



NAVIGATING THE NEW NORMAL: HAND SANITIZERS

ABOUT HAND SANITIZERS

Hand washing using soap and water is not possible every time. Often, it becomes difficult to maintain hygiene especially when you are travelling or are too busy to leave your place. In such cases, having a hand sanitizer is always a smart and handy option. Therefore, hand sanitizers are increasingly being adopted as an instant alternative to soap and water for reducing the chances of hand contamination and to prevent the spread of microbial infection. Hand sanitizers can be categorized into two types based on the active ingredient, namely, alcohol-based and non-alcohol based. Alcohol-based sanitizers are potent to kill the microbes effectively when used externally. They contain varying amounts of alcohol, usually isopropyl alcohol (isopropanol), ethanol (ethyl alcohol) or n-propanol, often between 60–95%.¹ Non-alcohol-based sanitizers include antiseptics like antimicrobial agents or benzalkonium chloride.² The World Health Organization (WHO) has published guidelines for manufacturing hand sanitizers using readily available chemicals. It suggests that the formulations should include glycerol (to prevent dry skin), hydrogen peroxide (to remove bacterial pores) and distilled water in addition to alcohol (ethanol or isopropanol).³



The **global hand sanitizer market size in India** is poised to grow by **USD 405 million** during 2020–2024



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As we approached the end of 2020 there was hope and optimism in looking ahead towards restoration of some normalcy in our lives but having gone past the anniversary of the pandemic in India things seem to be going downhill again. The pandemic is on the upswing again with multiple strains infecting communities clearly pointing towards a second wave and it's anybody's guess how things are going to turn out. At this juncture it is critical for all of us to be mindful of the threat it poses and the need to adopt Covid-appropriate behaviour that includes wearing of masks, maintaining social distance, hand-washing and use of sanitizers. Mask and a bottle of sanitizer are our new accessories now.

Sanitizers are now easily available all across the country and in varying price ranges and over the counter without much control or adequate information of the ingredients used or their efficacy. It's a difficult choice for the customers and most people are happy to be using the liquid. Hand sanitizer was earlier also available in markets but largely being used in hospital settings or amongst a select section of informed citizenry for maintenance of personal hygiene. Sudden and excessive demand triggered by COVID-19 has resulted in relaxing the norms for its licensing and enforcement of regulatory mechanism in the hope

that businesses will adopt self-regulation and ethical practices in its manufacture and sale. Some of these sanitizers also use toxic chemicals in their manufacture that needs to be regulated since these are products that are used to sanitize our hands and most of us could ingest these chemicals while consuming our food. WHO has issued guidelines clearly mentioning the ingredients that should go into preparation of safe and effective hand-sanitizers and now it's for governments and respective agencies to ensure that the provisions of the guidelines are implemented. This product is in its widest possible use currently and people place immense faith in its efficacy and have a sense of assurance against infection by the virus. We need this assurance to be maintained by placing a mechanism to weed out spurious products and also mandate the list of ingredients, storage protocol and shelf life to make it convenient for customers to pick an efficacious and safe product to protect themselves. My personal preference though will always be hand washing.

While the pandemic has had multiple impacts all around we do realise that the environment has been in a healing mode on account of slowdown of industrial and human activities. However as economic activities pick up pace this short-lived healing will end and soon we might be back to previous levels of environmental pollution. Yet there is so

much to learn about how citizens are coping and adapting to the new normal situation and also the role of media in reaching out with necessary information on safety measures and public behaviour. It is indeed heartening to notice that most people today are using cloth masks that do not require to be disposed after single use, I am extremely happy to notice this collective behaviour change and the ease with which most have adapted to this change. We were so apprehensive of masks and gloves being thrown and disposed in garbage dumps or on street corners but it is a big surprise that it has not happened. Economics of reuse appears to be a critical driver for this collective behaviour change and we can take this learning into other aspects of material use and waste minimization. There is a need to study all waste streams to get a better understanding of how COVID-19 impacted waste generation all around us and the lessons to be learnt.

We look forward to be with you more regularly and keep you informed on developments in the environmental space.

Satish Sinha

Associate Director, Toxics Link

HAND SANITIZER MARKET IN INDIA AND ITS GROWTH AMIDST COVID-19 PANDEMIC

The trend of using hand sanitizers picked up in the US and European countries almost a decade ago; however, they have been in use in India only for the past four to five years. In the beginning, the gel-based hand sanitizers formed a major segment of the Indian hand sanitizer market and they were looked upon as cosmetic or luxury products. The gel-based formulation easily spreads on the palms and between fingers. Moreover, it also allows the sanitizer to dry quickly and prevents any sticky feeling on the hand after use. The changing socio-economic scenario and increasing westernization and urbanization in India has led to a shift in several personal care products, one of which is hand sanitizer, from initially being a luxury product to an essential item now. The endorsement from the WHO and government recommendations for hand sanitizers have boosted the demand



for sanitizers in India like never before across the diverse end-user segments, amidst the COVID-19 pandemic. The global hand sanitizer market size in India is poised to grow by USD 405.31 million during 2020–2024. Smaller players have also jumped in to exploit the surge in demand following the COVID-19 crisis, and in March, close to 61% of the market was captured by the newly launched, mostly local brands.

REGULATIONS AND REGISTRATION PROCESS

Hand sanitizers are considered as over-the-counter (OTC) drugs and

not categorized as cosmetics if they contain ethanol or isopropanol as an active ingredient. Under the Drugs and Cosmetics Act (DCA), 1940, the license to sell/ manufacture/distribute hand sanitizers in India has to be obtained from the Licensing Authority as prescribed by the Government under the Drugs and Cosmetic Rules, 1945. In India, the Central Drugs Standard Control Organisation (CDSCO) at the national level and State Drug Control Organisations at the state level have the authority to issue drug licenses. After the applicant has submitted the license application form to the state drug licensing authority, it will scrutinize the form and the District Coordination Officer (DCO) will inspect the organization and ensure that it complies with all the requirements. After the verification and inspection, the DCO will forward the report to the Senior Drug Control Officer (SDCO) of the zone for granting the license. The report of SDCO will be forwarded to the respective State Drug License Authority, and, if the authority finds no discrepancy in the report, then it

will issue a drug license to the applicant. Approximately, 30 days are required for the issuance of a drug license. When the hand sanitizers are sold as cosmetics, the manufacturer should not make any drug claim on it. For example, there should not be a claim on the label that the hand sanitizer kills germs, as it implies that the product is for medicinal purpose and not for cosmetic application. The definition of 'drug' under DCA is broad and covers all the substances that are intended for the prevention of diseases in human beings. If any such drug claim is made on the label of a cosmetic, then it may invite strict regulatory action under DCA.⁴ The license guidelines also clearly state that the drug facts label should state the composition of the product under sale. All the OTC drugs must list the date of manufacture and expiry confirming its stability and safety for use. It is also advisable to write about storage conditions and appropriate warnings, in view of the high concentration of alcohol in sanitizers.

SPURIOUS SANITIZERS AND HEALTH IMPACTS

The sale of commonly used active ingredients in hand sanitizers like ethanol is strictly regulated in India and it is not possible to obtain it without an alcohol permit. Although synthetic alcohols are available, they are very expensive. To overcome these problems, some manufacturers avoid using ethanol and instead use toxic methanol or methyl alcohol as a replacement. The WHO guidelines do not permit methanol as an ingredient in the hand sanitizers. Methanol has a much narrower range of safety compared to ethanol and

isopropanol though the price is half as compared to ethanol. Methanol is highly flammable and toxic and used in automotive antifreeze, rocket fuels and as a general solvent. Exposure to methanol can result in nausea, vomiting, blurred vision, permanent blindness, seizures, coma or even impair the central nervous system.

