATED 19.02.2024 PASSED BY THE HON'BLE NATIONAL GREEN TRIBUNAL (NGT), PRINCIPAL BENCH, NEW DELHI IN

O. A. No. 22/2024/PB

(PRESENTLY O.A No. 67/2024/EZ)

IN THE MATTER OF

KRISHNA MANDAL Vs

STATE OF JHARKHAND & ORS.

APRIL 2024

1.0 Introduction

1.1 With reference to the order of the Hon'ble NGT, Principal Bench, New Delhi dated 19/02/2024 passed in O. A. No. 22/2024 (PB) which has been transferred to the Hon'ble NGT, Eastern Zonal Bench, Kolkata and has been re-numbered as O. A. No. 67/2024 (EZ) in the matter of Krishna Mandal Vs State of Jharkhand & Ors. a Joint Committee was constituted by the Hon'ble NGT vide its order dated 19/02/2024 in the present matter which comprises of the representatives from (i) Central Pollution Control Board (CPCB) (ii) Jharkhand State Pollution Control Board (JSPCB) and (iii) District Magistrate, Dumka Jharkhand. Copy of order dated 19/02/2024 is enclosed and marked as **Annexure – I.**

1.2 Direction of the Hon'ble NGT vide order dated 19/02/2024

The Hon'ble NGT, Principal Bench, New Delhi vide its order dated 19/02/2024 in O. A. No. 22/2024 (PB) in the matter of Krishna Mandal Vs State of Jharkhand & Ors. has given certain directions. The relevant portion of which is as under: -

"2. The applicant has submitted that they are living in village Sarsazol, Thana Shikaripada, District Dumka, Jharkhand for the last 20 years. Nandlal Mandal has setup rice and flour mill adjoining to their house in January, 2022 by shifting the same from his old house. The project proponent is operating the rice and flour mill by using the diesel engine. His father is suffering from breathing problems. Studies of the applicant are also being affected by the air and noise pollution caused. He made complaints to the concerned authorities in April 2022 and July 2022 but no action has been taken on the same.

3. Prima facie the averments made in the application raise substantial questions relating to environment arising out of the implementation of the enactments specified in Schedule-I to the National Green Tribunal Act, 2010.

4. In view of the averments made in the application, we also consider it appropriate that a Joint Committee be constituted to verify the factual position and suggest appropriate remedial action. Accordingly, we constitute a Joint Committee comprising of representatives of Central Pollution Control Board, Jharkhand State Pollution Control Board, District Magistrate, Dumka and direct the same to meet within two weeks, undertake visits to the site, look into the grievances of the applicant, associate the applicant and representative of the concerned project proponents, verify the factual position and suggest appropriate remedial action to the concerned Authorities. The Jharkhand State Pollution Control Board will be the nodal agency for coordination and compliance.

BISHWAMBHAR MAHTO NOTARY PUBLIC PHOTO COPY ATTESTED Ranchi, Jharkhand (India)

5. Even though in the present case cognizance has been taken by this Bench on the basis of letter petition received by post with approval and assignment under order of Hon'ble Chairperson, but in view of the facts and circumstances of the case including the fact that the place of accrual of cause of action lies within jurisdiction of the Eastern Zone Bench of this Tribunal at Kolkata, we are of the considered view that it will be appropriate if the case is further heard by the Eastern Zone Bench of this Tribunal at Kolkata.

6. Accordingly, the Registry is directed to list the matter before the Eastern Zone Bench of this Tribunal at Kolkata on 23.04.2024 after obtaining orders from Hon'ble the Chairperson for transfer of the case.

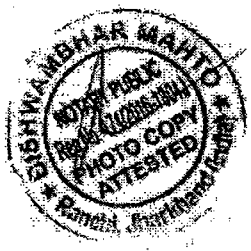
7. Factual and Action taken Report by the Joint Committee and reply/response by the respondents be filed before the Eastern Zone Bench of this Tribunal at Kolkata by email ngtjudicial-kolkata@gov.in ....."

1.3 In compliance to the order dated 19/02/2024 of the Hon'ble NGT, Principal Bench, New Delhi a Joint inspection was carried out by the Joint Committee as constituted by the Hon'ble Tribunal on 16/04/2024 in presence of the Applicant and the representative of the Unit in question. The Joint Committee comprised of the following members: -

a) Sri Anjaneyulu Dodde, Deputy Commissioner, Dumka

b) Sri Rajiva Kumar Sinha, Regional Officer, JSPCB Regional Office, Dumka.

c) Sri Toufic Aslam, Scientist – C, CPCB Regional Directorate, Kolkata.



