Prime Minister Narendra Modi launched India’s first “National Air Quality Index (AQI)”, which started working in 10 Indian cities, and expansion take to others states later. This index will record pollution levels every day, and be open for public to consult. All data available will be real-time. The Prime Minister said that India had a long tradition of recycling and environmental awareness. He said that we needed to just look at our past to adopt ways of becoming more environmentally-conscious. “We had found God in plants even before Jagdish Chandra Bose discovered life in plants,” he said. Saying development & environment went hand in hand, he said that “the thought was wrong” and both could happen at the same time.

The new index will transform the way common man understands the quality of air present, the cities covered by AQI are: Agra, Ahmedabad, Bengaluru, Chennai, Delhi, Faridabad, Hyderabad, Kanpur, Lucknow, and Varanasi. This index has simplified the way air quality was described earlier (per cubic metre). It has six categories from good to severe and also how rising air pollution can cause health hazards. At
to define air quality and will make people understand the severity of pollution. The purpose of simplifying the index is to let people know what air quality they breathe in and what precaution to be taken at an individual level.

Air pollution has been a matter of environmental and health concerns, particularly in urban areas. Central Pollution Control Board (CPCB) along with State Pollution Control Boards has been operating National Air Monitoring Program covering 244 cities of the country. In addition, continuous monitoring systems that provide data on near real time basis are also installed in a few cities. Traditionally, air quality status has been reported through voluminous data. It is important that information on air quality is put up in public domain in simple terms that is easily understood by a common person. Air Quality Index (AQI) is one such tool for effective dissemination of air quality information to people. Therefore, CPCB developed a National Air Quality Index (AQI) in consultation with IIT Kanpur and an Expert Group comprising medical professionals, air quality experts, academia, advocacy groups, and SPCBs.

There are six AQI categories, namely Good, Satisfactory,
Moderately polluted, Poor, Very Poor, and Severe. It considers eight pollutants (PM10, PM2.5, NO2, SO2, CO, O3, NH3, and Pb) for which short-term (up to 24-hourly averaging period) National Ambient Air Quality Standards are prescribed. Based on the measured ambient concentrations, corresponding standards and likely health impact, a sub-index is calculated for each of these pollutants. The worst sub-index reflects overall AQI. Associated likely health impacts for different AQI categories and pollutants have been also been suggested, with primary inputs from the medical expert members of the group.

It is proposed cover 46 cities with million plus population and other 20 State capitals in due course. Each of these cities will have 6-7 continuous air quality monitoring stations with AQI Display Boards. The AQI may prove to be a major initiative for improving air quality in urban areas, as it would enhance public awareness and involvement, and would create a competitive environment among cities to take steps for air pollution mitigation.

How India’s air quality index work?

The air quality index is the first national index to explain in layman’s terms the effect that breathing the air in could have on a person’s health. For instance, the air on a particular day contained three to four times the recommended level of small airborne particles – pollutants linked to serious health problems. The air quality index translates detailed information on different pollutants into a colour-coded warning system. Hours where pollution was below regulatory limits are coloured green to represent minimal impact on health, the shades of red indicate levels that would affect healthy people and have a serious impact on those with pre-existing health conditions.

The index, overseen by the environment ministry, calculates the average pollution for a day, which the government says is a better way to judge air quality. If a resident of region wanted to avoid breathing in the worst air, they would have had to stay indoors until when the air quality had become less harmful, according to the data.

Pollution levels in that area fell as the day wore on, helping to push up the average air quality to “moderate,” or yellow, on the regulatory scale. Moderately polluted air means that it would cause “breathing discomfort” to people with asthma as well as those with diseases of the heart and lungs. Main idea is that the CPCB making the effort to inform people about health hazards on a daily basis, in a language of common people understand.

Centre plans Categorisation of pollution industries

The environment ministry is planning to rate industrial units based on how well they comply with green norms. The government will categorize them under a three-colour scheme—red, orange and green—depending on their pollution potential. “The idea is to incentivize industry which meets the pollution standards and performs better on the scale.

Though these sectors (the 17 critically polluting industries, including cement, thermal power plants, distillery, sugar, paper and pulp, among others) will continue to remain in red category, those industries...
performing better will get higher rating and they can sell their products with star ratings showing that their product have met the prescribed green norms," said Shashi Shekhar, chairman of Central Pollution Control Board and a special secretary in the ministry.

