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BEFORE THE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI

IN

ORIGINAL APPLICATION NO.702 OF 2022

IN THE MATTER OF

Deepak Kumar & Anr

..... Applicant

Versus

State of Uttarakhand & Ors.

.....Respondent

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ADDITIONAL AFFIDAVIT ON BEHALF OF RESPONDENT NO. 2 i.e.
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (MoEFCC)

I, Kanchan Puri, Daughter of Shri Harish Puri, aged about 35 years presently working as Scientist 'B' in the Ministry of Environment, Forest & Climate Change, at New Delhi, do hereby, in my official capacity, solemnly affirm and state on oath as follows: -

1. That I am acquainted with the facts and circumstances of the instant case and duly competent to swear the present affidavit on behalf of the MoEFCC on the basis of the official records maintained therein.
2. It is humbly submitted that the instant matter came up for hearing on 26.07.2023 wherein the Hon'ble Tribunal inter-alia observed and directed that :-

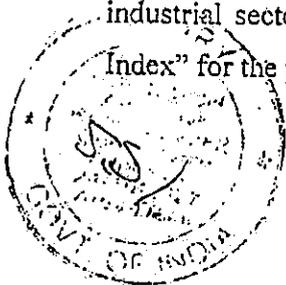
"..... it is to be noted that while passing the order dated 01.03.2023, in para 4, an observation was made by this Tribunal that though categorization of the CPCB is general, the same has been made applicable to eco-sensitive zone for which no particular study has been conducted. Thus, stone crushing is taken as an orange category and in view of general



categorization by CPCB taken as permissible in eco-sensitive zone, as per Notification dated 06.01.2020.

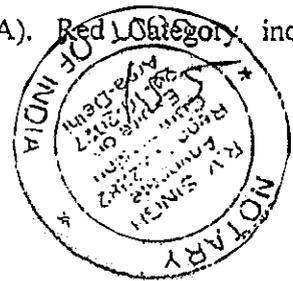
In view of above, no particular study has been conducted by the respondents or filed before this Tribunal. Accordingly, we direct the State PCB and the MoEF&CC to file a study with regard to the categorization quoted above before the next date."

3. It is submitted that the Central Pollution Control Board (CPCB) vide communication No. B-29012/ESS (CPA)/2015-16, dated 07.03.2016 issued the guideline on categorization of Industrial Sectors as part of 'Directions under Section 18(1)(b) of the Water (Prevention & Control of Pollution) Act, 1974 & the Air (Prevention & Control of Pollution) Act, 1981 regarding Harmonization of Classification of Industrial Sector under Red/Orange/Green/White Categories'. (ANNEXURE-I). The Guideline Categorized Industries, on the basis of Pollution Index (PI) which is a basis of weightage drawn from water pollution, air pollution, hazardous waste generation, fuel consumption and waste water generation. The concept of categorization of industries into red, orange, green and white categories, is based on the "Precautionary Principle", mainly focuses on potential of industries to impact the environment. The purpose of categorization is to ensure that the industry is established in a manner consistent with the environmental objectives and to prompt industrial sectors to adopt cleaner technologies, ultimately resulting in generation of no or minimum pollutants. CPCB's categorization of industries in 2016 vide No. B-29012/ESS (CPA)/2015-2016 dated 07.03.2016 is applicable to all across the Country.
4. That as part of the extant guideline, the CPCB has used the scale for the Pollution Index (PI) of any Industrial Sector, which is a rational number between 0 to 100 and the increasing value of PI denotes the increasing degree of pollution level from the industrial sector. The following criteria with regard to the "Range of Pollution Index" for the purpose of categorization of industrial sectors is used:



- i. Industrial sectors having PI score of 60 and above – Red category
- ii. Industrial sectors having PI score of 41 to 59 – Orange category
- iii. Industrial sectors having PI score of 21 to 40 – Green category
- iv. Industrial sectors having PI score upto 20 – White category

5. That based on the methodology, CPCB classified 254 industrial sectors under Red (61), Orange (90), Green (65) and White (38) categories, and directed SPCBs/PCCs to adopt the same. White category of industries, which are considered as non-polluting industry, are not required to obtain Consent to Operate (CTO) from State Pollution Control Board (SPCBs)/ Pollution Control Committee (PCCs) and an intimation to concerned SPCBs/PCCs shall suffice.
6. It is to humbly submit that Stone Crushing Units are mainly air polluting units and unless no pollution control measures are installed, such units release fugitive dust (Secondary Emission) and therefore, the PI for the Stone Crushing Units is 50.
7. It is humbly submitted that Stone Crushers are regulated as per Doon Valley Notification as amended from time to time. Doon Valley Notification, 1989 (Annexure II) was first attempt towards such categorization of industries which was much before the EIA Notification, 1994; EIA Notification, 2006 and Guidelines on Categorization of Industries in 2016 by CPCB. After EIA Notification, 1994 followed by EIA Notification, 2006; the Doon Valley Notification was amended vide S.O. 943 (E) dated 04.07.2005 (Annexure III) and S.O. 2125 (E) dated 13.12.2007 (Annexure IV) w.r.t Environmental Clearance (EC) mechanism for various categories of industries. Accordingly, all those projects which are covered in the Schedule under the EIA Notification issued vide S.O. 1533 (E) dated 14.06.2006 will follow the procedure laid down in the notification. All those projects which are not covered under the EIA notification but which fall under the Orange Category as per CPCB shall be considered by the State Level Environment Impact Assessment Authority (SEIAA). Red Category industries remained



prohibited in the specified region and Green Category remained out of the preview of environmental regulation till there is necessity. Accordingly, the Orange Category of industries remains under the regulation.

- 8. That, with categorization of CPCB *vide* letter No. B-29012/ESS (CPA)/2015-2016 dated 07.03.2016, the Doon Valley Notification was again amended on 06.01.2020 (Annexure V) in line with CPCB Categorization for implementation purpose and to bring uniformity with the guidelines across the Country, the Stone Crusher Unit has been categorized as Orange Category and hence continue to be regulated.
- 9. That, siting of industries in Doon Valley, Uttarakhand is governed by the provisions of the Doon Valley notification published as S.O. 102 (E), dated 01.02.1989, as amended from time to time. The said notification prescribes for regulated, restricted and prohibited activities and the Stone Crusher units as per the above said Notification falls under the Orange Category which is a regulated activity.
- 10. That, vide S.O. 102(E), dated 01.02.1989, the "Industries falling within the list (list of Orange Category of industries) shall be assessed by the State Pollution Control Board and referred to the Ministry for consideration, before issuing "No Objection Certificate" and the maximum validity period for Consent to Operate (CTO) for Stone Crusher units is 10 years. Such units are required to be inspected at least once in a year by concerned State Pollution Control Board (SPCB)/ Pollution Control Committee (PCC) for compliance of environmental norms.
- 11. That, as per CPCB directions dated 07.03.2016, SPCBs/PCCs are empowered to categorize new/existing sectors at their own, based on the methodology/criteria prescribed by CPCB.
- 12. That Stone Crushers are regulated as per extant Doon Valley Notification as amended and there is a prescribed mechanism for allowing any such unit in the Doon Valley which requires CTO/CTE from SPCB and EC from SEIAA and there is CPCB Guidelines for Stone Crushing units dated July 2023 (Annexure



VI), which takes into account the environmental and safety aspect of the concerned sector. It is humbly submitted that considering that adequate policy and procedure have already been put in place by the Ministry for dealing with environmental and safety aspect of Stone Crushing unit.

- 13. That it will be relevant to mention that the CPCB Guideline, 2016 regarding categorization of industries w.r.t. Eco-Sensitive Zone, has been formulated after detailed exercise as enumerated and is applicable across the country as mentioned above and does not call for any revision.
- 14. It is humbly submitted that the answering respondent without any prejudice reserves his right to file an additional affidavit at a later stage, if so necessary.
- 15. It is humbly submitted that the present additional affidavit may kindly be considered on record and into consideration and the Hon'ble Tribunal may pass any such appropriate order(s), direction(s) as deem fit and proper under the facts and circumstances of the present case which the answering respondent shall duly comply with.

VERIFICATION

I, the above-named deponent, do hereby verify that the contents of the above affidavit are true and correct to my knowledge as per the records of the answering respondents. No part of it is false and nothing material has been concealed there from

Verified at NEW DELHI on this FRIDAY 15 SEP 2023 day of 2023



solemnly affirmed before me, read over & explained to the deponent

[Signature]
Notary Public, DELHI

15 SEP 2023

[Signature]
DEPONENT (S)
(KANCHAN PURI)
श्री/Scientist 'B'
पर्यावरण, वन एवं जलवायु परिवर्तन विभाग
Min of Environment, Forest and Climate Change
भारत सरकार, नई दिल्ली
GOVT. of India, New Delhi

[Signature]
DEPONENT (S)
(KANCHAN PURI)
श्री/Scientist 'B'
पर्यावरण, वन एवं जलवायु परिवर्तन विभाग
Min of Environment, Forest and Climate Change
भारत सरकार, नई दिल्ली
Govt. of India, New Delhi

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ANNEXURE-1



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 अरजुन नगर, दिल्ली-110032

Parivesh Bhawan, East Arjun Nagar, Delhi - 110032

फोन: 22305793, 22307078, 22307079, 22301538, 22304948
फैक्स: 22305793, 22307078, 22307079, 22301538, 22304948
ईमेल: cpcb@nic.ni, cpcb@vsnl.com, 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

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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:

- o Industrial Sectors having Pollution Index score of 60 and above - Red category
- o Industrial Sectors having Pollution Index score of 41 to 59 - Orange category
- o Industrial Sectors having Pollution Index score of 21 to 40 - Green category
- o 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 :

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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.

