TOXICS DISPATCH
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Toxics Link
for a toxics-free world

THE PLASTIC TRAP!

Earlier this year, a close friend of mine saw this bull standing outside her Sector, his head hanging down and the animal looking very listless. She noticed that his stomach looked abnormally distended. Being an animal lover, when she saw him again next morning down the same road, she was a bit concerned and decided to seek help. She got in touch with a medical facility for Bovines and reported the matter to them. Thankfully, they promptly picked him up. Named Jeeva, the bull went through multitude of blood tests and x rays over the next couple of days. My friend kept a tab and was told that Jeeva's blood count was low and so transfusions were organized. The facility decided that Jeeva had to go through a surgery called 'Rumenotomy'. What came out of his stomach is unbelievable and appalling- 160kgs of plastic and 1.4 Kgs of iron was extricated from the poor Jeeva's stomach!

Unfortunately Jeeva did not survive. His innards were so stretched and wounded with all the plastic and iron that there was no elasticity anymore. And Jeeva is not alone…. many bovines meet this fate. The roadside dumps are filled with food waste wrapped in plastic bags. Stray animals invariably end up gobbling the bags and other stuff along with the food. And wait, if you thought that only the strays face this, it is not true. Dairies routinely let their cattles out in the streets and near dumps to eat, after which they get back home to be milked. Their stomachs are filled with the plastic and other stuff- also imagine the quality of the milk that all of us are drinking every day, thinking that it is for good health!

And this plastic waste is not just restricted to our landmass and animals on land like Jeeva. The oceans are teeming with plastic trash: shopping bags, water bottles, old toothbrushes, and much more. It is estimated that by 2020, there will be more

IN THIS ISSUE

EDITORIAL

Its end of the year once again, time for festivities and moments to be shared with friends and family. Also time to pause and look back at the year gone and draw up a wish list or expectations from the future. Looking back I witness a perceptible change in Delhi conversation – "weather" especially air quality being the most dominant topic and citizens exhibiting extreme knowledge on technical details such as Particulate Matter (PM) levels and their health impacts. The campaign launched by media has also helped understand the contributing factors to this crisis and possible solutions. Unfortunately long term solution appears to be elusive as concerned agencies continue to play ping-pong with the issue, the judiciary appears to work overtime directing the executive to act and make it possible for citizens to breathe easy. We could perhaps also take some learning's from other cities or countries that have taken tough measures to address issues around air quality.

Swachh Bharat campaign gradually progresses in its third year, suitably complemented by new waste rules 2016 is yet to bring in desired change and improve the landscape of the country, we continue to read horror stories of landfill accidents from across the country and rising health concerns on account of vector borne disease clearly indicating serious gaps in institutional capacity and ownership of responsibility. Notification on banning the sale of cattle by Ministry of Environment, Forest & Climate Change (MOEFCC) also generated much heat, controversy and has finally resulted in increased number of cattle roaming free on roads and chewing on plastic bags to access food.

The enormity and complexity around plastics and its complete lifecycle is yet to be understood for its total impact on ecology. There is always a constant push to increase production and consumption of plastics but very little effort towards its end of life management A recent report by ORB media, United States indicates and suggests that Delhi's tap water is contaminated with micro-plastics ,its indeed scary and frightful to think that we could be consuming plastics through our drinking water and perhaps even through our food too since oceans are proving to be the biggest sink of plastic waste and possibility of such plastics landing up in our plates through fish and other marine products. The issue is gathering enough momentum across many countries though not adequately spoken or written about it in India. There is critical need for more data and understanding on micro plastics in our country and scope for local action too by reducing consumption of plastics and promoting good recycling practices .The issues around plastics require careful scrutiny and initiation of comprehensive global action to protect environment and animal kingdom from its perils.

There is serious threat to marine life due to micro plastics on but on another front global action to safeguard fish from mercury contamination is being addressed by the Minamata Convention. The convention came into force on 16 Aug 2017 urging nations to draw up road maps and initiate action to meet their global commitments to reduce the impacts of mercury on human health which is indeed extremely encouraging. We are hopeful that India would soon ratify the Convention and become a party to this global effort. We hope that 2018 will usher in new insights, energy and increased political commitment to address issues connected with environment.

Wishing you all a very happy new year!

Satish Sinha
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plastic than fish in marine waters! A range of animals throughout the marine environment, including corals and zooplankton, Sea turtles are consuming plastic particles called microplastic.

So, what is micro plastic and where does this micro plastic come from??? Microplastics are small plastic particles, usually around 5 mm or less in diameter. They can come from a variety of sources, including cosmetics, clothing, and industrial processes. There are two main types of microplastics currently recognised: primary microplastics which are manufactured for product use like micro beads, and secondary microplastics which are plastic fragments from the breakdown of larger plastic debris. Both types are recognized to persist in the environment at high levels, particularly in aquatic and marine ecosystems. Reports suggest that there are more than five trillion pieces of microplastic in the world's oceans and the equivalent of one rubbish truck of plastic waste being added to the sea every minute. And if you thought that it is restricted to habitations, the nearly 18 tonnes of plastic piling up on an island, Henderson, a tiny landmass in the eastern South Pacific, that is otherwise mostly untouched by humans have been pointed to as evidence of the catastrophic, extent of marine plastic pollution.

Could the plastic you're washing your face with end up in your fish curry? Crazy, but yes! Plastic microbeads are in face soaps, body washes, and even toothpastes. Infact a single shower could result in 100,000 plastic particles entering the ocean! Most wastewater treatment doesn't filter out microbeads, and they get discharged into waterways. As a result, micro-beads end up in bays, gulfs and seas worldwide, as well as inland waterways. Fish species that human's harvests for food have been known to eat micro-plastic particles at an alarming rate and the toxins absorbed in those plastics transfer to the fish tissue. The toxic-coated beads are consumed by fish and other marine organisms and then by us.