The ministry will hold talks with all State Pollution Control Boards to finalize the criteria for classification of industries. “Industry having a score above 60 will fall in the red category, score between 30-59 in orange category, 15 to 29 in green category," said Environment Minister Shri Prakash Javadekar while speaking at a two-day Conference of Environment and Forest Ministers of State Governments at Vigyan Bhawan, New Delhi.

Polluted Rivers in the Country have doubled over past five years

According to the latest assessment by the Central Pollution Control Board (CPCB), the number of polluted rivers has been increased from 121 in 2009 to 275 and the number of polluted river stretches has also doubled from 150 in 2009 to 302. CPCB is monitoring 445 rivers in 27 States and 2 Union Territories in the country. There are 302 polluted river stretches on 275 rivers.

Criteria and priority of polluted river stretches

Based on the Biochemical Oxygen Demand (BOD) levels, the stretches of rivers not meeting with the criteria are identified as polluted stretches and categorized in five priority classes. As the level of BOD varies widely in River stretches the same are prioritized in five categories based on BOD concentration consistently exceeding to:

| Criteria for Priority I - Monitoring locations exceeding BOD concentration 30 mg/l has been considered as the standard of sewage treatment plant and in river it appears without dilution. (River locations having water quality exceeding discharge standards for BOD to fresh water sources) |

| Criteria for Priority II Monitoring locations having BOD between 20-30 mg/l. |
| Criteria for Priority III Monitoring locations having BOD between 10-20 mg/l. |
| Criteria for Priority IV Monitoring locations having BOD between 6-10 mg/l. |
| Criteria for Priority V Monitoring locations having BOD between 3-6 mg/l. |

<table>
<thead>
<tr>
<th>Table : Number of stretches in priority class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority I</td>
</tr>
<tr>
<td>Priority II</td>
</tr>
<tr>
<td>Priority III</td>
</tr>
<tr>
<td>Priority IV</td>
</tr>
<tr>
<td>Priority V</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

The water quality management is one of the manly environmental problems in
India. Increasing demand of water for human consumption, irrigation and growing industrial activities has impacted the water quality of rivers due to declining flows in rivers and depleting water levels of subsurface resources. Water quality data on rivers is analyzed to compare with water quality criteria. Biochemical Oxygen Demand (BOD) has been considered as principal parameters for identification of monitoring locations in exceedance to the criteria limit. The present study highlights the water quality issues in 275 rivers comprising of 302 Stretches in 27 States and 2 UTs. The water data indicates that organic pollution as indicated by Biochemical Oxygen Demand (BOD) continues to be the major water quality issues. This is mainly due to discharge of untreated domestic wastewater from the urban centres of the country. The municipal corporations at large are not able to treat increasing load of municipal sewage flowing into water bodies. Secondly the receiving water bodies also do not have adequate water for dilution.

### New Directions

**CPCB prepared guidelines on techno–economic feasibility of implantation of Zero Liquid Discharge (ZLD) for water polluting industries**

The water polluting industries have been persuaded to set-up effluent treatment plants and CETPs and operate them to meet with prescribed standards. Standards for compliance have been notified under the Environment Protection Act, 1986. The notified standards permit industries to discharge the effluents only after compliance. However, CPCB and SPCBs / PCCs now, are insisting industries to reduce water consumption and also take measures to not-to-discharge effluents. But, it has been observed that industries are not able to meet all time compliance standards and as a result, rivers like Ganga and its tributaries is carrying high pollution load.

Zero Liquid discharge (ZLD) refers to installation of facilities and system which will enable industrial effluent for absolute recycling of permeate and converting solute (dissolved organic and in-organic compounds/salts) into residue in the solid form by adopting method of concentration and thermal evaporation. ZLD will be recognized and certified based on two broad parameters that is, water consumption versus waste water re-used or recycled (permeate) and corresponding solids recovered (percent total...
CPCB revisited the notified standards for Bathing Water Quality under the provision of The Environment Protection Act 1986. The results have indicated that so far water quality of rivers did not meet the prescribed standards as per designated best use with respect to bathing water quality criteria prescribed under Water (1974) Act.