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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) 2.3.16
Member Secretary

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Final Document
on
Revised
Classification
of
Industrial Sectors
Under

Red, Orange, Green and White Categories
(February 29, 2016)



Central Pollution Control Board
Delhi

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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, APFPCB, 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.

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- o Industrial Sectors having Pollution Index score of 60 and above - Red category
- o Industrial Sectors having Pollution Index score of 41 to 59 -Orange category
- o Industrial Sectors having Pollution Index score of 21 to 40 -Green category
- o 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 dyeing/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.

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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

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(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:

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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
<p>Note :</p> <ul style="list-style-type: none"> • 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 w.r.t 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

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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 far¹prescribed 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 .

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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 - <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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

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	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 $W = W1+W2$		

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Appendix I

• 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 C₆H₅OH) , 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.

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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/Nm ³	30
2	Group A1B	Presence of criteria air pollutants having prescribed standard from 3 to 10 mg/Nm ³	25
3	Group A1C	Presence of criteria air pollutants having prescribed standard from 11 to 50 mg/Nm ³	20
4	Group A1D	Presence of criteria air pollutants having prescribed standard from 51 to 250 mg/Nm ³	15
5	Group A1E	Presence of criteria air pollutants having prescribed standard from 251 mg/Nm ³ & above.	10
6	Group A1F	<ul style="list-style-type: none"> • Generation of fugitive emissions of Particulate Matters which are: <ul style="list-style-type: none"> ◦ Not generated as a result of combustion of any kind of fossil-fuel. ◦ Generated due to handling / processing of materials without involving the use of any kind of chemicals. ◦ Which can be easily contained /controlled with simple conventional methods 	10
7	Group A1G	<ul style="list-style-type: none"> • Generation of Odours which are : <ul style="list-style-type: none"> ◦ Generated due to application of binding gums / cements /adhesives /enamels ◦ 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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			

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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, NO_x
- Air Pollutants covered under Group A1E:
NO_x with liquid-fuel, SO₂ with liquid-fuel

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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	<ul style="list-style-type: none"> • Land disposable HW which require special care & treatment for stabilization before disposal. 	20
HW2	<ul style="list-style-type: none"> • Incinerable HW 	15
HW3	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Recyclable HW, which are easily recyclable with proven technologies. 	10

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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 :

- 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 = $\{100 \times W \text{ (or A)}\} / 40$
- 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 = $\{100 \times (W+A)\} / 80$
- 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 = $\{100 \times (A+H)\} / 60$
- 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 = $\{100 \times (W+H)\} / 60$

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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

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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.

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

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

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

Sl No.	Orgn 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 of combinations of polluting activities viz. washing, metal surface finishing operations, 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, 2003 - 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.

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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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> i. The separation of phosphate rock from impurities and non-phosphate materials for use in fertilizer manufacture consists of beneficiation, drying or calcining at some operations, and grinding. Phosphate rock from the mines is first sent to beneficiation units to separate sand and clay and to remove impurities. Steps used in beneficiation depend on the type of rock. ii. The water & air pollution scores are normalized to 100.

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9.	66	Power generation plant [except Wind and Solar renewable power plants of all capacities and Mini Hydel power plant of capacity <25MW]	30	-	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 SO ₂ 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.	87	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 Khandasari)	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.

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												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 assemblies 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.	65	Phosphorous and its compounds	30	-	30	25	-	25	-	68.75	R-R	Water pollution & air pollution containing compounds of phosphorus 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.

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20.	41	Manufacturing of explosives, detonators, fuses including management and handling activities	30	-	30	20	-	20	20	70	R-R	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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-water. 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	<ul style="list-style-type: none"> i. The Airports are generating mainly the waste-water. 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	<ul style="list-style-type: none"> 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 electrochemicals and its derivatives including manufacturing of acid	30	-	30	-	-	-	10	75	R-R	<ul style="list-style-type: none"> i. Standards prescribed for Inorganic Chemicals are adopted. ii. It is mainly water polluting industry having effluents which are toxic and not easily biodegradable.

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												<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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

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												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 "Ralls" 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 assemblies comprising accumulators and other batteries included on list A, mercury-switches, activated glass outlets 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.

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35.	52	Nuclear power plant	10	-	10	30	-	30	15	75	R-R	<p>i. Mainly air polluting due to incinerator. Others - cooling water.</p> <p>ii. Air pollution score is normalized to 100.</p>
37.	58	Pesticides (technical) (excluding formulation)	30	-	30	25	-	25	20	75	R-R	<p>i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'.</p> <p>ii. Such types of industrial sectors generate all sorts of pollution.</p>
38.	64	Photographic film and its chemicals	30	-	30	-	-	-	-	75	R-R	<p>i. Silver salts and other chemicals are used in preparation. Slight quantity of effluents is generated.</p> <p>ii. Water pollution scores are normalized to 100.</p>
39.	68	Railway locomotive workshop/Integrated road transport workshop/Authorized service centers	20	10	30	-	-	-	10	75	R-R	<p>i. Mainly water polluting industry. Water is used in the washing of locomotives, road transport vehicles during servicing.</p> <p>ii. This score is valid for those Centers having discharge more than 100 KLD.</p> <p>iii. Service Centers having waste-water generation < 100 KLD, the normalized score will be = (100*20)/40 = 50.</p>
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	<p>i. This industrial sector is the one among the '17 categories of Highly Polluting Industries'.</p> <p>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.</p>
42.	70	Ship Breaking Industries	30	-	30	30	-	30	20	80	R-R	<p>i. The ship-breaking industry creates numerous hazards for the coastal and marine environment.</p> <p>ii. Ship-breaking releases a large number of dangerous pollutants, including toxic waste, oil, poly-chlorinated biphenyls, and heavy metals, into the waters and sea bed.</p> <p>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.</p>

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52.	20	Fertilizer (basic) (excluding formulation)	30	10	40	20	10	30	20	90	R-R	pollution. 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.	95	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.

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Note :

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

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

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

Sl No.	Original Sl No.	Industry Sector	Original Category	Remarks
1	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 & Machinery 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

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

Final Sl. No.	Orgn 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 polluters 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 ₂ SO ₄ are generated.

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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.	75	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.

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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 SO ₂ , PM).
18.	3	Automobile servicing, repainting 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.

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23.	11	Coal washeries	15	10	25	15	-	15	-	50	R-O	<p>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.</p> <p>ii. Water & air pollution scores are jointly normalized to 100.</p>
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, palletisating, 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	<p>i. Mainly water polluting industry. This is the normalized water pollution score for units having discharge < 100 KLD.</p> <p>ii. For the units having discharge > 100 KLD, the normalized water pollution score will be 75 and shall be accordingly categorized as Red.</p>
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	<p>i. Mainly air polluting.</p> <p>ii. This score is applicable to secondary production of ferrous & non-ferrous metals (excluding lead) up-to 1 MT/hour production.</p>

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												<p>iii. For lead, the normalized air pollution score will be $= (100 \times 25) / 40 = 62.5$ and is categorized as Red.</p> <p>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 $= (100 \times 25) / 40 = 62.5$ and is categorized as Red.</p>
29.	26	Fertilizer (granulation / formulation / blending only)	--	--	--	20	--	20	--	50	0-0	Air polluting.
30.	27	Fish feed, poultry feed and cattle feed	20	--	--	20	--	20	--	50	0-0	Obnoxious odour, H2S etc. AP score is normalized to 100.
31.	28	Fish processing and packing (excluding chilling of fishes)	20	--	20	--	--	--	--	50	0-0	Mainly water polluting. WP score is normalized to 100.

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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 scores 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.

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		dispersible form, Slags from copper processing for further processing or refining, Insulated Copper Wire, Scrap/copper with PVC sheathing including ISRI-code material namely "Druid", Jelly filled Copper cables, Zinc Dross-Hot dip Galvanizers SLAB, Zinc Dross-Bottom Dross, Zinc ash/Skimming arising from galvanizing and die casting operations, Zinc ash/Skimming/other zinc bearing wastes arising from smelting and refining, Zinc ash and residues including zinc alloy residues in dispersible form.										
42.	35	industry or processes involving foundry operations	-	-	-	20	-	20	-	50	R-O	1. This score is valid for the foundries having capacity < 5 MT/hr as such units require the coal/coke @ < 500 kg/hr. 2. 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.