2.0 Site Visit

2.1 The Joint Committee, as constituted by the Hon'ble NGT undertook visit of the site in question along with the application and the representative of the Unit in question on 16/04/2024. The observations of the Joint Committee during field visit are as follows: -

a) The rice mill (which is in question in the O. A.) is actually a Rice Huller Unit, also known as the rice husker, it is a machine used to remove the outer husk of paddy (rice grains). Furthermore, this machine is used to grind wheat to produce wheat flour.

b) During the inspection, it was noted that a diesel engine of power 10 HP, as well as an electric motor is provided for operating the said Rice Huller. It was further observed that the Unit has provided a silencer with the diesel engine, which is at a height of 2 meters above the roof level of the Unit.

c) The project proponent has provided both diesel engine and electric motor for operation of Rice Huller Unit. In this regard, the project proponent and local villagers informed that at present the Unit is mostly operated by electricity only but in special circumstances when there is no electricity, then the Unit is operated by diesel engine.

d) The Rice Huller Unit has obtained Consent to operate (CTO) from JSPCB under Green Category Industry vide Board's Ref. No. JSPCB/RO/DMK/CTO-17221686/2023/187 dated 2023-10-10 for the Product and Capacity rice – 300 Kg/day & Flour – 40 Kg/day which is valid up to 30.09.2028 Copy of Consent is enclosed and marked as **Annexure – II.**

e) During the inspection, it was observed that the Rice Huller Unit and the Diesel Engine is set up on an RCC (Reinforced Cement Concrete) foundation and both are installed in an enclosed area / inside a permanent structure (pucca house).

f) During the inspection, it was observed that two windows of the house where the Rice Huller Unit is installed is located towards the complainant's house which was found closed. Rice Huller representative informed that the said windows have been kept closed for last 02 years to prevent the rice husk or other materials from being air borne and entering the locality / Applicant's premises.

g) A tin sheet barrier is provided between the Applicant's premises and the Unit's premises, the distance between the Boundary wall of both the premises is approx 2 feets.

3.0 Ambient Air Quality and Noise level Status: -

3.1 In compliance with the Hon'ble NGT order and to verify the factual status of noise levels during the inspection of the Joint Committee on 16/04/2024, a noise level monitoring was conducted by JSPCB Officials. The result of the Noise Level Monitoring is given below in table: -

Table - 01: Noise level Monitoring Result

Place: M/s Biswajit Mandal, At – Sarsajol, P.O. – Shikaripara, District – Dumka.			Date: 16/04/2024
S. N.	**Location**	**Time**	**Report (Sound Level)**
1.	Nearby Complainant House	01:57 PM	LAF (Max) – 72.9 dB LAF (Min) – 53.6 dB Average – 63.25 dB
2.	Near Milling Side	02:15 PM	LAF (Max) – 75.4 dB LAF (Min) – 54.0 dB Average – 64.70 dB

3.2 However, in the past, Ambient Air Quality Monitoring (AAQM) of the Rice Huller Unit was conducted by two different laboratories in response to complaints, and in both instances, the AAQ parameters were observed within permissible limits. Monitoring parameters of both reports are shown below: -

Table - 02: Result of AAQM by Yugantar Bharti Analytical & Engineering Laboratory

Monitoring Date: 18/10/2022 to 19/10/2022				
Parameters	**Sampling Location**			**Standard**
	Site A (Name)	**Site B (Name)**	**Site C (Name)**	
$PM_{2.5}$ (µg/m^3)	59.7	62.3	64.8	100
PM_{10} (µg/m^3)	26.3	29.1	27.3	60
SO_2 (µg/m^3)	14.0	16.0	15.0	80
NOx (µg/m^3)	25.8	28.8	24.1	80

Table 03: Result of AAQM by Envirocheck Laboratory, Dhanbad

Monitoring Date: 14/09/2023				
Parameters	PM_{10} (µg/m^3)	PM_{10} (µg/m^3)	SO_2 (µg/m^3)	NOx (µg/m^3)
Location: At North Side	50.10	80.09	6.09	25.0
Location: At East Side	47.30	74.10	5.67	23.46
Limit	**60.0**	**100.0**	**80.0**	**80.0**

Noise Level & Ambient Air Quality Monitoring Reports are attached as **Annexure - III.**

4.0 Conclusion

a) In the light of the complaint received earlier about this unit in the JSPCB office, vide JSPCB Regional Office letter no. **680**, dated **21/05/2022**, the Unit was directed to obtain consent from JSPCB. In compliance to above, the Unit has obtained Combined consent (CTE/CTO) from the JSPCB. Additionally, the Unit's representative has closed the window facing the complainant's house. A GI sheet barrier has also been provided between the Applicant's premises and the Unit's premises to prevent pollution from rice husk and other activities from being air borne and entering the locality / Applicant's premises.

b) The result of the Ambient Air Quality which was monitored near by the Unit in question in past (Details mentioned in Para 3.2), were observed to be within National Ambient Air Quality Standards as prescribed by CPCB.

c) The result of the Noise Level which was monitored on dated 16/04/2024 were observed within permissible limit.

d) As, the Unit is installed on an RCC (Reinforced Cement Concrete) foundation and in an enclosed area / inside a permanent structure (pucca house) the chances of vibration and other air pollutants entering the Applicant's house are negligible.

e) If Project Proponent will operate the Unit through electric power supply instead of diesel engine, the problems of noise pollution may be minimized.