**Bathing Water Quality Criteria**

Rivers have an important place in Indian culture and tradition. They are the lifeline of majority of population in cities, towns and villages and are considered sacred. In India, mass bathing in sacred water bodies, is an age - old ritual. Consequently, organized outdoor bathing has become an important in-situ utilization of water bodies which demands water quality as good as drinking water since during bathing, the river water is also used for drinking. In view of significance of bathing water, CPCB has prepared sector-specific action plans for prevention and control of pollution in river Ganga from five key industrial sectors:

- Distilleries
- Pulp and Paper
- Sugar
- Tanneries
- Textiles

It has been estimated that 501 MLD of industrial effluent is being discharged by water polluting industries through drains of tributaries into River Ganga. Water polluting industries (GPI), are mainly of industries discharging effluents having BOD load of 500kg/day or having toxic / hazardous chemicals. There are 2535 industries identified in Ganga basin which includes states of Uttarakhand [74] Uttar Pradesh [993], Bihar [40], Jharkhand [94] and West Bengal [147]. In accordance with the above, CPCB has prepared sector-specific action plans for prevention and control of pollution in river Ganga from five key industrial sectors:

CPCB has issued directions on 24.02.2015 to nine states Uttarakhand, Uttar Pradesh, Haryana, NCT Delhi, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand & West Bengal under SECTION 18(1)(b) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974 AND SECTION 18(1)(b) OF THE AIR (PREVENTION AND CONTROL OF POLLUTION) ACT, 1981 to achieve Zero Liquid Discharge (ZLD) in a fixed time.

It has been estimated that 501 MLD of industrial effluent is being discharged by water polluting industries through drains of tributaries into River Ganga. Water polluting industries (GPI), are mainly of industries discharging effluents having BOD load of 500kg/day or having toxic / hazardous chemicals. There are 2535 industries identified in Ganga basin which includes states of Uttarakhand [74] Uttar Pradesh [993], Bihar [40], Jharkhand [94] and West Bengal [147]. In accordance with the above, CPCB has prepared sector-specific action plans for prevention and control of pollution in river Ganga from five key industrial sectors:
Table shown below was accepted for notification.

**PRIMARY WATER QUALITY CRITERIA FOR BATHING WATER**

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>RATIONALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total Coliform (MPN/100ml)</td>
<td>50 Himalayan rivers are the direct source of drinking water.</td>
</tr>
<tr>
<td>2. Fecal Coliform (MPN/100ml)</td>
<td>&lt;1.8 Fecal Coliform is considered as they reflect the bacterial pathogenicity through human origin. Presence of Fecal Coliform renders the river water unsuitable for drinking purposes. To ensure no fecal contamination in drinking and bathing waters.</td>
</tr>
<tr>
<td>3. Fecal Streptococci (MPN/100ml)</td>
<td>&lt;1.8 Fecal streptococci are considered as they reflect the bacterial pathogenicity through animal origin. To ensure no fecal contamination in drinking and bathing waters.</td>
</tr>
<tr>
<td>4. pH value</td>
<td>6.5-8.5 The maximum dissolved Oxygen concentration of 5 mg/l ensures reasonable freedom from Oxygen consuming organic pollution immediately upstream which is necessary for preventing production of anaerobic gases (Obnoxious gases) from sediments.</td>
</tr>
<tr>
<td>5. Dissolved Oxygen (mg/l)</td>
<td>5 or more The Bio-chemical Oxygen Demand of 3 mg/l or less of the water ensures reasonable freedom from oxygen demanding pollutants and prevent production of obnoxious gases.</td>
</tr>
<tr>
<td>6. Bio-chemical Oxygen Demand 3 days, 27°C</td>
<td>3 or less None except for such small amount that may result from discharge of approximately treated sewage and or industrial waste effluents</td>
</tr>
<tr>
<td>7. Chemical Oxygen Demand (COD) mg/l</td>
<td>&lt;10 mg/l To ensure no contamination from industrial source after treatment.</td>
</tr>
<tr>
<td>8. Colour (Hazen)</td>
<td>10-20 Specially caused by chemical compound like creosols, phenols, naphtha, pyridine, and benzene, toluene etc. causing visible coloration of water and tainting of odour in fish flesh.</td>
</tr>
<tr>
<td>9. Odour</td>
<td>None in such concentration that would impair usages specially assigned to this class.</td>
</tr>
<tr>
<td>10. Floating Matter</td>
<td>Nothing Obnoxious or detrimental for use purpose.</td>
</tr>
<tr>
<td>11. (a) Floating Materials, Oil, grease and scum (including Petroleum Products) mg/l</td>
<td>&lt;10 None except for such small amount that may result from discharge of approximately treated sewage and or industrial waste effluents</td>
</tr>
<tr>
<td>(b) Sludge deposits, Solid refuse floating solids, oil grease and scum</td>
<td>None in such concentration that would impair usages specially assigned to this class.</td>
</tr>
<tr>
<td>12. Suspended Solids mg/l</td>
<td>&lt;10 from sewage or industrial waste origin None in such concentration that would impair usages specially assigned to this class. Many places bathing water is utilized for hydro power generation where more than 10 mg/l of Suspended Solids, are unsuitable and chock the turbines.</td>
</tr>
<tr>
<td>13. Turbidity NTU (Nephalo Turbidity Unit)</td>
<td>30 Measured at 0.9 depth Turbidity in water is caused by suspended and colloidal matter such as clay, silt finely divided organic and inorganic matter, and plankton and other microscopic organisms.</td>
</tr>
<tr>
<td>14. Aquatic life of Benthic Macro-invertebrates</td>
<td>(a) Saprobic score range 6.0-7.0 To ensure suitability of water quality standards for protection of aquatic life in bathing waters.</td>
</tr>
<tr>
<td>(b) Diversity score range</td>
<td>0.5-1.0</td>
</tr>
</tbody>
</table>
Draft Guidelines for Implementing Liabilities for Environmental Damages due to Spillage/Fire/Illegal Disposal of Hazardous Waste and Penalty