The other source of microplastic is our garbage. Garbage dumps are full of unsegregated waste especially plastic. Plastic in all forms and shapes come out of our homes, and are picked up to be dumped elsewhere. Do you know what happened to the packet of chips that you threw 5 years back, or for that matter the polythene bag that you put in the dustbin 2 years back? They are probably still lying somewhere…in a landfill or may be a water body. Imagine the number of such packets and other plastic products that we discard everyday. Many of these end up breaking

down into micro plastic and reaching the oceans and river bodies.

Land or Water-our planet is now teeming with plastic debris. The material has been adopted widely and has replaced many traditional materials, multiplying its use and discards many folds. With its non biodegradable nature, the plastic, once discarded, is going nowhere. As the Prince of Wales puts it- "I find it sobering to think that almost all the plastic ever produced is still here somewhere on the planet in one form or another and will remain here for centuries to come, possibly thousands of years." Imagine the amount of plastic that we may have used since the material discovery and which may still be lingering somewhere….

It is clear that plastic waste is a complex, social, economic and environmental problem with few easy solutions. The "out of sight, out of mind" mindset keeps people from truly understanding the consequences of plastic pollution but the scale of the issue is massive. Its interference in our lives is increasing day by day and we are probably only at a nascent stage to properly understand its impact on plants, animals and humans. The ideal wat should be to reduce its usage but it's definitely easier said than done.

But it is certainly high time that we start thinking about how we want to manage our plastics- do we want many more Jeevas to suffer…do we want fishes or plastic in our oceans and finally do we want a day when our generation next tell us this same thing… .'PLASTIC AGAIN'.

Do you have a solution? Please share with us your idea and suggestions.

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FEATURES

SMALL CITY- BIG STEP

Biomedical waste still remains a major concern in India. The list of potential harm that it can cause to us and to the environment is endless, necessitating its proper handling and management. Toxics Link has been working on this issue since two decades and in continuation to its effort, in June 2017, we started to work on biomedical waste management in Ambala as a part of "OYE! Ambala" awareness campaign. Municipal Corporation of Ambala launched this campaign for strengthening the Municipal Solid Waste & Bio-medical waste management system. Recity Network Pvt. Ltd implemented the program and the Bio Medical Waste Management vertical was managed by Toxics Link. The project was conducted in 4 phases and aimed to reach out to maximum healthcare facilities and Common Bio-medical Waste Treatment Facility (CBWTF).The purpose of the project was to sensitize healthcare fraternity about the issue of biomedical waste, making them aware about the requirements of the new BMW Rules 2016, training them in how to implement it, working with them in implementation, and monitoring the changes in practice thus incorporated.

While working in close coordination with the healthcare fraternity of Ambala, we discovered that gaps in the biomedical waste management existed at various levels. Doctors and nurses who deal with the waste on regular basis were found to be ignorant about the gravity of the issue. Unavailability of infrastructure and strategy for implementing the system was also present to add to the misery of the situation. Our interaction with the sanitation staff revealed that they are not even aware about the personal protective equipments leave alone the biomedical waste and its management. These issues exist not only in Ambala but all over the nation due to lack of motivation. If we are to fight the menace of biomedical waste, instilling a perception of self protection in the healthcare workers is of utmost importance as it's the attitude towards the problem solving that matters the most.

Despite all these issues, the healthcare fraternity and the Municipality of Ambala welcomed the changes for improving the biomedical waste management with open arms. The trainings provided by Toxics Link motivated the healthcare staff to a great extent. One of the sanitation staff in a hospital was so motivated that when Toxics Link Team visited the hospital, he himself started explain all the categories of waste with colour coding and showed us how he uses the personal protective equipments and also told that he makes sure that other members of his team do the same while handling the biomedical waste.

The hospitals visited during the project were also eager to implement the new BMW Rules 2016 in their respective facility and with guidance from Toxics Link Team, they were able to not only implement but demonstrate the model practices in biomedical waste management. A few hospitals went a step further and could come up with innovative methods like a smaller waste transportation trolley (that can be taken to different wards easily) and innovative tray (for better collection) for better compliance and to make the work easier. This kind of enthusiasm was not only seen in hospital staff but CBMWTF staff as well. They also started wearing gloves and masks and when asked as to why they are wearing it, they answered that it is for our protection and we want to be safe. Such is the wonder of right attitude.

Success of this project is an example that with proper motivation, infrastructural support and technical guidance the menace of the biomedical waste mismanagement can surely be curbed down. With the support of the municipality and motivated healthcare fraternity of Ambala, Toxics Link managed to bring the transition in BMW management scenario in Ambala in just 3 months. It would be interesting to the see if the same model being replicated in other cities as well. The point worth pondering is that, if a small city like Ambala can be so forthcoming for managing its biomedical waste properly, why can't others?

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TECHNOLOGY, PESTICIDES AND US

Our country is a home to a rising population of about 121.1 crores, which accounts for one – sixth of humankind in the world. Currently we are facing the problems associated with feeding this ever-growing population in India. Therefore, development in agricultural field is essential along with advances in other technological, health and education aspects. The issues surrounding agricultural development involve food and nutritional security, sustainability and profitability in the present and future. It is estimated that the requirement of food grains will rise to 450 from 297 million tonnes from year 2020 and 2050 respectively. In India, there is a concern about nutritional value of the food we eat. To enhance the productivity, plant protection is the most critical feature. It has been reported that there have been incidents where 20-30% crops are damaged due to insects, pests, diseases and weed. Thus, Plant Protection gives suitable measures that should be taken to prevent crop damage and minimize monetary loss to the farmers.