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45.	42	Manufacturing of glass	10	.	.	20	.	20	.	50	R-O	<p>i. Mainly air polluting (melting at 1500°C and refining).</p> <p>ii. In case of lead glass, the score of A1 will be 23 and accordingly the normalized scores will be 62.5 i.e. Red</p>
46.	43	Manufacturing of iodized salt from crude/raw salt	12	--	12	20	--	20	--	50	O-O	<p>Boiling in Evaporators (multiple effect evaporators), centrifuging, iodization with KIO3 mbdng. Mainly air polluting. Air pollution score is normalized to 100.</p>
47.	42	Manufacturing of mirror from sheet glass	--	--	--	20	--	20	--	50	O-O	<p>Evaporator & furnace for heating the metal to be applied as reflector on mirror. Mainly air polluting.</p>
48.	44	Manufacturing of mosquito repellent coil	--	--	--	20	--	20	--	50	O-O	<p>Mainly air polluting. Toxic fumes are expected.</p>
49.	46	Manufacturing of Starch/Sago	25	.	25	15	.	15	.	50	R-O	<p>i. Water and air polluting industry. Boiler is used for steam generation.</p> <p>ii. Water & air pollution scores are normalized to 100</p>
50.	46	Mechanized laundry using oil fired boiler	20	--	20	20	--	20	--	50	O-O	<p>Both air and water pollution are generated.</p>
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	<p>1. Mainly air polluting. Boiler as well as VOCs from use of adhesives. 2. Without boiler, it will be a Green category industry.</p>
52.	50	New highway construction project	-	-	-	20	.	20	-	50	R-O	<p>Mainly air polluting project.</p>

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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.

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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	Teflon 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.	85	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.

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73.	21	Dry cell battery (excluding manufacturing of electrodes) and assembling & charging of a 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 pollution.
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. Wastewaters are having high strength in respect of BOD. ii. This is the normalized air & water pollution score for units having wastewater generation < 100 KLD and fuel consumption less than 12 MTD. iii. For units having wastewater generation > 100 KLD or fuel consumption > 12 MTD or both, the unit shall be classified as Red.

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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 slabs 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 refractories 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

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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, 2005.
3	53	Power press	O	Very vague term hence deleted. Such types of general engineering units have already been covered.

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

Sl. No.	Orgnl Sl. No.	Industry Sector	W1	W2	W	A1	A2	A	H	W+A+H	Revised Category	Remarks
1.	2	Aluminium utensils from aluminium circles by pressing only (dry mechanical operation)	-	-	-	10	-	10	-	25	G-G	Minor air pollution due to some fugitive PM emissions from buffing operations.
2.	6	Ayurvedic and homeopathic medicines (without boiler)	10	-	10	-	-	-	-	25	G-G	Small quantities of waste-waters are generated from washing operations.
3.	8	Bakery /confectionery /sweets products (with production capacity <1tpd (with gas or electrical oven)	10	-	10	-	-	-	-	25	G-G	Small quantities of waste-waters are generated from washing operations.
4.	6	Bi-axially oriented PP film along with metalizing operations	10	-	10	-	-	-	-	25	G-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

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												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 planer, 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 pulverizers 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.

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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.	23	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.	35	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	<ul style="list-style-type: none"> 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 footwear and leather products (excluding tanning and hide processing except cottage scale)	-	-	-	10	-	10	-	25	G-G	Minor fumes due to use of adhesives / gums.

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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 Ghanl 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 workzone
32.	67	Polythene and plastic processed products (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 ₂ S, 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

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												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 retreading (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

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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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> This is mainly air polluting activity. This is the normalized score based on air pollution.
59.	48	Mineral stock yard / Railway sidings	15	-	15	15	-	15	-	37.5	R-G	Mainly air pollution due to loading, unloading, storage and transportation of the minerals.

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												<ul style="list-style-type: none"> Waste-water generation mainly during rains only.
60.	54	Oil and gas transportation pipeline	-	-	-	10	5	15	-	37.5	R-G	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> With boiler, it is an orange category Industry. Without boiler, it will be green category industry.

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Note :

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

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

Sl No.	Origin of 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	<ul style="list-style-type: none"> • Normal operation - 12 hrs a day. • Consumption of diesel = 1680 litres for 1 MVA DG set at full load @ 0.21 litres / KVA / hr. • Stand-alone DG Sets having total capacity 1 MVA or less and equipped with acoustic enclosures alongwith adequate stack height may be exempted from the purview of Consent management. Higher capacity DG sets have already been covered under Red / Orange categories.

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

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

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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 dyeing and bleaching operation)	--	--	--	--	--	--	--	--	G-W
22.	46	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

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

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

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

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Annexure



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

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

19.08.2015

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

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

2. Accordingly, a Committee comprising the Chairman of CPCB, APFCB, TNPCB, MPFCB, 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 indexes.
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 May 28-29, 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 01.09.2015. The comments may kindly be sent through hard copy as well as soft copy at e-mail: nkgupta.cpcb@nic.in, nkgpcb@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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ई-मेल / e-mail : cpcb@nic.in वेबसाइट / Website : www.cpcb.nic.in

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MINISTRY OF ENVIRONMENT & FORESTS
(Department of Environment, Forests & Wildlife)

New Delhi, the 1st February 1989

NOTIFICATION

Notification under 3(2)(v) of Environment (Protection) Act, 1986, and Rule 5(3)(d) of Environment (Protection) Rules, 1986, restricting location of industries, mining operations and other development activities in the Doon Valley in Uttar Pradesh.

S.O. 102(E)--Whereas notification under sub-rule (3) of rule 5 of the Environment (protection) Rules, 1986, inviting objections against the imposition of restriction on location of industries, mining operations and other developmental activities in the Doon Valley, in Uttar Pradesh was published vide No. S.O. 923(E), dated the 6th October, 1988;

And whereas all objections received have been duly considered by the Central Government:

Now, therefore, in exercise of the Powers conferred by Clause (d) of sub-rule (3) of Rule (5) of the said rules, the Central Government hereby imposes restrictions on the following activities in the Doon Valley, bounded on the North by Mussoorie ridge, in the North-East by Lesser Himalayan ranges, on the South-West by Shivalik ranges, river Ganga in the South-East and river Yamuna in the North-West, except those activities which are permitted by the Central Government after examining the environmental impacts:

- (i) Location/siting of industrial units--It has to be as per guidelines given in the annexure or guidelines as may be issued from time to time by the Ministry of Environment & Forests, Government of India.
- (ii) Mining--Approval of the Union Ministry of Environment & Forests must be obtained before starting any mining activity.

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- (iii) Tourism--It should be as per Tourism Development Plan (TDP), to be prepared by the State Department of Tourism and duly approved by the Union Ministry of Environment & Forest
- (iv) Grazing--As per the plan to be prepared by the State Government and duly approved by the Union Ministry of Environment & Forests.
- (v) Land Use--As per Master Plan of development and Land Use Plan of the entire area, to be prepared by the State Government and approved by the Union Ministry of Environment & Forests.

(No. J-20012/38/86-IA)
K. P. GEETHAKRISHNAN
Secretary.

ANNEXURE

Guidelines for permitting/restricting industrial units in the Doon Valley area

Industries will be classified under Green, Orange and Red Categories, as shown below for purposes of permitting/restricting such industrial units in the Doon Valley from the environmental and ecological considerations:

CATEGORY GREEN

- A. LIST OF INDUSTRIES IN APPROVED INDUSTRIAL AREAS, WHICH MAY BE DIRECTLY CONSIDERED FOR ISSUE OF NO OBJECTION CERTIFICATE WITHOUT REFERRING TO (MINISTRY OF ENVIRONMENT & FORESTS) (IN CASE OF DOUBTS REFERENCE WILL BE MADE TO MINISTRY OF ENVIRONMENT & FORESTS).
 - 1. All such non-obnoxious and non-hazardous industries employing upto 100 persons. The obnoxious and hazardous industries are those using inflammable, explosive, corrosive or toxic substances.

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2. All such industries which do not discharge industrial effluents of a polluting nature and which do not undertake any of the following processes:

Electroplating
Galvanising
Bleaching
Degreasing
Phosphating
Dyeing
Pickling, tanning
Polishing
Cooking of fibres and Digesting
Desizing of Fabric
Unhairing, Soaking, delimiting and bating of hides
Washing of fabric
Trimming, Pulling, juicing and blanching of fruits and vegetables
Washing of equipment and regular floor washing, using of considerable cooling water
Separated milk, buttermilk and whey
Stopping and processing of grain
Distillation of alcohol, stillage and evaporation
Slaughtering of animals, rendering of bones, washing of meat
Juicing of sugar cane, extraction of sugar Filtration, centrifugation, distillation
Pulping and fermenting of coffee beans
Processing of fish
Filter back wash in D.M. Plants exceeding 20 K.l. per day capacity
Pulp making, pulp processing and papermaking
Coking of coal washing of blast furnace flue gases,
Stripping of oxides;
Washing of used sand by hydraulic discharge;
Washing of latex etc.
Solvent extraction.

3. All such industries which do not use fuel in their manufacturing process or in any subsidiary process and which do not emit fugitive emissions of a diffused nature.

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Industries not satisfying any one of the three criteria are recommended to be referred to Ministry of Environment & Forests.

