Conference on Green Chemistry
Initiatives of KSPCB

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Green ChemisTree Foundation, Mumbai.
Initiatives of KSPCB to mitigate environmental pollution

- To support Transport Department to carry out continuous monitoring of vehicular emission and noise pollution.
- To procure three mobile laboratories equipped with sampling and monitoring facilities for water, air, noise and other wastes.
- To support Traffic Police by giving them noise meters with printers.
- To take up fresh study on source apportionment. Similar study is also proposed for noise level mapping in Bangalore and Mysore with the technical support from the National Institutes.
- To establish Real Time CAAQM Stations at non-attainment cities Mangalore, Bellary, Hubballi - Dharwad & Kalaburagi.
Initiatives of KSPCB to mitigate environmental pollution

- Local Area Lake Committees constituted for lakes in Bangalore.
- Board has constituted six teams in Bangalore to verify the performance of operation and maintenance of STPs in apartments and commercial establishments.
- The Board has made mandatory to provide sewage treatment plants for 50 apartments and above so as to address the issue of sewage entry into lakes.
- The Board has advised the Government to ban idol making by using Plaster of Paris and other paints containing heavy metals.
Initiatives of KSPCB to mitigate environmental pollution

- One more facility is being planned to facilitate the industries in Northern Karnataka for scientific disposal of hazardous waste.

- Initiated action to establish common effluent treatment plant for electroplating industries at Urban Eco Park of KSPCB at Peenya. Laghu Udyog Bharati, Karnataka has come forward to invest and maintain the plant on no profit basis.
Guidelines for various activities
Guidelines for various activities

- Siting guidelines for industries.
- Siting guidelines for MSW landfill sites.
- Disposal of construction and demolition waste.
- Guidelines for institutions to manage the MSW within the campus.
- Siting guidelines for slaughter house.
Consent Management
Consent Management

- **Uniform validity period** –
  - **Red** – Validity upto 30th of June.
  - **Orange** – Validity upto 30th of September.
  - **Green** – Validity upto 31st of December.

- Consent Committee for Red category industries.

- Consent fee criteria based on investment is now being revised. Based on the investment made on plant and machinery only. This amendment being simplification in tune with the Industrial Policy of the State Government.

- A Vigilance Squad is being constituted for effective monitoring and enforcement of Board activities.

- All Consent to Establishment covered under SAKALA (23 to 120 days)
Consent Management

- Online consent under the Water Act, the Air Act for Green and Orange category industries has been introduced.

The Board is in the process of establishing software for online payment of consent fees and introduction of digital signature.

- In line with CPCB directions online monitoring is taken up.

- The redundant procedures of collecting guarantee money and administrative charges to ensure compliances by defaulting industries have been stopped.
Technical Advisory Committee
Initiatives

- New industries are perused with to minimize the use of traditional solvents and to go for green solvents.
- Segregation of wastes at source and converting the wastes as far as possible as marketable by-products.
- Emphasis for ZLD.
- Encouraging incinerable hazardous waste for co-incineration in cement kilns (five cement industries, total incinerable waste generation 65,725 MTPA)
- Encourage use of catalysts instead of reagents.
- Use of non-toxic reagents.
- Reduction / use of hazardous waste for secondary use instead of TSDF.
Central Environmental Laboratory has obtained certification from National Accreditation Board for Laboratories (NABL) and is in the process of obtaining recognition under the Environment (Protection) Act, 1986.

Up-gradation of Regional Laboratories at Mysuru, Mangaluru and Belagavi in order to get National Accreditation Board for Laboratories (NABL) accreditation and recognition under the Environment (Protection) Act, 1986.
Action taken to control pollution from an Industry located on River bank
Initiatives of KSPCB to mitigate environmental pollution

• The Board insisted the industry for maintaining the same Total Dissolved Solids (Inorganic) load to the river even after production expansion.

• Accordingly the industry had to increase their salt recovery from 71.4% to 84% to comply with the condition stipulated by the Board.

• The increase in recovery required additional infrastructure with significantly high investment.

• The industry developed the facilities and complied with the Board stipulation.

• Additional Salt recovery from lean streams
Initiatives of KSPCB to mitigate environmental pollution

Facilities incorporated in the process for increasing Sodium Sulphate Recovery from 71.4% to 84.0%

- Installation of two sets of Multistage Flash Evaporators to recover Sodium Sulphate from First wash which was earlier going to Effluent Treatment Plant
- Up gradation of Acid Absorption Crystallizers
- Additional Rotary Vacuum Filters in Salt recovery system
- Installation of Salt Dryer
- Recycling of Sump zone in place of water for tow washing to maximize chemical recovery
- Installation of CFBC Boilers in place of AFBC Boilers to reduce coal consumption due to increased energy requirement for additional Salt recovery from lean streams.
Initiatives of KSPCB to mitigate environmental pollution

Increased Salt Recovery

• New Multi Stage Flash Evaporators for Recovery of Additional Sodium Sulphate from Waste Streams

Benefits

• Enhanced Sodium Sulphate Recovery
• Reduction in TDS/SO4 load in treated effluent
Initiatives of KSPCB to mitigate environmental pollution

Installation of CFBC Boilers in place of AFBC Boilers to reduce coal consumption due to increased energy requirement for additional Salt recovery from lean streams.
Other initiatives

- Published Citizen Charter
- Board’s building are going for solar energy and for green buildings.
- Emphasis is given for awareness.
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