5.0 Recommendations: -

a) The project proponent will operate the Rice Huller Unit only during day time and in the closed premises.

b) The project proponent will operate the Rice Huller Unit using electricity only and the diesel engine should be removed from the premises.

c) The windows facing the complainant's house should permanently be closed.

(Toufic Aslam) Scientist - 'C' CPCB, Kolkata	(Rajiva Kumar Sinha) Regional Officer, JSPCB Regional Office, Dumka	(Anjaneyulu Dodde) Deputy Commissioner, Dumka.

PHOTO COPY ATTESTED NOTARY PUBLIC Ranchi, Jharkhand

Photographs:

Photo - 1: Interaction with Local Villagers during site visit by the Committee.

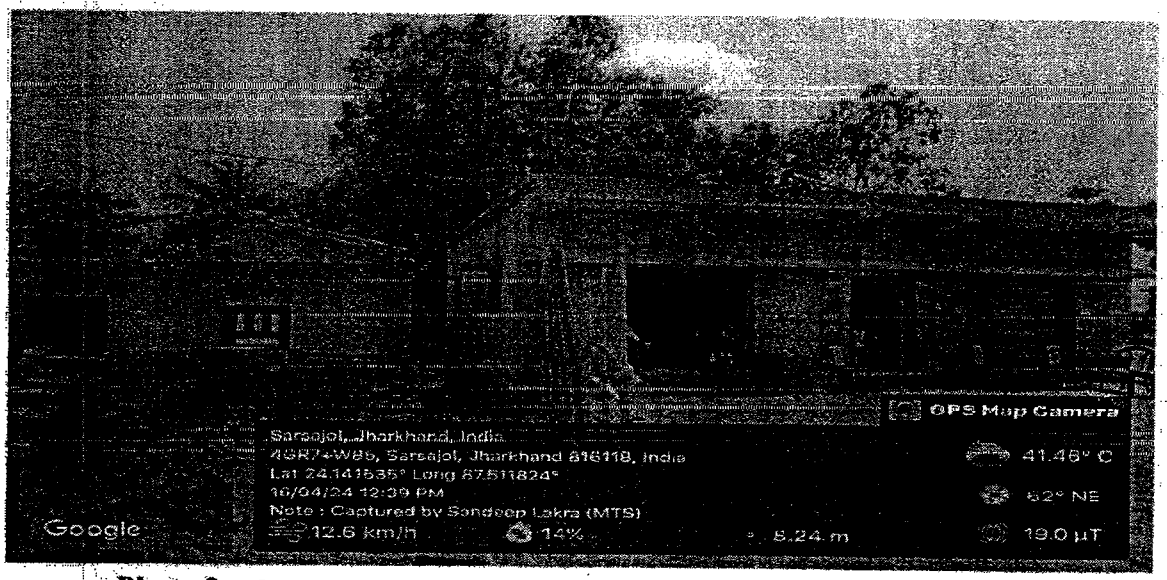


Photo 2:- Complainant's house (1) & Project proponent house (2)