The following industries appear to fall in non-hazardous, non-obnoxious and non-polluting category, subject to fulfilment of above three conditions :

1. Atta-chakkies
2. Rice Mullors
3. Iceboxes
4. Dal mills
5. Groundnut decortinating (dry)
6. Chilling
7. Tailoring and garment making
8. Apparel making
9. Cotton and woollen Hosiery
10. Hand loom weaving
11. Shoe lace manufacturing
12. Gold and silver thread and sari work
13. Gold and silver smithy
14. Leather foot wear and leather products excluding tanning & hide processing
15. Manufacture of mirror from sheet glass and photo-frame
16. Musical instruments, manufacturing
17. Sports goods
18. Bamboo and cane products (only dry operations)
19. Card Board and paper products (Paper & pulp manufacture excluding)
20. Insulation and other coated papers (Paper & pulp manufacture excluded)
21. Scientific and Mathematical instruments
22. Furniture (Wooden and Steel)
23. Assembly of Domestic electrical appliances
24. Radio assembling
25. Fountain pens
26. Polythene, plastic and P.V.C. goods through extrusion/moulding
27. Surgical gauges and bandages

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28. Railway sleepers (only concrete)
29. Cotton spinning and weaving
30. Rope (cotton and plastic)
31. Carpet weaving
32. Assembly of Air coolers
33. Wires, pipes-extruded shapes from metals
34. Automobile servicing & repair stations
35. Assembly of Bicycles, baby carriages and other small non-motorized vehicles.
36. Electronics equipment (assembly)
37. Toys
38. Candles
39. Carpentry-excluding saw mill
40. Cold storages (small scale)
41. Restaurants
42. Oil-ginning/expelling (non-hydrogenation and no refining)
43. Ice cream
44. Mineralized water
45. Jobbing & Machining
46. Manufacture of Steel trunks & suit cases
47. Paper pins & U-clips
48. Block making for printing
49. Optical frames

CATEGORY ORANGE

B. LIST OF INDUSTRIES THAT CAN BE PERMITTED IN THE DOON VALLEY WITH PROPER ENVIRONMENTAL CONTROL ARRANGEMENT.

1. All such industries which discharge some liquid effluents (below 500 kl/day) that can be controlled with suitable proven technology.
2. All such industries in which the daily consumption of coal/fuel is less than 24mt/day and the particulars emissions from which can be controlled with suitable proven technology.
3. All such industries employing not more than 500 persons.

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The following industries with adoption of proven pollution control technology subject to fulfilling the above three condition fall under this category :

1. Lime manufacture-pending decision on proven pollution control device and Supreme Court's decision on quarrying.
2. Ceramics
3. Sanitaryware;
4. Tyres and tubes.
5. Refuse incineration (controlled)
6. Flour mills;
7. Vegetable oils including solvent extracted oils;
8. Soap without steam boiling process and synthetic detergents formulation.
9. Steam generating plants.
10. Manufacture of office and house-hold equipment and appliances involving use of fossil fuel combustion
11. Manufacture of machineries and machine tools and equipment
12. Industrial gases (only Nitrogen, Oxygen and CO_2)
13. Miscellaneous glassware without involving use of fossil-fuel combustion.
14. Optical glass
15. Laboratory ware
16. Petroleum storage & transfer facilities.
17. Surgical and medical products including & prophylactics and latex products
18. Foot-wear (Rubber)
19. Bakery products, Biscuits & Confectioners
20. Instant tea/coffee; coffee processing
21. Malted food
22. Manufacture of power driven pumps, compressors refrigeration units, fire fighting equipment etc.
23. Wire drawing (cold process) & bailing straps.
24. Steel furniture, fasteners etc.
25. Plastic processed goods
26. Medical & Surgical instruments
27. Acetylene (synthetic)
28. Glue & gelatine
29. Potassium permanganate
30. Metallic sodium

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31. Photographic films, papers & photographic chemicals
32. Surface coating industries
33. Fragrances, flavours & food additives
34. Plant nutrients (only manure)
35. Aerated water/soft drink.

NOTE :-

- (a) Industries falling within the above identified list shall be assessed by the state pollution control Board and referred to the Union Department of Environment for consideration, before according No Objection Certificate.
- (b) The total number of fuel burning industries that shall be permitted in the Valley will be limited by 8 tonnes per day of Sulphur Dioxide from all sources. (This corresponds to 400 tonnes per day Coal with 1% sulphur).
- (c) Siting of Industrial areas should be based on sound criteria.

CATEGORY RED

C. LIST OF INDUSTRIES THAT CANNOT BE PERMITTED IN THE DOON VALLEY

1. All those industries which discharge effluents of a polluting nature at the rate of more than 500 kl/day and for which the natural course for sufficient dilution is not available, and effluents from which cannot be controlled with suitable technology.
2. All such industries employing more than 500 perons/day.
3. All such industries in which the daily consumption of coal/fuel is more than 24 mt/day.

The following industries appear to fall under this category covered by all the points as above:

1. Ferrous and non-ferrous metal extraction, refining, casting, forging, alloy making processing etc.
2. Dry Coal Processing/Mineral processing industries like Ore sintering beneficiation, pelletization etc.
3. Phosphate rock processing plants.
4. Cement plants with horizontal rotary kilns.
5. Glass and glass products involving use of coal.
6. Petroleum refinery
7. Petro-chemical Industries
8. Manufacture of lubricating oils and greases
9. Synthetic rubber manufacture;
10. Coal, oil, wood or nuclear based thermal power plants
11. Vanaspati, hydrogenated vegetable oils for industrial purposes
12. Sugar mills (White and Khandasari)
13. Craft paper mills
14. Coke oven by products and coal tar distillation products
15. Alkalies
16. Caustic soda
17. Potash
18. Electro-thermal products (artificial abrasives, Calcium carbide etc.)
19. Phosphorous and its compounds
20. Acids and their salts (organic & inorganic)
21. Nitrogen compounds (Cyanides, cyanamides and other nitrogen compounds)
22. Explosive (including industrial explosives, detonators & fuses)
23. Phthalic anhydride
24. Processes involving chlorinated hydrocarbon
25. Chlorine, fluorine, bromine, iodine & their compounds
26. Fertilizer industry
27. Paper board and straw boards
28. Synthetics fibres
29. Insecticides, fungicides, herbicides & pesticides (basic manufacture & formulation).

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30. Basic drugs
31. Alcohol (Industrial or potable)
32. Leather industry including tanning and processing
33. Coke making, coal liquification and fuel gas making industries
34. Fibre glass production and processing
35. Manufacture of pulp-wood, pulp, mechanical or chemical (including dissolving pulp)

36. Pigment dyes and their intermediates
37. Industrial carbons (including graphite electrodes, anodes, midget electrodes, graphite blocks, graphite crucibles, gas carbons activated carbon, synthetic diamonds, carbon black, channel black, lamp black etc.)
38. Electro-chemicals (other than those covered under Alkali group)
39. Paints, enamels & varnishes
40. Polypropylene
41. Poly Vinyl chloride
42. Cement with vertical shaft kiln technology pending certification of proven technology on pollution control
43. Chlorates, perchlorates & peroxides
44. Polishes
45. Synthetic resin & plastic products.

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EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)

PART II—Section 3—Sub-section (ii)

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NEW DELHI, MONDAY, JULY 4, 2005/ASADHA 13, 1927

पर्यावरण और वन मंत्रालय

आदेश

नई दिल्ली, 4 जुलाई, 2005

का.आ. 943(अ).—पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उप-नियम (3) के खण्ड (घ) के अधीन, वन क्रियाकलापों के सिवाय, जिन्हें पर्यावरणी समाघातों की जांच करने के लिए केन्द्रीय सरकार द्वारा अनुज्ञात किया जाता है, दून घाटी उत्तरांचल में विभिन्न क्रियाकलापों पर निर्बंधन स्वनिरोधित करने वाली अधिसूचना का.आ. 102(अ) तारीख 1 फरवरी, 1989 द्वारा जारी की गई थी;

और उक्त अधिसूचना ने उद्योगों को तीन प्रवर्गों में वर्गीकृत किया है, अर्थात्, हरा, नारंगी और लाल और दून घाटी क्षेत्र में औद्योगिक इकाइयों को अनुज्ञा देने और उनको निर्बंधित करने के लिए मार्गदर्शी सिद्धांतों को भी विहित किया है;

और नारंगी प्रवर्ग के अंतर्गत आने वाले उद्योगों को राज्य प्रदूषण नियंत्रण बोर्ड द्वारा निर्धारण किए जाने की और उन्हें "अनापत्ति प्रमाणपत्र" प्रदान करने से पूर्व पर्यावरण और वन मंत्रालय में केन्द्रीय सरकार को विनिर्दिष्ट किए जाने की अपेक्षा की जाती है;

और अब यह सुनिश्चित किया गया है कि उक्त अधिसूचना में यथा-विनिर्दिष्ट नारंगी प्रवर्ग के अधीन आने वाले प्रस्तावों पर का.आ. 60(अ) तारीख 27 जनवरी, 1994 द्वारा जारी पर्यावरण समाघात निर्धारण अधिसूचना के अनुसार पर्यावरणीय निकासी की अपेक्षा करने वाले उद्योगों के रूप में कार्रवाई की जाएगी।

अतः अब पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 5 में प्रदत्त शक्तियों का प्रयोग करते हुए, यह निर्देश दिया जाता है कि अधिसूचना संख्यांक का.आ. 102(अ) तारीख 1 फरवरी, 1989 द्वारा प्रवर्गीकृत नारंगी उद्योग के प्रवर्ग के अंतर्गत आने वाले दून घाटी, उत्तरांचल के विकास संबंधित प्रस्ताव वैसी प्रक्रिया का पालन करेंगे जैसी राजपत्र में इस अधिसूचना के प्रकाशन की तारीख से समय-समय पर यथा-संशोधित का.आ. 60(अ) तारीख 27 जनवरी, 1994 द्वारा जारी पर्यावरण समाघात निर्धारण अधिसूचना, 1994 के अधीन उद्योग सेक्टर परियोजनाओं के पर्यावरण निकासी के लिए पालन किया जा रहा है।

