





"Addressing Industrial Waste in India"

Collective inputs from over 240,000+ Citizens in circle

"Swachh Bharat"

(Current state, Issues, Root Causes and Proposed Solutions)

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Addressing Industrial Waste in India

Executive Summary

Thousands of small scale and bigger industrial units simply dump their waste, more often toxic and hazardous, in open spaces and nearby water sources. Over the last three decades, many cases of serious and permanent damage to environment by these industries have come to light.

The 240,000+ strong "Swachh Bharat" online community has come together to collectively identify the key issues, root causes and solutions for Industrial Waste in India and the community expects that the Government, Industry Bodies and the Industrial units will work towards implementing the identified solutions.

Issues Identified:

- 1. Industries try to save money by not processing waste appropriately
- 2. Industries are not willing to install waste disposal systems as they cost
- 3. Industrial waste is dumped in open grounds
- 4. In many areas industrial waste is thrown in fertile lands, slowly making it barren
- 5. Some industries use rivers as the dumping ground for their waste
- 6. Industries pollute air with smoke, smelly chemicals, ash etc.
- 7. Highly toxic element such as mercury, lead, arsenic, chromium etc. find their way into the water, soil & air due to reckless dumping of untreated industrial waste
- 8. The health of humans, birds, animals is jeopardized as the pollutants enter the food chain
- 9. Industries do not follow the existing pollution control norms and get away with by paying bribes to inspectors
- 10. Industrial units make their surroundings dirty
- 11. Industries try to cover up by bribing officials
- 12. Health of the workers inside these plants also get affected in a bad way
- 13. There is little or no control on units operating in unauthorized colonies

Root Causes Identified:

- 1. There is lack of awareness amongst the citizens/workers on the hazards posed by industrial waste
- 2. Non-existing waste separation plants
- 3. Effluent treatment plants are set up but are mostly non-functional or working below capacity due to maintenance/operational issues





- 4. There is very poor monitoring & regulations of industries which are in remote & farflung areas
- 5. Making profits is the sole motive without any consideration for the impact on the environment
- 6. The Government does not have strict and well researched modern laws for industrial cleanliness, controlling and punishment systems setup
- 7. No emphasis on research into conversion of waste to harmless or useful materials
- 8. No encouragement for setting up public or private sector waste conversion industries.
- 9. No monitoring of existing waste conversion industries
- 10. No compulsory reporting to shareholders of waste produced
- 11. The pollution monitoring agency namely 'Pollution Control Board' (PCB) is ineffective / inadequate in its operations and even the Board itself is polluted due to the nexus with industry people or politicians
- 12. The production processes are not scientific, out dated and ineffective and lead to pollution
- 13. Location of unauthorised industries/small scale units and their processes are not monitored
- 14. Recycling concept is not effectively followed
- 15. Use of raw materials, which do not decompose completely in the industrial process and result in residues
- 16. Conversion of industrial wastes for other uses is not fully explored
- 17. Industrial effluents are discharged during rains or nearby water courses
- 18. The ill effects caused to soil and water is not considered and the production of crops gets affected
- 19. Industrial wastes pollute air and cause discomfort to human life
- 20. Most industries are not serious about waste management
- 21. Lack of strict enforcement and compliance as most environment clearance certificates can be easily obtained with bribes
- 22. Municipal authorities lack resources and the will to enforce

Solutions Identified:

- Social campaigns should be designed to educate citizens and workers about the hazards of industrial waste
- 2. Waste segregation plants should be made mandatory for all industries
- 3. Pre-appointed days to collect each category of waste by the Service provider
- 4. Waste collection mechanisms should be mechanized as much as possible





- 5. Monitoring and regulation of industrial waste should be made a high priority by the Government
- 6. Create awareness and incentives amongst industrialists so profit generation is balanced with impact to environment
- 7. Government should come up with laws to mandate industrial waste regulation
- 8. Conversion of Waste to Wealth should be given emphasis and encouragement by the Government
- 9. Research and development facilities should be set up to study conversion of industrial waste in to useful materials
- 10. Special tax benefits should be given to private entities setting up waste conversion units
- 11. The working of the Pollution Control Board should be modernized through process reengineering and systems
- 12. Pollution Control Board (PCB) officials' industrial visit reports should be put on their website immediately after their visits and also follow up/ rectifications/action taken /certification by PCB to be put on the website
- 13. Corrupt nexus between the non-compliant industries & Government officials (who need to enforce the regulations) needs to be eliminated
- 14. Inspectors caught taking bribes should be suspended and criminal proceedings should be done against them
- 15. The production processes should be scientifically designed, which will ensure least pollution and wastage
- 16. Recycling plants should be set up by industries with the Government guaranteeing buy back
- 17. Raw materials which lead to major harm to the environment should be banned
- 18. Municipality should be given modern equipment and resources to enforce regulations
- 19. Municipal Corporators should be asked to make public their contributions towards improving the state of handling, treatment & disposal of industrial waste
- 20. Disposing off of chemical effluents waste into bores that affect ground water should be made punishable
- 21. Declare the Environment as a "National Asset" to be nurtured and protected by every individual
- 22. Relocate small units in industrial estates with common environment support system
- 23. Set up a process for collection for small and medium sized industries
- 24. Recognition to zero waste discharge firms
- 25. Strict Fines & Penalties should be imposed on violators