This document prepared in compliance with the order dated 18/2/2014 of the Hon’ble National Green Tribunal, (Western Zone) Bench, Pune, in the matter of Application No. 87/2013 (WZ), Ramubhai Kariyabhai Patel & others versus Union of India & others, wherein it has been ordered that “Gujarat Pollution Control Board and Central Pollution Control Board shall immediately undertake efforts for capacity building within their organizations and also, other SPCBs for scientific handling of such accidents, through training and preparation of guidelines and manuals, particularly enforcement of Rule 25 (1) and (2) of HW Rules, 2008.

Polluting Industries has a Deadline on emission e-monitoring

The Central Pollution Control Board (CPCB) has warned highly-polluting industries that their licences will be withdrawn if they fail to put in place an online emission and effluent monitoring system by June. “If the industries will not install an online monitoring system by June 30, 2015, their consent to operate shall be withdrawn,” the CPCB said, in a recent directive. The 17 highly-polluting industries have also been asked to submit a bank guarantee of 100 per cent of the cost of online monitoring systems (emission and effluent, whichever applicable) for ensuring timely installation of e-monitoring system by June this year. Such bank guarantee will be discharged if they install the system before June, CPCB said, adding that failing which, the “bank guarantee shall be forfeited”.

CPCB Prepared Draft Standard Operating Procedures for Ambient Air Quality Monitoring in Delhi

In order to ensure reliable air quality data, following procedure will be adopted by three monitoring agencies viz. DPCC, CPCB and IITM/IMD:
Calibration of monitoring systems

(I). Calibration will be performed for all the analyzers used for monitoring of notified parameters.

(ii). Auto calibration of all the analyzers to check zero drift and span will be performed on daily basis.

(iii). NIST certified standard gases will be used for secondary calibration.

(iv). With regard to particulate matter, secondary calibration will be carried using pre-calibrated Foil Filter/Disc.

(v). Secondary calibration will be performed once in a month for all analyzers, however, any variation in zero drift or span more than the values recommended by the analyzer manufacturer will require immediate re-calibration.

(vi). All calibration records should be maintained and shared among the three agencies every month.

(vii). An audit of the calibration system will be conducted jointly by three agencies involving scientists who are not associated with regular calibration. Such audits will be carried out quarterly.

Data Validation

Respective monitoring agencies will be responsible for data validation on the basis of following guidelines:

(I). Online auto validation as per sample and data averaging cycle of the analyzer.

(II). Missing data shall be flagged with further analysis of the cause and recording.

(III). Data generated during calibration should be isolated and flagged.