As a result of the growing demand for hand sanitizers in India, back-alley operators have begun peddling spurious hand sanitizers, which carry fake labels or are diluted with coloured liquids. These malpractices can have serious health impacts. Some companies are even making scented sanitizers, which are likely to be loaded with toxic chemicals and do not disclose the ingredients that make up their secret scents.⁵ Synthetic fragrances contain phthalates⁶, which are endocrine disruptors that emulate hormones and could alter genital development. State drug control departments have also reported that some small players have turned to sourcing low quality ingredients for manufacturing sanitizers with harmful impurities such as benzene and toluene among others which can damage skin and do more harm than relief.⁷

REGULATORY CHALLENGES IN INDIA WITH SOME CASE STUDIES

Given the excessive demand for sanitizers due to the COVID-19 pandemic, the Union government included sanitizers in the Essential Commodities Act, 1955 in March till 30th June 2020. The Union Ministry of Consumer Affairs instructed the state governments to ramp up the production of hand sanitizers on a priority basis to meet the growing demand. The ministry also allowed sugar mills and distilleries to manufacture sanitizers for three months. The state food and drug administration departments were asked to issue licenses within three days of receiving the application. The Union Ministry of Ayush (Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy) allowed Ayurvedic medicine manufacturers to produce hand sanitizers as well.⁵ Further, in its July 2020 notification, the Ministry of



Health and Family Welfare exempted hand sanitizers from the requirement of license for its stocking or sale under DCA, intending to make the product more widely available to the public amidst the pandemic.⁸ The license exemption order for hand sanitizers was issued by the government despite a large number of chemists in the country urging the government to not exempt the product from licensing norms.⁹

Although enough fervency was shown in removing all possible bottlenecks for manufacturing, not much attention was paid to oversight and control. In the rush to meet the growing demand, the regulators ignored the usual safety standards and approval mechanisms for sanitizer manufacturing. The hasty approvals and announcements by both central and state governments led to a wide range of ineffective and toxic hand sanitizers flooding the market.¹⁰ As per rules, if an application for a sanitizer license is made, the process generally involves inspectors from the state and central drug authorities and compliance with Schedule M, a clause in the DCA on good manufacturing practices. But now, the licenses are issued soon after a license fee is deposited, without any inspection of the premises. The manufacturers had to just assure the authorities that they had enough infrastructure and manpower to produce sanitizers.⁵ To encash the easy money-making opportunity, many cosmetic companies also entered the sanitizer market. Thus, many new products sold in the last few months bypassed the rigorous testing processes and licensing requirements. Over 75% of the market is now cornered by non-drug



manufacturing companies.⁵ According to DCA, non-pharma companies can only describe their products as hand-rubs or hand-cleansers and not sanitizers. But based on the reports from the food and drug administration of various states, many are flouting the rules, creating a false illusion of security for millions of users. For example, nearly 50% of 122 hand sanitizers tested in Mumbai and Thane were adulterated according to a scientific study by the Consumer Guidance Society of India, the oldest consumer body in the country. Many spurious sanitizers were also confiscated in states like Punjab, Haryana, Andhra Pradesh, West Bengal, etc.¹¹ In India, the government has found sanitizers carrying over-hyped claims of killing 99.9% germs, incorrect label details and contravention of rules under DCA. The vendors were found to be selling medicinal sanitizers despite obtaining cosmetic licenses and selling products without obtaining any manufacturing and marketing license. Some of the opportunists were also found to be selling similar products under deceptively similar brand names.

CONCLUSIONS AND RECOMMENDATIONS

It is of utmost necessity that the government should set higher regulatory standards for hand sanitizers concerning the quality of ingredients and the manufacturing conditions. No specific guidelines regarding the hand sanitizer composition are available on the CDSCO website. Instead, only an image of a document is available stating examples of formulations of hand sanitizers and surgical disinfectants.¹² In the market, many of the sanitizers are being marketed in the name of Ayurvedic hand sanitizer without adequate checks and balances. Nevertheless, the top authoritative books of Ayurveda mentioned in the schedule under the Drugs Act, including Charak Samhita, never mention hand sanitizers or surface disinfectants.¹³ Alarming, there is no data in the public domain on the manufacturers that are registered to produce hand sanitizers so that people can differentiate between genuine and fake products.

Therefore, the food and drug administration should strengthen surveillance in all regions and conduct frequent quality checks to control the

sales of poor quality hand sanitizers. The testing standards should be improved, especially for ayurvedic and cosmetic hand sanitizers. The usual procedure for drug licensing was relaxed by the Consumer Affairs Ministry in its March notification. What started as a stopgap measure amidst the COVID-19 pandemic has become the norm and many non-pharmaceutical companies have entered the sanitizer market. Nowhere in any of the notifications of the ministry was it made clear whether the usual tests and raids should be conducted in the new fast-tracked approval process. With the license exemption order for selling or stocking of hand sanitizers in India, there will be no control over the quality of sanitizers and they will be available at every nook and corner, thereby putting the health of common citizens in great danger in this COVID situation. It would be cumbersome for drug regulators to ensure the quality of such products, which is crucial in this pandemic period. The high possibilities of a rise in substandard or impure sanitizers defeat the purpose of avoiding COVID-19 infection.

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FOOD WASTAGE IN INDIA

WHERE WE WENT WRONG?



Food wastage is defined as the wastage of food which goes unconsumed due to abundance or expiring of food products. It is estimated that globally, one third of the total global food production goes to waste which amounts to roughly 1.3 billion tons per year.

In India, according to a study by UNDP, roughly 40 % of food is wasted which equates to roughly 92,000 crores INR. Sadly, this is happening when 14% of our population remains undernourished, i.e. they don't have access to nutritious food. Even though India ranks 94th among 107 countries in the Global Hunger Index, those 14% people, considering India's vast population, stand at a huge number of 189 million people which is almost equal to the population of Russia or Mexico. Speaking on the environment front, this amount of food wastage leads to 3.3 million tons of global greenhouse gas emissions. The farm-to-table process for any food preparation requires abundant resources predominantly (water and fossil fuel) which is wasted along with the food being thrown away. Discarded food waste which ends up in the landfill, during decay, produces Methane, a potent greenhouse gas, which can trap more heat than carbon dioxide, contributing to global warming.

Grossly, a lot of factors go behind the huge amount of food waste. In India, only 10% of total produce gets stored in the cold storage. Lack of proper storage facilities leads to crops being laid out in the open where they are contaminated by rodents, insects, pollutants etc. Poor agricultural practices, changing soil

topography, excessive use of pesticides, water scarcity at times leads to a harvest, which is either of poor quality or is not consumable. This sort of waste that happens during the early stages is known as food loss.

On a day-to-day basis, the major source of food wastage is considered to be weddings/public gatherings, followed by restaurants and cafes. At any given point of time, the majority of food prepared during weddings and celebratory events ends up in the dustbins. Another major upcoming source is the lifestyle most of us are leading today. Technology today has led people to order and store more than they consume. Various market giants have brought over the grocery experience to our laptops and phones and the alluring pictures make us "experiment" over new things and those never ending "offers" which prompt us to keep adding products to our carts which subconsciously becomes a common part of our daily shopping experience. We often overorder, ignoring the shelf life of products, and ultimately end up throwing away those products.