[फा. सं. जे-11013/25/2005—आई.ए. II(1)]

आर. चन्द्रमोहन, संयुक्त सचिव

MINISTRY OF ENVIRONMENT AND FORESTS

ORDER

New Delhi, the 4th July, 2005

S.O. 943(E).—Whereas a notification under clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, imposing restrictions on various activities in Doon Valley Utranchal, except those activities which are permitted by the Central Government for examining the environmental impacts, was issued vide No. S.O. 102(E) dated the 1st February, 1989;

And whereas the said notification classified industries into three categories, namely, green, orange and red and also prescribed guidelines for permitting and restricting industrial units in Doon Valley Area;

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And whereas industries falling in the orange category are required to be assessed by State Pollution Control Board and referred to the Central Government in the Ministry of Environment and Forests before granting 'No Objection Certificate';

And whereas it has now been decided that proposals covered under the orange category, as specified in the said notification shall be dealt with as industries requiring environmental clearance as per the Environment Impact Assessment Notification, 1994, issued *vide* No. S.O. 60(E) dated the 27th January, 1994.

Now, therefore, in exercise of the powers conferred by Section 5 of the Environment (Protection) Act, 1986, it is hereby directed that all proposals, relating to development in Doon Valley, Uttaranchal falling in the category of orange industry categorized *vide* notification No. S.O. 102(E) dated the 1st February, 1989, shall follow the same procedure as is being followed for the environment clearance of Industry Sector Projects under Environment Impact Assessment Notification, 1994 issued *vide* No. S.O. 60(E) dated the 27th January, 1994 as amended from time to time with effect from the date of publication of this notification in the Official Gazette.

[F.No. J-11013/25/2005-IA.II(D)]
R. CHANDRAMOHAN, Jt. Secy.

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रजिस्ट्री सं० डी० एल०-33004/99

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भाग II—खण्ड 3—उप-खण्ड (ii)

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No. 1539]

NEW DELHI, THURSDAY, DECEMBER 13, 2007/AGRAHAYANA 22, 1929

पर्यावरण एवं वन मंत्रालय

आदेश

नई दिल्ली, 13 दिसम्बर, 2007

का.आ. 2125(अ) — जबकि, पर्यावरण (सुरक्षा) नियमावली, 1986 के नियम 5 के उप-नियम (3) के खण्ड (घ) के तहत दूध घाटी, उत्तराखण्ड में उन गतिविधियों जिनके लिए केन्द्रीय सरकार ने पर्यावरणीय प्रभाव के परीक्षण के लिए अनुमति दे दी है, को छोड़कर विभिन्न गतिविधियों पर प्रतिबंध लगाने के लिए दिनांक 1 फरवरी, 1989 के सं. का.आ. 102(अ) के तहत एक अधिसूचना जारी की गई थी;

और, जबकि, उक्त अधिसूचना में उद्योगों को तीन श्रेणियों अर्थात् ग्रीन, ओरेंज और रेड में वर्गीकृत किया गया है और दूध घाटी क्षेत्र में औद्योगिक इकाइयों को अनुमति देने और उन पर प्रतिबंध लगाने के लिए दिशानिर्देश भी निर्धारित किए गए हैं;

और, जबकि, ओरेंज श्रेणी के अंतर्गत आने वाले उद्योगों का मूल्यांकन राज्य के प्रदूषण नियंत्रण बोर्ड द्वारा किया जाना तथा उन्हें अनापत्ति प्रमाण-पत्र देने से पहले संबंधित प्रस्ताव को केन्द्र सरकार, पर्यावरण एवं वन मंत्रालय के पास भेजा जाना अपेक्षित है;

और, जबकि, यह परिकल्पना की गई थी कि ओरेंज श्रेणी के अंतर्गत शामिल प्रस्तावों के मामले में वही प्रक्रिया अपनाई जाएगी जो कि दिनांक 4 जुलाई, 2005 के का.आ. 943(अ) के तहत जारी पर्यावरण प्रभाव मूल्यांकन अधिसूचना, 1994 के अंतर्गत उद्योग क्षेत्र की परियोजनाओं को पर्यावरणीय संजूरी देते समय अपनाई जाती है;

और, जबकि, दिनांक 27 जनवरी, 1994 के का.आ. 60(अ) के तहत जारी उक्त पर्यावरण प्रभाव मूल्यांकन अधिसूचना को दिनांक

14 सितम्बर, 2006 के का.आ. 1533(अ) के तहत जारी अधिसूचना द्वारा अधिकृत हुआ माना जाएगा;

अतः, अब, पर्यावरण (सुरक्षा) अधिनियम, 1986 की धारा 5 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, एतद्वारा, यह निर्देश दिया जाता है कि दूध घाटी, उत्तराखण्ड में विकास कार्यों से संबंधित सभी प्रस्तावों की निम्नलिखित प्रक्रिया अपनाते हुए जांच की जाएगी :-

- ऐसी सभी परियोजनाएं जो 14 सितम्बर, 2006 के सं. का.आ. 1533(अ) के तहत जारी पर्यावरण प्रभाव मूल्यांकन अधिसूचना के अंतर्गत अनुसूची में शामिल की गई हैं, के लिए उक्त अधिसूचना में निर्धारित प्रक्रिया ही अपनाई जाएगी।
- ऐसी सभी परियोजनाएं जो उक्त पर्यावरण प्रभाव मूल्यांकन अधिसूचना के अंतर्गत शामिल नहीं हैं, और ओरेंज श्रेणी के अंतर्गत आती हैं उन पर राज्य स्तर के पर्यावरण प्रभाव मूल्यांकन प्राधिकरण द्वारा विचार किया जाएगा।
- उत्तराखण्ड राज्य के लिए राज्य स्तरीय प्रभाव मूल्यांकन प्राधिकरण का गठन होने तक, प्रस्तावों की जांच, राज्य प्रदूषण नियंत्रण बोर्ड की टिप्पणियां प्राप्त होने के पश्चात्, उन्हें मूल्यांकन समिति के पास भेजे बिना, केन्द्र सरकार द्वारा की जाएगी।

[सं. जे-11013/25/2005-आई ए-II (1)]

रा. आनन्दकुमार, वैज्ञानिक 'जी'

MINISTRY OF ENVIRONMENT AND FORESTS
ORDER

New Delhi, the, 13th December, 2007

S.O. 2125 (E).—Whereas, a notification under clause (d) of sub-rule (3) of rule 5 of the Environment (Protection)

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Rules, 1986, imposing restrictions on various activities in Doon Valley Uttarakhand, except those activities which are permitted by the Central Government for examining the environmental impacts, was issued *vide* No. S.O. 102(E) dated the 1st February, 1989;

And, whereas, the said notification classified industries into three categories; namely, green, orange and red and also prescribed guidelines for permitting and restricting industrial units in Doon Valley Area;

And, whereas, industries falling in the orange category are required to be assessed by State Pollution Control Board and referred to the Central Government in the Ministry of Environment and Forests before granting 'No Objection Certificate';

And, whereas, it was envisaged that the proposals covered under orange category shall follow the same procedure as is being followed for the environment clearance of industry sector projects under Environment Impact Assessment Notification, 1994, issued *vide* S.O. 943(E) dated the 4th July, 2005;

And, whereas, the said Environment Impact Assessment notification issued *vide* S.O. 60(E) dated the 27th January, 1994 has been superseded by the notification *vide* number S.O. 1533(E) dated 14th September, 2006;

Now, therefore, in exercise of the powers conferred by Section 5 of the Environment (Protection) Act, 1986, it is hereby directed that all proposals, relating to development in Doon Valley will be examined as per the following procedure :—

- (i) All those projects which are covered in the schedule under the Environment Impact Assessment notification issued *vide* number S.O. 1533(E) dated the 14th September, 2006 will follow the procedure laid down in that notification.
- (ii) All those projects which are not covered under the EIA notification but which fall under the orange category shall be considered by the State level Environment Impact Assessment Authority.
- (iii) Till such time as the State level Impact Assessment Authority is constituted for the State of Uttarakhand, the proposals will be examined by the Central Government, without referring them to the Appraisal Committee, after obtaining the comments of the State Pollution Control Board.