(IV). Any unusual activity near monitoring location shall be recorded and reported.

(III). DPCC will disseminate the authenticated analysed air quality information. In addition, running auto-validated average as per notified frequency (i.e. 1,8 hourly for CO, 8 hourly for 03, and 24-hourly for other parameters) will also be displayed for all the monitoring locations.

Data Analysis and dissemination

(I). Data will be transmitted through a common format to CPCB with a frequency of one hour for analysis.

(II). Data from all the monitoring stations will be analysed on daily basis. Analysis should include but not limited to concentration range, average, exceedance from respective notified standards for each monitoring location as well as overall for the city with explanation.

CPCB is the first Environmental Laboratory

The Bureau of Indian Standards (BIS), New Delhi, has granted License for Occupational Health and Safety Management System Certification as per IS 18001:2007 to CPCB for a period of 3 (Three) years with effect from December 11, 2014 to December 10, 2017. The scope of the License is as under:

“All activities carried out for testing of Environmental Samples in Air Laboratory, Bio-Science Laboratory,
Instrumentation Laboratory, Trace Organic Laboratory and Water Laboratory including support services of Building Division at Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032"

It is also informed that the CPCB’s Laboratory at Head Office is the first Environmental Laboratory in the country that has been granted IS 18001:2007 by BIS.

“Tamil Nadu Sewage Treatment Model”

Appreciating the Tamil Nadu model of water supply and sewage treatment, the Ministry of Environment and Forests & Climate Change (MoEF & CC) asked other states to explore the self-sustaining system as sewage treatment. According to the MoEF & CC, the Tamil Nadu self-sustaining model of water supply and sewage treatment envisages taxation from the end user and capital generation from use of treated wastewater via recycling and mandatory use of recycled water for non-potable purposes. MoEF & CC special secretary Shashi Shekhar said that the ministry is in the process of bringing out a notification making treatment of sewage mandatory so that it is not released directly into water bodies. “All the states have agreed on this and we are mandating sewage collection, transportation, treatment and its reuse. It can be reused for various non-drinkable purposes like industrial use, gardening, railway cleaning and balance can go for irrigation,” he said. The special secretary, who is handling the charge of the Central Pollution Control Board (CPCB), said that the ministry has also suggested ways as the model needs to be self-sustainable. “Sewage is the main cause for water pollution. We have told states to demand money for the same on loan model and they cannot delay it on excuse of non-availability of money as if one state (Tamil Nadu) can do it others can also do the same. The matter was also discussed at the recently held meeting of state environment and forest ministers, where a resolution was passed making treatment of sewage and granting consents to the municipal authorities mandatory under the water (prevention and control of pollution) Act 1974. It was also agreed upon to revisit the standard of treatment of sewage proposed by the CPCB and secondary treatment sewage be recycled and used for non-potable purposes.

**Strengthening of National Ambient Noise Monitoring Network**

Central Pollution Control Board in association with State Pollution Control Board has laid down National Ambient Noise Monitoring Network in 07 metropolitan cities and installed 35 no. of Noise Monitoring System in Mumbai, Delhi, Kolkata, Chennai,
Surprise Inspection of CPCB:
CPCB on 10th & 11th December, 2014 carried out surprise checks in 7 areas of Delhi namely Vishwas Nagar, Peeragarhi Village (Rohtak Road), Hyderpur Village, Shalimar Village, Nagloi Village/Naresh Park/Laxmi Park, Tri Nagar, Shastri Nagar, Shahzadabagh & Rajiv Colony & Shree Ram Colony (Loni, U.P.). It has been found that many units producing Plastic carry bags are running without having valid registration of Delhi Pollution Control Committee & UPSPCB.

(i) These Units (30 seen) are producing plastic carry bags not meeting with standard of film thickness of 40 micron.

(ii) These Units do not have any measures of environmental and fire safety.