A typical human body can enjoy food till the time the hypothalamus does not activate the satiety center but once it's activated, the "I can eat everything, add more to the plate" phase goes down the drain. It is a very common experience in restaurants where people order three different "Instagram-worthy" dishes to eat and end up leaving half of it. We mostly forget to realize that the wastage of food is not only the waste of the product or ingredients, it is also

the wastage of uncountable numbers of natural resources that form a part of its life cycle

Some organizations in India have started to tackle this huge issue of food wastage. Annakshetra, a Jaipur-based non-profit collects excess food from places and stores it for refrigeration. The food is only distributed once it is considered fit for consumption by medical experts. Roti Bank by the Dabbawala Association of Mumbai, also collects excess food prepared from weddings, birthday parties and events and gives it to the needy. Similar work in multiple cities is being done by organizations such as Feeding India and Robinhood Army.

While, as an individual, you may not be able to prevent food wastage at the production level, you can surely prevent food wastage at the consumption level. There are a number of simple ways to do that.

- Plan your shopping according to your needs. Don't get too carried away by offers and alluring pictures.
- When eating out, order food periodically, order a step below your hunger pangs.
- If you are hosting a wedding or event, surplus food can be handed over to organizations which deal with leftover food items.

Take these small steps, they may go a long way. As they say, the world produces double the amount of food it needs to consume, it's the food wastage that leads to starvation

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FOOD DELIVERY: THE NEW NORMAL?

Pull out your phone, tap on a food delivery app, choose your restaurant, the number of choices available makes it difficult, choose your meal and voila. In a short while, you will have piping hot food delivered at your doorstep. Online delivery gives us much more options than dine-in could ever provide us, it is a pandora's box of temptations. Food delivery services have become increasingly popular due to fast-paced life in metropolitan cities. Though the Covid-19 pandemic brought the world to its knees and the economies came shattering down, with the hospitality industry suffering a great deal; the food delivery business saw a huge surge. The demand for restaurant-like food was at an all-time high; new type of eateries started springing up, like food delivery kitchens with just cloud kitchens. From an economic standpoint, while the online food delivery system provided job and sales opportunities, there was a downside in terms of increase in the amount of plastic generated and carbon footprint.

India is expected to reach 225.6 million users of food delivery in 2021 with revenue of US \$11,666 million. There is still immense potential for this industry to grow in India as it is grasping its hold in smaller cities and towns; currently more popular in metropolitan cities. This change in consumer behaviour across the country has also been assisted by the pandemic which locked people down in their homes. The food delivered is also accompanied by a plastic box, a plastic/paper bag, sanitizer sachet and plastic cutlery. On an average 112.5 grams of plastic waste gets generated every time you order a dish. If you order two dishes a week you would generate 11.7 kgs of plastic waste in a year. Food delivery- the new normal is ready to add massively to the ever-growing stream of plastic waste. A lot of plastic which comes with food is also unnecessary such as cutlery and these days sanitizers as well. When we order in at home, we do not need these products. Some food delivery platforms provide an option for not giving cutlery; however, they are not implemented as many delivery executives are not aware of the same. The food delivery platforms communicate the additional information



to the delivery executives and not to the restaurants itself who finally pack the order. The delivery executives many a times do not have any information on such options which reflects on failure of the food delivery platform's training platform.

Packaging waste comprises of 36% of the plastic waste generated across the world; at 141 million tonnes. This share is only bound to increase due to the increasing culture of ordering in, from food to groceries due to the convenience associated with it. The type of plastic waste generated by the food delivery platforms is 'single-use plastic'; plastic designed to be used only once. With such a short span of lifetime and increasing demand this monster is rising rapidly waiting to overtake our oceans. If we continue dumping plastic at our current rate by 2050 an estimated 99% of sea birds would have ingested plastic.

In India most of the waste is being handled by the informal sector. Toxics Link's report on Single-Use Plastic also found that many of these plastic boxes used in food delivery are not recycled because of their poor quality. Even if they are recyclable there is often leftover food in the boxes and they are mostly not washed which poses a hindrance to the process. Small items such as straws and cutlery, which are there in the delivery boxes, are also often not recycled. Even if they could be recycled one should remember that plastic cannot be recycled it can only be downcycled; that is the quality of plastic will degrade every time it is recycled. So, recycling only provides a very temporary situation which increases the lifetime but ultimately

plastic ends up in our earth.

In such a scenario wondering how you can contribute in reducing the amount of plastic waste being generated:

- Make your own meal; as obvious as it can get
- When things get back to normal prefer dining out or take out using your own utensils
- Even if you order food online – clean the plastic box and segregate your waste so that the plastic goes into the right channels of recycling
- Join Toxics Link's campaign to #cutoutcutlery to pressurize food delivery platforms to give a choice for opting against plastic cutlery and sanitizer packets and enforce the same.

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GUEST ARTICLE

UNTREATED WASTE-INVITATION TO DISASTER

By **Er. Abdul Rashid Bhat**

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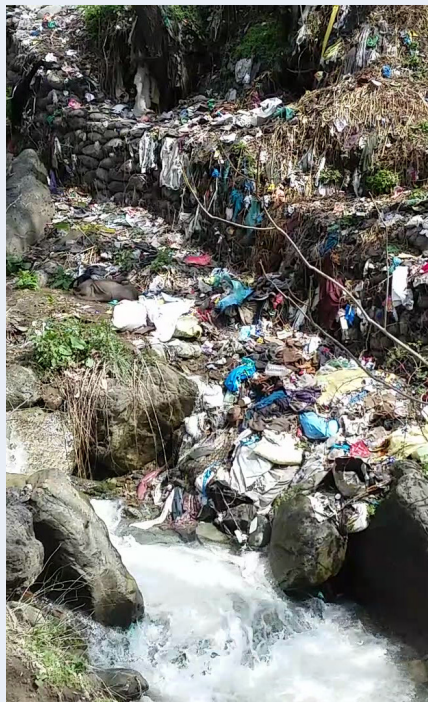
Kashmir is renowned for its beauty, pristine peaks, virgin meadows and cascading rivers. But is this the truth or are we losing its beauty to human greed and waste?

Where else on this planet would you find garbage flowing away with glacial waters, clogging the beautiful streams and ruining the pristine natural surroundings.

Garbage is an issue around the world but it lives freely and is ubiquitous in Kashmir.

Kashmir has many health resorts that are filled with mesmerizing beauty. But even they have been plagued by the issue of garbage. It is a sorry state of affairs.

As the population continues to grow, so does the amount of waste that people produce. When plastic or any other kind of waste is generated in any area it begins to negatively impact the natural environment and create problems for wildlife and pose danger to the livestock.



chemicals. When these chemicals seep underground, they degrade the water quality. Therefore proper disposal of waste becomes absolutely essential.

Also due to mismanagement of this waste, people especially children are suffering as waste is often thrown near schools or on the streets.

Therefore, for proper waste management, segregation at source through Bioremediation Process conversion of dumping sites is the need of the hour. Otherwise the humongous amounts of garbage generated is like a ticking time bomb. This can be implemented by making local body members accountable for waste management in rural areas and municipal bodies in urban areas. Also civil society needs to be sensitized to the issue of proper waste management and mass awareness is needed.