[No. J-11013/25/2005-IA-II(1)]

R. ANANDAKUMAR, Scientist 'G'



भारत का राजपत्र

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असाधारण
EXTRAORDINARY
भाग II—खण्ड 3 उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)
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No. 86]

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NEW DELHI, MONDAY, JANUARY 6, 2020/PAUSHA 16, 1941

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 6 जनवरी, 2020

का.आ. 94(अ).— अधिसूचना संख्या का.आ. 102 (अ), तारीख 1 फरवरी, 1989 (इसमें इसके पश्चात उक्त अधिसूचना कहा गया है) को, तत्कालीन पर्यावरण और वन मंत्रालय ने तत्कालीन उत्तर प्रदेश (अब उत्तराखंड) में दून घाटी में, उत्तर में मसूरी रिज़ से घिरा, उत्तर-पूर्व में हिमालयी पर्वतश्रेणी, दक्षिण-पश्चिम में शिवालिक श्रेणियों द्वारा, दक्षिण-पूर्व में गंगा नदी और उत्तर-पश्चिम में यमुना नदी में उद्योगों, खनन कार्यों और अन्य विकासात्मक क्रियाकलापों पर, क्षेत्र में पर्यावरणीय प्रभाव को ध्यान में रखते हुए प्रतिबंध लगा दिया था;

और, उक्त अधिसूचना के संबंध में कतिपय दिशा-निर्देश अधिसूचना संख्या का.आ. 943 (अ), तारीख 4 जुलाई, 2005 और का.आ. 2125 (अ), तारीख 13 दिसंबर, 2007 द्वारा जारी किए गए हैं;

और, इस बीच, केंद्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) ने पत्र सं. वी-29012/ईएसएस(सीपीए)/2015-16, तारीख 7 मार्च, 2016 को उद्योगों के वर्गीकरण पर भी दिशा-निर्देश जारी किए हैं;

और, उत्तराखंड सरकार ने पत्र सं. 122/डी-3-19-13(04)/2018, तारीख 10 अप्रैल, 2019 को उक्त अधिसूचना में संशोधन के लिए पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय से अनुरोध किया;

और, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय ने उत्तराखण्ड सरकार के अनुरोध की जांच की है;

और, उपर्युक्त संशोधनों और दिशा-निर्देशों को समेकित करने और उक्त निर्देशों और संशोधनों के आधार पर शर्तों का सामंजस्य करने की भी आवश्यकता है;

अतः, अब, केन्द्रीय सरकार पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (4) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की उपधारा (1), के साथ धारा 3 की उपधारा (2) के खंड (V) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, उक्त अधिसूचना में निम्नलिखित संशोधन करती हैं और उपरोक्त मानदंड में मिल कर बनने वाली दून घाटी में आने वाले क्रियाकलापों के संबंध में निम्नलिखित शर्तें अधिरोपित करें, अर्थात्:-

उक्त अधिसूचना में, खंड (i), (ii), (iii), (iv), (v) और उपाबंध, के लिए निम्नलिखित को प्रतिस्थापित किया जाएगा, अर्थात्:-

" (i) औद्योगिक इकाइयों के अवस्थान/स्थल - केन्द्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी) द्वारा पत्र सं. वी-29012/ईएसएस(सीपीए)/2015-16, तारीख 7 मार्च, 2016 को धारा 18 (1) (बी) के तहत जल (प्रदूषण की रोकथाम और नियंत्रण) अधिनियम, 1974 और वायु (प्रदूषण की रोकथाम और नियंत्रण) अधिनियम, 1981 लाल/नारंगी/हरा/सफ़ेद श्रेणियों के अंतर्गत औद्योगिक क्षेत्रों के वर्गीकरण के सामंजस्य के संबंध में जारी किए गए संशोधित दिशा-निर्देशों के अनुसार होना चाहिए और सीपीसीबी और पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा समय-समय पर संशोधित किया जा सकता है।

(ii) खनन- किसी भी खनन क्रियाकलाप को शुरू करने से पहले संघ पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की मंजूरी अभिप्राय करनी होगी।

(iii) पर्यटन- पर्यटन विकास योजना (टीडीपी) के अनुसार, राज्य पर्यटन विभाग द्वारा तैयार किया जाता चाहिए और संघ पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा यथानियम अनुमोदित किया जाना चाहिए।

(iv) चराई- राज्य सरकार द्वारा तैयार की जाने वाली योजना के अनुसार और संघ पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा यथानियम अनुमोदित किया जाना चाहिए।

(v) भूमि उपयोग- संपूर्ण क्षेत्र के विकास और भूमि उपयोग योजना के महायोजना के अनुसार, राज्य सरकार द्वारा तैयार किया जाना है और संघ पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा अनुमोदित किया जाएगा।

टिप्पण:

- (क) दून घाटी में उद्योगों की लाल प्रवर्गों की अनुमति नहीं होगी;
- (ख) दून घाटी में ईंधन जलाने वाले उद्योगों की कुल संख्या को सभी स्रोतों से सल्फर डाइऑक्साइड के 8 टन प्रति दिन तक सीमित किया जाएगा। (यह 1% सल्फर के साथ प्रति दिन 400 टन कोयले के संभार है);
- (ग) औद्योगिक क्षेत्रों के स्थल निर्धारित मानदंड पर और सक्षम प्राधिकारी की पूर्व स्वीकृति के साथ होगी;
- (घ) विद्यमान नारंगी प्रवर्ग के उद्योग, जो अब उद्योगों की लाल प्रवर्गों में हैं, को जारी रखा जाएगा, तथापि, किसी विस्तार की अनुमति नहीं प्रदान की जाएगी।"

[फा. सं. 25/6/2012-ईएसजेड]

डॉ. सतीश चन्द्र गडकोटी, वैज्ञानिक 'जी'

टिप्पण: मूल अधिसूचना भारत के राजपत्र में, असाधारण, भाग II, द्वारा 3, उप-धारा (II), संख्या का.आ. 102 (अ), तारीख 1 फरवरी, 1989 को प्रकाशित की गई थी।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 6th January, 2020

S.O. 94(E).—WHEREAS, *vide* notification number S.O. 102(E), dated the 1st February, 1989 (hereinafter referred as the said notification) the erstwhile Ministry of Environment and Forests imposed restriction on location of industries, mining operations and other developmental activities in the Doon Valley, bounded on the North by Mussoorie ridge, in the North-East by Lesser Himalayan ranges, on the South-West by Shivalik ranges, river Ganga in the South-East and river Yamuna in the North-West in erstwhile Uttar Pradesh (now Uttarakhand), keeping in view the environmental impact in the region;

AND WHEREAS, in respect of the said notification certain directions have been issued *vide* notification number S.O. 943 (E), dated the 4th July, 2005 and S.O. 2125 (E), dated the 13th December, 2007;

AND WHEREAS, in the meantime the Central Pollution Control Board (CPCB) has also issued directions on the categorisation of industries *vide* letter No. B-29012/ESS(CPA)/2015-16, dated the 7th March, 2016;

AND WHEREAS, the Government of Uttarakhand *vide* letter No. 122/D-3-19-13(04)/2018, dated the 10th April, 2019 requested the Ministry of Environment, Forest and Climate Change for amendment in the said notification;

AND WHEREAS, the Ministry of Environment, Forest and Climate Change has examined the request of the Government of Uttarakhand;

AND WHEREAS, there is a need to consolidate the amendments and the directions as above and also to harmonise the conditions based on the said directions and amendments;

NOW THEREFORE, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 read with sub-rule (4) of Rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following amendments in the said notification and impose following conditions in respect of the activities falling the Doon Valley comprising of the above criteria, namely:—

In the said notification, for clauses (i), (ii), (iii), (iv), (v) and ANNEXURE, the following shall be substituted, namely:—

(i) Location/siting of industrial units – It has to be as per modified directions issued by the Central Pollution Control Board (CPCB) *vide* letter No. B-29012/ESS(CPA)/2015-16, dated the 7th March, 2016 under section 18(1)(b) of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 regarding harmonization of classification of industrial sectors under red/orange/green/white categories and as may be amended from time to time by the CPCB and the Ministry of Environment, Forest and Climate Change.

(ii) Mining – Approval of the Union Ministry of Environment, Forest and Climate Change must be obtained before starting any mining activity.

(iii) Tourism – It should as per Tourism Development Plan (TDP), to be prepared by the State Department of Tourism and duly approved by the Union Ministry of Environment, Forest and Climate Change.

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(iv) **Grazing** – As per the plan to be prepared by the State Government and duly approved by the Union Ministry of Environment, Forest and Climate Change.

(v) **Land Use** – As per Master Plan of development and Land Use Plan of the entire area, to be prepared by the State Government and approved by the Union Ministry of Environment, Forest and Climate Change.

Note:

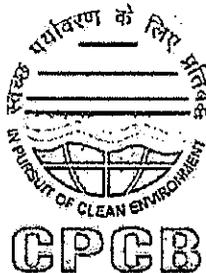
- (a) Red categories of industries shall not be permitted in Doon Valley;
- (b) The total number of fuel burning industries that shall be permitted in the Doon Valley shall be limited by 8 tonnes per day of Sulphur Dioxide from all sources. (This corresponds to 400 tonnes per day Coal with 1 % Sulphur);
- (c) Siting of Industrial areas shall be based on the prescribed criterion and with prior approval of Competent Authority;
- (d) Existing orange categories industries, which are now in the red categories of industries shall be continued, however, no expansion shall be allowed."

[F. No. 25/6/2012-ESZ]

DR. SATISH C. GARKOTI, Scientist 'G'

Note: The principal notification was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide number S.O. 102 (E), dated the 1st February, 1989.

Environmental Guidelines
for
Stone Crushing Units



Central Pollution Control Board

Ministry of Environment, Forest and Climate Change
Parivesh Bhawan, East Arjun Nagar
Delhi-110032

(July, 2023)

1.0 Introduction

Stone crushing sector is an important industrial sector engaged in producing crushed stone of various sizes (40 mm.20 mm.10 mm. crushed sand, stone dust etc) depending upon the requirement which acts as raw material for various construction activities.