Actions Taken:
(i) Central Pollution Control Board (CPCB) directed all State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) in Union Territories under Section 5 of EPA to ensure that all the illegal and unregistered units including units manufacturing substandard (less than 40 micron thickness) carry bags shall be

Plastic waste Management (PWM)

Present Status:
Despite having the legislations and guideline in place, the illegal manufacturing of unauthorized plastic carrybags <40µ is going on. Despite Rules for collection, segregation, transportation and disposal of plastic waste, it is going uncollected and littered all over which calls for strict implementation of the Rules in the country. The local bodies which are responsible for management of plastic waste need to take the task seriously. The general public also need to be made aware about the hazards of their habits of throwing plastic unmindfully. There is also need to develop cost effective alternatives to plastic and plastic carry bags like biodegradable and compostable plastic bags as per Rules 5(f) of PWM Rules, 2011. However, there is need to give exemption on excise/import duty. There is an obvious and urgent need to take a focused and strategic approach towards plastic waste management as well as plastic product management.

Disposal of plastic waste is a serious concern in India

Bangalore, Lucknow and Hyderabad (five stations in each) during 2010-11. Real Time Continuous Ambient Noise Monitoring has been conducted at these 35 locations spread over seven States/UT (Delhi, Maharashtra, Tamil Nadu, West Bengal, Uttar Pradesh, Karnataka and Andhra Pradesh) since November 2014.

The Strengthening of Network has been carried out by adding 35 more stations in the same 07 metropolitan cities during 2014-15. Real Time Continuous Ambient Noise Monitoring has now been conducted at 70 locations spread over seven States/UT (Delhi, Maharashtra, Tamil Nadu, West Bengal, Uttar Pradesh, Karnataka and Telangana) since November 2014.

Ministry of Environment, Forests and Climate Change (MoEF&CC) has notified Ambient Air Quality Standards in Respect of Noise under Noise Pollution (Regulation and Control) Rules, 2000 which was last amended during 2010.
closed down taking the help of local administration/police and disconnection of electricity, as applicable.

(ii) \( SPCBs / PCCs \) shall constitute squads for vigilance and reporting illegal operation of unregistered units including units manufacturing substandard (less than 40 micron thickness) carry bags to the SPCB for ensuring their non-operation.

(iii) CPCB issued directions to the Secretaries of State Department of Urban Development to prohibit/ban for stocking, selling and use by any concern in the State/UT of any carry bag (having handle or non-handle). Those found stocking/selling such carry bags shall be penalised by imposing a fine of Rs.1.0 lac and confiscate the material stocked or sold.

**Standards for Sewage Treatment Plants (STPs)**

New Sewage standard have been developed by CPCB to meet the criteria limits. These standard will be useful for stakeholders for operating STPs, CETPs etc. for complying regulatory orders.

Sewage, the single major source for water deterioration and contributes 70% of the pollution load to water bodies. Consumption of polluted water adversely impact human health and aquatic life. Sewage generation estimated at approximately 62,000 MLD. Installed sewage treatment plants (STPs) 24728 MLD with 920 STPs. However, only 615 STPs operational treating 20325 MLD. Quality of treated sewage generally of lower standard further adding to problem. Very sizeable gap in generation and

**EFFLUENT DISCHARGED STANDARDS FOR SEWAGE TREATMENT PLANT**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Parameter</th>
<th>Parameters Limit (Standards for New STPs Design after notification date) *</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>pH</td>
<td>6.5-9.0</td>
</tr>
<tr>
<td>2.</td>
<td>BOD (mg/l)</td>
<td>Not more than 10</td>
</tr>
<tr>
<td>3.</td>
<td>COD (mg/l)</td>
<td>Not more than 50</td>
</tr>
<tr>
<td>4.</td>
<td>TSS (mg/l)</td>
<td>Not more than 20</td>
</tr>
<tr>
<td>5.</td>
<td>NH(_4)-N (mg/l)</td>
<td>Not more than 5</td>
</tr>
<tr>
<td>6.</td>
<td>N-total (mg/l)</td>
<td>Not more than 10</td>
</tr>
<tr>
<td>7.</td>
<td>Fecal Coliform (MPN/100ml)</td>
<td>Less than 100</td>
</tr>
</tbody>
</table>

Note:

(i) These standards will be applicable for discharge in water resources as well as for land disposal. The standards for Fecal Coliform may not be applied for use of treated sewage in industrial purposes.

(ii) * Achievements of Standards for existing STPs within 05 years from the date of notification.