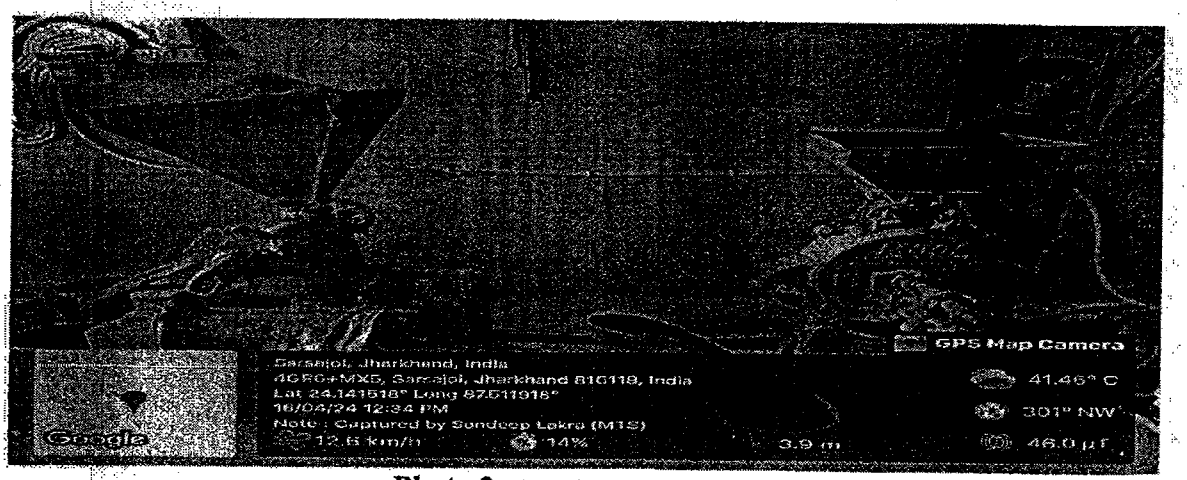


Photo 3: -Rice Huller

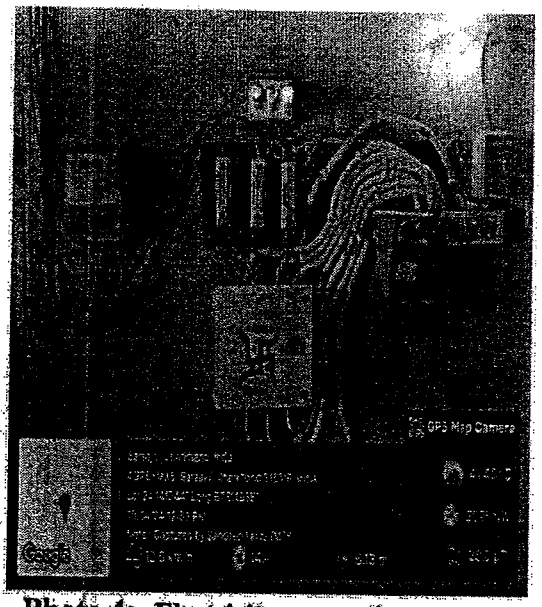


Photo 4: -Electricity connection Provided for operations of rice huller

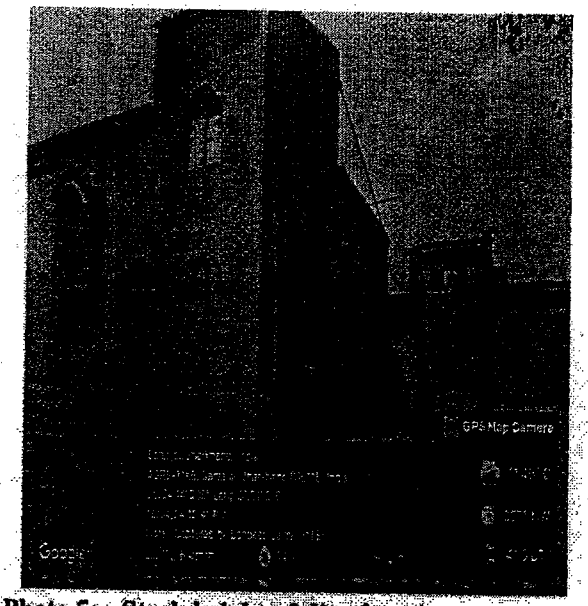


Photo 5: - Stack height of diesel engine.

Photo 6: - Rice Huller

SOHWAMBHAR MAHTO NOTARY PUBLIC PHOTO COPY ATTESTED

Annexure -I

Item No.4 (Court No. 2)

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI.

(Through Physical Hearing with Hybrid V.C. Option)

Original Application No. 22/2024

Krishna Mandal ...Applicant

Versus

State of Jharkhand & Ors. ...Respondents

Date of hearing: 19.02.2024

CORAM: HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER,
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER.

Applicant: None for the Applicant.

Application is registered based on a letter petition received by post.

ORDER

1. Krishna Mondal has sent by post the present letter petition to this Tribunal, which has been treated and registered as O.A. No. 22/2024.

2. The applicant has submitted that they are living in village Sarsazol, Thana Shikaripada, District Dumka, Jharkhand for the last 20 years. Nandlal Mandal has setup rice and flour mill adjoining to their house in January, 2022 by shifting the same from his old house. The project proponent is operating the rice and flour mill by using the diesel engine. His father is suffering from breathing problems. Studies of the applicant are also being affected by the air and noise pollution caused. He made complaints to the concerned authorities in April 2022 and July 2022 but no action has been taken on the same.

3. *Prima facie* the averments made in the application raise substantial questions relating to environment arising out of the implementation of the enactments specified in Schedule-I to the National Green Tribunal Act, 2010.

4. In view of the averments made in the application, we also consider it appropriate that a Joint Committee be constituted to verify the factual position and suggest appropriate remedial action. Accordingly, we constitute a Joint Committee comprising of representatives of Central Pollution Control Board, Jharkhand State Pollution Control Board, District Magistrate, Dumka and direct the same to meet **within two weeks,** undertake visits to the site, look into the grievances of the applicant, associate the applicant and representative of the concerned project proponents, verify the factual position and suggest appropriate remedial action to the concerned Authorities. The Jharkhand State Pollution Control Board will be the nodal agency for coordination and compliance.

5. Even though in the present case cognizance has been taken by this Bench on the basis of letter petition received by post with approval and assignment under order of Hon'ble Chairperson, but in view of the facts and circumstances of the case including the fact that the place of accrual of cause of action lies within jurisdiction of the Eastern Zone Bench of this Tribunal at Kolkata, we are of the considered view that it will be appropriate if the case is further heard by the Eastern Zone Bench of this Tribunal at Kolkata.

6. Accordingly, the Registry is directed to list the matter before the Eastern Zone Bench of this Tribunal at Kolkata on 23.04.2024 after obtaining orders from Hon'ble the Chairperson for transfer of the case.

O.A. No.22/2024

Krishna Mondal Vs. State of Jharkhand Ors.

7. Factual and Action taken Report by the Joint Committee and reply/response by the respondents be filed before the Eastern Zone Bench of this Tribunal at Kolkata by email ngtjudicial-kolkata@gov.in preferably in the form of searchable PDF/OCR Supported PDF and not in the form of Image PDF.