A variety of pesticides is used to combat the problems of infestation of pests, pathogens, weed. These are often considered a quick, easy and an inexpensive solution for controlling weed and insects in agriculture to increase production. Despite its essential use, residues of pesticides are found in agriculture and dairy products, food and water causing serious hazards to health and environment and accidental poisoning. There is a possibility that pesticides might leach into surface water through unwanted run-off from plants and soil. It has eco-toxicological effects on aquatic flora and fauna and on human beings. Sediments loaded with pollutants affect the ecological functioning of the rivers due to their persistence and long-range transport characteristics in the environment. In India, all environment segments have been detected with some concentration of these pesticides due to their extensive use in the past that is likely to bio-magnify or accumulate in animal tissues, human blood and breast milk. Fish take up contaminants directly from water/air though their food chain. The issue of pesticide contamination of Indian rivers is still a prominent problem. Recent studies have shown that Deomani, one of the major rivers of Terai region is contaminated by organochlorine and organophosphate pesticides.

The shift towards using high yielding varieties (HYV) seeds and their hybrid cereals have put a great pressure on soil, land, water and other resources. Cultivation of vegetation is intensive in nature i.e. it requires heavy doses of fertilizers and chemicals to protect the crops from insects-pests, diseases, weed etc. which has also aggravated the problems. Therefore, to curb its detrimental effects on the environment, it is necessary to understand use pattern of each pesticide used for these crops.

Farmers must follow various precautions in using these pesticides. Application of pesticides and following the precautions are equally important and must go hand in hand. Survival of farmers means a business to agricultural input retailers, who sell chemicals to the farmers. Thus, these retailers should also be considered one of the important stakeholders; hence, government should acknowledge their role in the same. Effective use of pesticides and maintenance of water quality is the need of the hour.

In view of the above article, recently incidents of pesticide poisoning in farmers in India have been reported. During the month of October 2017, more than 600 farmers in Vidarbha region of Maharashtra have been affected by pesticide inhalation. They did not wear their protective gear while spraying pesticide on the fields. Such mishaps could have been avoided by ensuring the proper availability of personal protective equipment (PPE) to the farmers by the authorized agencies and spreading awareness about its timely usage for protection of one self. In another incident that occurred in July 2013 called Bihar School Meal Poisoning Incident, at least 23 students died and many fell ill at a primary school in Saran district of Bihar after consuming Midday meal contaminated with pesticides. Initial investigations in the case suggested the use of toxic pesticides – organophosphates in food; however, later on a forensic report confirmed the cooking oil contained monocrotophos, an agricultural pesticide.

Clearly, the above incidents show a conflicting relationship between nature, environment, technology and mankind. Such kinds of disturbing incidents are now becoming a global concern. Mitigation strategies have to be formulated to curb the use of such harmful and toxic pesticides on crops in the fields. Farmers must be educated about the safety equipment that should be used while spraying is done and enable them to learn about pesticide's harmful effects. A combination of conscious efforts by the government agencies along with international/national policies on their use, interventions by civil society organizations, individual interests by farming community and retailers of such chemicals/pesticides, can together achieve a safe and sound environment for all of us.

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WHY ARE WE STILL USING MERCURY? WHY IS THERE IS A RESISTANCE TO THE SHIFT?

Mercury, a heavy metal well known for its toxicity, is still being put in people's mouth without their consent. Did you know that the dental amalgam, a filling that our doctors use in our mouth is actually 50% mercury!!

There is no doubt on the fact that mercury- a neurotoxin and it has the potential of causing many neurological as well as nephrological diseases. There are ample studies to prove the toxicity of this metal. Then why the world is still arguing about the fact whether we should use it or not? As doctors we should understand what we are exposing our patients to.

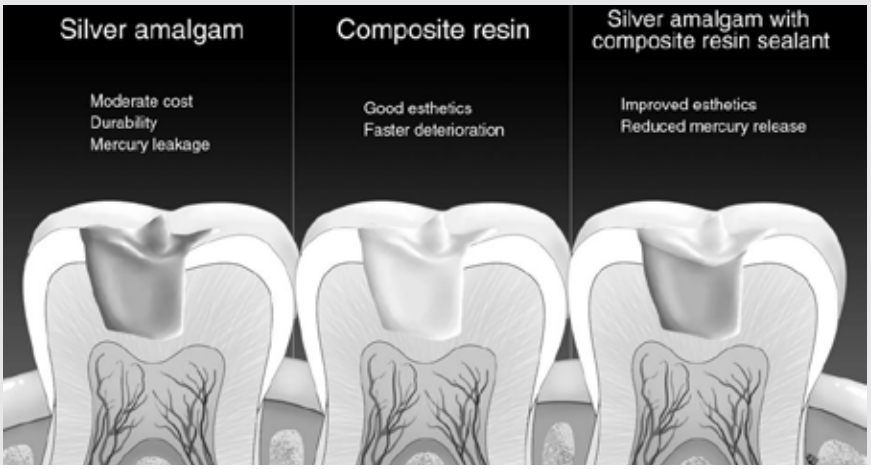
Not only in the patients, use of mercury in the dental sector is leading to environmental contamination. The dental setups in our country are not disposing the mercury waste as required by the regulations. Once used, mercury, especially the non-contact mercury is thrown down the drain and reaches our environment, polluting all our matrices. Once it enters our food chain, it bio-accumulates and gets bio-magnified i.e. its concentration increases exponentially as we move up the trophic level. So if you eat a fish, you might be eating mercury as well!!

At times the mercury waste from the dental colleges also makes its way to the Common Bio-Medical Waste Treatment and Disposal Facilities which incinerates it. So mercury vapours are dispersed into the air putting the whole community at risk.

The amount of mercury that is released from the dental sector is quite high. Toxics Link studies "Lurking Menace" of 2004 estimates that if there are 640 dentists in Delhi and each dentist uses 200mg of mercury per filling a total of 76.8kgs of mercury from non-contact amalgam and 6.9kg of mercury from contact amalgam is released in the environment in a year.