Burning of garbage in the open air, leads to environmental pollution due to the release of toxic chemicals. The polluted air when inhaled by humans and animals affects their health and can cause respiratory problems.

Water conservation is already a concern in places ranging from California to India, but the world's water is in great danger because of leaking plastics and waste. Even lakes, rivers and wetlands have not been spared, these too are turning into dumping sites.

When huge quantity of garbage is dumped in landfills, the toxic substances leach into the soil and form hazardous



In a nutshell, all is not lost yet but it is high time that we act before it is too late.



INTERVIEW

INTERVIEW WITH SIDDHARTH AGARWAL

The rivers of India are interwoven with the lives of its people. Nurturing the millions who live on the banks of these rivers, these waters are sacred for numerous reasons. Yet, as the world today faces many challenges from climate change, our rivers face threats unlike any before. Siddharth Agarwal is a young activist who is on a mission to document these Indian rivers with his not-for-profit initiative Veditum by walking along the banks of these rivers to comprehend life around these unique ecosystems. An IITian who majored in aerospace engineering, he subsequently changed tracks to set a new course for himself. In 2015, Siddharth founded his research think tank and media organisation Veditum (meaning 'to understand' in Sanskrit) which is based out of Kolkata, working at the intersection of social, cultural and environmental issues with a mission to seek a grassroots-level understanding of issues. Through innovative methods in ground level research, documentation and use of media tools, stories of Indian environment and people are brought to life. In an email interview with Toxics Link he shares his insights.



Q: WHAT IS THE MOST POTENT THREAT TO INDIA'S RIVERS TODAY?

A: Rivers in India today face multiple threats, and a 'lack of flow' in our rivers is the biggest threat. This lack of flow is being contributed by a combination of excessive extraction of groundwater and the rampant construction of dams & barrages on our rivers

Q: SHOULD HUMANS TRY TO CONTROL NATURE?

A: We're living in the anthropocene and all human activities are bound to have an impact on Nature. We must strive to reduce this impact as much as possible, and live in harmony with Nature - as co-members and not as masters.

Q: WHAT IS THE ROLE OF INDIA RIVERS FORUM TOWARDS CONSERVATION OF OUR RIVERS?

A: India Rivers Forum (IRF) is an active network of organisations & individuals who have dedicated themselves to work for the rejuvenation & restoration of rivers. IRF works to bridge gaps between knowledge and action groups, to facilitate larger discussions on the idea of rivers, and to educate and create awareness at large about our rivers.

Q: CAN LOCAL COMMUNITIES AND THE CIVIL SOCIETY DO ANYTHING TO HELP SAVE OUR RIVERS?

A: Local communities and civil society hold the key to saving our rivers. Larger public interest and participation towards

the cause of the environment and our rivers is imperative to nudging our policy makers and bureaucrats to work for a greener future, and free flowing rivers. Home composting of kitchen waste, reducing usage of single-use plastics and consuming organic food are simple actions that can help us reduce the overall toxicity in our ecosystem.

Q: ANY RECOMMENDATIONS AND INSIGHTS

A: The challenge to save our rivers can sometimes feel overwhelming, but we need to keep chipping away at it slowly. However, we must recognise that system level changes are required for our rivers to thrive, and individual actions while commendable, may not be able to take us all the way.



VOICE FROM THE FIELD

E-WASTE PROCESSING HOTSPOTS IN DELHI OPERATING WITHOUT SAFEGUARDS

BY VINOD SHARMA

Through the eyes of our researchers and field workers, Toxics Link's 'Voice from the Field' presents on-the-ground perspectives and first-hand insights of our work for environmental justice and freedom from toxics.

Toxics Link has been working on the issue of e-waste since its inception in

the legal territories both nationally and internationally. The journey of e-waste management in India is also documented in different reports by us. One such study titled "Informal E-waste Recycling in Delhi" finds crude processing of e-waste in 15 informal hotspots of Delhi, functioning without any health or environmental safeguards. This is after the first e-waste management rules (2011) and also the 2016 Rule, clearly highlighting the

failure of the system. E-waste is one of the fastest growing waste streams globally and India generates more than 2 million tonnes of this toxic waste annually. Toxics Link tries to assess the ground reality in Delhi, known as one of Asia's biggest e-waste markets. Our survey found units operating in 15 informal hotspots of Delhi. New & Old Seelampur (Shahdara), Mustafabad (North East Delhi), Behta Hazipur and Loni (Ghaziabad) are the biggest such informal hotspots in the city followed by Turkman Gate, Darvaganj, Shastri Park, Mayapuri, Saeed Nagar, Zafrabad, Mata Sundari Road, Mandoli, Brijpuri and Seemapuri. It was found that e-waste, from across the country is finding its way to the processing yards of Delhi majorly located surrounding the river Yamuna. All sorts of e-waste processing operations are carried out including refurbishing, dismantling, metal recycling & recovery. Workers operate from shabby small rooms of residential or unauthorized colonies or open units near agricultural areas and are routinely being exposed to chemical and metallic vapor, dusts and acidic effluents. These units have no environmental measures either and are polluting our air, soil and water. Shockingly many authorised dismantlers/recyclers are selling their waste to the informal sector, in complete violation of the rules. Open burning, acid baths, disposal and dumping of hazardous waste and effluents coming out of the process are found to be common in these operations. They can contain brominated flame retardants (BFR), lead, cadmium, mercury, compounds of hexavalent chromium, PVC- the potential of releasing dioxins and furans. Exposure to them can cause neurotoxicity, reproductive problems, cancer, alteration in hormone functions, bone and kidney damage.

Delhi-NCR alone has some 5000+ such units providing livelihood to 50000+ people and the workforce, which includes a large number of women, is dependent on this income and is also instrumental in keeping the waste out of landfills. Clearly, the informal sector's potential and contribution in managing e-waste should be recognized and integrated into the clean mechanisms. Ignoring and shutting them down from one place will only lead to mushrooming of such operations in the fringes and loss of livelihood of a huge labour force.

STUDENTS' CORNER

ENERGY SECURITY IN INDIA COMES AT WHAT COST?

A CRITIQUE OF THE CULTURE OF DENIAL IN THE INDIAN OIL INDUSTRY

By Sonakshi Yadav | Student at Ramjas College, University of Delhi



'If this is a minor incident then why has it taken OIL India 150 years to find an invention to control a blowout?' – villagers from Baghjan, Tinsukia raise their voice during a [protest](#) against OIL India in light of the major blowout at an oil rig in the region. An estimated [11,000 people](#) have been displaced from their homes, the [Maguri Motapung Beel](#) wetland has been polluted, tea estates and farmlands have been destroyed – the damage is irreparable. But when damage occurs at the hands of an oil company, all of this is considered secondary. The narrative quickly changes in support of the oil company which has been faced with an 'unprecedented disaster'.

Over the past two decades, most exploration sites in India have been faced with oil spills of varying degrees. The stories of disaster remain the same all across the nation—and so do the stories of inaction by authorities. The Arabian Sea along India's busiest

port in Mumbai has been polluted to unparalleled levels due to unchecked oil exploration work. A [series of oil spills](#), in the early 2010s, near Mumbai port caused by different operators has been responsible for long-term damage in the region. These incidents have failed to garner public attention and have been forgotten by company owners, as is evident from the crores of compensation that have gone unpaid for more than 8-9 years now.