Stone crushing operation releases a substantial amount of fugitive dust, which not only pollute the environment, but also pose a health hazards to the workers and the surrounding population. The growth in infrastructure is leading to increase in demand of raw materials, thereby resulting in the need to set up new stone crushing units or increase production from existing units. This poses a challenge to maintain the ambient air quality, which is possible if environmental guidelines predetermined by the industry concerned are followed.

Inventory and information about stone crushing units gathered from 27 SPCBs/PCCs (Arunachal Pradesh, Andaman & Nicobar island, Assam, Bihar, Chandigarh, Chhattisgarh, Daman, Dadra & Nagar Haveli, Goa, Gujarat, Haryana, Himanchal Pradesh, Jharkhand, J&K, Karnataka, Kerala, Madhya Pradesh Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Sikkim, Tripura, Uttarakhand), and the data received indicates that there are about 16,931 stone crushing units with capacity ranges between 0.1 TPH to 1,400 TPH.

2.0 Classification of Stone Crushing Units

Based on the information received from SPCBs/PCCs, stone crushers may be classified into small, medium and large-scale in terms of production capacity.

S.No.	Category	Production capacity (TPH)
1.	Small Scale	Up to 25
2.	Medium Scale	26 to 100
3.	Large Scale	100 above

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3.0 Stone Crushing Process

The stone crushing process can be broadly divided in following stages:

3.1 Transportation of raw material: Stones extracted from various sources are transported to stone-crushing units by means of trucks, trailers or automatic dumpers.

3.2 Primary crushing: Mined stones are fed directly into the primary crusher through stone feeders. The primary crusher breaks large stones and boulders into 100-140 mm size stones. Crushed stones are sent to secondary crusher for further reduction into smaller sizes. Various types of crushers are used in stone crushing industry. Jaw crushers are widely used as primary crushers.

3.3 Secondary crushing: After primary crushing, crushed stones are fed to secondary crushers through conveyor belts. In this stage, stones are further crushed to a size of 40-60 mm to 10 mm or even smaller. Stone crushing units use different types of crushers for secondary crushing. Granulator or cone crusher is usually used for secondary crushing.

3.4 Screening: From secondary crusher, crushed stones are transferred for screening through a conveyor belt. Screening is the process for segregating products of various sizes. Different mesh size screens are aligned one below the other and each screen is connected to a separate conveyor belt for discharging different size products. Mass that remains on the screen is called 'oversize' and material that passes through screen is called 'under size'. Oversize is returned to secondary crushers for further crushing and then again to screen. Under size is discharged through a 'telescopic chute' and screened products of various sizes are conveyed to stockpiles by belt conveyors. Different types of screens are used such as; grizzly-type screen, vibrating screen and rotary screen. Vibrating screens are most commonly used.

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3.5 Tertiary crushing: Tertiary crushing is carried out in units that produce stone dust as their primary product. Dust is usually a by-product of stone crushing process. Units that produce dust, install a separate machine, usually roller crushers. Stones of size 10-20 mm are sent to roller crushers for grinding into fine dust.

3.6 Product storage and loading: After crushing and screening, final product is transferred to a conveyor belt which distributes the product into different stockpiles, depending on size of the product. The product/fines are either stored as stockpiles or directly loaded into trucks & dumpers and transported.

4.0 Environmental Issues associated with Stone Crushing Units

The major environmental issue due to operation of a stone crushing unit is fugitive dust emissions which is contributed by the following processes:

- **Primary crushing:** Primary crushers breaks large boulders into smaller sizes. Crushing process as well as unloading of stones generate a substantial amount of fugitive dust. Mechanism for water sprinkling is provided to reduce fugitive dust. Some primary crushing areas are partially or completely covered with a shed as a measure to further prevent the fugitive dust emissions to surroundings, however at some places partial coverings provided which do not appear to be sufficient to such emissions.
- **Secondary crushing:** Compared to primary crushing, fugitive dust emitted at secondary crushing is relatively higher. Generally, insufficient covered shed provided in the process results in fugitive emissions.
- **Screening:** Screening process is also a source of fugitive dust emissions. As the material is conveyed to screen from secondary crusher, screen vibrates and thus, separates the material of different sizes resulting into huge amount of fugitive dust emissions. Generally, units provide covered shed and water sprinklers to combat

dust emissions however, improper design and operation of sprinklers and improper covering is an issue.

- **Tertiary crushing:** Fugitive emissions are generated during grinding of stones into fine dust.
- **Conveyor Belt:** Conveyor belts are primary means of transferring raw materials and products from one end to the other. Movement of products on the conveyor belts is a potential source of fugitive dust emissions. To reduce dust emissions, water sprinkling arrangement is provided on each belt. Some units cover conveyor belts either with sheets or thick cloth to reduce dust emissions.
- **Product release and storage:** Fugitive emissions generated during transfer of material through telescopic chutes is lower than that generating during direct disposal of product on stockpile. Material, such as stone dust, stored in open areas is are also a potential source of fugitive dust emissions.
- Although no process waste water is generated from stone crushing units, however, water is used for sprinkling, conveyed to settling tanks of appropriate size which is recycled and reused in process.

5.0 Environmental Guidelines for Stone Crushing Units

The stone crushing units should adopt following environmental guidelines to prevent/suppress fugitive dust emissions from their operation:

Source of emission	Measures to be Taken
Unloading of raw material for storage	Water sprinkling with adequately designed nozzle which produce tiny droplets of water should be provided during raw materials unloading .
Unloading of raw material into hopper	<ul style="list-style-type: none"> • Three sides and top should be covered and one side may be kept open for vehicular movement. • Water sprinklers should be provided on approach roads.

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Primary Crushing/ Jaw-Crusher	<ul style="list-style-type: none">• Crusher should be completely enclosed by G/MS sheets on top and at least three sides completely from the ground level. One side should have provision of movable sheet/door for movement/maintenance.• Primary crushers/jaw crushers should be covered with tarpaulin/cotton cloth/suitable materials to contain fugitive dust emissions (Figure-1)• Water sprinkler system with adequately designed nozzle which produce tiny droplets of water should be provided at primary crusher/jaw crusher so that fugitive emissions are contained and amount of water sprayed should be optimized.
Secondary Crushing	<ul style="list-style-type: none">• Crusher should be completely enclosed by G/MS sheets on top and at least three sides completely from the ground level. One side should have provision of movable sheet/door for movement/maintenance.• Dry extraction cum bag filter followed by cyclone to be provided for control of emissions.
Screening	<ul style="list-style-type: none">• Crusher should be completely enclosed by G/MS sheets on top and at least three sides completely from the ground level. One side should have provision of movable sheet/door for movement/maintenance. Door to be kept closed during operation.• Flexible covers where conveyors pass through the screen house should be installed at entries and exits of conveyors to screen house.• Dust extraction system connected with bag filter to be provided.• Provision of water mist sprinkling systems with adequately designed nozzle which produce tiny droplets of water should be made at inlet/outlet of screens.
Tertiary Crushing	<ul style="list-style-type: none">• Crusher should be completely enclosed by G/MS sheets on top and at least three sides completely from the ground level. One side should have provision of movable sheet/door for movement/maintenance. Dust extraction system connected with bag filter to be provided.• Provision of water mist sprinkling system should be made with adequately designed nozzle which produce tiny droplets of water.

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Conveyor Belts	Conveyor belts should be properly covered from node to node with a thick sheet of suitable material along with water sprinkling system with adequately designed nozzle which produce tiny droplets of water.
Discharge points	Flexible Telescopic chute from top of discharge point to the ground level should be provided (Figure-2 & Figure-2(a)).
Product storage	<ul style="list-style-type: none">• Properly designed telescopic chute of adequate length of suitable material should be provided at ends of conveyor so that dust generated from this section is contained at source.• All open stockpiles for aggregates of size above 5 mm should be kept sufficiently wet by water spraying.• Stockpiles of aggregates of 5 mm size or less should be covered to ensure that same is not carried away (or whipped out) by wind.

5.1 General Measures

- i. Wind breaking wall: GIMS/brick wall should be provided along the periphery of crusher. Height of the wall should be 3-ft more than the highest node of the crusher.
- ii. Roads: Metaled/concrete roads should be provided within the premises. Ramps and the entire ground area inside the premises should also be metaled.
- iii. Housekeeping: To curb the air pollution in the crusher premises, arrangement of rotating water sprinkling system/fogger/Anti-smog gun should be provided. Water sprinklers should have adequately designed nozzle which produce tiny droplets of water, as such system is more effective in dust control with significant reduction in consumption of water. Fine dust accumulated and bag filters in the crushing area should be cleaned at regular intervals and the collected dust should be stored in sacks for further sale or disposal.
- iv. Plantation: 2-3 rows of tall trees should be planted around the periphery of crusher.
- v. Housing should be open for movement of mechanical drivers, conveyor belts, etc. should be sealed properly with flexible rubber flaps.