The effects of such release can be disastrous. This neurotoxin has the ability to vaporise at room temperature and the mercury vapour released can be enough to cause death by inhalation. A very important question that is raised here is that why are we using this metal as a filling material if it is so toxic? A simple answer would be because of its strength and its ability to accommodate temperature ranges of the food or the liquid that we take and most importantly it is an age old practice. We have been using this material for almost 150 years and thus we are reluctant to change.

There are counter statements on this issue by doctors who claim that the amount which is released in the body from the filling is not that high and it doesn't really cause any harm. But they need to ask themselves if they can guarantee the fact that it won't? So, what makes us so willing to take the risk of exposing our patients to such a toxic metal? Studies have shown that as much as 10 micrograms of mercury can be released from amalgam in the body in a day and it has a capability to pass skin, blood-brain and placental barrier thus putting everyone at a risk.



The problem is not just the health hazard we are causing to our patient. It is also to the doctor and other clinical staff who is preparing the filling and is then putting it in the mouth. Doctors and their staff spend more than 8 hours in a hospital or a clinic and are thus highly exposed to this metal, especially the women of child bearing age. Studies have shown high concentration of mercury inside the dental wing of a hospital. A study by Toxics Link, 2009 measured mercury at a concentration of 3.11 microgram per cubic metre in a dental wing in a Delhi hospital. If the wing has so much of mercury in its air, imagine the concentration you would have inhaled while working there 8-10 hours a day!!

So, it is not a question anymore whether mercury is toxic or not, whether we should use it not!! This question has been addressed by the world in 2013 when Minamata Convention was adopted. And India being a signatory to it, it has to eradicate its use completely.

And what is stopping us? There are good alternatives available in the market. These alternatives are aesthetically appealing; preserve your tooth material (unlike mercury amalgam which destroys it) and have the required strength. They definitely continue to improve with the technological advancements.

Also, with the increasing use of composites, the prices have come down. Though mercury amalgam still seems cheaper it is because we do not pay the environmental cost and do not follow Best Management Practices (BMPs). Once we consider the environmental cost, alternatives are actually cheaper.

Thus, with all the right reasons we need to completely eradicate mercury from our mouths and our lives.

So, today take a pledge, as a doctor never to use mercury in your patient's mouth and as a patient- be aware, as your doctor for a mercury free-filling!!

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DELHI BEING DEADLY

Air Pollution in the world is fourth largest fatal risk with 10.1 % of annual deaths globally. It will not be wrong to assert that Air pollution has become one of biggest public concern in India, especially in Delhi. Delhi, being the capital of the country; has all the influential agencies, departments, change makers, research institutes, laboratories and the right infrastructure etc. However, when it comes to air quality of the city it is getting worse year after years. The city and its peoples are vulnerable towards varied health risks and many health practitioners have terms this as "A Medical Emergency". Here from these observations or findings these questions arises that, are we really moving towards the right development practices or are these environmentally responsible development practices. Air pollution has huge implication but the major implication will be sufficed here.

Know the air quality in your area

Air Quality Index	Levels of Health concern	Possible Health Impacts
0-50	Good	Minimal impact
51-100	Satisfactory	Minor breathing discomfort to sensitive people
101-150	Moderate	Breathing discomfort to the people with lungs, asthma and heart diseases
151-200	Poor	Breathing discomfort to most people on prolonged exposure
201-300	Very Poor	Respiratory illness on prolonged exposure
301 to 500	Severe	Affects healthy people and seriously impacts those with existing diseases[1]

FACTORS IMPEDING AIR POLLUTION

The city which is surrounded by other states wherein largely during winters farmers perform stubble burning activities. That is one of the reasons for the deterioration of the air quality of the city, but there many other factors which the city has itself. Delhi, being one of the densely populated cities in the country and it is also one of most polluted cities in the world. Due to rapid increase in urban emission through vehicle, waste burning in the city, dust from construction activities and burning crackers during Diwali and use of diesel generator sets during functions and power cut off are the major factors that augments air pollution in the city. However, the government has taken some measures by banning the purchase of crackers during Diwali and the use of diesel generators but still day by day the quality of the air in the city is being deteriorated and it is causing diverse health problems for children, adults and to allergic patients. The air quality data of last few months clearly depicts that there has been a significant rise of Particulate matter in Delhi air, The PM level in air has increased more than 10 times of pm 2.5 while compared with the safe limits. Government is consistently trying to minimize the air pollution through "Odd-Even policy" or by encouraging people more towards using public transport like metro, bus or car pool sop that the pollution level can be controlled to an certain extent and we are hopeful that by mid December the air quality will be improved.

Air pollution has the direct relationship with the loss of economy and health like the other pollutions. There are varied impacts of Air pollution on people those are discussed below:

Health loss – Air pollution had led to an exponential rise in number of chronic respiratory disease, cardiovascular diseases, increased number of Asthma attacks has been recorded in the past few years. As per WHO reports more than 1 million people died due to air pollution, it is the fifth killer in the country. The death toll due to pollution has increased exponentially over the years from 80, 0000 in 2000 to 3.2 million in 20122. In Delhi itself, 10,000 to 30,000 people lost their life due to Air pollution annually. The poor quality air also led to damages irreversibly of the lungs of 2.2 million or 50 percent of children's and it has posed a serious threat to their life and well-being. As per Lancet commission on pollution and health reports, clearly depicts that approximately 19 lakhs people die prematurely every year due to indoor and outdoor air pollution[3]. In another study done by Indian Journal of Pediatrics shows that the children's who are raised in polluted environment like Delhi have 10% smaller lungs compared to those who grow in US.

Economic loss : As per the World bank report, 2013 shows that the Air pollution and other environmental degradation has costs India $80 billion per year, which is about 5% of the country's GDP. In India, air pollution also led to loss of labour output, which reported loss of 8.5% of its GDP in 2013[4].