8. A copy of this order be sent to the Member Secretary, Central Pollution Control Board, Member Secretary, Jharkhand State Pollution Control Board, District Magistrate, Dumka by email for requisite compliance.

Arun Kumar Tyagi, JM

Dr. Afroz Ahmad, EM

February 19th, 2024
N

Annexure-II

JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004
Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

Ref No. JSPCB/RO/DMK/CTO-17221686/2023/187 Dated : 2023-10-10

Consent to operate (CTO) under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

1. Application (s) dated 2023-09-08 of Bishwajit Mandal, Occupier Name :Bishwajit Mandal for consent under section 25 (1)(b)/25 (1) (c)/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21(1) of the Air (Prevention & Control of Pollution) Act,1981.,

2. **Documents Relied Upon:**

(a) The content of inspection report ref no. 2080 dated 04.10.2023 of R.O., Regional Office-Cum-Laboratory, J.S.P.C. Board, Dumka.

(b) The content of Own land.

(c) The content of Combined Consent (CTE & CTO) Ref No. JSPCB/RO/DMK/CTE/CTO14001949/2022/10 Dated : 2022-11-22

3. The consent is granted under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 to operate the project in Mauza -Sarsajole , P S -Shikaripara , District -DUMKA , as follows:

Project	Site-Area		Investment (Rs)	Product & Capacity	Period of CTO
	Plot Nos.	Area			Date of issue To
Before Expansion	Mauza - Sarsajole, J B no. 02, Khesra No. 453	2 Bigha 4 Katha	02 Lac	Rice hullers only- 300 Kl/Day & Flour - 40 Kg/Day	30/09/2028

(A) Specific Conditions:

BISHWAMBHAR MAHTO NOTARY PUBLIC PHOTO COPY ATTESTED

1. That, the occupier shall obtain raw material from valid source only.

2. That, the occupier shall submit A A Q R & N M R within consent period.

3. That the occupier shall maintain premises neat & clean and wetting of the ground with appropriate technique.

4. That, he(they) shall implement Rain Water Harvesting.

5. That, he(they) shall dispose solid waste properly.

6. That, he(they) shall do tree plantation & maintains.

7. That, the occupier shall submit applications for renewal of consent under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 again 120 days prior to the date of expiry of this consent i.e. 30.09.2028 with documents showing compliance of all of the above conditions.

(B) General Conditions :

(1) That, the occupier shall maintain the **National Ambient Air Quality Standard** given below:

S N	Pollutant	Time Weighted Average	Concentration in Ambient Air	
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Govt.)
(1)	(2)	(3)	(4)	(5)
1.	Sulphur Dioxide (SO2), µg/m3	Annual 24 hours	50 80	20 80
2.	Nitrogen Dioxide (NO2), µg/m3	Annual 24 hours	40 80	30 80
3.	Particulate Matter (size less than 10 µm) or PM10, µg/m3	Annual 24 hours	60 100	60 100
4.	Particulate Matter (size less than 2.5 µm) or PM2.5, µg/m3	Annual 24 hours	40 60	40 60
5.	Ozone(O3), µg/m3	8 hours 1 hour	100 180	100 180
6.	Lead (Pb) µg/m3	Annual 24 hours	0.50 1.0	0.50 1.0
7.	Carbon Monoxide (CO) mg/m3	8 hours 1 hour	02 04	02 04
8.	Ammonia (NH3) µg/m3	Annual 24 hours	100 400	100 400
9.	Benzene (C6H6) µg/m3	Annual	05	05
10.	Benzo(a) Pyrene(BaP) Particulate Phase only ng/m3	Annual	01	01
11.	Arsenic (As) ng/m3	Annual	06	06
12.	Nickel (Ni) ng/m3	Annual	20	20

Note : Serial no. 1 to 4 – Mandatory
Serial no. 5 to 12 As applicable for specific type of industry

(2) That, the occupier shall maintain the emission quality within the standard and the quantity, as follows:

S N	Parameter	Standard

(3) That, the occupier shall keep process effluent in close-circuit and the quality of effluent from other sources in conformity with the standard (s) and the discharge quantity as below:

S N	Parameter	Standard

(4) That, the occupier shall dispose of solid wastes as follows:

S N	Waste Type	Mode of Disposal

(5) That, the occupier shall keep D G Set(s) within acoustic enclosure and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm.

(6) That, the occupier shall install and maintain Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge and submit the photographic view of the structures within a month.

(7) That, the occupier shall grow and maintain greenery of the project in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.

(8) That, the occupier shall submit environmental statement with supporting stoichiometric calculations analyses reports, every year latest by 30th September of the next financial year.

(9) That, the occupier shall submit report(s) duly monitored and issued by an NABL accredited / ISO 9001:2008 and OHSAS 18001:2007 certified laboratory in compliance sub-para (2), (3), (4) and (5) of paragraph 3 of this CTO yearly at required periodicity.

(10) That, this CTO is valid subjected to the validity of mining Lease/Mining Plan/Ecofriendly/Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically.