(iii) Abbreviation: BOD=Bio-chemical Oxygen Demand, COD=Chemical Oxygen Demand, TSS=Total Suspended Solids, NH\(_4\)-N = Total Ammonical Nitrite, N-Total=Nitrite
Centre plans commission status for Ganga

The National Ganga River Basin Authority (NGRBA) - a key central body which monitors planning and execution of all schemes of Ganga rejuvenation in coordination with five states will be converted into a commission under Parliament Act so that it can work more effectively. A proposed law on this matter was discussed in a high-level review meeting on Ganga where Prime Minister Narendra Modi called for an "uncompromising mission-mode approach" to stop further pollution of the country's national river.

Rs. One lakh fine for stocking, making illegal plastic bags

The ministry of environment, forests and climate change has directed the state government to enforce a blanket ban on all plastic bag manufacturing units operating without a licence across all districts of the state. The Union ministry and the Central Pollution Control Board (CPCB) ordered the Haryana State Pollution Control Board to comply with Section 5 of the Environment Protection Act, 1986, regarding closure of unauthorized plastic manufacturing industries. Following the order, the urban local bodies department (ULB) has directed all deputy commissioners to impose a fine of Rs 1 lakh on shop owners found stocking or selling plastic bags less than 40 microns in thickness. The ULB's directives (a copy of which is with TOI) reads, "It is to be ensured that all illegal and unregistered units, units manufacturing substandard (less than 40-micron thickness) plastic carry bags be closed down immediately with the help of the local administration and police including disconnection of electricity".

UP sugar mill polluting Ganga fined Rs 5 crore

An expert member of The National Green Tribunal (NGT) visited the site in March and pointed various shortfalls in the functioning of these polluting units and concluded that they were a source of serious pollution. NGT has cracked the whip on industries that have been polluting river Ganga. It has imposed an Rs 5 crore fine on Simbhaoli sugar mill and distillery unit and a fine of Rs 25 lakh on Gopalji dairy in Ghaziabad. It was hearing an appeal that alleged that the industries were discharging toxic effluents in Phuldehra drain which falls into Ganga through the Syana canal. The application had also alleged that toxic wastes from industries were affecting Gangetic dolphins, turtles and other riparian species.

CPCB cracks whip on flimsy plastic bags

The Central pollution control board (CPCB) has directed the Goa state pollution control board (GSPCB) to shut down those plastic manufacturing units in the state that produce carry bags having a thickness less than 40 microns. It has also instructed the latter to constitute vigilance squads for the purpose of reporting illegal
operations by unregistered and non-compliant units, while outlining a fine of 1 lakh over and above confiscation of materials if manufacturers are found to be defaulting. The GSPCB has consequently decided to issue notices to the state’s 25 plastic manufacturing units.

Illegal slaughter of animals

The Central Pollution Control Board (CPCB), has directed the Maharashtra Pollution Control Board (MPCB) to obtain source of raw material from meat processing units in the state. The CPCB direction comes following a ruling by Western Zone bench of National Green Tribunal (NGT), Pune; and had asked MPCB to see that slaughter houses maintained record of sourcing of slaughtered animals along with details of clearances as laid down by the apex court.

Guidelines and other material of good practice

Global good practices in industrial wastewater treatment and disposal/reuse, with special reference to common effluent treatment plants

Common Effluent Treatment Plants (CETPs) are considered as one of the viable solution for small to medium enterprises for effective wastewater treatment. However, many of the operating CETPs are not performing optimally due to various technical and managerial reasons. This study has made an attempt to understand the issues related to the operating CETPs and provide information related to Best Available Techniques (BAT), along with economic feasibility.

Rules on construction waste in 15 days: Minister

The Centre is to come up within 15 days with rules and guidelines for handling construction waste and dust, one of the major causes of air pollution in the cities.

Announcing this at a conference of state ministers, environment minister on Monday said, "Construction waste is a big contributor to air pollution in Delhi. We will bring in rules within next 15 days...Today ministers from all the state governments in NCR region are here. We will discuss it with them and come out with details."

The rules for Delhi would be framed by the environment ministry in consultation with Central Pollution Control Board (CPCB) and experts from construction and infrastructure sectors. Other cities will also use the guidelines for managing construction waste.