Due to the bad quality of air, measures to safeguard the health and environment are often considered economic spoilers. As the spending gradually, increases wherein people are compel to install air purifier in their homes. Often people have respiratory health problems and allergic reactions due to poor quality of air and often they have to made visits to the doctors. As per the World Bank report, the estimate cost of Air pollution globally is $5.11 trillion in terms of the welfare losses incurred due to air pollution. All of these puts an economic burden on the family and their and this has a negative impacts on their savings. So, overall the daily household economy especially middle class income group is getting affected due to air pollution, the money that can otherwise be used as a savings people are forced to use that in order to ensure the safety of the families' health.

1 Central Pollution Control Board, Ministry of Environment, Forests and Climate Change Report. http://164.100.160.234:9000/

2 http://www.firstpost.com/india/air-pollution-causes-30000-deaths-annually-in-delhi-fifth-leading-cause-of-death-in-india-2547278.html.

3 http://www.thelancet.com/commissions/pollution-and-health.

4 https://www.ft.com/content/0a89f3a8-eeca-11e2-98dd-00144feabdc0.

SUGGESTIONS TO TACKLE AIR POLLUTION:

Urban emission can be curbed by persuading the people to move from conventional sources of energy from fossil fuels and it is important the clean form of energy. India's economic energy needs is required to be remodeled through investment more on the clean and renewable sources of energy like solar, wind, etc. In addition, it is important to raise the level of energy efficiency through investment in building retrofits and by making industries efficient. Apart from these the Supreme Court of India has directed Center and State Governments of NCR to adopt certain measures in order to curb air pollution in Delhi, those are as follow:

- Uttar Pradesh to set up 14 and Haryana 35 air monitoring station
- Formulate a plan to introduce battery-operated vehicle
- Upgradation of Burari vehicle testing center.
- Installation of weight-in-motion machines to check overloading at entry points to Delhi.
- Procurement of 10,000 old buses.
- Augmenting metro services to carry more passengers.
- Prepare public transportation plan for NCR.[5]

TIPS TO REDUCE IMPACT OF AIR POLLUTION:

- Try to stay indoors. Go out when it is bright and sunny.
- Avoid stepping out if you have breathing difficulty.
- Keep children indoors as much as possible and wear N95 masks while going out.
- Avoid smoking. Do not burn garbage.
- Drink adequate amount of water as it helps in flushing toxins from the body.
- Avoid strenuous activity, as they may lead to inhalation of minute pollutants.
- Eat fruits that are loaded with vitamin C, magnesium and omega fatty acids. These fruits are rich in antioxidants and anti-inflammatory compounds and helps in boosting immunity.

5 https://timesofindia.indiatimes.com/city/delhi/sc-wants-10000-buses-in-city-by-next-yr/articleshow/62060121.cms.

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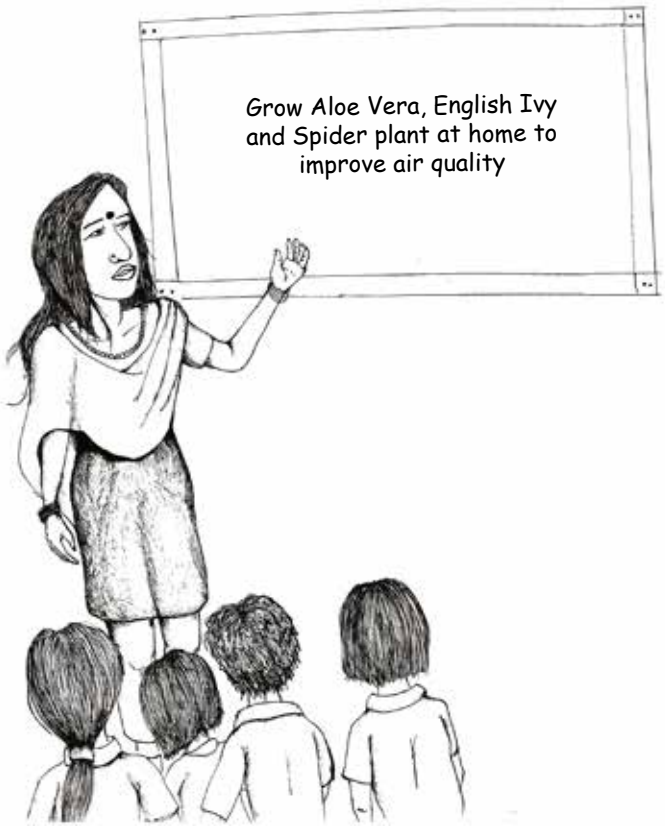

"SWACHH KOLKATA - ARE WE REALLY WORKING TOWARD IT??": PUBLIC LECTURE IN KOLKATA

Solid Waste Management has become one of the major challenges in the state of West Bengal. With high annual growth in urban population and rapid pace of urbanization the situation is becoming more and more critical with the passage of time.

Kolkata city now generates three times more Municipal Solid Wastes (MSW) than it did in 1981 because of increasing urbanization and changing life styles. The rate of increase of MSW generated per capita is estimated at 0.75 to 1.25% annually. An average household in the city generates approximately 1.5 kg of MSW per day, leading to around 5,400 tonnes of MSW generation for the entire city and it is estimated that this will grow to 8805 Mt per year by 2035.

With this backdrop, Toxics Link in collaboration with Birla Industrial &Technological Museum (BITM), organized a Public Lecture on "Swachh Kolkata - Are we really working toward it??". Mr. Sanjoy Mitra, Chief Engineer, Kolkata Municipal Corporation (KMC), Ms Sharmistha Kundu, Sr. Environmental Engineer, WB-PCB and Md. Shafakat Alam, Jt. Secretary, Tiljala Shed were among the eminent speakers. The discussion points were to work with schools & KMC on awareness generation and placing proper waste management systems, steps to eradicate open defecation problems in the city, steps taken to protect East Kolkata Wetlands from the pollution of Dhapa landfill, change of land use of East Kolkata Wetlands for waste dumping, recognition of waste pickers by Govt. bodies.