- vi. Name of the unit, contact details of the owner and address of the unit, plant capacity and date of issue of CTE/CTO from SPCBs/PCCs should be displayed on the display board at the entrance.
- vii. Transportation: Vehicles carrying any kind of material should be completely covered.
- viii. Regular wetting of roads should be done to suppress dust within the premises to control dust emission re-suspension.
- ix. Water consumption and handling: Unit should provide settling tanks of appropriate size and recycle & reuse of the water in process. Crusher should provide a water storage tank with adequate capacity. In case of use of groundwater, stone crushing unit should obtain permission to extract groundwater from the Central Ground Water Authority (CGWA)/Ground Water Department (GWD) of the State/UT. Unit should maintain proper log book of consumption of fresh water. Depending on availability, efforts may be made to use STP treated water instead groundwater to control emissions from process activities.

6.0 Regulatory/Monitoring Mechanism for Stone Crushing Unit

- i. Stone crushing unit should obtain Consent to Establish (CTE) and Consent to Operate (CTO) from the concerned SPCBs/PCCs.
- ii. Unit while applying for CTO/renewal of consent, should upload the duly filled checklist attached at Annexure-1 along with digitally tagged photographs and videos of the crushing unit to ensure compliance of the conditions mentioned in the guidelines. SPCBs/PCCs should digitally verify the said conditions before issuance of CTE/CTO/renewal of consent.
- iii. CCTV/PTZ cameras should be installed at the entrance and all corners of the premises of the unit covering entire area with minimum of 30 days data storage.
- iii. Stone crushing unit shall comply with emission norms prescribed under the Environment (Protection) Rules, 1986 and conditions laid down in CTO by concerned SPCB/PCC.

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- v. Online/manual ambient air monitoring systems to be installed in crusher zone as per CPCB/SPCB guidelines – in upwind and downwind directions.
- vi. Stone crushing unit should develop green belt as per the plan approved by concerned Department of the State/UT.
- vii. Local authorities should associate with stone crusher associations for the construction of metalled road in the entire crusher zone.
- viii. A District Level Committee should be constituted under chairmanship of District Magistrate/Deputy Commissioner so that surprise inspections for surveillance of stone crushing units located under their jurisdiction can be carried out on regular basis.
- ix. Health survey of workers should be carried out by the stone crusher on half-yearly basis.
- x. New Crushers should be allowed to operate only in dedicated crusher zones as per the siting policies of SPCBs/PCCs.
- xi. Stone crusher unit should be operated only during day time (i.e. 6.00 AM to 10.00 PM) to avoid inconvenience to the nearby residents due to ambient noise.

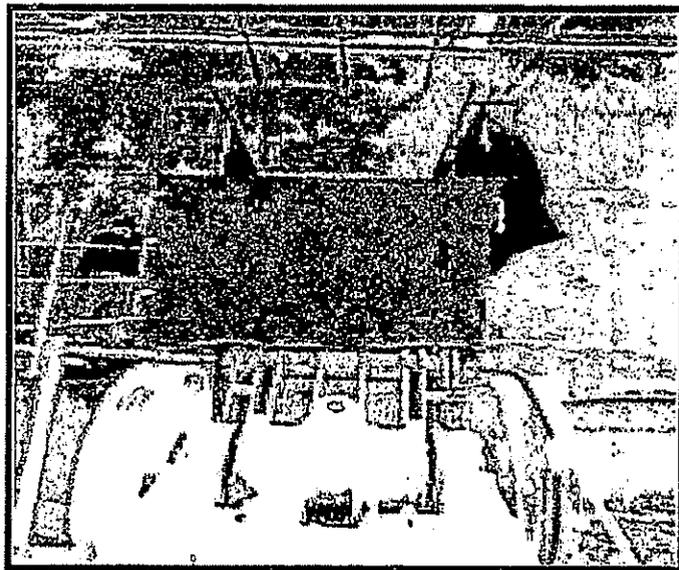


Figure-1: Covering of Primary/Jaw crusher

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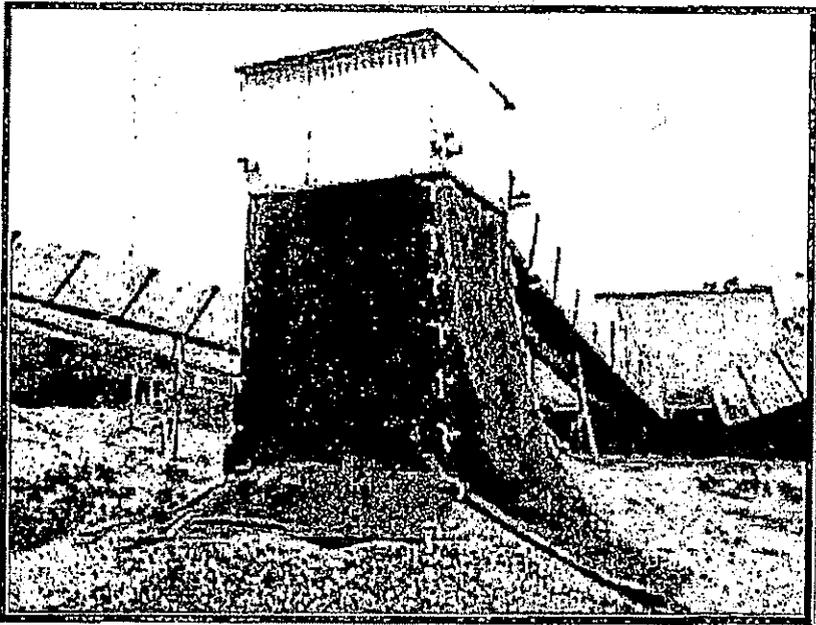


Figure-2: Chute from top of discharge point

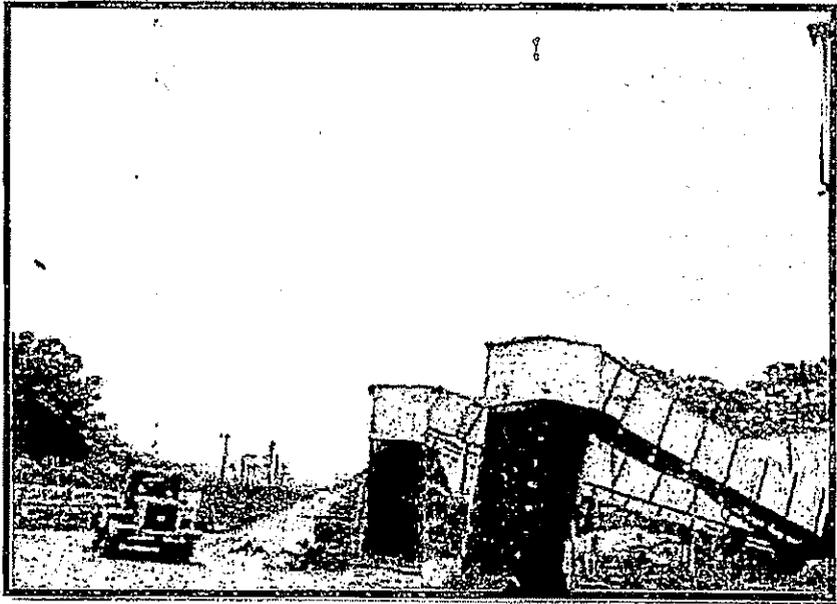


Figure-2(a): Chute from top of discharge point

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Annexure-1

Format/Checklist for SPCBs/PCCs before issuance of CTE & CTO

S. No.	Fugitive Emission Source Locations	Checklist for compliance of conditions of Environmental guidelines	Yes/No
1.	Unloading area of raw material, primary crusher, Screener, conveyors belts and transfer points	Water sprinklers installed with adequate designed nozzles (Upload photo/videos).	
2.	Primary crushers, Secondary crushers, Screeners and tertiary crushers	Enclosures by GI/MS sheets on top and at least three sides completely from the ground level (Upload photo/videos).	
3.	Secondary, Tertiary crushers and Screener	Dry extraction cum bag filter followed by cyclone. (Upload photo).	
4.	Covering of Conveyor belts from node to node with a thick sheet of suitable material	Covering of Conveyor belts (Upload photo).	
4	At discharge points	Flexible Telescopic chute from top of discharge point to the ground level (Upload photo).	
5	GI/MS/brick wind breaking wall of 3-ft more than the highest node of the crusher along the periphery of crusher	Wind breaking wall (Upload photo)	
General			
6.	Wind breaking wall	GI/MS/brick wind breaking wall of 3-ft more than the highest node of the crusher along the periphery of crusher (Upload photo)	
7.	Roads	Metalled/concrete roads within the premises. Ramps and the entire ground area inside the premises should also be metalled	

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8.	Suppression of dust within the premises	Arrangement of rotating water sprinkling system/fogger/Anti-smog gun in the premises to suppress dust within the premises to control dust emission re suspension,	
9.	Green belt	Plantation of 2-3 rows of tall trees around the periphery of crusher	
9.	Display board	Display board at the entrance, having name of unit, contact details of owner and address of unit, plant capacity and date of issue of CTE/CTO from SPCB/PCC	
10	Covering of vehicles	Covering of vehicles carrying any kind of material .	
11	CCTV/PTZ camera	CCTV/PTZ cameras installed at the entrance and all corners of the premises of the unit covering entire area with minimum of 30 days data storage	
12	Photos/videos	Upload photographs/videos ensuring compliance of all conditions as mentioned in the guidelines while applying CTE/CTO/ Renewal	

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