After years of flouting rules and neglecting deteriorating conditions of the surroundings, when accidents do occur, operating companies and owners bank on the easy-to-accept narrative of 'accidents happen'. Industry leaders appeal to the public: Things go wrong, human error is unavoidable. Damage to the ecosystem is just seen as a cost we have to pay to obtain the valuable resource that is oil and petroleum.



PHOTOGRAPHERS TAKE PICTURES OF OIL CONTAMINATED WATER ON THE SHORES OF A BEACH IN MUMBAI ON AUG. 7, 2011.

AGENCE FRANCE-PRESSE/GETTY IMAGES



RESIDENTS WATCH THE BURNING BAGHJAN OIL FIELD ON JUNE 11, 2020
BIJU BORO / AFP

MIT Professor Nancy Leveson has investigated major oil spill disasters in the USA and accurately points out how ‘[Accidents are not inevitable nor are they the price of productivity](#)’. No, she does not envision a utopia where oil industries adhere to strict safety norms at the cost of their productivity. She carefully points out the ways in which these industries use hierarchical knowledge to ignore on-ground warnings and cultivate a culture of denial where the likelihood of something going wrong

is not considered, based on a false set of assumptions.

It is vital to understand that the exploits of the energy industry will only be exacerbated as climate change becomes more pervasive in the coming years (read: months). It is not enough to just demand foolproof disaster contingency plans, at this stage. A well-furnished plan to cultivate a safety culture, along with an elaborate system for holistic rehabilitation of communities affected by

exploration work has to be drafted and discussed widely in the public domain. Ruling governments have benefitted from minimum public intervention in the industry for years. Failing to realise the urgency of addressing systemic issues even now, will lead to greater levels of inequity and widespread human rights violations in the near future. Universal energy accessibility is an unachievable dream without energy transparency.

NEWS

1. TIME TO RESET OUR RELATIONSHIP WITH NATURE: UN AHEAD OF 5TH ENVIRONMENT ASSEMBLY

Source: Down To Earth, Feb 21, 2021

Climate change, biodiversity loss and land degradation should be tackled together by transforming the world's relationship with nature, said a new report released by United Nations ahead of its fifth Environment Assembly.

The assembly will be held February 22-23, 2021 on the theme ‘Strengthening Actions for Nature to Achieve the Sustainable Development Goals’.

It calls for strengthened action to protect and restore nature and nature-based solutions to achieve the sustainable development goals in its three social, economic and environmental dimensions.

The new 168-page report called ‘Making Peace with Nature’ presents a strong case for innovation and investment to tackle climate, biodiversity and pollution – the three environmental emergencies within the framework of sustainable development goals.

“It is time to re-set and reevaluate our relationship with nature,” said UN Secretary-General António Guterres in his address while launching the report.

Growing triple crisis

The three self-inflicted planetary crises are closely interconnected and put the well-being of current and future generations at unacceptable risk, warned the report released on February 18, 2021.

Inequity in economic growth has left 1.3 billion people poor. At the same time, extraction of natural resources has multiplied three times creating a planetary emergency.

More than one million of the estimated 8 million plant and animal species are increasingly at risk of extinction. Every year, nine million people die prematurely due to pollution.

Even though the causes and mechanisms of climate change, biodiversity loss and land degradation are complex, these should be considered together, the report proposed.

Read more at: <https://www.downtoearth.org.in/news/environment/time-to-reset-our-relationship-with-nature-un-ahead-of-5th-environment-assembly-75613>

2. CALCULATE THE ENVIRONMENTAL FOOTPRINT OF YOUR FOOD

Source: BBC News, Feb 5, 2021

When picking which groceries to put in our baskets, a number of considerations are likely to affect our choices – will it tickle our taste buds? How good is it for us? And how much does it cost? But increasingly, consumers are looking for foods that will lower their impact on the environment too.

The food we eat makes up a sizable portion of our individual carbon footprint – depending on where you live and what you dine on, it can account for between 10-30% of your household's greenhouse gas emissions. The entire food system – which includes the production, packaging, transportation and disposal of everything we eat – accounts for 21-37% of all human-

produced greenhouse gas emissions. By 2050, our food could account for almost half of all carbon emissions released by human activity unless more steps are taken to reduce its environmental impact.

But one of the problems we face as consumers is knowing which foods have the least or greatest effect on our planet's health. Unlike nutritional information that appear on the labels of most foods we buy, easy to read information about sustainability is largely absent.

This is why BBC Future has worked with Verve Search and researchers at the University of Oxford to produce our Foodprint Calculator. It will allow you to input a selection of staple foods, along with the number of times you consume them in a week up to a maximum of seven, to find out what the environmental impact of your chosen diet might be. Crucially you can also choose a selection of alternative foods to see how changing your diet might alter your carbon emissions.

Read more at: <https://www.bbc.com/future/article/20210204-calculate-the-environmental-footprint-of-your-food>

3. WITH BUDGET FOCUSING ON ECONOMIC RECOVERY, ENVIRONMENT GOES OUT OF FOCUS

Source: Mongabay India, Feb 4, 2021

In May 2020, while the economy was facing a slowdown due to Covid-19, the government of India announced a special package worth Rs. 20 trillion for AtmaNirbhar Bharat (self-reliant India), which had measures for all sectors of the economy, including a focus on the

mining sector. The budget announced by the government on February 1, 2021, picks up that thread from months ago with a focus on the mineral sector and infrastructure.

The budget brings some good news, in terms of attention towards the environment and clean energy sector. Announcements in the budget included measures for the water sector, renewables, deep-sea biodiversity conservation, controlling pollution, and a hydrogen energy mission.

The May 2020 Atma Nirbhar Bharat (ANB) package was followed by two more small packages to revive the economy. India's Finance Minister Nirmala Sitharaman, in her budget speech, said the total financial impact of all ANB packages including measures taken by the Reserve Bank of India was estimated to about Rs 27.2 trillion – which amounts to more than 13 percent of India's gross domestic product.

She said the ANB packages have “accelerated our pace of structural reforms” while recounting that “commercialisation of the mineral sector and agriculture and labour reforms” were undertaken during that period.

Read more at: <https://india.mongabay.com/2021/02/with-budget-focusing-on-economic-recovery-environment-goes-out-of-focus/>

4. INDIA, FRANCE JOINT INITIATIVE TO BOOST TIES IN SUSTAINABLE DEVELOPMENT, ENVIRONMENT PROTECTION

Source: PTI, Jan 29, 2021

India and France on Thursday launched a joint initiative to strengthen cooperation in sustainable development and work towards global environment protection. Union Environment Minister Prakash Javadekar and French Minister for Ecological Transition Barbara Pompili launched the Indo-French Year of the Environment, under which the two countries will engage in discussions on critical areas of collaboration relating to environment and allied areas.

Various programmes under the initiative will focus on five main themes -- environmental protection, climate change, biodiversity conservation, sustainable urban development, and

development of renewable energies and energy efficiency.

Welcoming Pompili on her maiden visit to India, Javadekar emphasised on the significance of India-France alliance in working towards climate change.

“We are the two main pillars of the International Solar Alliance launched by PM Narendra Modi. This revolutionary step has changed into a successful experiment. This partnership towards global environment protection will set an example for the rest of the world to work more effectively and efficiently towards sustainable development,” Javadekar said.

Speaking about India's efforts towards climate change, he said the country has already achieved 26 per cent of reduction of emission intensity.

“As of 2020 the renewable capacity in India stands at 90 GW which includes 36 GW of solar energy and 38 GW of wind energy, he said.