(11) That, this CTO is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ occupier.

(12) That, this CTO shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.

(13) That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules made there under.

4. That, this CTO shall not absolve the occupier from making compliance of other statutory prescribed under any law or direction of courts or any other instrument for the time being in force.

5. That, this CTO is being issued on the basis of information/ documents/ certificate submitted by the unit. This CTO will be revoked if any of the information/documents/certificates/undertaking given by the occupier is found false/fictitious/forged in future.

6. The Order shall be valid subject to compliance of all other legal requirements applicable to the unit.

7. The State Board reserve the right to revoke, withdraw or make any reasonable variation / change / alteration in conditions of this consent.

This is issued with the approval of the Competent authority KAMLAKANT PATHAK

Digitally signed by KAMLAKANT PATHAK
Date: 2023.10.10 18:06:48 +05'30'

(Kamlakant Pathak)
Regional Officer

Memo No. : JSPCB/RO/DMK/CTO-17221686/2023/187

Dated : 2023-10-10

Copy to: Sri Bishwajit Mandal of M/s Bishwajit Mandal, At.- Sarsajore, Po. Bankijore, Ps.- Shikaripara, Dist.- Dumka 816118/ Director of Industry, Government of Jharkhand, Ranchi/ Director of Mines, Government of Jharkhand, Ranchi /Deputy Commissioner, Dumka / Chief Inspector of Factories, Government of Jharkhand, Ranchi / Member Secretary, JSPCB, Ranchi for information & necessary action.

KAMLAKANT PATHAK

(Kamlakant Pathak)
Regional Officer

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Annexure-III

Jharkhand State Pollution Control Board,
Regional Office- cum-Laboratory, Dumka

Ref. No. 693

Dated 19/04/2024

Noise Level Monitoring Report				
Sl. No.	Date	M/s Biswajit Mandal, At.- Sarasajol, P.o.- Shikaripara, Dist.- Dumka		
Point -1	16.04.2024 (01.57 PM)	LAF (Max)	72.9 dB	Average
	(Nearby complainer house)	LAF (Min)	53.6 dB	63.25 dB
Point -2	16.04.2024 (02.15 PM)	LAF (Max)	75.4 dB	Average
	(Near milling side)	LAF (Min)	54.0 dB	64.70 dB

19/4/2024
(Ravi Kumar)
A.S.O

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YUGANTAR BHARATI
ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Accredited by: - NABL accredited testing laboratory vide certificate Number TC-4032
Jharkhand State Pollution Control Board (JSPCB)
Certified by :- ISO 9001:2015 & ISO 45001:2018

TC-4032

Test Certificate

ULR (Unique Lab Report) No.		T C 4 0 3 2 2 2 0 0 0 0 0 0 1 7 3 8 F			
Discipline	Chemical	Group	Atmospheric Pollution	Sample Description	Ambient Air Quality
Report Release Date		22nd October, 2022		Report ID	YBAEEL-221018-105234-A01
W. Order/ JSPCB App. No.		14523867		Work Order Date	16.10.2022
Type of Industry (If any)		Huller Mill		Job code/ Ref. no.	YBAEEL/WA/JA/Oct-22/20
Report Issue to		M/s Bishwajit Mandal At.- Sarsajore, PO - Bankijore, PS - Shikaripara, Dist.- Dumka - 816118, Jharkhand.			
Sampling Period		18/10/2022– 19/10/2022	Mode of sample collection		By YBAEEL Team
Sampling Protocol		IS:5182 and CPCB Air Manual Volume-1(NAAQM/36/2012-13)			
Sampling Locations		A. North Side		24°08'30.2"N, 87°30'43.1"E	
		B. East Side		24°08'30.6"N, 87°30'42.8"E	
		C. South Side		24°08'30.7"N, 87°30'43.9"E	
Meteorological Cond. of Field		W.C.– Cloudy	RH % - 67	Temp.- 28°C	W.D.– North-South
Sample receipt Date		21/10/2022	Analysis Started on 21/10/2022	Analysis completed on	22/10/2022

******Test Results******

Parameters	Test Methods	Units	MU %	Sampling Location Site A	Site B	Site C	Limits
Particulate matter (PM_{10})	IS:5182 (P-23) 2006, RA 2017	µg/m³	2.68	59.7	62.3	64.8	100
Particulate matter ($PM_{2.5}$)	IS:5182 (P-24) 2019	µg/m³	2.60	26.3	29.1	27.3	60
Sulphure Dioxide (SO_2)	IS:5182 (P-2) 2001 RA 2017	µg/m³	7.64	14.0	16.0	15.0	80
Nitrogen Dioxide (NO_2)	IS:5182 (P-6) 2006 RA 2017	µg/m³	4.17	25.8	28.8	24.1	80

******End of Report******

Limit is specified as	Environmental (Protection) Rule – 1986.
Abbreviation	MDL - Minimum detection limit, BDL - Below detection limit.
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C)
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility
	This report, in full or in part, shall not be used for advertising or as evidence in any court of law.
	This report cannot be reproduced, except when in full, without the written permission of the CEO.
	The samples collected shall be destroyed after 7 days from the date of issue of the certificate unless specified otherwise
	The liability of the laboratory is limited to the invoiced amount.
	All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Samples comply with prescribed limits.