OYE AMBALA! A PROJECT ON BIO – MEDICAL WASTE MANAGMENT IN AMBALA

Ambala, a city that scored 308th rank out of 438 cities under the Swachh Bharat survey in 2017 needed much attention to be a smart city. The need of the hour was to inculcate better waste management practices in the city. To solve the issue of Waste segregation a project was initiated by Municipal Corporation, Ambala for strengthening the Municipal Solid Waste & Bio-medical waste management system in the city.

OYE! Ambala is an awareness campaign initiated by the Municipal Corporation, Ambala for strengthening the Municipal Solid Waste & Bio-medical waste management system. Recity Network Pvt. Ltd. is the organization implementing the program and the Bio Medical Waste Management vertical was managed by Toxics Link. Bio-medical waste being highly infectious needs to be managed separately. Bio-medical Waste Management Rules 2016 has certain provisions that the waste generator. (the hospital) and the waste collector (Common Bio-medical waste treatment facility) needs to abide by.

The purpose of the project was to achieve environmentally sound management of medical waste by preventing it from mixing with the municipal waste in the city of Ambala, Haryana state.

To understand the current scenario of medical waste management, Toxics Link planned and conducted a series of activities which started from a baseline study in a total of 14 healthcare facilities, capacity building programme for Doctors, nurses and ward boys. Capacity building programme was aimed at creating awareness on Bio- medical Waste Management Rules 2016 and its implementation among the health care staffs. These programmes reached out to almost 240 participants from 88 healthcare facilities.

The team further visited 22 hospitals to provide on-ground solutions to many of their issues and to implement an efficient Bio-medical waste management system. We reached out to almost 494 healthcare staff members including, doctors, nursing and cleaning staff. On the spot training sessions were conducted in many locations throughout the hospital.

The impact of the capacity building programmes and the implementation was clearly visible. Many of the hospitals procured/created infrastructure suitable for their facilities. A huge improvement was observed in the attitude of the waste collection and cleaning staff. After their sensitization they were more active in the process and were always using Personal Protective equipments. They also took interest in teaching their fellow staff on following the right practices.

"OVER 73 PER CENT OF PAINTS FOUND TO HAVE EXCESSIVE LEAD: STUDY"

Source: The Times of India, New Delhi Oct 30, 2017

More than 73% of household decorative paints, collected from several regions across the capital, were found containing exceedingly high levels of lead content in a recent study conducted by Toxic Links - a Delhi-based NGO in association with International POPS Elimination Network (IPEN). Findings are alarming as lead — exposure to which is known to harm a child's brain development and cause behavioral change in kids — at high levels of exposure can do irreversible damage to the brain and central nervous system. The study also found that most of the violations were in the paints produced by small and medium scale enterprises (SMEs).

Overall, 11 out of 15 paints from 13 different brands that were analysed, contained exceedingly high lead levels. The can labels of these 11 paints also did not have any consumer information about lead content.

Read More: https://timesofindia.indiatimes.com/city/delhi/over-73-of-paints-found-to-have-excessive-lead-study/articleshow/61327095.cms

ALREADY POLLUTED RIVER BRACES FOR YET ANOTHER ONSLAUGHT" PUBLISHED ON OCT 26, 2017.

Source: The Times of India, New Delhi, Oct 26, 2017

City ghats are all decked up for chhath puja: while extensive preparations have been made to ensure that devotees face no hardships, environmentalists are having sleepless nights over what it could mean for the already fragile river. Immersions during Ganesh Chaturthi and Durga Puja had led to pollution levels soaring at Yamuna. The National Green Tribunal had taken civic bodies to task over semi-dissolved idols and puja material being strewn all over the banks. Immersions during Ganesh Chaturthi and Durga Puja had led to pollution levels soaring at Yamuna. The National Green Tribunal had taken civic bodies to task over semi-dissolved idols and puja material being strewn all over the banks.

As devotees prepare to enter the Yamuna to offer prayers to the Sun God, similar fears are being expressed, even as experts say that foam in the river already testifies to the poor quality of water post-immersion last month. The Delhi government has declared a holiday on the final day of the three-day festival, which sees devotees entering the water and offering 'Arghya' to the setting sun.

Read More: https://timesofindia.indiatimes.com/city/delhi/already-polluted-river-braces-for-yet-another-onslaught/articleshow/61231458.cms

"POLLUTION PANEL TO GET CRACKING ON RS5,000 FINE FOR GARBAGE BURNING

Source: Hindustan Times , New Delhi, Oct 23, 2017

You might have to shell out Rs 5,000 if officials from the civic agencies or pollution control bodies catch you burning garbage, the Supreme Court-empowered Environment Pollution Control Authority has warned. In 2015, the National Green Tribunal had directed authorities to levy a fine of Rs 5,000 on anyone found burning garbage in the open. The order had rarely been implemented to date.Garbage burning is one of the major contributors to pollution in Delhi. The city produces nearly 10,000 metric tonnes of municipal solid waste daily, most of which directly lands at already exhausted landfills. EPCA members, in a meeting last week, said the penalty would now be strictly implemented now as the Graded Response Action Plan to control very poor and severe air pollution in Delhi and NCR has come into force from Tuesday. The plan is being enforced for the first time and would remain in effect till March 15, 2018.

Read More: http://www.hindustantimes.com/delhi-news/pollution-panel-to-get-cracking-on-rs5-000-fine-for-garbage-burning/story-L58rZth33A7c3hGGByJYmO.html

GARBAGE CRISIS: INDIA'S URBAN AREAS MUST REDUCE, RECYCLE, RETHINK

Source: Hindustan Times, New Delhi, Sept 13, 2017

When you throw something away, said Annie Leonard, a 'critic of consumerism', it must go somewhere. That somewhere — overburdened dumpsites stinking and fuming on the outskirts of our cities — cannot hold anymore.