Industrial Waste in India –A few Citizen quotes:

- Dumping of industrial waste is common across all cities in India. There is no proper water purification before dumping. Even if it is implemented no one bother to check. Instead of fines, industries which indulge in such acts should be shut down. But issue remain the same "Corruption" out babus make money out of it. they wasn't industries to indulge in such act so that they get monthly income from these companies – *Pavithran Nair*
- 2. No action taken neither by Pollution Control Boards nor by Municipalities on units supping acid and other chemical from within the authorized colonies. Chemical waste casually allowed to join ground water or allowed to mix with surface drain that joins recharge ponds. *Prashant K Shrivastava*
- 3. It will be difficult for every small and medium scale industry to have their own waste management system because of the cost involved. Let the private entrepreneur to establish waste system and collect the waste from industry and then treat it then take disposal action take the money for his services. I feel Government to encourage entrepreneur in this field *Amit Goswami*
- 4. Concerned Industry knows waste generated and know how it can be disposed. True Indian Citizen will not allow the waste is disposed indiscriminately making it a Health & a Public hazard and Problem. Basic CIVICS should not be overlooked or forgotten Ramesh Chandra Dutt
- 5. The nexus between rouge industries and corrupt Govt. officials should be first addressed. The Pollution control Board itself need knowledge updates. They have no idea on the latest trends or developments in the field of Effective handling of industrial wastes. There are a host of power plants using industrial waste as fuel but are unable to run the plants due to various Govt. issues. availability of industrial wastes etc. *Vishveshwar Uppin*
- 6. Industrial waste merging in the natural source of water is very sensitive and a major cause of deficiencies in all zoological & botanical lives, continuing the present process may result for shortage of drinking water shortly apart from water for other use.
 - Root cause: Laws are made in public interest, but are implementing in personal financial interest, supports offenders to break the laws in confidence that everything is manageable *Sudhir Jain*
- 7. Large numbers of people are supported by waste picking and recycling activities, which may be unsanitary but important in terms of economics and reducing the quantities of waste requiring disposal. The waste recycling activities are still the businesses of the informal sector but if the government supports the businesses they will be gold mines *Hari Krishna Rangisetti*





- 8. Well the problem of Corruption in the system is no denying the biggest cause of pollution or in fact any other evil existing in our country. Other technical aspects are also there. Every piece of land, water, air has certain capacity to get abused, when we create a tax free zone to lure investors and industrialist we unknowingly (for a good cause of employment generation) put too much pressure on existing infrastructure *Amit Bakshi*
- 9. Managing Industrial waste in India is one of the big problems in the world. Many economies are fully subsidized by environment (I do not know how I would write that in a better way). Eg. Electricity was produced, so all businesses flourished, employment generated, agricultural irrigation grew, produced more food and so on... economy grew. But It was not all right, when electricity was produced by burning coal – Ramesh Shegaonkar
- 10. Industrial waste is dumped because disposal norms and methods are not declared as part of the factory unless it is a large scale unit. Small and medium industries can be corrected if there is enforcement because it is not very difficult to trace back the source of industrial waste if there is commitment and not corruption. Encouragement must always be to link waste management to economics and technology. Unless someone's waste is another's raw material or source of income for paid disposal the problem cannot be solved *Uday Pasricha*
- 11. As had been mentioned in my initial document, a few months back, we need to have an automated system for monitoring of the industrial waste, from a centralized location leveraging ICT technology. This would automatically put a check on the industrial units as well as put a tab on the corrupt officials entrusted with such a task. This would even help in the process of cleaning our rivers and other water resources *Vimal Wakhlu*
- 12. For the industrial waste, there should be recycling system in the industrial set-up/plant to the extent it is possible. SMBs may be provided with facilities for centralised recycling centres. A governing body should provide needful support and should examine periodically, may be every quarter. It should be linked with the quarterly performance of the industry *Vijay Shrivastav*