Sample Drawn By – Mukesh Singh
Tested By – Akash Khalkho (Lab Analyst)

BISHWAMBHAR MAHTO NOTARY PUBLIC PHOTO COPY ATTESTED Ranchi, Jharkhand

Only CONCERN for Jharkhand State Pollution Control Board
Application No. 14523867
Allotted Date 11.10.2022
Submission Date 22.10.2022

Mukesh Kumar

22/10/22

Verified by Sanjeev Kumar Singh Deputy Technical Manager	Issued by Umesh Das Authorized Signatory

Authorized Signatory
Atmospheric Pollution
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

ENVIROCHECK
Certified by : ISO/IEC 17025:2017 (NABL) & Recognised by JSPCB
ISO 9001:2015 & ISO 45001 : 2018 Certified Laboratory
Lab : MIG, R-3 Housing Colony, Dhanbad, Pin - 826001, State - Jharkhand (9830067044

TC-11501

FORMAT NO : ENVJK/FM/37

APPLICATION NO. : 17221711 DTD. 08.09.2023

TEST REPORT

Name of the Industry	:	Biswajit Mandal			Type of Industry	:	Huller Mill	
Address	:	At. – Sarsajora, P.O. – Bankijore, P.S. – Shikaripara, Dist. – Dumka – 816118			Sampling Date	:	12.09.2023 – 13.09.2023	
					Period of Analysis	:	14.09.2023 – 14.09.2023	
					Date of Issue	:	16.09.2023	
Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	: No	Type of Sample	:	Ambient Air	
Sample Condition	:	Sealed	Sample ID No.	: ENVJK/76/Sep./A/I	Report No.	:	ENVJK/76/Sep./TR(A)/I/23-24	

A] GENERAL INFORMATION

1.	Location of Sampling	:	At North Side
2.	Duration of Sampling	:	24 hrs. (10:00 a.m. – 10:00 a.m.)

B] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
1.	Concentration of $PM_{2.5}$	$\mu g/m^3$	USEPA 1997; 40 CFR Part 50, Appendix L: 2006	50.10	60.0
2.	Concentration of PM_{10}	$\mu g/m^3$	IS 5182 (Part 23) : 2006	80.09	100.0
3.	Concentration of SO_2	$\mu g/m^3$	IS 5182 (Part 2) : 2001	6.09	80.0
4.	Concentration of NO_2	$\mu g/m^3$	IS 5182 (Part 6) : 2006	25.0	80.0

Remarks : *Result shows that all parameters are within limit as per JSPCB.*
: *Result relates only to the sample tested.*

Reviewed By :

(Saswata Burman Roy, Dy. Quality Manager)

Authorised Signatory :

(Dr. Ajoy Paul, Quality Manager)

BISHWAMBHAR MAHTO NOTARY PUBLIC Ranchi, Jharkhand PHOTO COPY ATTESTED

Kolkata Office : 63/8, Rastraguru Avenue, Kolkata - 700028 (033-25792891/25487490
Email : envirocheck50@gmail.com
Website : www.envirocheck.in

Test Certificate

ENVIROCHECK
Certified by : ISO/IEC 17025:2017 (NABL) & Recognised by JSPCB
ISO 9001:2015 & ISO 45001 : 2018 Certified Laboratory
Lab : MIG, R-3 Housing Colony, Dhanbad, Pin - 826001, State - Jharkhand (9830067044
TC-11501

TEST REPORT

FORMAT NO : ENVIK/FM/37

APPLICATION NO. : 17221711 DTD. 08.09.2023

Name of the Industry	:	Biswajit Mandal		Type of Industry	:	Huller Mill	
Address	:	At. – Sarsajora, P.O. – Bankijore, P.S. – Shikaripara, Dist. – Dumka – 816118		Sampling Date	:	12.09.2023 – 13.09.2023	
				Period of Analysis	:	14.09.2023 – 14.09.2023	
				Date of Issue	:	16.09.2023	
Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	: Ambient Air
Sample Condition	:	Sealed	Sample ID No.	:	ENVJK/76/Sep./A/II	Report No.	: ENVJK/76/Sep./TR(A)/II/23-24

A] GENERAL INFORMATION

1. Location of Sampling : At East Side
2. Duration of Sampling : 24 hrs. (10:30 a.m. – 10:30 a.m.)

B] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
1.	Concentration of $PM_{2.5}$	$\mu g/m^3$	USEPA 1997a,40 CFR Part 50, Appendix L- 2006	47.30	60.0
2.	Concentration of PM_{10}	$\mu g/m^3$	IS 5182 (Part 23) : 2006	74.10	100.0
3.	Concentration of SO_2	$\mu g/m^3$	IS 5182 (Part 2) : 2001	5.67	80.0
4.	Concentration of NO_2	$\mu g/m^3$	IS 5182 (Part 6) : 2006	23.46	80.0

Remarks : *Result shows that all parameters are within limit as per JSPCB.*
Result relates only to the sample tested.