India's urban population is growing at 3-3.5% annually. At this rate, the waste generated by Indian cities is expected to increase by 5% every year, estimates

the Centre for Science and Environment (CSE). By the government's own calculation, by 2047, the country will have to find land the size of Delhi every year to dump garbage.

That is an impossibility in an increasingly urbanised and crowded India, which is fast running out of space. Landfills, or even incinerators, are anyway a civic, environmental, public health hazard nobody wants in their backyard.

Read More: http://www.hindustantimes.com/india-news/urban-areas-in-india-must-reduce-recycle-rethink/story-bPhdHt7rVt-GP3ADFhcVKyI.html

MOEF TO PHASE OUT MORE POLLUTING CHEMICALS

Source: Deccan Herald, New Delhi, Sept 10, 2017

India has begun the process of eliminating seven extremely harmful chemicals almost eight years after the world agreed on their phase out under the Stockholm Convention.

The Union Ministry of Environment and Forest came out with a draft proposal to remove these seven chemicals from the industry.

It would be done in the same manner as followed earlier to wipe off another 12 persistent organic pollutants.

Four out of the seven chemicals are brominated flame retardants used mainly in the electrical and electronic industry; two are found in the insecticide industry and the remaining one is an industrial solvent.

They are among the persistent organic pollutants that can stay the environment for years with damaging consequences.

Removal of the POPs from the environment is an international exercise under the Stockholm Convention that began in 2004 with 12 chemicals, popularly known as the "dirty dozens". India ratified the convention in 2006 and banned these chemicals with some exceptions.

Read More: http://www.deccanherald.com/content/632463/moef-phase-more-polluting-chemicals.html

GHAZIPUR LANDFILL COLLAPSE: MERE SHIFTING OF SITE WON'T END AIR POLLUTION, DISEASES; SCIENTIFIC DISPOSAL ONLY WAY OUT

Source: First Post, New Delhi, Sep, 06 2017

Shamima is happy with the Delhi Lieutenant Governor's decision to ban the use of the landfill site near her home in Mulla Colony in the capital city's Ghazipur area. The stinking heap of garbage with the shape of a hillock as high as a five-storey building is the reason behind her misfortunes. She got infected by tuberculosis thrice during her teenage and lost two valuable academic years. All of her friends are studying in college now while the 19-year-old is still struggling to pass 9th standard with her frail health.

"If the garbage dump is removed from here, I hope none in Mulla Colony would be struck by misfortunes like me," she said. But she knows that the order banning the landfill site can do nothing to recover the loss she has already incurred in her academic career.

Read More: http://www.firstpost.com/india/ghazipur-landfill-collapse-mere-shifting-of-site-wont-end-air-pollution-diseases-scientific-disposal-only-way-out-4014855.html

HOW E-WASTE WORKERS IN DELHI JEOPARDISE THEIR HEALTH TO EARN A LIVING

Source: Indian Express, New Delhi Sep 4, 2017

In 2001, a shop in Ooty in the Nilgiri mountain range was fined Rs 1,000 for disregarding a ban on plastic. News reports from that time talked of a "panic reaction" through the marketplace. In reality, it was not just a fine that made Nilgiris "plastic free", but a "people's movement" that ensured environmentally unfriendly habits along with the seized plastic bags lay buried in a nearby dumping yard.Sixteen years later, the National Green Tribunal on August 10 called for a complete ban on "plastic carry bags" smaller than 50 microns in Delhi's markets. In Delhi, a 2014 study by the NGO Toxics Link found that the maximum usage of plastic bags was to carry vegetables, fruit, meat and fish and they were used because they were convenient, easily available and cost-effective.

Read More: http://indianexpress.com/article/explained/in-fact-hard-to-delhi-plastic-ban-harder-to-dispose-4827150/

GANESH CHATURTHI: IDOL IMMERSION THREATENS TO CHOKE YAMUNA AGAIN"

Source: The Times of India, New Delhi, Sep 1, 2017,

The immersion of idols after Ganesh Chaturthi will reach a peak on Anant Chaturdashi on September 5, but with visarjan taking place at specific intervals during the 10 days of the festival, the Yamuna is already starting to show the effects of idols made of plaster of Paris or covered in lead-based paints being released into its water. At a number of ghats around the capital, the river water has turned distinctly foamy, and the problem is likely to become worse after Anant Chaturdashi.

Read More: http://timesofindia.indiatimes.com/city/delhi/no-idol-threat-this-immersion-threatens-to-choke-river-again/articleshow/60315207.cms

"MINAMATA CONVENTION COMES INTO FORCE, INDIA YET TO RATIFY IT "

Source: live mint, New Delhi, Aug 17, 2017

The Minamata Convention, a global treaty to protect human health and the environment from adverse effects of mercury, took effect on Wednesday, but India has missed the bus for now. Although India is a signatory to the convention, it is yet to ratify it and that would close the doors for any technological and financial assistance for now.The first Conference of the Parties (CoP) under the Minamata Convention is scheduled to take place in Geneva, Switzerland next month (24-29 September).In October 2013, at a conference in Kumamoto (Japan), the convention was formally adopted. It was a global, legally binding treaty.Mercury is considered by experts to be one of the most toxic metals known.

Once released into environment, mercury bio-accumulates and bio-magnifies up in the food chain, and easily enters the human body and impacts the nervous system. The treaty aims at protecting human health and the environment from its adverse effects.

*Read More: http://www.livemint.com/*Politics/2MFJYzIbR9mXUpZOtrYNZM/Minamata-Convention-comes-into-force-India-yet-to-ratify-it.html

" WHY E-WASTE WILL CONTINUE TO FLOW INTO CITY"

Source: The Times of India, New Delhi, Aug 3, 2017.