ENVIRONMENT IN FOCUS

Indian Railways is mulling a plan to turn waste plastic bags, bottles and cups into diesel through a waste-to-wealth technology developed by Scientists at the Dehradun-based Indian Institute of Petroleum - a laboratory under the Council of Scientific and Industrial Research are currently discussing plans to scale up the process with senior railway officials. Union science and technology minister Shri Harsh Vardhan announced the railways plan to set up plants to...
produce diesel to run trains through the technology that can turn 1,000kg plastic waste into 800 litres of high quality diesel. "Plastic waste will henceforth be viewed more as a resource than a nuisance." The Central Pollution Control Board had estimated that 60 cities across India cumulatively churn out about 15 million kg of plastic waste every day, and much of the country’s plastic waste is disposed in landfills despite efforts to reuse it in road construction and cement kilns.

GPCB orders closure of 42 units in Vapi for 2 months

At least 42 industrial units manufacturing paper, drugs and pesticides, dyes and chemicals, etc. located in Vapi GIDC have been ordered to close down for two months by Gujarat Pollution Control Board (GPCB) for alleged non-conformance of certain environment norms and failing to install environment management system (EMS). "The industrial units issued with directions for closure are required to install EMS latest by May 31, 2015, failing which they would face permanent closure," said a GPCB officer.

In 2013, Vapi industrial estate was rated by the union environment ministry as ‘critically polluted’ after it found the quality of air, water, land and ground water not meeting ‘desired’ standards. Since then, GPCB and Central Pollution Control Board (CPCB) have stressed upon constantly evaluating environmental sustainability in the region.

UrbAirIndia – A GIS Based Decision Support System

UrbAirIndia is an integrated web and GIS enabled decision support system for urban air quality management. It provides science based decision for reduction of air pollution. It is an expert system that deals with various components of air quality management viz., air quality monitoring, emission inventory, dispersion and receptor modeling, and multiple scenario analysis. UrbAirIndia is developed to provide useful inputs to policymakers for taking air quality management decisions, environmental researchers for analyzing scientific data, public as an information portal. Besides establishing an automatic framework for strategies to reduce pollution, UrbAirIndia can be used to assess air pollution impacts due to future development.

UrbAirIndia is equipped with the facilities of statistical and GIS analysis. UrbAirIndia has four major components,

- **Air Quality Monitoring** – Status of air quality with respect to any single pollutant or multiple pollutants, measured at various locations in a city with spatial and temporal analysis.

- **Emission Inventory** – Emission quantification for different air pollutants emitted from various sources within a specific period and specific geographical area. It facilitates development of emission inventory using activity data and the emission factors using GIS technology and has a provision to generate future projections under business as usual and control scenarios.

- **Dispersion Modeling** – Helps in evaluation of efficacy of control options, resultant air quality due to proposed action plan.

- **Receptor Modeling** – Provides source apportionment for ambient PM10 or PM2.5.

UrbAirIndia is a user friendly, flexible, robust and strong analytical tool. It also makes available templates for source data, emission factors, source emission profiles, input data templates for model applications, expected reduction from large number of control options. UrbAirIndia will facilitate science based
decision making for air quality management.

Regional Evaluation Workshop of Environments Information System (ENVIS) Centres

The Ministry of Environment, Forest & Climate Change, conducted Regional Evaluation Workshop for Environment Information System (ENVIS) Centres. Regional workshop was organized to evaluate the functioning of the ENVIS Centres as per the Guidelines of the ENVIS Scheme, framed by Ministry of Environment, Forest & Climate Change. An Expert Committee evaluated "online" the contents of ENVIS website and knowledge products. The workshop was also focussed on Bhuvan portal, a geospatial portal to enable the GIS-based information in the websites of the ENVIS Centres by NRSC officials.

The workshop concluded with a thought-provoking session by experts who shared their remarks and concluding address by Economic Adviser.

1. Northern Region
   12th-13th January, 2015 at Dehradun, Uttarakhand
2. South Region
   February 05-06, 2015 at Coimbatore, Tamil Nadu
3. Western Region
   February 16-17, 2015 at Nagpur, Maharashtra
4. Eastern and North-Eastern Region
   March 23-24, 2015 at Guwahati, Assam

Source:

Published by: CPCB ENVIS Centre on behalf of Dr. A. B. Akolkar, Member Secretary, CPCB.

Compiled by ENVIS Team:
Shri G. Ganesh, ENVIS Coordinator
Ms. Hemlata, Information Officer
Shri Prem Raj, IT Assistant