Read more at: <https://energy.economictimes.indiatimes.com/news/renewable/india-france-joint-initiative-to-boost-ties-in-sustainable-development-environment-protection/80550526>

5. DELHI FOREST DEPT TELLS INFRA AGENCIES HOW TO PRESERVE ENVIRONMENT

Source: Hindustan Times, Feb 22, 2021

Following the orders of the Delhi high court, the city's forest department has arranged for a workshop for all road-owning agencies, to apprise them of ways to preserve the ecology of an area while it carries out digging and construction activities.

The forest department on February 19 sent a meeting notice to all road-owning, construction and development agencies in Delhi, asking them to attend the workshop, where they will be given a walk-through on ways in which construction and digging work can be carried out while also preserving the ecology of the area.

Along with officials from the forest department, the training session will be carried out by reputed experts in the field. Invitations have been sent out to Pradip Krishen, author and environmentalist, Prabhakar Rao, member of Kalpkrish, an environment

action group, Vimlendu Jha, founder of environment NGO Swechha and a former independent member of Delhi's Ridge Management Board, and Vallari Sheel, researcher and urban ecologist, who will also be discussing best practices with the agencies.

The workshop will be conducted on February 23.

“All officials and experts are requested to participate in the said workshop. In case of exigency, senior officials may depute representatives not less than a gazetted officer or equivalent,” the meeting notice issued by chief conservator forests (CCF) Nisheeth Saxena read.

The workshop will be attended by representatives from Delhi Development Authority (DDA), Public Works Department (PWD), the three municipal corporations (north, south and east), the New Delhi Municipal Council (NDMC), Delhi Jal Board (DJB), Delhi Fire Services (DFS), Delhi Metro Rail Corporation (DMRC), Delhi Cantonment Board etc.

This workshop was scheduled after the Delhi high court in an order issued on February 10, asked the Delhi government to initiate measures to sensitise agencies to the importance of preserving trees while undertaking civil construction work.

Read more at: <https://www.hindustantimes.com/cities/others/delhi-forest-dept-tells-infra-agencies-how-to-preserve-environment-101613929818017.html>

6. ISRAEL SHUTS MEDITERRANEAN SHORE AFTER OIL SPILL DEVASTATES COAST

Source: AlJazeera, Feb 21, 2021

Israel closed all its Mediterranean beaches until further notice on Sunday, days after an offshore oil spill deposited tonnes of tar across more than 160km (100 miles) of coastline in what officials are calling one of the country's worst ecological disasters.

Activists began reporting globs of black tar on Israel's coast last week after a heavy storm.

The deposits have wreaked havoc on local wildlife, and the Israeli Agriculture Ministry determined on Sunday that a dead young fin whale that washed up on a beach in southern Israel died from ingesting the viscous black

liquid, according to Kan, Israel's public broadcaster.

Israel's Nature and Parks Authority called the spill "one of the most serious ecological disasters" in the country's history.

The environmental protection, health and interior ministries issued a joint statement warning the public not to visit the entire length of the country's 195km (120 miles) Mediterranean coastline, cautioning that "exposure to tar can be harmful to public health".

Representatives from a coalition of Israeli environmental groups said in a news conference on Sunday that the environmental protection ministry was woefully underfunded and that existing legislation did little to prevent or address environmental disasters.

They cautioned that this disaster should be a wake-up call for opposition to a planned oil pipeline connecting the United Arab Emirates and Israeli oil facilities in Eilat – home to endangered Red Sea coral reefs.

Israeli Prime Minister Benjamin Netanyahu and Environment Protection Minister Gila Gamliel visited a beach in the southern port city of Ashdod on Sunday to inspect the damage.

[Read more at:https://www.aljazeera.com/news/2021/2/21/israel-shuts-mediterranean-shore-after-oil-devastates-coast](https://www.aljazeera.com/news/2021/2/21/israel-shuts-mediterranean-shore-after-oil-devastates-coast)

7. PSU OPERATES NEYVELI COAL MINE WITHOUT REVALIDATING ENVIRONMENTAL CLEARANCE

Source: *The Wire Science*, Feb 20, 2021

The Indian public sector mining company NLC India Ltd. (formerly Neyveli Lignite Corporation) has come under fire for operating its coal mine without revalidating its environmental clearance. The company is currently operating three opencast mines – Mine-I, Mine-IA and Mine-II – in Neyveli, Tamil Nadu, with a total capacity of 28.5 million tonnes per annum (MTPA). It is linked to the NLCIL thermal power plant, which has a capacity of 3,390 MW with a 250-ME independent power producer.

Mine-II has a capacity of 15 MTPA and has allegedly been operating without revalidating its environmental clearance. This is a functional mine that started

work in 1981 as a lignite opencast mine with a capacity of 4.7 MTPA. Subsequently, it expanded in stages to a 15-MTPA facility in 2010, with a mining area of 41.22 sq. km and project area of 71.94 sq. km. As on March 31, 2020, NLC India had mined 2,414.32 hectares.

The company had obtained an environment clearance for this mine on December 24, 2002. The government had issued the clearance under the environment impact assessment (EIA) notification 1994, and the Union coal ministry approved the mine closure plan for Mine-II on March 31, 2011.

[Read more at:https://science.thewire.in/environment/psu-operates-neyveli-coal-mine-without-revalidating-environmental-clearance/](https://science.thewire.in/environment/psu-operates-neyveli-coal-mine-without-revalidating-environmental-clearance/)

8. COCA-COLA TRIALS PAPER BOTTLES TO ADDRESS PLASTIC POLLUTION. BUT IS IT ACTUALLY GOOD FOR THE ENVIRONMENT?

Source: *The Swaddle*, Feb 18, 2021

Trialing paper packaging for its fruit drink Adez, Coca-Cola's prototype for paper bottles will have a strong paper shell with a thin plastic liner. "The trial we are announcing today is a milestone for us in our quest to develop a paper bottle," Daniela Zahariea, director of Coca-Cola's technical supply chain and innovation in Europe, said in a statement, adding that the company was motivated by, "people expect[ing] Coca-Cola to develop and bring to market new, innovative and sustainable types of packaging."

The announcement of the trial followed closely on the heels of an annual audit by Break Free From Plastic (BFP) in December last year, which named Coca-Cola, PepsiCo, and Nestlé as the world's top plastic polluters for the third consecutive year – suggesting that the companies had done little to reduce the adverse impact of their packaging on the environment, despite having been called out twice on it before 2020. Another report from March 2020 also found Coca-Cola, along with three other companies, responsible for more than half a million tonnes of plastic pollution in six developing countries, including India.

In fact, in 2020, the amount of plastic pollution caused by Coca-Cola was not

only almost as much as PepsiCo and Nestlé combined, but also marked an increase from 2019 when its beverage bottles were found to be the most frequently discarded plastic item on beaches, rivers, parks and other litter sites. In 2019, pollution caused by Coca-Cola was pervasive in 37 out of the 51 countries surveyed; in 2020, it jumped to 51 out of 55.

But is switching to paper simply an exercise in PR, for the sake of attracting favorable publicity in the face of all the criticism the brand has faced for plastic pollution? Or can switching to paper bottles actually help the environment? Experts are unsure.