Reviewed By :

(Saswata Burman Roy, Dy. Quality Manager)

Authorised Signatory :

(Dr. Ajoy Paul, Quality Manager)

DIGHWAMBHAR MAHTO PHOTO COPY ATTESTED Ranchi, Jharkhand

ENVIROCHECK

Certified by : ISO/IEC 17025:2017 (NABL) & Recognised by JSPCB
ISO 9001:2015 & ISO 45001 : 2018 Certified Laboratory
Lab : MIG, R-3 Housing Colony, Dhanbad, Pin - 826001, State - Jharkhand (9830067044

TC-11501

TEST REPORT

APPLICATION NO. : 17221711 DTD. 08.09.2023

FORMAT NO : ENVIK/FM/37

Name of the Industry	:	Biswajit Mandal			Type of Industry	:	Huller Mill		
Address	:	At. – Sarsajora, P.O. – Bankijore, P.S. – Shikaripara, Dist. – Dumka – 816118			Sampling Date	:	12.09.2023 – 13.09.2023		
					Period of Analysis	:	14.09.2023 – 14.09.2023		
					Date of Issue	:	16.09.2023		
Sampling Plan & Procedure	:	ENV/SOP/01	Deviation from the Sampling Method and Plan	:	No	Type of Sample	:	Ambient Air	
Sample Condition	:	Sealed	Sample ID No.	:	ENVJK/76/Sep./A/III	Report No.	:	ENVJK/76/Sep./TR(A)/III/23-24	

A] GENERAL INFORMATION

1. Location of Sampling : At South Side
2. Duration of Sampling : 24 hrs. (11:00 a.m. – 11:00 a.m.)

B] RESULTS

SL. NO.	PARAMETERS	UNIT	METHOD NO.	RESULTS	LIMIT
1.	Concentration of $PM_{2.5}$	$\mu g/m^3$	USEPA 1997a,40 CFR Part 50, Appendix L: 2006	44.86	60.0
2.	Concentration of PM_{10}	$\mu g/m^3$	IS 5182 (Part 23) : 2006	71.81	100.0
3.	Concentration of SO_2	$\mu g/m^3$	IS 5182 (Part 2) : 2001	5.8	80.0
4.	Concentration of NO_2	$\mu g/m^3$	IS 5182 (Part 6) : 2006	23.54	80.0

Remarks : Result shows that all parameters are within limit as per JSPCB.
: Result relates only to the sample tested.

Reviewed By :

(Saswata Burman Roy, Dy. Quality Manager)

Authorised Signatory :

(Dr. Ajoy Paul, Quality Manager)

<End of Report>

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Website : www.envirocheck.in

झारखण्ड राज्य प्रदूषण नियंत्रण पर्षद्,

क्षेत्रीय कार्यालय–सह–प्रयोगशाला, दुमका – 814101
Ph: 06434-230203 Web Site: www.jspcb.org

पत्रांक :–

दिनांक :–

प्रेषक:

क्षेत्रीय पदाधिकारी,
दुमका।

सेवा में,

बिश्वजीत मंडल,
सर्वश्री बिश्वजीत मंडल,
ग्राम– सारसाजोल, थाना – शिकारीपाड़ा,
जिला – दुमका।

विषय : उत्पादन क्षमता के संबंध में।

महाशय,

उपर्युक्त विषय के संबंध में सूचित करना है कि आपकी इकाई को पर्षद् पत्रांक JSPCB/RO/DMK/CTO-17221686/2023/187 दिनांक 2023-10-10 द्वारा वर्ष 30.09.2028 तक के लिए संचालन सहमति निर्गत किया गया है, जिसमें इकाई की उत्पादन क्षमता टंकन दोष के कारण Rice hullers only- 300 Kt/Day & Flour - 40 Kg/Day अंकित हो गई थी। इकाई की वास्तविक उत्पादन क्षमता Rice hullers only- 300 Kg/Day & Flour - 40 Kg/Day है। उपर्युक्त के आलोक में इकाई की उत्पादन क्षमता को इस हद तक संशोधित समझा जाय।

विश्वासभाजन,

ह0/–
क्षेत्रीय पदाधिकारी,
दुमका।

ज्ञापांक :– 695 दुमका / दिनांक :– 13/04/24

प्रतिलिपि :– उद्योग निदेशक, झारखण्ड सरकार, राँची / खान निदेशक, झारखण्ड सरकार, राँची / उपायुक्त, दुमका / मुख्य कारखाना निरीक्षक, झारखण्ड सरकार, राँची / सदस्य सचिव, झारखण्ड राज्य प्रदूषण नियंत्रण पर्षद्, राँची को सूचनार्थ एवं आवश्यक कारवाई हेतु प्रेषित है।

SHYAMBHAR MAHTO
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PHOTO COPY
ATTESTED
618 Dumka, Jharkhand

क्षेत्रीय पदाधिकारी,
दुमका।

Letter 2020