With the Centre planning to reconsider targets given to companies for collecting e-waste from consumers and recycling them, tonnes of e-waste may continue to pollute waterbodies, groundwater and soil in informal recycling hubs like Moradabad, Saharanpur, Delhi and other smaller towns. The targets for collection and recycling — as specified in the e-waste rules 2016 — were to be implemented from May.Central Pollution Control Board (CPCB) officials told TOI that industry bodies met environment ministry officials and the revision of e-waste collection targets was being considered by the ministry. At present, CPCB has been implementing the e-waste rules for companies authorised by the board.

Read More: http://timesofindia.indiatimes.com/city/delhi/why-e-waste-will-continue-to-flow-into-city/articleshow/59888609.cms

IT'S A LOSING BATTLE AGAINST PLASTIC

Source: The Times of India, New Delhi, Aug 3, 2017

National Green Tribunal (NGT) may have rapped the Delhi government recently for not implementing the ban on plastic crockery, but the issue of plastic waste is anything but new and is unlikely to get resolved till a long-pending case is decided.

While the Delhi government has not promoted or subsidised alternative jute or cloth bags that could have brought a shift in consumer behaviour, officials say plastic manufacturers' plea against a ban on sale, storage and use of both 'thin' plastic bags and use-and-throw crockery have been pending in NGT itself.

According to a government notification in 2012, "no person, including a shopkeeper, vendor, a wholesaler or a retailer, trader, hawker or a rehriwala shall sell, store and use plastic carry bags for supply of any goods". It also banned manufacture, storage, import, sell or transport of "any kind of plastic carry bags (including polyproplyne, non-woven fabric ones)". But two manufacturers soon moved the Delhi high court and got a stay on the notification. Last year, the high court sent the case to NGT.

Read More: https://timesofindia.indiatimes.com/city/delhi/its-a-losing-battle-against-plastic/articleshow/59888554.cms

RESOURCES

SHORT CHAIN CHLORINATED PARAFFINS, DECABROMODIPHENYL ETHER AND HEXACHLOROBUTADIENE FACTSHEET -

Toxics Link published a factsheet on Short Chain Chlorinated Paraffins, Decabromodiphenyl Ether And Hexachlorobutadiene. These chemicals are introduced in Stockholm Convention.

Short Chain Chlorinated Paraffins are found in Plasticizers (flame retardant properties) in plastics (PVC), rubbers, paint & sealants, Flame retardants in textiles, Lubricants in metal cutting fluids, Leather production and PVC production.

Deca BDE uses in electric and electronic components like Housing and TV internal components, Mobile phone sets and fax machine parts, Communication cables, Components for scanner, printing and photocopy machines and Light sockets and decorative lights. Deca BDE uses in Textile sectors like Furnishings and upholstery like sofas, office chairs, Manufacturing curtains and Tents.

HCBD is used in solvent for rubber &amp, other polymers, Transformer liquid in heat transfer fluids, Hydraulic fluid & washing liquor for removal of hydrocarbons from gas streams Manufacturing processes of aluminium and graphite rods.

WASTE SEGREGATION POSTER

Toxics Link published a poster on Bio – Medical Waste Segregation to disseminate knowledge and awareness to the healthcare fraternity about the waste segregation according to the color coding as per the Bio-Medical Waste Management Rules 2016.

TRAVELING FILM FESTIVAL- "QUOTES FROM THE EARTH"

Along with the biennial "Quotes from the Earth", Toxics Link also organises travelling film festival at cities, towns and remote locations of our country. The purpose is to provide a platform for local residents/institutes to connect their surrounding issues with that of larger global environmental concerns, to further enhance awareness and strengthen the policy advocacy initiatives at all levels. The travelling film festival is organised with support of local civil society organisations or schools or any other environment based institution. If you are interested in organising "Quotes from the Earth" in your area, please write to us or call us at our office numbers.

PHASING OUT BPA!

It's almost impossible to find a product that does not have synthetic chemical added into it, and one of them is the commonly used baby feeding bottle containing the chemical BPA in it. BPA or Bisphenol-A found in baby feeding bottles play the role of Endocrine Disruptive Chemicals (EDCs) that are capable of harming infants and newborn babies. Many countries have banned it as a precautionary measure. Toxics Link has been campaigning against the chemical and released a lab tested report titled "Bottles can Be Toxic" that received considerable attention from all stakeholders including the media. The report was also discussed during winter session of the Indian Parliament. Currently, we are having dialogues with Bureau of Indian Standards to completely phase out BPA from India. Join us in our campaign against BPA.

TOXICS LINK LIBRARY-A TREASURE HOUSE OF KNOWLEDGE

The library of Toxics Link houses a variety of books, magazines and reports which are well-stocked, classified and indexed, for the benefit of the readers. One can also get the entire collection of around 520 documentary films from around the world on various issues concerning environment. It has over 4900 books and research based reports; and new books, magazines and periodicals are added from time to time. One can also find media coverage on environment that are updated on a regular basis. Besides, the library also has stock of parliament questions that are raised on the research based studies on environment done by Toxics Link. The readers can find all the studies done by Toxics Link on its website.

TOXICS ALERT (E-NEWS)

An environment news bulletin

Visit: http://enews.toxicslink.org/, for our monthly e-newsletter on environment related news, articles, policy interventions, events on toxicity and its management. You can also subscribe to receive its update via e-mail.

Edited by: Aastha Elawadhi

KEEP YOUR HOSPITALS CLEAN & GREEN WITH TOXICS LINK

The Clean & Green Hospitals (CGH), an initiative of Toxics Link, in association with STENUM Asia Sustainable Development Society, is aimed at supporting and facilitating health care facilities in the country to provide environmentally sustainable healthcare to the masses. It also offers handholding support for hospitals to implement its suggestions which includes capacity building of internal resources. Besides, CGH has an array of training and awareness materials meant at aiding the process of greening the hospital. Please write to us or call us to get detail information about the support that we provide.

Toxics Link

for a toxics-free world

STAY CONNECTED

For more information materials, invitations and updates on environmental issues please write to us at info@toxicslink.org

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