[Read more at:https://theswaddle.com/coca-cola-trials-paper-bottles-to-address-plastic-pollution-but-is-it-actually-good-for-the-environment/](https://theswaddle.com/coca-cola-trials-paper-bottles-to-address-plastic-pollution-but-is-it-actually-good-for-the-environment/)

9. IN VACCINATION LIST OF FRONTLINE WORKERS, NO PLACE YET FOR THOSE WHO DEAL WITH COVID WASTE

Source: *The Indian Express*, Feb 20, 2021

While over 83,000 persons involved in the fight against Covid-19 have been inoculated so far in Pune district, an overlooked lot of about 60 frontline workers who are shouldering a key responsibility in the battle are feeling left behind. These are staffers at the Common Bio-Medical Waste Treatment Facilities (CBWTF), who have collected and disposed of over 1,100 tonnes of Covid-related waste from public and private hospitals in the last 11 months.

There are two biomedical waste processing plants in Pune district – one for Pune city located at Sangawadi and another for Pimpri-Chinchwad located at Yashwantrao Chavan Municipal Hospital – which are responsible for collecting biomedical waste from 5,500 healthcare establishments and then incinerating or recycling it. The operations of CBWTFs have been outsourced to Passco Environmental Solutions – a private firm contracted by Pune and Pimpri-Chinchwad municipal corporations.

Over a dozen vans collect the biomedical garbage every day and transfer them to these facilities. At the start of the pandemic in March, the Sangamwadi plant was getting about 250 kg of Covid-19 related waste every day, which

was to be handled with extreme care and incinerated immediately. This went up to 6,000 kg per day during the month of July, when the virus was spreading in the city at a very fast rate.

Read more at: <https://indianexpress.com/article/cities/pune/in-vaccination-list-of-frontline-workers-no-place-yet-for-those-who-deal-with-covid-waste-7197442/>

10. MICROPLASTICS IN NEWBORN BABIES — A HIDDEN PERIL

Source: News Decoder, Feb 12, 2021

A mother holds her newborn for the first time in her arms. She counts her baby's toes and fingers, marvels at the fragile contour of the infant's nose, eyes and lips, and feels the child's gentle heartbeat against her own chest.

She sighs with relief when the doctor says, "Your baby seems healthy."

The last thing she expects to be told is that there may be microplastics in her baby.

That is what four women were told after researchers examined their placentas using special techniques to detect microscopic plastic particles — microplastics.

The effects of microplastics on newborn babies are not fully known.

Formally defined as particles smaller than five millimetres, microplastics are produced by degradation of plastic products. In the Italian study, four out of six women had micro-plastics ranging from 5-10 micrometres — a human hair is usually about 70 — in the placenta, the organ responsible for feeding babies during their nine months in the womb.

The effects of these microplastics in our bodies and our babies are not fully known. There are so many different types of microplastics, with many kinds of additives and chemicals, that scientists are having a hard time keeping up.

The tiny fragments can originate in plastic waste in oceans that has degraded and been ingested by shellfish and fish, or from degraded plastic on land that ends up in our food chain. Plastic water bottles, food packaging and even teabags can leach microplastics. We inhale many microplastics as particles in polluted air.

Read more at: <https://news-decoder.com/microplastics-in-newborn-babies-a-hidden-peril/>

11. HIGHEST E-WASTE PRODUCED IN PUNE AFTER MUMBAI; NGT CRITICIZES POLLUTION CONTROL BOARD

Source: Punekarnews, Jan 25, 2021

"The electronic waste is increasing every year and we do not have a system capable of disposing it. The health of the general public will be risked as the administration is not serious about e-waste management rules. This negligence of the administration may be harmful in the future," said the National Green Tribunal (NGT) criticizing the Central Pollution Control Board (CPCB).

A petition regarding the e-waste disposal issue is being heard before the main bench of the NGT. Disposal of e-waste in the country should be done in accordance with the rules laid down by the CPCB.

According to the information given to the tribunal by the Union Ministry of Environment in 2018, 95 percent of e-waste in the country is disposed of in an unscientific manner by unorganized sector and scrap dealers. Most of this waste is destroyed by burning or melting in chemicals. After three years also no concrete steps have been taken at the administrative level. In many places today, people burn wires and other equipment to obtain various metals from e-waste. The smoke coming out of it is adversely affecting the health of the people. The vigilance committee should work to prevent these incidents. According to the e-waste disposal management rules 2016, the state pollution control boards across the country should sort and dispose of this waste", the tribunal ordered.

After Mumbai, Pune has the highest e-waste: Maharashtra ranks first among the states producing the most e-waste in the country. In Maharashtra, Mumbai ranks first and Pune is second. IT companies are the biggest source of e-waste generation. About 30,000 tonnes of e-waste is generated in Pune every year. The Pollution Control Board in the state has approved more than 25 industries to recycle e-waste. However, researchers say that disposal companies

have less capacity than the total waste collected.

According to the report submitted by the CPCB before the NGT, one million metric tonnes of waste was collected in India during the period 2019-20. Prior to that, in 2017-18, the figure was seven lakh metric tonnes. However, compared to that, the capacity of the e-waste disposal system and related companies is still only 7.82 lakh tonnes. The government has failed to enable this system in two years.

Read more at: <https://www.punekarnews.in/highest-e-waste-produced-in-pune-after-mumbai-ngt-criticizes-pollution-control-board/>

12. BIOMEDICAL WASTE: MEDICAL COLLEGE SERVED NOTICE

Source: New Indian Express, Feb 12, 2021

Biomedical waste management has been a crippling issue for the state, especially amid the pandemic. Unscientific disposal of medical waste could have lasting effects on public health, claim experts

The Kerala State Pollution Control Board (KSPCB) has served a notice on the Thiruvananthapuram Medical College authorities for unscientific dumping of biomedical waste on its campus. The action was taken after the residents and public complained of piling biomedical waste, comprising used syringes, blood-stained cotton and bandages, in open spaces.

"The Bio-medical Waste Management Rule of 2016 restricts the occupier from establishing an on-site or captive biomedical waste treatment and disposal facility if a common biomedical facility is available within a distance of 75 km. This is because it requires trained, skilled manpower for proper operation and maintenance of treatment systems with minimal impact on human health and environment. But, we have noticed that many hospitals tend to unscientifically dispose of biomedical waste, leading to pollution. While some hospitals burn it openly, others were found to temporarily landfill the accumulated waste," said Pradeep Kumar A B, chairman of KSPCB.

An incident of landfilling of huge piles of biomedical waste at an open space of the Medical College hospital was brought to the board's notice recently. "We have already warned the hospital authorities

regarding this. Many such incidents have been reported from other hospitals. Strict action will be taken against healthcare institutions found to be violating the rules,” said Pradeep. However, the Medical College Hospital authorities opined that they are unaware of the action taken by the KSPCB officials.

Read more at: <https://www.newindianexpress.com/cities/thiruvananthapuram/2021/feb/12/biomedical-waste-medical-college-served-notice-2262770.html>

13. HOW TO STOP POISONING CHILDREN

Source: Newrepublic, Feb 19, 2021

Residents of the West Calumet Housing Complex in East Chicago, Indiana, have been poisoned for decades. The federal government built the public housing complex in 1972 on land that had formerly housed a lead smelting plant.

Then it let scores of children grow up around an element linked to cognitive disability, developmental disorders, and more.

On Wednesday, The Washington Post broke the latest news in West Calumet's ongoing lead exposure crisis. The Post's report did not focus on the source of the lead poisoning or on the effects of the exposure but rather on a report from the inspector general for the Department of Housing and Urban Development, which found that HUD knew about the lead poisoning in the community's children for over two decades before taking appropriate regulatory action.

In 1998, the Department of Health and Human Services, or HHS, found that 30 percent of the children tested at West Calumet had excessive amounts of lead in their blood. Even after lead-filled soil was removed, children were still testing at rates well above the national

average in 2016, indicating that the lead had seeped into their water source. The following year, HUD finally conducted a proper environmental review of the site. The complex has since been destroyed, with the Post reporting that its 1,100 majority Black and Hispanic residents were relocated after living with the exposure for over four decades. (In response to the inspector general's scathing 44-page memo, HUD said that it will “continue its work with EPA to improve information sharing and to jointly evaluate the proximity of other HUD-assisted housing to contaminated sites.”)

Read more at: <https://newrepublic.com/article/161408/stop-lead-poisoning-children-environmental-racism>

PUBLICATIONS



COVID WASTE: HOW HAS DELHI MANAGED IT?

There has been a steep rise in the generation of highly infectious waste in Delhi since the onset of the Covid-19 pandemic but the capacity of its waste management facilities have not been overwhelmed so far. The study titled ‘Covid Waste How has Delhi managed it?’ captures real-time data on covid waste from the city.



WHAT'S IN THE DIAPER? PRESENCE OF PHTHALATES IN BABY DIAPERS

The study titled, ‘What's in the Diaper: Presence of Phthalates in Baby Diapers’ released by Toxics Link raises concern over toxic phthalates being found in disposable baby nappies that are available in the Indian market. Phthalates are endocrine disrupting chemicals (EDCs) and exposure to them is known to cause serious health impairments.



PHARMACEUTICAL POLLUTION IN INDIA : AN EMERGING CONCERN

Over the last few decades, India has emerged as an important pharmaceutical production hub of the world. As per the Directory of Pharmaceutical Manufacturing Units in India - National Pharmaceutical Pricing Authority (NPPA), 2007, the country has 10563 pharmaceutical manufacturers with the majority of them concentrated in 5 states namely Maharashtra (29.7%), Gujarat (14.4%), West Bengal (7.2%), Andhra Pradesh (6.9%) and Tamil Nadu (5.4%). However, recently Baddi of



ENVIRONMENTAL ILLUSION : THE NON-WOVEN BAG

The study titled “Environmental illusion The non-woven bag” busts the myth that non-woven bags are an eco-friendly alternative to plastic bags and reveals that they are nothing but polypropylene (a form of plastic) thereby emphasising the need for informing and educating the consumers regarding their reality. The study results indicate that 88% of the respondents have replaced plastic bags with alternatives while 45% have replaced plastic bags with non-woven bags. Ironically all markets where single-use plastic is banned are being swamped with these NW bags creating a huge confusion in the perception of consumers.



FACTSHEET NO. 60 ON PHTHALATES

Phthalates are ubiquitously present and are well-known endocrine disrupting chemicals. They are generally effective at very low concentration and are particularly harmful during critical phases of life such as pregnancy (fetal development), infancy, early childhood and adolescence. The hormone system is not fully developed at these stages, and effects could be irreversible and visible only in a later phase of life. Phthalates can

cross the placental barrier and have been found in the amniotic fluid in humans. Such an exposure can lead to placental DNA mutation. The different sizes and shapes of phthalates have different effects on hormone receptor proteins and enzymes involved in the synthesis or activation of hormones.



FACTSHEET NO. 61 ON ANTIMICROBIAL RESISTANCE: AN EMERGING PUBLIC HEALTH CHALLENGE

AMR in India came into the limelight earlier in 2010 with the determination of superbugs carrying the New Delhi metallo-lactamase (NDM-1) gene, igniting much needed discussion and action on AMR at the global and national level. AMR control in India is challenging because it is the largest consumer of antimicrobials globally, with easy access to non-prescribed medications for both human health and livestock. India has some of the highest antibiotic resistance rates among bacteria that commonly cause infections in the community and healthcare facilities. In 2012, India also overtook the United States as the highest consumer of a class of new antibiotics known as oxazolidinones, which are prescribed as a last resort when more commonly used antibiotics are not effective. Globally, India is the third largest producer of pharmaceuticals by volume, thus the manufacturing industries also contribute to India's rising AMR burden. India has at least 40 antibiotic API manufacturers and at least 250 antibiotic formulation companies manufacturing at least one antibiotic for human use, as per data from CIMS INDIA, April–July 2017 edition. Multiple antimicrobials and antibiotics have been detected in the Indian rivers such as Musi River in Hyderabad, Yamuna in Delhi and Ganga in the Northern states.



FACTSHEET ON BASEL BAN AMENDMENT AND ITS IMPLICATIONS FOR INDIA

India was one of the first countries of the global south in the early 1990s to call for a ban on exports to developing countries. India notified the hazardous waste rules in 1989 before the Basel Convention came into force in 1992, and became a party to the Basel Convention in 1992. Subsequently, India made amendments to its regulations in 2000 and in 2003 in order to properly align national law with the Convention. A revised version of the Hazardous Waste Rules was promulgated in 2008. The rules were revised again in 2016. They are now called “The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016”. Recently, in March 2019, the country passed a complete prohibition on the import of solid plastic waste into the country including the Special Economic Zones (SEZ) and by Export Oriented Units (EOU). The plastic ban is an important step that the Indian Government has taken to protect its environment. However, India does not have a national ban on the import of hazardous wastes; and, they have still not ratified the Basel Ban Amendment, which will be critical in the context of global waste trade.



MINED, USED & LANDFILLED HOUSEHOLD BATTERIES: A LOOK INTO THEIR END-OF-LIFE MANAGEMENT IN JHARKHAND & RAJASTHAN

India does not have any specific regulatory framework for management of household battery waste. Its mere mention in the solid waste management rules as ‘domestic hazardous waste’ and mandate for segregation has never really served either purpose of segregation or management of end-of-life household batteries. This fact is quite evident from the studies in Jharkhand and Rajasthan. Voluntary action by battery manufacturers is also almost absent in the states. In the current situation, the entire battery waste load is ending up in the landfill, wasting the resources as well.



TALCUM POWDER IN INDIA : TIME TO ACT

In 1893, J & J released its popular baby powder after discovering it could prevent diaper rash. Later, companies began marketing it to women stating that talc was good for controlling odour and moisture in the genital area. At that time, no one was aware of the potential risks associated with the long-term use of talcum powder. Published scientific literature dating back to the 1960s has suggested a possible association between the use of powders containing talc and the incidence of ovarian cancer. According to the reports, several litigations were filed against some of the manufacturers of talcum powder, among which J & J was one of the biggest names. In the wake of huge public outcry and several litigations, the company decided to permanently discontinue about 100 products, including the J & J baby powder. However, this decision was only applicable to the North American Market (i.e., US and Canada). The company stated that there has been a decline in demand for the powder and stores can continue selling its existing inventory until it runs out. The company, continues to sell its products in other markets, including India. Therefore, emphasizing the prevention approach, few recommendations like phasing out the use of talc in products, regulatory actions, promotion of safer alternatives etc have been proposed in the study “Talcum Powder in India : Time To Act” to safeguard the health of the women and children.

TRAVELLING 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

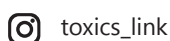
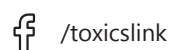
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For more information materials, invitations and updates on environmental issues please write to us at info@toxicslink.org



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